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

COMMENTARY NUMBER 970

Tipping Point, Liquidity, Freight, Hurricane-Disrupted Data, Retail Sales, Production, Inflation

September 26, 2018

Tipping Point for the Markets Likely Is at Hand

Booming Consumer Outlook in September 2018 Has Parallels to 1987

The FOMC Hiked Rates as Expected, Although Core Inflation Had Slowed Back to Below "Overheated" Conditions

The Fed Has Dimmed Near-Term Economic Prospects by Continuing to Tighten the Screws on Consumer and Systemic Liquidity, Likely Thwarting Any Nascent Economic Recovery

August Real Average Weekly Earnings Growth Remained Impaired

Monthly Growth in Real Retail Sales and Production Ground to a Halt in August, Net of Revisions, While Annual Growth in Freight Activity Softened

Hurricane Florence Likely Disrupted Pending September Employment and Unemployment Numbers, on Top of Year-Ago Distortions

Hurricane-Spiked Gasoline Prices in 2017 Will Have a Minimal Dampening Effect on the Pending Social Security COLA Determination

Hurricane-Driven 2017 Data Turmoil Resurfaced with August 2018 Inflation, Slowing Annual Inflation, with Headline Growth Distortions Likely in Pending Economic Releases for September 2018 and Beyond

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PLEASE NOTE: The next regular *Commentary No. 971*, planned for Friday, September 28th will provide a review or initial review of August 2018 New Residential Construction, Existing- and New-Home Sales, New Orders for Durable Goods and the third estimate of Second-Quarter 2018 GDP.

Hyperinflation and Consumer Liquidity Watches. Both of the most-recent *Watches, Hyperinflation Watch – No. 3* of August 12th and *Consumer Liquidity Watch – No. 4* of August 10th are in the process of being updated fully in the week ahead.

DAILY UPDATE Coverage. New Residential Construction, Existing- and New-Home Sales details are available in the ***Daily Update*** section in the top left-hand column of the *www.ShadowStats.com* home page. When major economic releases are published, brief, summary headline details usually are posted in the ***Daily Update*** within an hour or so of the release. Those details remain posted there, until they are covered separately in a subsequent *Commentary*.

The planned ShadowStats Publication Schedule, Schedule Revisions and Notes to Subscribers also are posted regularly at the end of that column.

Your comments and suggestions always are invited.

Best wishes to all, John Williams (707) 763-5786

Today's (September 26th) ***Opening Comments*** first explores the "Tipping Point" and an unsettling pattern of economic and political developments suggestive of a pending major shift in the domestic financial markets, including the U.S. Dollar. Separately reviewed are the recent intensified tightening of consumer- and systemic-liquidity conditions, the August 2018 CASS Freight Index™ and past, present and pending hurricane-related disruptions to the national economic activity and reporting.

The ***Reporting Detail*** provides coverage of August 2018 CPI and PPI inflation, Retail Sales and Industrial Production.

The ***Week, Month and Year Ahead*** provides background on recent *Commentaries* and discusses/previews pending economic releases.

Commentary No. 970 contents, including graphs and tables, are indexed and linked on following page.

Contents – Commentary No. 970 Major Sections and Graphs

OPENING COMMENTS

Financial-Market, Liquidity and Economic Troubles Loom

The Tipping Point – A Financial System Dangerously Out of Balance?

Economy Falters Amidst Liquidity Woes; Political Washington Approaches War-Zone Conditions; Fed Tightens Liquidity as the Markets Enter the Squirrelly Season; What Could Go Wrong Here? Good news this week was that headline September 2018 Consumer Confidence leap-frogged higher by 8.2% from two months back, to its highest level since 2000 (see *Graph OC-1*).

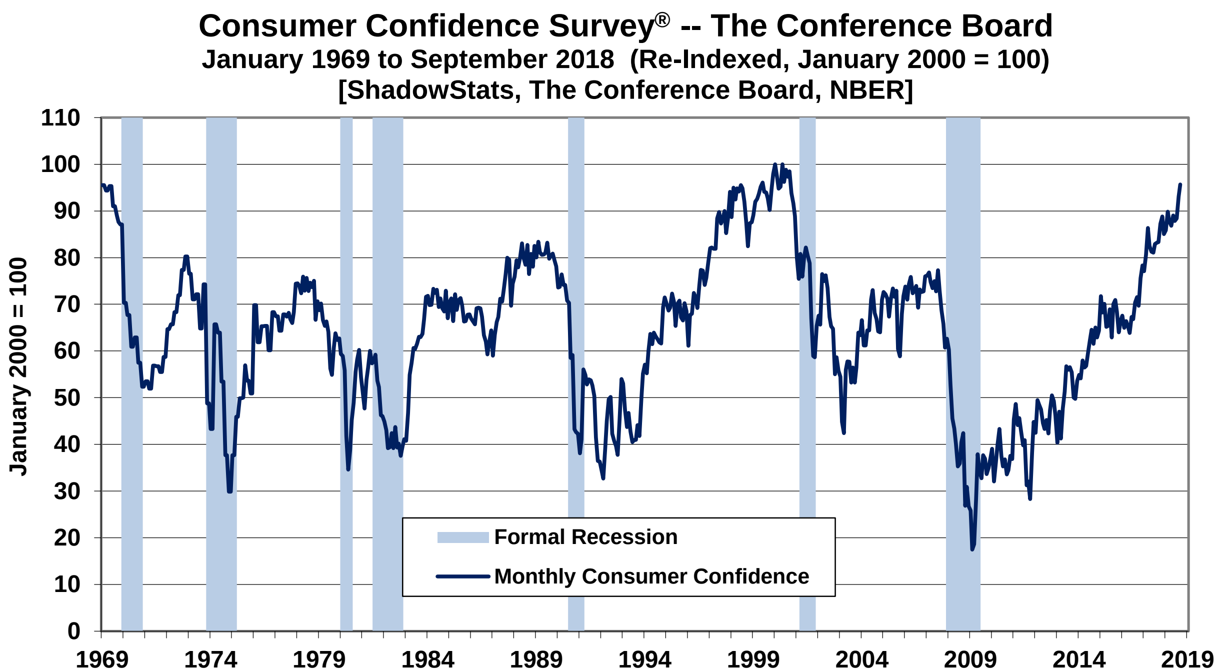
In September 1987, Consumer Confidence leap-frogged higher by 9.4% from two months back, to its highest level since 1972. That was in the context of the new Federal Reserve Chairman Alan Greenspan having had the Federal Reserve's Federal Market Open Committee (FOMC) hike the discount rate by 0.50% on September 6, 1987. The rate hike was designed, among other issues, to help prop the U.S. Dollar in the global currency markets.

With the October 1987 stock market rattled by the higher interest rates and continued weakness in the Dollar, then-U.S. Treasury Secretary James Baker commented that the United States no longer would support the Dollar versus the Deutschemark. That helped push U.S. stocks into their worst-ever one-day crash on October 19, 1987, with the Dow Jones Industrial Average dropping by 22.6% (-22.6%).

Today, September 26, 2018, the new Federal Reserve Chairman Jerome Powell had the FOMC hike the targeted federal funds rate by 0.25%, with an indication of another 0.25% hike looming in December 2018. Such was designed as part of the reversal of the extraordinary emergency, systemic-salvaging measures taken by the Federal Reserve under Federal Reserve Chairs Ben Bernanke and later Janet Yellen to prevent the collapse of the U.S. banking system, the U.S. dollar, the U.S. financial system and U.S. economy in 2007/2008 and after. Those emergency measures have kept the system together for a decade, but they have failed to return either the U.S. banking system or the U.S. economy to normal functioning.

Contrary to popular hype by some on Wall Street, higher interest rates generally are not a health tonic for the stock market. Discussed separately in *Commentary No. 967* of August 24th, the annual squirrely season is upon us, when squirrels begin gathering nuts for the Winter, and where some parallel vestigial instincts have been noted to have survived in humans, as noted in the stock markets of 1929 and 1987.

Graph OC-1: The Conference Board Consumer Confidence (1969-2018),
(To be reviewed in the pending Consumer Liquidity Watch No. 5)



Other issues do not appear to be in healthy balance. Noted in *Commentary No. 969-Extended* of September 16th, reporting of 2017 Real Median Annual Household Income and related measures of Income Dispersion showed income variance or dispersion to be higher than in 1987 and likely higher than in 1929. The greater the income inequality, the greater the risk for a systemic financial and/or economic meltdown/crash. Such crashes tend to redistribute wealth towards the center, which generally leads to a healthier, more-stable economy.

The current U.S. economy has begun to falter anew, discussed in today's *Reporting Detail* covering August Retail Sales (three months of contracting auto sales) and Industrial Production. Related weakness also is evident in the Housing Sector. This faltering reflects intensifying systemic- and consumer-liquidity stresses generated by the Federal Reserve's efforts to unwind the extraordinary liquidity measures it implemented to prevent a banking-system collapse, as discussed partially in the next section of these *Opening Comments.*

Special Commentary No. 968-Extended reviewed underlying economic reality, in the context of statistical deception used in boosting headline GDP activity, and against the background of extended analysis of the 2010 Comprehensive GDP Benchmarking.

Separately here, a note on the unusually negative, disruptive and distracting political turmoil in Washington, D.C. *Special Commentary No. 888* of May 22, 2017 discussed evolving political circumstances that could impact the markets and the economy. While President Trump does not appear to be in any real risk of Impeachment, the contravening political turmoil created by his opposition, just as easily can trigger loss of confidence in the government and the U.S. dollar, negatively exacerbating or triggering financial and economic panics. Watch for regular, fundamental selling pressures mounting against the U.S. Dollar.

My reading of current circumstance is that the financial markets already have moved beyond the tipping point, with high risk of a financial panic in the next month or two. As regularly discussed here, the U.S. Dollar and financial markets remain at extraordinarily-high risk of intense, panicked declines, now possible at any time. 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 during times of high inflation and currency debasement, and/or political- and financial-system upheaval.

All the above issues will be expanded upon and updated in the new *Hyperinflation* and *Consumer-Liquidity Watches* of the week ahead.

Nascent Recovery in Peril from FOMC Rate Hikes, Consumer Liquidity Squeeze

FOMC Hiked Rates Today, as Expected; Consumer- and Systemic-Liquidity Conditions Will Continue to Deteriorate, Likely Thwarting Any Nascent Economic Recovery. Current FOMC activity and today's rate hike will be reviewed and updated in the new *Hyperinflation* and *Consumer-Liquidity Watches* of the week ahead. *Graphs OC-2* to *OC-5* provide a sampling of some of the new material.

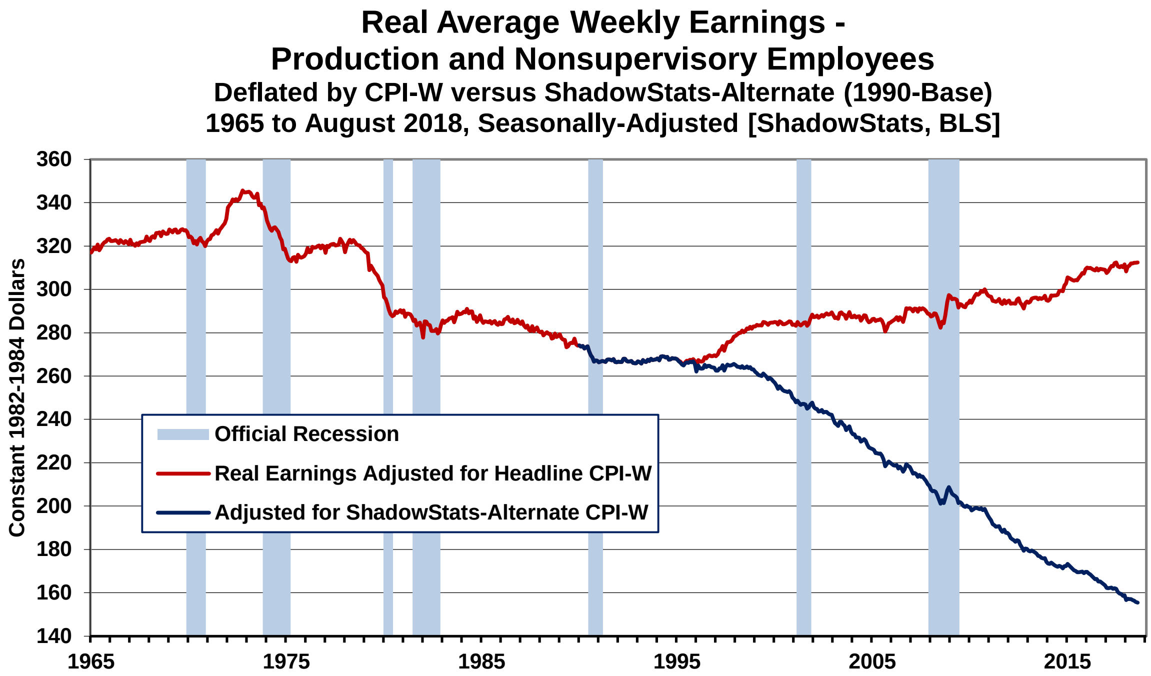
In the context of the FOMC continuing to tighten, and promising to tighten further in the quarters ahead, the Fed's actions will kill any nascent economic recovery, pushing headline economic activity into renewed economic contraction. Ultimately, this path should lead the Fed back into renewed quantitative easing, and perhaps into a perpetual economic morass, if not the eventual hyperinflation that likely looms in the not-so-distant future.

Graph OC-2 plots the estimates of Real Average Weekly Earnings to August 2018. There is no recovery there. *Graph OC-3* plots the latest estimate of Household Sector, real Credit Market Debt Outstanding (including home mortgages) from the just-published, second-quarter 2018 Flow-of-Funds accounts out of the Federal Reserve Board. Real debt outstanding remains 10.6% (-10.6%) shy of recovering its pre-recession peak.

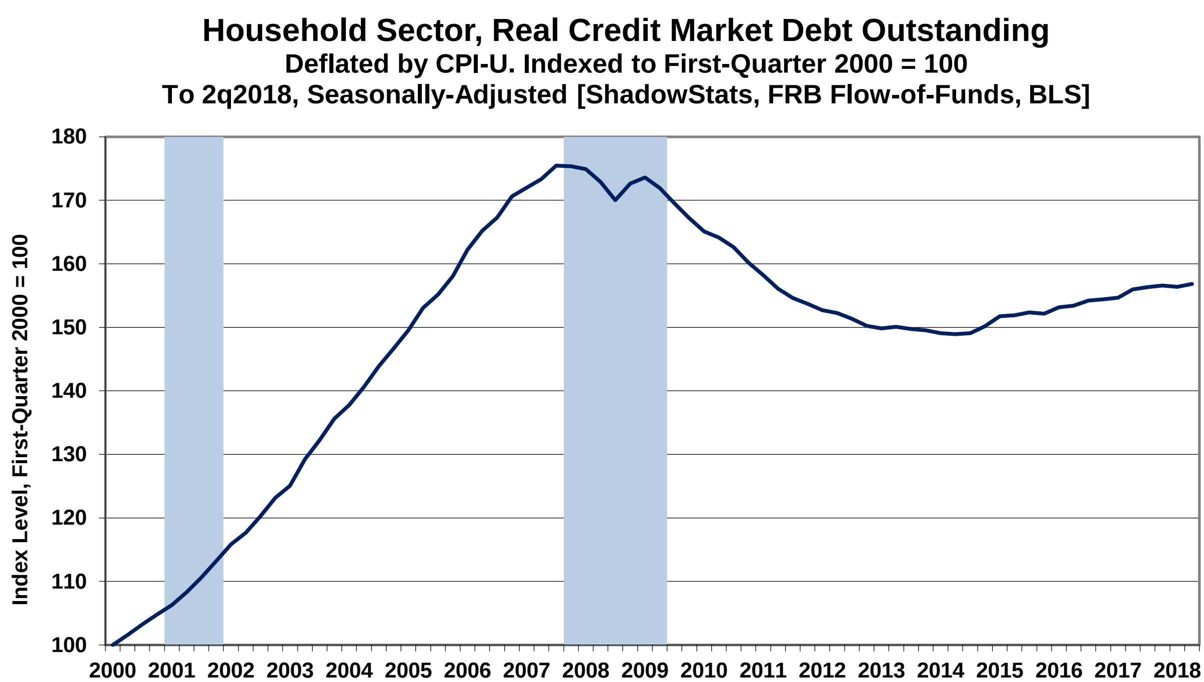
Graph OC-3 shows the regular ShadowStats calculations of year-to-year change in monthly real Consumer Credit Outstanding. Note the parallel annual changes within comparable periods of annual growth in real Consumer Credit, versus real M3 in *Graph OC-5*. As noted in the text surrounding the copy of *OC-5* on page 9, but for the 2017 hurricane-depressed annual gain in August 2018, the real annual growth in M3 would have generated a "hard" recession signal.

[Graphs OC-2 to OC-5 begin on the following page.]

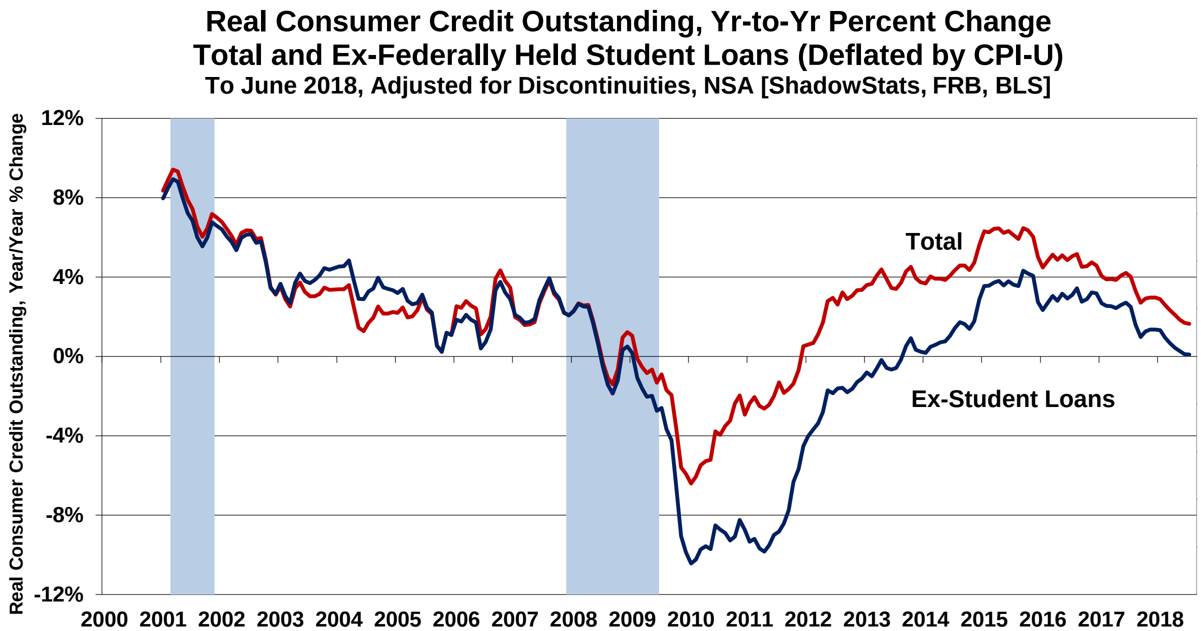
Graph OC-2: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date
(Same as Graph 4 in the Reporting Detail)



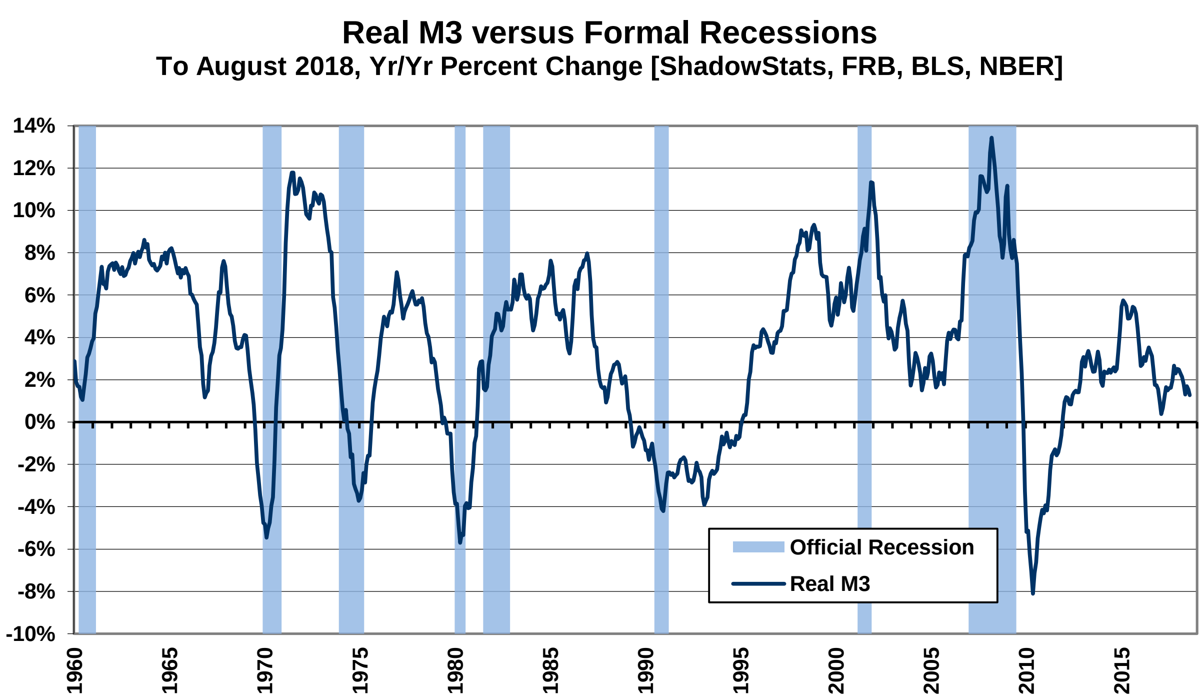
Graph OC-3: Household Sector, Real Credit Market Debt Outstanding (2000 through Second-Quarter 2018)
(To be reviewed in pending Consumer Liquidity Watch No. 5)



Graph OC-4: Consumer Credit Outstanding, Ex-Federally Held Student Loans, Yr-to-Yr Percent Change
(To be reviewed in the pending Consumer Liquidity Watch No. 5)



Graph OC-5: Real M3 Annual Growth versus Formal Recessions
(Same as Graph 5 in the Reporting Detail)



Manufacturing and the Cass Freight Index™ (August 2018)

August 2018 Freight Index Held Shy of Recovering Its Adjusted Pre-Recession Peak by a Narrowing 3.9% (-3.9%), in the Context of Rapidly Slowing Annual Growth. An independent, reliable private indicator of real-world economic activity and shifting business patterns, the August 2018 Cass Freight Index™ was published September 14th. Again, we thank Cass Information Systems for their permission to use the data.

Patterns Reflected in Other Key Economic Measures. Although uptrending based on its 12-month moving average, the unadjusted freight series continued to pull back sharply from its post-recession high, amidst a sharp slowing in year-to-year growth (see *Graphs OC-6* and *OC-8*). The improving smoothed series remained shy of full economic recovery, still shy of recovering its pre-recession peak activity by 3.9% (-3.9%). The headline detail here remains as published, not seasonally adjusted and not subject to annual benchmark revisions, unlike some of the purportedly better-quality government numbers, such as Industrial Production, as discussed shortly, which still are heavily modeled and gimmicked (see *Commentary No. 942-B* and *Commentary No. 950*). Similar patterns are seen in a variety of major economic measures, including the heavily upside biased headline GDP (see *Sections I* and *II* of *Special Commentary No. 968-Extended* of September 6th). Other series include the Manufacturing Sector of Industrial Production (see *Graphs OC-7* and *OC-9*) and U.S. Petroleum Consumption, Real Construction Spending and the Employment-Population Ratio (again see *No. 968-Extended*).

The August 2018 Cass Freight Index numbers continued in low-level economic non-expansion as otherwise reflected in some elements of broad economic and general business activity, yet they also showed a pattern of positive, uptrending headline activity. The pace of year-to-year growth had backed off to 6.0% in August 2018 (again *Graph OC-8*), from 10.6% in July 2018, versus 7.2% in June 2018, 11.9% in May 2018, all versus a near-term peak in January 2018 of 12.5%. The unadjusted monthly level of August activity (thin line in *Graph OC-6*) resumed its decline, where July activity had held close to June's level, which had backed off May's post-recession high, still holding below its pre-recession peak activity.

The 12-month trailing average of activity, however, did hit a new post-recession high, yet it remained meaningfully shy of recovering its pre-recession peak. Activity reflected in the 12-month trailing average—used to eliminate seasonality in the unadjusted series (see the *General Background to the Freight Index*)—remained in low-level, uptrending stagnation, down by 3.91% (-3.91%) from recovering its formal pre-recession high, down by 6.95% (-6.95%) from its precursor peak (see *Graph OC-6*).

For the twenty-first consecutive month, the twenty-second month in the last twenty-three, year-over-year change in the unadjusted monthly index was positive. Again, though, it fell back to 5.96% in August 2018 from 10.57% in July 2018 holding off its near-term peak activity of 12.54% in January 2018 (see *Graph OC-8*).

A consecutive string of nineteen months of annual contraction in the Freight Index began in March 2015. That was consistent with the "new" recession signal following the near-term Industrial Production peak in November 2014 (recovered anew in initial March 2018 reporting, lost again with the annual benchmark revisions, only to be regained once more with the headline April 2018 level see the *Reporting Detail*).

Comparative growth patterns of the Freight Index versus the never-recovered, dominant Manufacturing Sector of Industrial Production are shown in *Graphs OC-6* and *OC-7* as to level and in *Graphs OC-8* and *OC-9* as to year-to-year change. More-extensive comparisons with other meaningful indicators of U.S. economic activity, including the GDP, again, are found in *Sections I* and *II* of *Special Commentary No. 968-Extended*.

The continuing uptrend in the smoothed series, and the ongoing positive, albeit fluctuating annual growth in the Cass Index, indicate that the recession in freight activity likely has hit bottom. Yet, even with positive annual gain in 2017 and the first eight months of 2018, current patterns of smoothed levels of activity have yet to break out of the not-recovered pattern of the last ten-plus years, to enter a period of new economic expansion. Shown in *Graph OC-6*, uptrending monthly activity is not yet fully recovered.

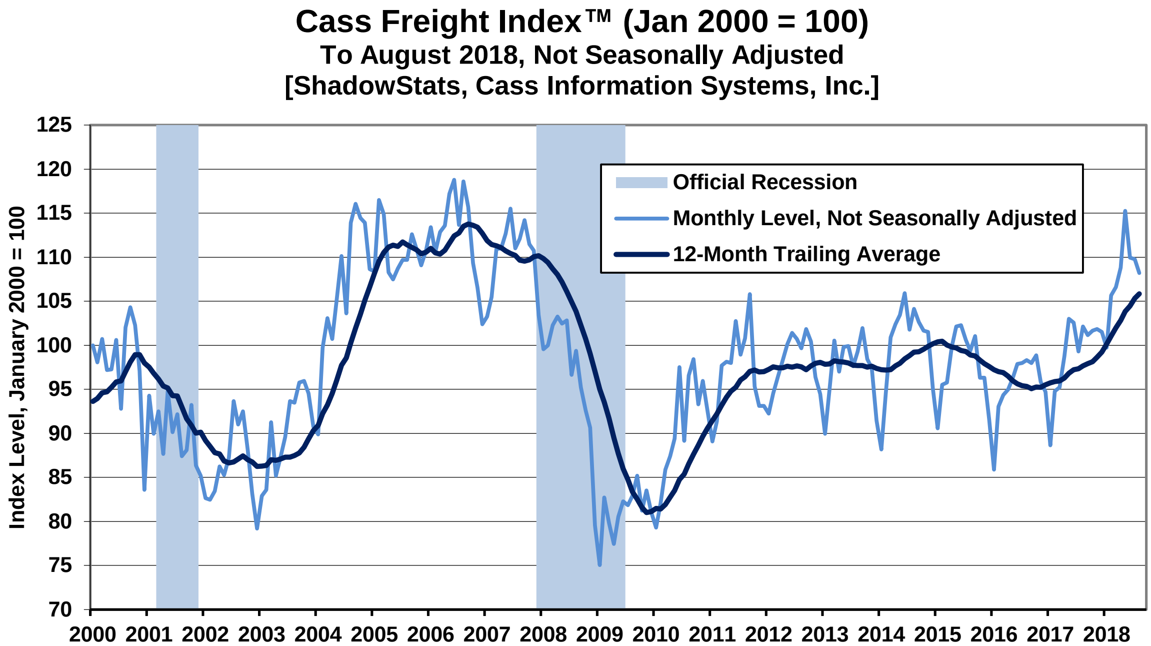
Early Recovery, But No Economic Expansion**.** When economic activity starts to recover, such happy growth traditionally is not clocked formally as new economic "Expansion," until the level of the series breaks above its pre-recession high. This is reviewed in *Commentary No. 875* and expanded upon in *Commentary No. 876*, on the nature of the business cycle.

Noted earlier, the ShadowStats smoothed (12-month trailing average) headline reading on the CASS Freight Index, through August 2018 (*Graph OC-6*) remained down by 6.95% (-6.95%) from "Recovering" its preliminary pre-recession peak of September 2006, down by 3.91% (-3.91%) from recovering its formal "Pre-Recession Peak" of December 2007 (Fourth-Quarter 2007). That also was the formal peak for the Industrial Production, Manufacturing and GDP series. While the "Recovery" receives the benefit of growth off low levels of activity—the recession "Trough"—the deficit in current activity versus the pre-recession peak has to be overcome, before formal, economic "Expansion" begins. Economic downturns eventually hit bottom. The official 2007 recession and related collapse in broad economic activity has been recognized formally from a peak in December 2007 to a trough in June 2009, which appears to be fairly consistent with a number of series, in terms of timing the trough.

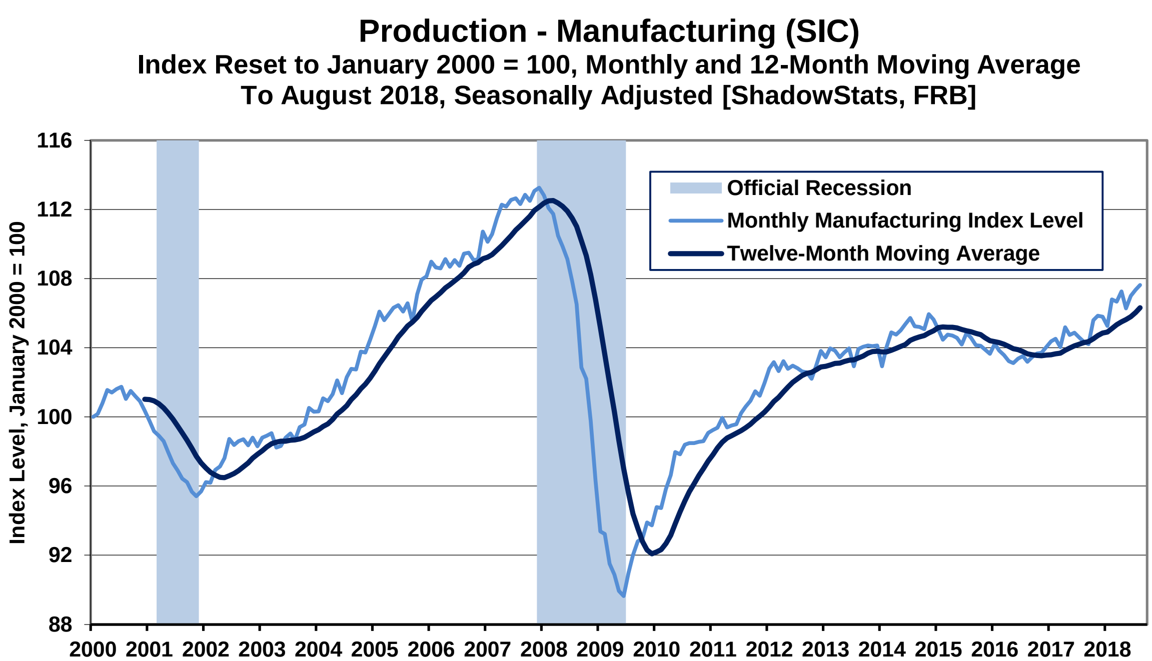
General Background to the Freight Index. [*This section largely is repeated from its prior version in Commentary No. 966*.] Beginning with *Commentary No. 782* (further information is available there), ShadowStats published the detail on the CASS Index, a measure of North American freight volume as calculated by, and used with the permission of Cass Information Systems, Inc. Freight activity is a basic, underlying indicator of commercial activity and the broad GDP. Of the combined U.S. and Canadian (North American) GDP in 2017, roughly 92% was attributable to the United States.

[Graphs OC-6 to OC-9 begin on the following page.]

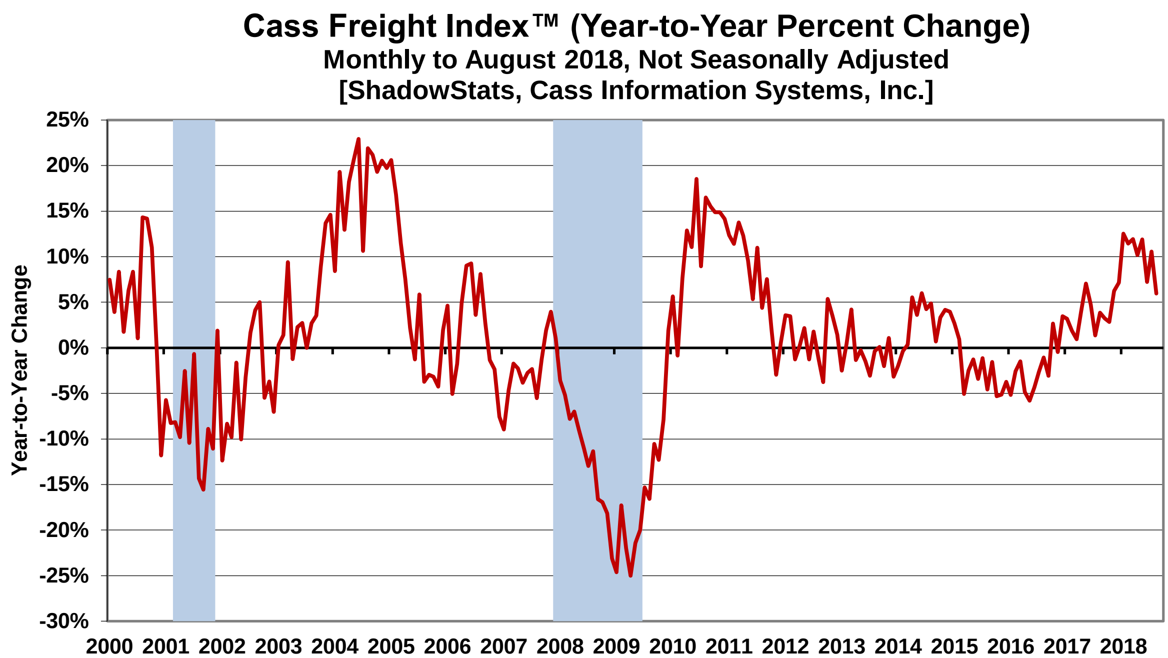
Graph OC-6: CASS Freight Index™ Moving-Average Level (2000 to August 2018)



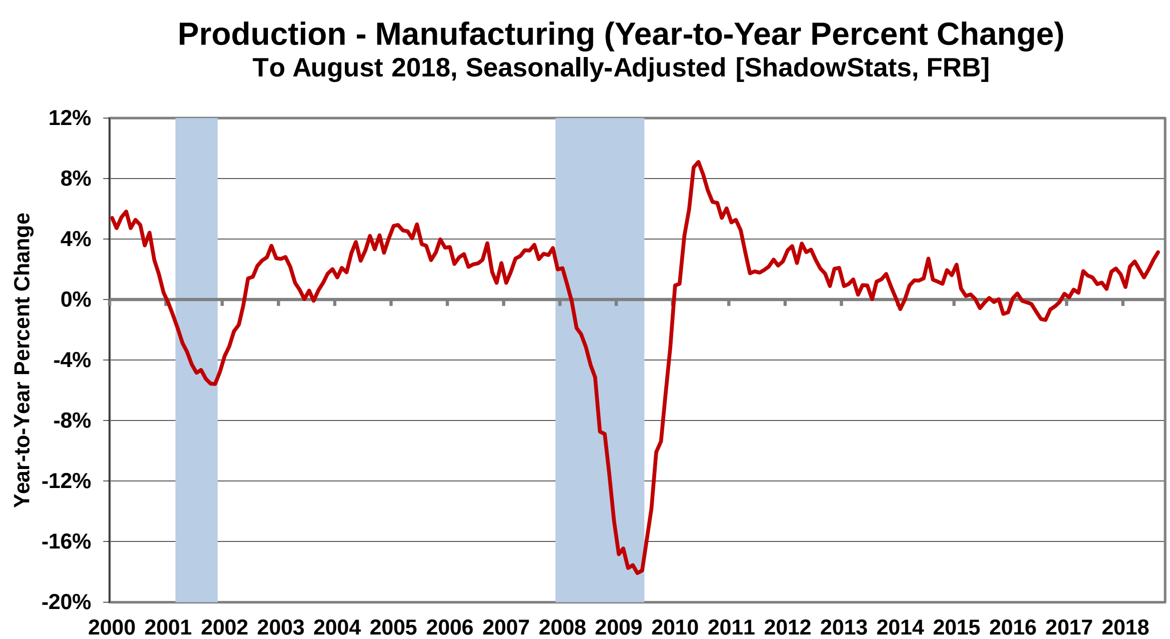
Graph OC-7: Industrial Production-Manufacturing, 12-Month Moving-Average Level (2000 to August 2018)



Graph OC-8: CASS Freight Index, Monthly Year-to-Year Percent Change (2000 to August 2018)



Graph OC-9: Manufacturing, Year-to-Year Percent Change (2000 to August 2018)
(Same as Graph 21 in the Reporting Detail)



Graph OC-6 reflects the monthly freight numbers updated through August 2018. While adjusted for factors such as days in a month, the headline monthly detail is not adjusted for broad seasonality patterns, such as retailers stocking for the holiday shopping season. Accordingly, ShadowStats plots the series using a trailing twelve-month average, which tends to neutralize regular seasonal patterns over the period of a year, along with the unadjusted monthly detail plotted in the background. ShadowStats also re-indexed the series to January 2000 = 100, consistent with other graphs used here, where the headline Cass Index plot is based on January 1990 = 100. The plot of the trailing twelve-month average of the freight index shows it hit a near-term peak in February 2015, consistent with the onset of what appears to have been a "new recession" in December 2014. It slowed through September 2016, then flattened out and turned back to the upside through the current August 2018 reading, its highest level of the post-recession period, although still shy of its pre-recession peak (again, see *Graph OC-6*).

The pattern here is broadly consistent with the Industrial Production series, although no signs of an aggregate economic contraction came out of the recent comprehensive annual benchmark revisions to the GDP (see *Special Commentary No. 968-Extended*), despite indications of double-dip recession in the Industrial Production benchmarking (see *Graph 12* in today's *Reporting Detail*).

Another approach to assessing not-seasonally-adjusted monthly detail is to look at year-to-year change by individual month, as plotted in *Graph OC-7*. The unadjusted monthly detail had been in continual year-to-year decline since March of 2015, down at an intensified annual rate of 3.05% (-3.05%) in September 2016. It rallied to an annual gain of 2.66% in October 2016, but fell back into year-to-year contraction of 0.05% (-0.05%) in November 2016, coming back to the plus-side by 3.46% in December 2016, eventually hitting a near-term peak of 12.54% in January 2018, with fluctuating activity down to the current 5.96% in August 2018. In combination, *Graphs OC-6* to *OC-9* remain consistent with a pattern of collapsing economic and business activity into 2009, with subsequent low-level, non-expanding, albeit currently uptrending stagnation.

Year-Ago and Current Hurricane Disruptions of Headline Economic Reporting

Beware of Data Distortions from Current and Year-Ago Hurricane Disruptions to Pending Monthly Employment and Unemployment Surveying as Well as Other Economic Reporting. Hurricanes Harvey and Irene dealt a devastating double blow to the U.S. mainland in terms of physical destruction and monetary losses/costs in August and September 2017. Such included distortions and disruptions to economic activity ranging from oil and gas production (and related spikes to gasoline prices and headline inflation), to massive property destruction, as well as to reporting disruptions of employment, unemployment and other labor-market details. In particular, labor-surveying distortions reflected inconsistent Bureau of Labor Statistics (BLS) methodologies, when Irene hit Florida during the BLS's September 2017 survey week for its monthly Household and Establishment (Payroll Employment) Surveys.

Where data distortions from the 2017-hurricane season and related recovery spending, had ongoing relative month-to-month and quarterly impact through headline first-quarter 2018 economic activity, a similar pattern already is in the works, into first-quarter 2019, thanks to the timing of Hurricane Florence's impact on the Carolinas and beyond. As with Irene in 2017, Florence hit hard in the week that included the 12th of September, where the 12th defines the week used for both the Household and Payroll Surveys in a given month.

The Payroll Employment Survey counts those individuals on payrolls, counting the number of jobs, not people, where a person who holds multiple jobs (including part-time and/or full-time) is counted as "employed" multiple times, once for each job. In the event such a person is out of work in the survey week, due to weather conditions (such as a hurricane), that individual is counted as not employed.

In contrast, the Household Survey counts a person as employed only once, irrespective of how many jobs that person actually holds. In the event a person is out of work in the survey week, due to weather (such as a hurricane), that individual is counted as employed.

The difference can be seen in the jobs or employment reporting for September 2017, which reflected the impact of Hurricane Irene, primarily in Florida. The initial headline reporting of the Payroll Survey for September 2017 showed a loss of 33,000 (-33,000) jobs in the month, while the Household Survey showed a gain of 906,000 employed. The unusually extreme and exaggerated monthly details were discussed in *Commentary No. 915* of October 6, 2017.

In the current circumstance, protracted evacuations and school closings from Virginia to the Carolinas will have had some disruptive effect in the regional and national September jobs and employment surveying, as well as disruptive impact on regional and national economic activity.

Going forward, unusual relative activity in pending September 2018 headline data, versus either August 2018 or disaster-distorted numbers from a year ago, will be highlighted in the *Week, Month and Year Ahead* section as the different headline numbers come due. Most of the involved annual numbers will show initial effects/distortions versus 2017 and from 2018 with headline September 2018 detail, beginning with the release of September 2018 employment and unemployment detail on October 5th.

The first major headline "distortion" from year-ago numbers is discussed in today's inflation-related *Reporting Detail*. Annual inflation rates in the headline August 2018 Consumer Price Index (CPI) and Producer Price Index (PPI) effectively were understated, distorted relative to the July 2018 annual numbers, due to the one-time and temporary headline spiking of gasoline prices and related CPI and PPI aggregates from the storm effects in August 2017, not otherwise reflected in the August 2018 activity. See the *Reporting Detail* for specifics.

[The Reporting Detail begins on the next page]

REPORTING DETAIL

Consumer Price Index (August 2018), Pending COLA and FOMC Machinations

August CPI-U Monthly Inflation Rose to 0.22% from 0.17%, but Unadjusted Annual Inflation Eased to 2.79% from 2.95%; Fed's Targeted 2.0% "Core" Eased to 2.20% from 2.35%. Headline consumer price inflation came in a bit below expectations in August 2018, reflecting a combination of some reversal to year ago comparisons of hurricane-spiked gasoline prices, as well as some easing in the annual "Core" inflation rate, beloved inflation benchmark of the Federal Reserve's Federal Open Market Committee (FOMC).

The FOMC hiked its targeted federal funds rates today (September 26th) by the 0.25% widely expected by the markets. The rate hike purportedly was put in place because the economy and labor conditions are so strong, with inflation near the Fed's target of 2%. While not explicitly stated in the FOMC announcement, raising interest rates usually slows economic activity. Implied here is that the Central Bank wants to cool an "overheating" economy (see the *Opening Comments*), as also reflected in the high level of near-target "core" inflation. The FOMC actions will be more fully explored in pending *Hyperinflation Watch No. 4* (*HW-4*).

Unadjusted, annual August 2018 CPI-U annual inflation dropped to 2.79%, where Annual CPI-U had jumped to 2.95% in July 2018, a 79-month high (highest since December 2011), while the August 2018 CPI-W dropped to 2.88%, from 3.16% in July 2018. Where the higher inflation levels in July took a heavy toll on functional consumer liquidity, particularly as the numbers played into knocking down the levels of real average weekly earnings. The Fed's FOMC could not care less, even though personal and systemic liquidity would benefit from a real liquidity infusion from the Fed, instead of what almost is a certain, intensified liquidity drain.

Hurricane-Generated Oil and Gasoline Price Jumps in August and September 2017 Are Distorting (Underestimating) Today's Effective Annual Headline Inflation Estimates. Discussed in the *Opening Comments*, Hurricane Irene threatened, and then hit hard, oil and gas production and distribution facilities in the Texas Gulf Coast region in late-August 2017. Oil and related gasoline prices spiked as the threat developed and then played through, hitting those energy-related facilities hard.

Seasonally-adjusted gasoline prices in the CPI-U declined month-to month by 1.48% (-1.48%) in July 2017, but jumped by 7.38% in August and then by an added 10.00% in September. Not seasonally adjusted gasoline prices were up year-to-year by 3.04% in July 2017, but that jumped to 10.36% in August 2017 and then to 19.36% in September 2017. One effect of that circumstance is that headline year-to-year CPI numbers for August and September 2018 have and will show weaker inflation growth than they would have otherwise, with today's prices being measured against irregularly bloated prices from last year's (so far) nonrecurring natural disaster.

Softening Headline Annual Inflation Should Be a Short-Lived Phenomenon; Implications for COLA. As the year-go hurricane-generated inflation distortions mellow, so too will the relative understatement of currently reported, headline unadjusted CPI-U inflation. Consider that net of the August/September 2017 hurricane-induced spikes in oil and gasoline prices:

- August 2018 CPI-U, not seasonally adjusted, annual inflation would have been about 3.0%, instead of the headline 2.7%.
- September 2018 CPI-U, not seasonally adjusted, annual inflation would have topped 3.0%, instead of coming in around what now is likely at about 2.6%.
- December 2018 CPI-U likely will be a headline 3.0% or higher, with much of the annual current distortions worked out of the system.
- The 2019 Social Security Cost of Living Adjustment (COLA), based on third-quarter 2018 CPI-W unadjusted annual change, likely will be closer to 2.8%/2.9%, instead of what would have been 2.9%/3.0%.
- The 2018 COLA based on third-quarter 2017 CPI-W unadjusted annual change was 2.0%, spiked some by the reverse-effect of the 2017 hurricane boosted CPI. COLA for 2017 (third-quarter 2016 base versus 2014, since 2015 was negative) was 0.3%.

FOMC Hiked Rates Again, Today (September 26th), Despite "Core" CPI Pullback. Last month, the FOMC's long-targeted, unadjusted annual "Core" inflation rose from 2.26% in June 2018, to a heavily publicized ***ten-year high*** of 2.35% in July 2018. Considering that the unadjusted "Core" rate had been at 2.33%, as recently as February 2016, that was not so remarkable. Nonetheless, such generated the Fed's orchestrated calls for the FOMC to hike the federal funds rate, so as to kill this "overheating" economic expansion. That broad nonsense was Fed/banking-system orchestrated, and indeed, they easily can destroy any nascent economy recovery from the economic collapse into 2009. There is no overheating economic expansion.

Consider now, however, that the August 2018 CPI-W annual inflation not only fell back below the ten-year "high" seen in July 2018, it was the lowest annual CPI-U inflation since April 2018, and lower than it was in February 2017. The "Core" inflation hype is just a canard, and always has been. Despite the pullback in the August 2018 "Core" CPI-U annual inflation rate, and today's rate hike, the FOMC appears ready to give the economy another quarter-percent economic depressant in December 2018.

Reviewed anew in today's *Opening Comments*, and as will be expanded upon in the updated *Hyperinflation Watch No. 4* (*HW-4*) and *Consumer Liquidity Watch No. 5* (*CLW-5*) of the week ahead, the Fed's tightening moves indeed are squeezing both systemic liquidity and consumer liquidity meaningfully, as intended by the U.S. Central Bank. Again, that directly threatens what appears to be something of a nascent economic recovery seen in number of reasonably good quality economic measures (see *Sections I* and *II* of *Special Commentary No. 968-Extended*).

The serious nature of the renewed economic crisis created by these gimmicked numbers and the Federal Reserve's inability to resolve fully or to exit from the 2008 banking crisis are discussed in *Hyperinflation Watch – No. 3*, and gain will be updated in *HW- 4*.

Underlying Common Experience Continues to Suggest Formal Understatement of Headline Inflation. Otherwise, in more-general terms, informal surveying by ShadowStats of consumer views, as to the credibility of headline inflation continues to suggest that most individuals believe headline consumer inflation consistently understates their real world inflation experience. The informal consensus is in the range of a 3% to 4% understatement of headline annual inflation against common experience. That is consistent with the ShadowStats Alternate CPI (versus 1990-based methodologies), and less severe than the 6% to 8% range suggested by the ShadowStats Alternate CPI (1980-based methodologies).

That latter measure is more accurate in terms of the meaningful methodological changes made to CPI reporting, beginning about 1980, which then began to exclude a component measure of the cost of buying a house. The revamped series shifted over to assessing housing costs as "homeowners equivalent rent," Those all were "guesstimations" by the BLS as to what homeowners would charge themselves to rent their owned properties. The inflation rate then was determined to be the amount of increase in the monthly rent that homeowners would charge themselves.

Where this was a completely rigged number, the BLS estimated it would have the net effect of reducing the headline annual CPI-U inflation rate by 1.4% (-1.4%) per year from what would have been reported as otherwise. Where that annual inflation-rate saving was cumulative, that one change knocked about 13.2% off the cumulative level of the headline CPI-U in the first decade. These issues are discussed in the *Alternate Consumer Inflation Measures* section.

Specifically, with the headline unadjusted annual August 2018 CPI-U inflation up by 2.7%, year-to-year inflation is not and has not been quite as low as indicated, when considered in the context of traditional CPI reporting and common experience. Moving on top of the unadjusted annual changes to the CPI-U, the ShadowStats-Alternate Inflation Measures showed year-to-year inflation in August 2018 at 6.3%, based on pre-Greenspan-gimmicked 1990 methodologies, and at 10.6%, based on 1980 methodologies. Detailed in *Public Commentary on Inflation Measurement*, inflation based on common experience is much worse than the headlines, both as experienced by individual consumers, as well the business community.

Longer-Range Inflation Outlook. Despite U.S. dollar strength of recent years, and what had been accelerating, then faltering dollar strength, subsequent to the post-2016 election euphoria, the dollar recently had seen fairly regular and intensifying selling pressure, then a reversal to the upside, and ongoing mixed pressures, currently somewhat on the downside. Much of what happens here has reflected market expectations of continuing FOMC rate hikes in the United States, and recent indications by the European Central Bank (ECB) that it may hold off another year or so to raise rates (see *Hyperinflation Watch – No. 3* and the imminent update to same in *HW-4*). Separately there have been mixed pressures, given shifting global and domestic political tensions.

Nonetheless, a tremendous threat to the dollar and systemic U.S. liquidity and market stability continues, tied to the U.S. Federal Reserve's fundamental inability to resolve the 2008 financial collapse, other than having bought finite time with emergency, stopgap measures and extraordinary jawboning and financial-market interventions. The proximal trigger here for potential shifts in FOMC policies likely remains tied to "unexpected" economic weakness. In a related matter, also with potential for triggering crisis-level disruptions in the global currency and financial markets are rapidly deteriorating, long-term U.S. sovereign-solvency issues.

The recent and current FOMC tightenings have been despite continued, lack of full-economic recovery from the 2008 collapse. That is both in terms of the banking system, where real consumer credit outstanding still has not expanded beyond pre-recession levels, and confirmed by the just-published, second-quarter 2018 Flow-of-Funds Analysis out of the Federal Reserve (see *Graphs OC-3* and *OC-4* in the *Opening Comments* and pending *Consumer Liquidity Watch No. 5*). These issues also are evident in terms of industries such as manufacturing and construction, which have yet to expand beyond pre-2007 recession levels.

How can the FOMC boast an expanding economy, when Main Street U.S.A. broadly still is not seeing it, and where Income Variance, as recently published by the Commerce Department (see *Commentary No. 969-Extended*) is at extremes rarely seen except before the greatest financial market calamities.

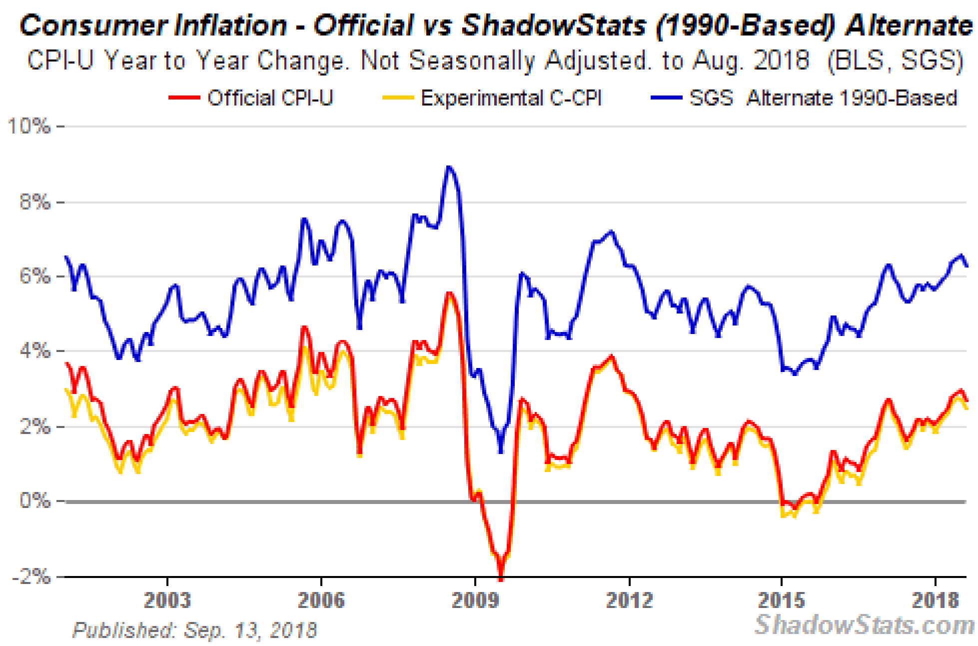
Headline series such as retail sales and industrial production are not booming month-to-month, as discussed later in this section. These indicators remain in the realm of "adverse" economic circumstances once feared by former Fed Chair Janet Yellen. Weaker economic circumstances were masked, temporarily in late 2017 by near-term disaster-recovery boosts to economic activity that now have unwound for a number of series.

Despite the headline booming second-quarter 2018 GDP, the financial markets, particularly the global currency markets versus the U.S. dollar, should begin to pick up on renewed faltering of U.S. basic and broad economic activity and on intensifying long-range U.S. Treasury solvency concerns. Fed Chairman Powell's initial response to those unfolding adverse circumstances should be forced within the next couple of months.

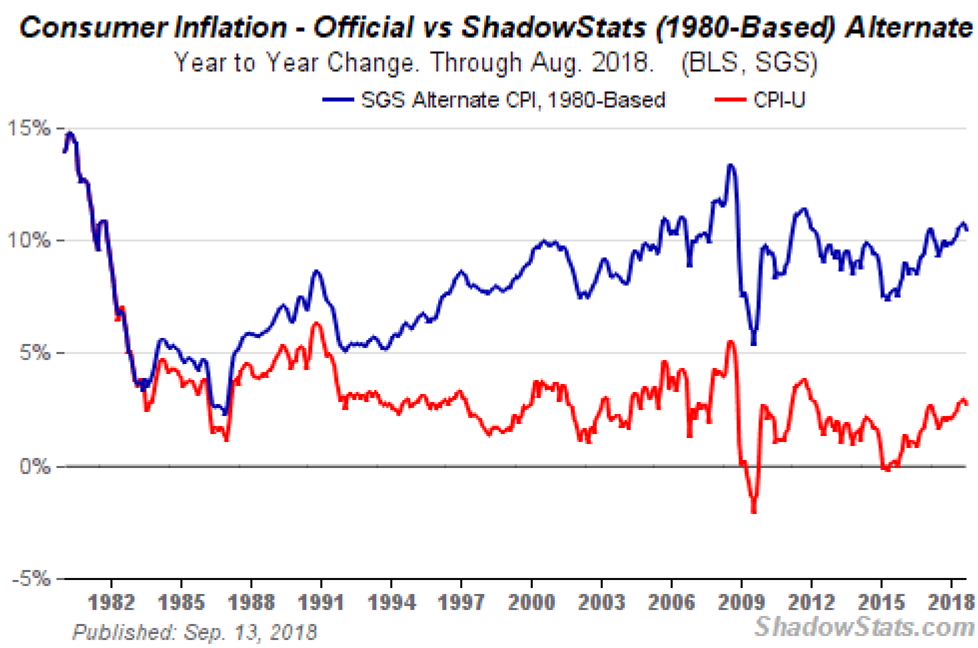
Out of necessity, the U.S. central bank has been forced to and continues to prop domestic banking-system liquidity against an ongoing gale of renewed, economically driven, banking-system solvency and liquidity issues. Those pressures were masked and then intensified by recent natural disasters, rapidly intensifying political discord in Washington and mounting global political instabilities (see the *Opening Comments*). Again, despite strong speculation and protestations to the contrary and promised continued tightening in 2018, the FOMC likely still will end up renewing/expanding quantitative easing well within the twelve months ahead.

Compounding the high-risk of an increasing near-term run on the U.S. dollar remains what should be mounting recognition in global markets of the Fed's conundrum, again, particularly amidst mounting concerns as to U.S. fiscal stability. The Federal Reserve and other central banks still have no effective idea as to how to boost current economic activity, how to stabilize global banking-system solvency, or otherwise how to slog their way out of a self-generated quagmire. That circumstance only can be exacerbated by intensifying economic and political uncertainties (again, see *Hyperinflation Watch – No. 3* and pending update, *Special Commentary No. 888* and *Special Commentary No. 935*).

Graph 1: Comparative Headline Year-to-Year Change, CPI-U vs. ShadowStats 1990-Based Alternate



Graph 2: Comparative Headline Year-to-Year Change, CPI-U vs. ShadowStats 1980-Based Alternate



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Notes on Different Measures of the Consumer Price Index

The Consumer Price Index (CPI) is the broadest inflation measure published by the U.S. Government, through the Bureau of Labor Statistics (BLS), Department of Labor:

*The **CPI-U (Consumer Price Index for All Urban Consumers)** is the monthly headline inflation number (seasonally adjusted) and is the broadest in its coverage, representing the buying patterns of all urban consumers. Its standard measure is not seasonally-adjusted, and it never is revised on that basis except for outright errors.*

*The **CPI-W (CPI for Urban Wage Earners and Clerical Workers**) covers the more-narrow universe of urban wage earners and clerical workers and is used in determining cost of living adjustments in government programs such as Social Security. Otherwise, its background is the same as the CPI-U.*

*The **C-CPI-U (Chain-Weighted CPI-U)** was an experimental measure—now set to go active, formally, with pending 2017 Tax Reform (see the Opening Comments)—where the weighting of components is fully substitution based. It generally shows lower annual inflation rate than the CPI-U and CPI-W. The latter two measures once had fixed weightings—so as to measure the cost of living of maintaining a constant standard of living—but now are quasi-substitution-based. Since it is fully substitution based, the series tends to reflect lower inflation than the other CPI measures. Accordingly, the C-CPI-U is the "new inflation" measure being proffered by Congress and the White House as a tool for reducing Social Security cost-of-living adjustments by stealth. Moving to accommodate the Congress, the BLS introduced changes to the C-CPI-U estimation process with the February 26, 2015 reporting of January 2015 inflation, aimed at finalizing the C-CPI-U estimates on a more-timely basis, and enhancing its ability to produce lower headline inflation than the traditional CPI-U.*

*The **ShadowStats Alternative CPI-U Measures** are attempts at adjusting reported CPI-U inflation for the impact of methodological change of recent decades designed to move the concept of the CPI away from being a measure of the cost of living needed to maintain a constant standard of living. There are two measures, where the first is based on reporting methodologies in place as of 1980, and the second is based on reporting methodologies in place as of 1990.*

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CPI-U. The Bureau of Labor Statistics (BLS) reported September 13th that the headline, seasonally-adjusted August 2018 CPI-U inflation increased month-to-month by 0.2% [up by 0.22% at the second decimal point], having gained 0.2% [0.17%] in July, 0.1% [up 0.13%] in June, 0.2% [0.21%] in May, 0.2% [0.22%] in April, declined in March by 0.1% (-0.1%) [0.06% (-0.06%)], having gained 0.2% [0.15%] in February, 0.5% [0.54%] in January, 0.2% [0.20%] in December 2017, 0.3% [0.34%] in November, 0.1% [0.08%] in October, 0.5% [0.46%] in September and 0.4% [0.40%] in August.

Unadjusted, monthly August 2018 CPI-U gained by 0.06%, having gained 0.01% in July, 0.16% in June, 0.42% in May, 0.40% in April, 0.23% in March, 0.45% in February, 0.54% in January, having declined 0.06% (-0.06%) in December 2017, having been unchanged at 0.00% in November, having declined in October by 0.06% (-0.06%), gained by 0.53% in September and 0.30% in August.

Major CPI-U Groups. The somewhat-firmer August 2018 CPI-U month-to-month inflation reflected a monthly jump in Energy costs, along with some softening of Food prices and "Core" inflation. By the numbers, the August 2018 CPI-U seasonally-adjusted monthly inflation gain of 0.22% [up by 0.06% on an unadjusted basis] was against an adjusted monthly gain of 0.17% [up by 0.01% unadjusted].

That encompassed a "Core" (ex-food and energy) August month-to-month inflation rate of 0.08% [up by 0.06% unadjusted], previously up by an adjusted 0.24% [up by 0.07% unadjusted].

Month-to-month Food inflation was 0.09% [up by an unadjusted 0.13%] in August, previously up by an adjusted 0.14% [0.20% unadjusted] in July.

Despite distortions in annual comparisons, Energy sector inflation surged by an adjusted 1.88% in August 2018, down by 0.07% (-0.07%) unadjusted. Previously, July monthly was down by 0.50% (-0.50%), adjusted, down by 0.89% (-0.89%) unadjusted. Related gasoline costs rose by an adjusted 3.01% in the month, down by 0.34% (-0.34%) unadjusted, where July gasoline had declined in the month by an adjusted 0.62% (-0.62%), by 1.43% (-1.43%) unadjusted.

Holding with FOMC expectations, unadjusted annual August 2018 "Core" CPI-U topped the targeted 2.0% annual inflation rate for the sixth consecutive month, although it eased back to 2.2% in August 2018, from 2.4% in July 2018. Such was against annual inflation of 2.3% in June 2018, 2.2% in May 2018 and 2.1% in April and March, where the March 2018 annual core inflation had broken to 2.1%, above the Fed's announced 2.0% target, for the first time since February 2017. As of February 2018, the "Core" rate had held range-bound for eleven straight months (since April 2017) at 1.8% +/- 0.1%. At the second decimal point, "Core" inflation showed an unadjusted year-to-year inflation rate of 2.20% in August 2018, versus 2.35% in July 2018, 2.26% in June 2018, 2.24% in May 2018, 2.14% in April 2018 and 2.12% in March 2018, 1.85% in February 2018 and 1.82% in January 2018.

Year-to-Year CPI-U. Not seasonally adjusted, year-to-year inflation for the August 2018 CPI-U increased by 2.7% [2.70% at the second decimal point (see the opening discussion in the CPI section on year-ago hurricane disruptions)]. That followed gains of 2.9% [2.95%] in July 2018, 2.9% [2.87%] in June 2018, 2.8% [2.80%] in May 2018, 2.5% [2.46%] in April 2018, 2.4% [2.36%] in March 2018, 2.2% [2.21%] in February 2018, 2.1% and [2.07%] in January 2018. Annual inflation of 2.1% [2.11%] in December 2017 followed 2.2% [2.20%] in November 2017, 2.0% [2.04%] in October 2017, 2.2% [2.23%] in September 2017 and 1.9% [1.94%] in August 2017.

Year-to-year, CPI-U inflation would increase or decrease in next month's September 2018 reporting, dependent on the seasonally-adjusted, month-to-month change, versus the adjusted, headline monthly gain of 0.46% in the September 2017 CPI-U. The adjusted change is used here, since that is how consensus expectations are expressed. To approximate the annual unadjusted inflation rate for September 2018, the difference in September's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the unadjusted August 2018 annual inflation rate of 2.70%. Given an early guess of a seasonally-adjusted monthly change of 0.4% in the September 2018 CPI-U, that would leave the annual CPI-U inflation rate for September 2018 around 2.6% plus-or-minus (still depressed by 2017 hurricane impact).

Given the year-ago price distortions in gasoline, and barring extreme gasoline-price gyrations in the next several months, unadjusted annual CPI-U inflation should be jumping back to around 3.0% by the November/December 2018 timeframe.

Quarterly CPI-U. On a seasonally-adjusted annualized quarter-to-quarter basis, CPI-U rose by 1.66% in second-quarter 2018, having gained 3.51% in first-quarter 2018, 3.31% in fourth-quarter 2017, 2.13% in third-quarter 2017, 0.10% in second-quarter 2017 and 2.96% in first-quarter 2017.

On an unadjusted, year-to-year basis, headline annual inflation by quarter was up by 2.71% in second quarter 2018, versus 2.21% in first-quarter 2018, 2.12% in fourth-quarter 2017, 1.97% in third-quarter 2017, 1.90% in second-quarter 2017 and 2.54% in first-quarter 2017.

Annual Average CPI-U. The unadjusted annual average CPI-U inflation rate was 2.13% in 2017, versus 1.26% in 2016 and 0.12% in 2015.

CPI-W. The August 2018 seasonally-adjusted, headline CPI-W, which is a narrower series than the CPI-U and traditionally has had greater weighting for gasoline than the CPI-U, rose month-to-month by 0.27%, following monthly gains of 0.15% in July, 0.14% in June, 0.23% in May and 0.26% in April, a decline of 0.16% (-0.16%) in March, gains of 0.11% in February, 0.62% in January, 0.19% in December 2017, 0.43% in November, 0.05% in October, 0.55% in September and 0.49% in August and 0.06%.

On an unadjusted basis, year-to-year CPI-W gained by 2.88% in August 2018 [again see the open discussion of this CPI section], versus 3.16% in July 2018, 3.09% in June 2018, 3.00% in May 2018, 2.59% in April 2018, 2.44% in March 2018, 2.32% in February 2018, 2.14% in January 2018, 2.18% in December 2017, 2.32% in November 2017, 2.05% in October 2017, 2.31% in September 2017 and 1.93% in August 2017.

Quarterly CPI-W. On an annualized quarter-to-quarter basis, seasonally-adjusted CPI-W rose by 1.57%, in second-quarter 2018, versus 3.70% in first-quarter 2018, 3.75% in fourth-quarter 2017, 2.26% in third-quarter 2017, having declined by 0.26% (-0.26%) in second-quarter 2017 and having gained by 3.04% in first-quarter 2017.

On an unadjusted year-to-year basis, annual inflation by quarter rose by 2.89% in second-quarter 2018, versus 2.30% in first-quarter 2018, 2.18% in fourth-quarter 2017, 1.96% in third-quarter 2017, 1.80% in second-quarter 2017 and 2.56% in first-quarter 2017.

Annual CPI-W. The unadjusted annual average CPI-W inflation rate was 2.13% in 2017, versus an average gain of 0.98% in 2016 and an average contraction of 0.41% (-0.41%) in 2015.

Chained-CPI-U. The headline C-CPI-U is not seasonally adjusted, and standardly is revised quarterly for the prior year, as seen in last month's July 2018 reporting, where year-to-year inflation rates revised lower by 0.175% (-0.175%) for each month back through September 2017. There were no further revisions in the August 2018 reporting.

The unadjusted annual inflation rate for the C-CPI-U in August 2018 was 2.48%, versus 2.71% in July 2018, 2.54% in July 2018, 2.44% in May 2018, 2.13% in April 2018, 2.01% in March 2018, 1.82% in February 2018, 1.64% in January 2018, 1.71% in December 2017, 1.79% in November 2017, 1.58% in

October 2017, 1.86% in September 2017 and 1.53% in August 2017. This ongoing accounting fraud was set up during the Clinton Administration and the Congress of the time, along with the support of the Greenspan Federal Reserve, with the intent of cheating Social Security recipients on their annual Cost of Living Adjustments (COLA), as well as artificially boosting taxpayers into higher tax brackets.

Through multiple downside quarterly revisions, the level of the headline C-CPI-U Index has been reduced by 0.35% from its original level. These clearly are plug numbers, not actual revisions to underlying calculations with better numbers. While these bogus numbers indeed now are boosting taxpayers artificially into higher tax brackets, the Congressional miscreants have not had the courage, yet, to debase further the COLA for Social Security, although the C-CPI-U initially was designed specifically for that purpose. Give them time. Other gimmicks, however, have been used in the interim.

Quarterly C-CPI-U, Year-to-Year. On an unadjusted, year-to-year basis, annual inflation by quarter was up by 2.37% in second-quarter 2018, 1.82% in first-quarter 2018, 1.69% in fourth-quarter 2017, 1.56% in third-quarter 2017, 1.50% in second-quarter 2017 and 2.30% in first-quarter 2017.

Annual Average C-CPI-U. The annual average C-CPI-U inflation rate was a revised 1.76% in 2017, versus 0.93% in 2016 and contraction of 0.12% (-0.12%) in 2015.

See the *Opening Comments* of *Commentary No. 945* and *Commentary No. 920* as to the impact of the adoption of this measure and its costs to the tax-paying public in the recent overhaul of federal income taxes. Also, see discussions in the earlier *Commentary No. 721* and in the opening notes in the *CPI Section* of *Commentary No. 699* as to the most-recent changes in the series. More-frequent revisions and earlier finalization of monthly detail broadly have been designed to groom the C-CPI-U series as the new Cost of Living Adjustment (COLA) index of choice for the increasingly budget-deficit-strapped federal government, as discussed in the *Public Commentary on Inflation Measurement*.

Caution: Artificially-low inflation numbers estimated by the U.S. Government and used in fields ranging from Social Security COLAs (see the 2017 CPI-W estimate discussion in *Commentary No. 841*) to determining income-tax brackets, have been redesigned in recent decades specifically to help reduce the federal deficit. They are harmfully misleading to anyone using a government CPI estimate as a meaningful cost-of-living measure for guidance on income or investment purposes.

Alternate Consumer Inflation Measures. The ShadowStats-Alternate Consumer Inflation Measures are constructed on top of the unadjusted CPI-U series. Adjusted to 1990 methodologies—the ShadowStats-Alternate Consumer Inflation Measure (1990-Base)—year-to-year annual inflation was roughly 6.3% in August 2018, versus 6.5% in July 2018, 6.4% in June, 6.4% in May, 6.0% in April 5.9% in March, 5.8% in February, 5.6% in January, 5.7% in December 2017, 5.8% in November, 5.6% in October, 5.8% in September, 5.5% in August, 5.3% in July, 5.2% in June, 5.5% in May, 5.8% in April, 6.0% in March, 6.3% in February and 6.1% in January.

The August 2018 ShadowStats-Alternate Consumer Inflation Measure (1980-Base), which reverses gimmicked changes to official CPI reporting methodologies back to 1980, was at about 10.5% (10.48%) at the second decimal point) in August 2018, versus 10.8% (10.75%) in July 2018, 10.7% (10.67%) in June 2018, 10.6% (10.59%) in May 2018, 10.2% (10.23%) in April 2018, 10.1% (10.12%) in March 2018, 10.0% (9.96%) in February 2018, 9.8% (9.81%) in January 2018, 9.8% (9.85%) in December 2017, 9.9% (9.95%) in November 2017, 9.8% (9.78%) in October 2017, 10.0% (9.98%) in September 2017, 9.7% (9.67%) in August 2017, 9.4% (9.44%) in July 2017, 9.3% (9.34%) in June 2017, 9.6% (9.60%) in May 2017, 10.0% (9.95%) in April 2017, 10.1% (10.14%) in March 2017, 10.5% (10.53%) in February 2017 and 10.3% (10.27%) in January 2017. Historical monthly detail and an inflation calculator will be found in the CPI section of the Alternate Data tab of the ShadowStats home page: www.ShadowStats.com.

Note: The ShadowStats-Alternate Consumer Inflation Measures largely have been reverse-engineered from BLS estimates of the anticipated impact on annual CPI inflation from various changes made to CPI reporting methodology since the early 1980s, as also incorporated in the CPI-U-RS series. That series provides an official estimate of historical inflation, assuming that all current methodologies were in place going back in time. The changes reflected there are parallel with and of the same magnitude of change as estimated by the BLS, when a given methodology was changed.

The ShadowStats estimates are adjusted on an additive basis for the cumulative impact on the annual inflation rate from the various BLS changes in methodology (reversing the net aggregate inflation reductions by the BLS). The series are adjusted by ShadowStats for those aggregate changes, but the series otherwise are not recalculated.

Over the decades, the BLS has altered the meaning of the CPI from being a measure of the cost of living needed to maintain a constant standard of living, to something that neither reflects the constant-standard-of-living concept nor measures adequately what most consumers view as out-of-pocket expenditures. Roughly five percentage points of the additive ShadowStats adjustment since 1980 reflect the BLS's formal estimate of the annual impact of methodological changes; roughly, two percentage points reflect changes by the BLS, where ShadowStats has estimated the impact not otherwise published by the BLS. For example, the BLS does not consider more-frequent weightings of the CPI series or shifting the nature of retail outlets to be changes in methodology. Yet those changes have had the effect of reducing headline inflation from what it would have been otherwise (see the Public Commentary on Inflation Measurement *and the discussion prior* Commentary No. 969-Extended *for further details).*

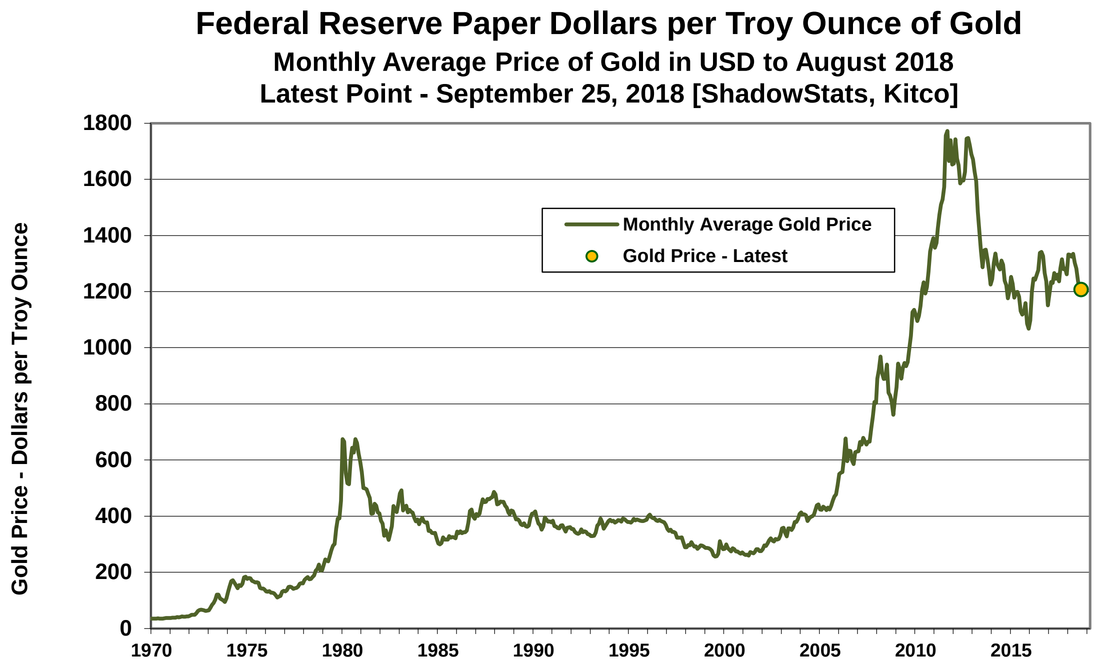
Gold and Silver Historic High Prices Adjusted for August 2018 CPI-U/ShadowStats Inflation

CPI-U: GOLD at $2,755 per Troy Ounce, SILVER at $160 per Troy Ounce
ShadowStats: GOLD at $16,022 per Troy Ounce, SILVER at $932 per Troy Ounce

Despite the September 5, 2011 historic-high gold price of $1,895.00 per troy ounce (London afternoon fix), and despite the multi-decade-high silver price of $48.70 per troy ounce (London fix of April 28, 2011), gold and silver prices have yet to re-hit their 1980 historic levels, adjusted for inflation. The earlier all-time high of $850.00 (London afternoon fix, per Kitco.com) for gold on January 21, 1980 would be $2,755 per troy ounce, based on August 2018 CPI-U-adjusted dollars, and $16,022 per troy ounce, based on August 2018 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (all series here are not seasonally adjusted).

In like manner, the all-time high nominal price for silver in January 1980 of $49.45 per troy ounce (London afternoon fix, per silverinstitute.org)—although approached in 2011—still has not been hit since 1980, including in terms of inflation-adjusted dollars. Based on August 2018 CPI-U inflation, the 1980 silver-price peak would be $160 per troy ounce and would be $932 per troy ounce in terms of the August 2018 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (again, all series not seasonally adjusted).

Graph 3: Monthly Average Gold Price in Dollars (Federal Reserve Notes)



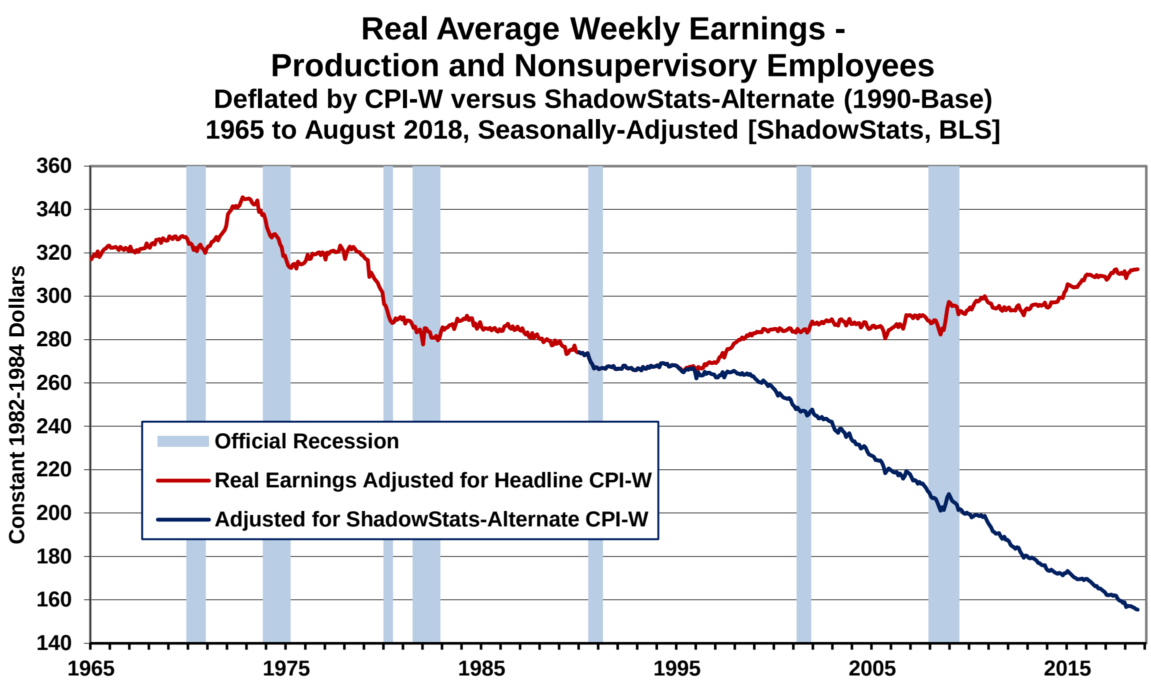
Graph 3 shows the regular gold plot published with monthly CPI detail, with extended graphs in the pending update to *Hyperinflation Watch – No. 3* (what will be *Hyperinflation Watch – No. 4* [*HW-4*]). As economic expectations increasingly take some hit in the weeks and months ahead, the dollar should continue to back off its recent strength, losing ground against both gold and the stronger currencies such as the Swiss France (CHF). Recent, relative short-term U.S. dollar strength has proved some fleeting (again see the pending *HW-4* update, in what fairly quickly could become a highly inflationary circumstance for those living in a U.S. dollar-denominated world.

Shown in *Table 1* on page 47 of *No. 859 Special Commentary*, and in *Table INFLATION-1* on page 46 of *Special Commentary No. 935*, over the decades, the increases in gold and silver prices have compensated for more than the loss of the purchasing power of the U.S. dollar as reflected by CPI inflation. The precious metals also (particularly gold in the last year) effectively have come close to fully compensating for the loss of purchasing power of the dollar based on the ShadowStats-Alternate Consumer Price Measure (1980-Methodologies Base).

Real Average Weekly Earnings—August 2018—Monthly Growth in Both the "All Employees" and "Production and Nonsupervisory Employees" Categories Remained Heavily Impaired. Estimates of August 2018 real average weekly earnings were published along with the headline CPI-W and CPI-U on September 13th. This series will be updated in the pending *Consumer Liquidity Watch – No. 5* (*CLW-5*). Consistent with prior data reviewed in *Consumer Liquidity Watch – No. 4*, real month-to-month changes were minimal, real annual growth was spiked by year-ago hurricane distortions that also depressed current, annual CPI inflation, discussed earlier.

Graph 4 of the Production and Nonsupervisory Employee series shows 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 headline 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 4: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date
(Same as Graph OC-3 in the Opening Comments)



Production and Nonsupervisory Employees Detail (Plotted in *Graph 4*). In the production and nonsupervisory employees category (deflated by the CPI-W)—the only series for which there is a meaningful history, back to 1964, the regularly-volatile, real average weekly earnings in August 2018 gained just 0.04% (that rounds to 0.0% at the headline first decimal point) month-to-month, seasonally adjusted, having eased by 0.01% (-0.01%) in July.

Year-to-year earnings gained by 0.25% (rounds to 0.2% at the first decimal point), reflecting the effects of a year-go, hurricane-induced spike to CPI-W price levels, which artificially suppressed the respective unadjusted annual inflation for August 2018 (exaggerated annual real gain) versus August 2017 by enough to have shown contracting real annual earnings growth here, otherwise, versus a year-to-year decline in July 2018 of 0.22% (-0.22%).

Against an unrevised first-quarter 2018 annualized quarterly contraction of 1.22% (-1.22%) and unadjusted 0.06% year-to-year growth, second-quarter 2018 showed an annualized quarterly gain of 2.87%, with annual growth of 0.45%. That first-quarter 2018 contraction remained the third-consecutive annualized quarterly contraction in real average weekly earnings, the fifth quarterly decline in the last six quarters.

Fourth-quarter 2017 earnings showed an annualized contraction of 0.39% (-0.39%), versus a minimal decline of 0.03% (-0.03%) in third-quarter 2017, a gain of 3.48% in second-quarter 2017, and contractions of 0.84% (-0.84%) in first-quarter 2017 and 0.18% (-0.18%) in fourth-quarter 2016.

All Employees Detail. In the broader "All Employees" category (deflated by the CPI-U), which has a more-limited history than the production and non-supervisory category, August 2018 real average weekly earnings gained 0.15% (rounds to 0.1% at the first decimal point) in the month, having declined by an unrevised 0.20% (-0.20%) in the July. Unadjusted August 2018 real annual earnings growth was 0.82% (again bloated by year-ago hurricane distortions) versus an unrevised "no change" or 0.00% in July 2018.

Second-quarter 2018 real earnings gained at a revised annualized pace of 1.83% [previously 1.78%], where first-quarter 2018 real earnings contracted at an unrevised annualized pace of 0.44% (-0.44%), versus an annualized 0.03% (-0.03%) decline in fourth-quarter 2017 and against an annualized gain of 3.48% in third-quarter 2017.

Intensifying Consumer Liquidity Stress. Discussed in today's *Opening Comments* and the soon-to-be-updated *Consumer Liquidity Watch – No. 4* (*CLW-5*), real consumer income and credit conditions generally reflect intensifying liquidity issues for the consumer.

A Leading Indicator to Broad Economic Activity, Inflation-Adjusted Money Supply M3—August 2018—Annual Change Dropped to a Sixteen-Month Low. Annual growth in nominal August 2018 M3 fell faster than annual CPI-U inflation, which was depressed artificially on the downside (meaning that comparable headline annual inflation would have been higher/real M3 annual growth lower) by the year-ago hurricane distortions. Nonetheless, annual growth in real August 2018 M3 dropped to a sixteen-month low.

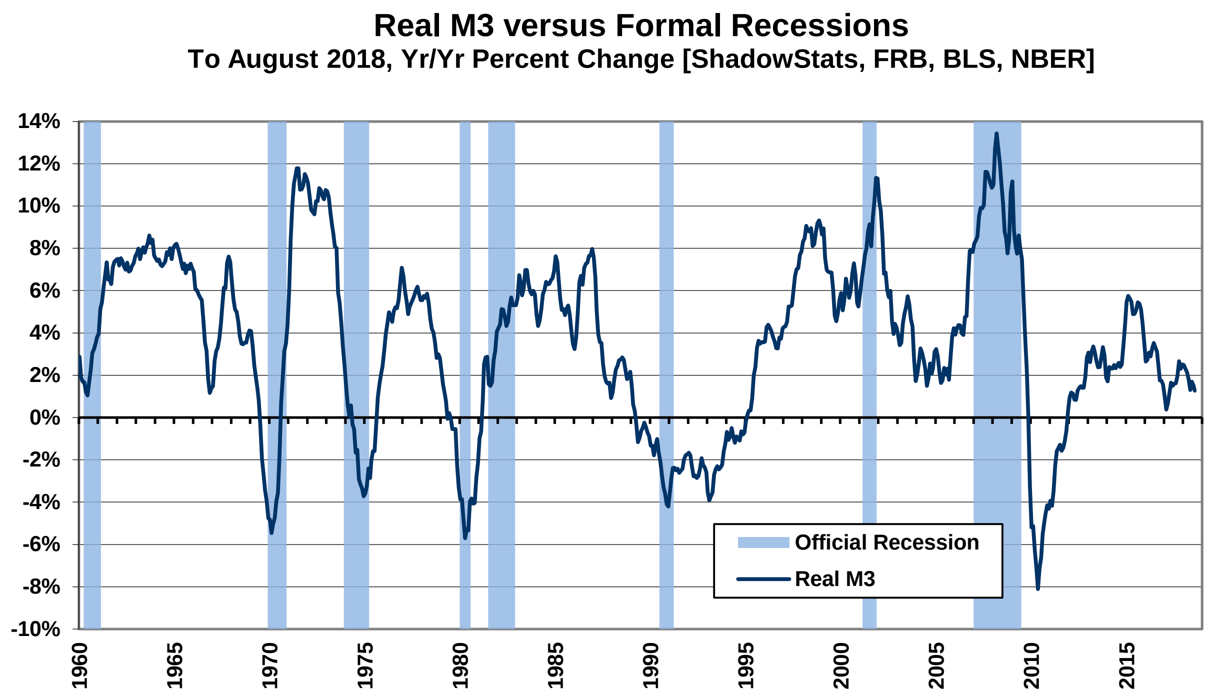
Nominal annual growth in August 2018 M3 fell to 3.97%, versus a revised 4.47% [previously 4.49%] in July 2018 M3 and unrevised annual gains of 4.57% in June 2018 and 4.10% in May 2018. At the same time, year-to-year change in the August 2018 CPI-U declined to 2.70%, from 2.95% in July 2018, versus 2.87% in June 2018 and 2.80% in May 2018. That combination muted the increase in real or inflation-adjusted annual M3 growth to 1.27% in August 2018, versus 1.52% in July 2018, 1.70% in June 2018 and 1.30% in May 2018. The August 2018 reading was the weakest since April 2017. Net of the year-ago hurricane distortions that suppressed current headline annual inflation, the series was close to generating a "hard" signal for recession.

On a quarterly basis, second-quarter 2018 annual real growth in Money Supply M3 stood at 1.60%, the weakest since 1.44% in second-quarter 2017 and then 0.66% in first-quarter 2017, which was the weakest seen since a long series of outright monthly year-to-year contractions throughout 2010 and 2011.

The signal for a double-dip, multiple-dip or simply protracted, ongoing recession, based on annual contraction in the real broad money supply (M3), had been re-triggered/intensified over a year ago, in February 2017. Yet, that signal then softened or flattened out with a contrary bounce from May 2017 into December 2017, turning down anew after the Federal Reserve's Federal Open Market Committee (FOMC) began more-aggressive tightening in December 2017. The previous recession signal of

December 2009 had remained in place, despite real annual M3 growth having rallied into positive territory post-2011.

Graph 5: Real Annual M3 Growth versus Formal Recessions (1960 to August 2018)
(Same as Graph OC-5 in the Opening Comments)



[Note: If realistic, not headline, inflation numbers were used here, there would be no question of an ongoing negative real annual growth in M3, or a renewed deepening of the economic collapse into 2009, as discussed in *Commentary No. 957* and *Public Commentary on Inflation Measurement*.]

FOMC Policy Is Setting Up a Formal, "New" Economic Downturn. A formal recession signal from low-level or negative annual real money supply growth has become increasingly likely in the near term. That reflects a continued, general weakening trend in nominal annual M3 growth, driven by FOMC policy, in combination with a continued pick-up in annual CPI inflation. Headline inflation generally has surged recently, driven by unstable political/supply conditions in the oil markets, not by an overheating U.S. economy that the FOMC likes to tout as the reason for spiking interest rates (see the *Opening Comments*).

Shown in *Graph 5*, based on August 2018 CPI-U reporting and the latest ShadowStats M3 Money Supply estimates, the ShadowStats-Ongoing M3 Estimate of real (inflation-adjusted) annual growth in August 2018 M3 was 1.27%, down from 1.52% in July 2018, 1.70% in June 2018 and versus 1.30% in May 2018, 1.79% in April 2018, 2.14% in March 2018, 2.30% in February 2018 and 2.49% in January 2018. That pattern broadly has reflected successive, downside benchmark revisions to the Federal Reserve's money measures, versus upside movement in annual CPI-U inflation. Those levels of activity were against a near-term peak growth of 2.66% in October 2017, and against the February 2015 and cycle-high peak growth of 5.74%.

Noted in the opening paragraph of this section, second-quarter 2018 annual real growth in Money Supply M3 stood at 1.60%, its weakest showing in a year, having slowed from 2.31% in first-quarter 2018.

What recently had been higher, albeit tepid, real annual growth likely was a temporary reversal in the pattern of plunging annual growth, which had held at levels last seen in plunging growth into the 2009 economic collapse, a level never seen outside an economy falling into, or already in a recession.

The Signal. The signal for a downturn or an intensified downturn in economic activity is generated when annual growth in real M3 first slows sharply, approaches zero and turns negative in a given cycle; the signal is not dependent on the depth of the downturn or its duration. Breaking into positive territory does not generate a meaningful signal one way or the other for the broad economy. The previous "new" downturn signal was generated in December 2009, even though there had been no upturn since the economy purportedly hit bottom in mid-2009. The ongoing issue here confounding the regular signal is that the U.S. economy never has recovered fully from its collapse into 2009 (see *Commentary No. 877*, *Commentary No. 902-B* and the latest GDP coverage in *Commentary No. 957*). The initial economic downturn never evolved into a meaningful or sustainable recovery. The current level and pattern of real annual M3 growth generally has been followed by annual contraction and a recession signal.

When real M3 growth breaks above zero, there is no signal; the signal is generated only when annual growth moves to zero and into negative territory, from which it has backed off at present. The broad economy tends to follow in downturn or renewed deterioration roughly six-to-nine months after the signal. Weaknesses in a number of economic series have continued to the present, with significant new softness in recent reporting, separate from short-lived activity generated by the destruction and resulting recovery from particularly-severe hurricane and California wildfire seasons. Actual post-2009 economic activity has remained at relatively low levels—in protracted stagnation—with no actual recovery (see the *ECONOMY* section of *Special Commentary No. 935* and, again, *Commentary No. 957*).

[Coverage of the Producer Price Index (PPI) begins on the next page.]

Producer Price Index (August 2018)

August Goods-Sector PPI Annual Inflation Backed Off to 3.9%, from July's Seven-Year Peak of 4.5%, Reflecting Year-Ago Energy Inflation Bloated Heavily by Hurricane-Harvey Disruptions. The less-meaningful headline August 2018 Final Demand Producer Price Index (FD-PPI) is dominated by Services Sector inflation, which has little definitional consistency with the old-fashioned Goods Sector inflation (see the ensuing *Bulk of Headline PPI Reporting Is of Little Practical Use* section). That said, August 2018 FD-PPI unadjusted annual inflation eased to 2.8% in August 2018, versus 3.3% in July 2018 and 3.4% in June 2018.

Where the more-meaningful August 2018 Goods Sector (FD-Goods PPI) Inflation, backed off to 3.9%, from 4.5% in July 2018, the July inflation had been little changed from the 4.3% level in June 2018. The drop in the annual August Goods inflation was dominated by Energy Sector inflation backing off to 13.6% in August 2018, from 17.0% in July 2018, otherwise little changed from 17.2% in June 2018. Affecting those shrinking August 2018 year-to-year changes, year-ago adjusted year-to-year energy costs jumped by 8.7% [8.3% unadjusted] in August 2017, spiked by hurricane disruptions, versus 4.1% [3.9%] and 4.15 [3.8%] in July and June. In August 2018, seasonally-adjusted monthly energy costs rose by 0.4% [declined by 0.5% (-0.5%) unadjusted)], versus a decline of 0.5% (-0.5%) [0.1% (-0.1%) unadjusted] in July and a gain of 0.8% [1.4% unadjusted] in June.

Against that, August 2018 Services Sector unadjusted annual inflation backed off to 2.2% in August 2018, from 2.6% in July 2018 and 2.8% in June 2018, exacerbating the circumstance. Minimal impact from the negligibly-weighted Construction Sector reflected annual inflation of 3.2% in August 2018, unchanged from 3.2% in July 2014 and down from 4.1% in June 2018.

Aggregate PPI and by Sector. The drop in annual PPI inflation to 2.83% in August 2018 from 3.27% in July 2018 and 3.37% in the June 2018 was dominated by hurricane distortions to August 2017 Energy in the Goods Sector, along with the usual nonsense reporting in the Services Sector. Where the 2018 Goods sector showed lower annual inflation, due to the storm-induced surge in 2017 Energy costs, the Services sector showed weaker annual inflation, tied to declining profit margins for Machinery and Equipment sales, a general non-consistent definitional issue discussed regularly in the *Bulk of Headline PPI Reporting Is of Little Practical Use* section.

Services Sector. In the dominant (most heavily weighted) Services Sector, unadjusted annual inflation growth of 2.19% in August 2018, slowed from 2.55% in July 2018 and from 2.82% in June 2018, its recent near-term peak. Month-to-month, seasonally-adjusted services inflation declined on August 2018 by 0.09% (-0.09%), the same as in July, versus a monthly gain of 0.43% in June.

According to the BLS, "... over 80 percent of the decreases in prices for final demand services can be traced to margins for machinery and equipment wholesaling, which fell 1.7%." Short-term shifts here in Services margins (counted as PPI price movements) usually run counter to underlying price movements, given inventories bought at earlier prices.

Goods Sector. Unadjusted August 2018 annual inflation growth of 3.86%, declined from 4.50% in July 2018, versus 4.32% in June 2018. The July reading had been the highest annual inflation rate in that series since December 2011. By subsector, the pattern of decreasing annual growth in August 2018 was dominated by the Energy Sector, where annual inflation dropped to 13.62% in August 2018, from 17.01% in July 2018, again dominated by a hurricane-induced spike to oil prices in August 2017. Inflation in the "Core" Goods Sector eased to 2.65% in August 2018, versus 2.83% in July 2018, with Food Sector inflation declining year-to-year by 1.03% (-1.03%) in August 2018, have dropped by 1.19% (-1.19%) in July 2018.

Construction Sector. In the Construction Sector, August 2018 annual inflation held at 3.24% for a second month, down from 4.15% in June 2018. Month-to-month headline inflation was 0.08% in August 2018, having moved higher to 0.41% in July from 0.17% in June. That pattern largely was a repeating artefact of the quarterly update to estimated construction industry margins, published in the first month of each calendar quarter. As discussed later, where the month-to-month numbers are not comparable, the year-to-year numbers generally are, as seen with the August 2018 and July 2018 annual numbers holding at a constant level.

Bulk of Headline PPI Reporting Is of Little Practical Use. *[The background text here and in the next subsection is as published previously.]* Beyond the broad issues with general inflation measurement (see *Public Commentary on Inflation Measurement*), indeed the bulk of the PPI is covered by the Services Sector, where inflation is determined largely by shifting profit margins. Discussed in the next subsection, profit-margin inflation estimates generally are handled in a manner counter-intuitive to the more-traditional measurement of inflation in goods and services, otherwise calculated as a measurement of change in prices. Accordingly, the headline detail here increasingly has a limited relationship to real-world activity.

The conceptual differences between goods inflation and services profit margins do not blend well and are not merged easily or meaningfully in the current version of the PPI. While the dual measures are more meaningfully viewed independently, rather than as the hybrid measure of the headline Producer Price Index Final Demand, the aggregate headline series here (ShadowStats separates the analyses of those sectors by sub-category) also is reviewed and covered within the headline reporting conventions of the Bureau of Labor Statistics (BLS).

Inflation That Is More Theoretical than Real World. Effective with January 2014 reporting, a new Producer Price Index (PPI) replaced what had been the traditional headline monthly measure of wholesale inflation in Finished Goods (see *Commentary No. 591*). In the new headline measure of wholesale Final Demand, Final Demand Goods basically is the old Finished Goods series, albeit expanded.

The new, otherwise dominant Final Demand Services Sector largely reflects problematic and questionable surveying of intermediate or quasi-wholesale profit margins in the services area. When profit margins shrink in the Services Sector, one could argue that the resulting lowered estimation of inflation actually is a precursor to higher inflation, as firms subsequently would move to raise prices, in an effort to regain more-normal margins. In like manner, in the circumstance of "increased" margins—due to the lower cost of petroleum-related products not being passed along immediately to customers—competitive pressures to lower margins tend to be reflected eventually in reduced retail prices (CPI). The oil-price versus margin gimmick works both way. In times of rapidly rising oil prices, it mutes the increase in Final Demand inflation, in times of rapidly declining oil prices; it tends to mute the decline in Final Demand inflation.

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

Headline Details of the August 2018 Final-Demand Producer Price Index and Its Major Sub-Sectors. The Bureau of Labor Statistics (BLS) reported Tuesday, September 12th, that the seasonally-adjusted, month-to-month, headline Producer Price Index Final-Demand (FD-PPI or PPI-FD) inflation for August 2018 was a decline of 0.09% (-0.09%), having been unchanged at 0.00% in July, having increased by 0.26% in June and 0.52% in May.

On a not-seasonally-adjusted basis—all annual growth rates are expressed unadjusted—year-to-year PPI-FD inflation in August 2018 fell to 2.83%, from 3.27% in July 2018 and from what had been a 79-month high of 3.37% in June 2018, versus 3.11% in May 2018 and a revised 2.66% in April 2018. Again, the August 2018 annual change numbers here were skewed by year-ago hurricane disruptions to (boosting of) oil and gasoline prices.

In summary, for the three major subcategories of the August 2018 PPI-FD, which showed an adjusted monthly decline of 0.09% (-0.09%), and an unadjusted 2.83% annual inflation; headline monthly Goods inflation was an adjusted "unchanged" 0.00% month-to-month, up by an unadjusted 3.86% year-to-year; Services "inflation" (profit margins) declined month-to-month by 0.09% (-0.09%), up by 2.19% year-to-year; and Construction "inflation" was up by an inconsistent 0.08% in the month, up by 3.24% year-to-year.

Final Demand Goods (weighted at 33.02% of the Aggregate Index). Running somewhat in parallel with the old Finished Goods PPI series, headline month-to-month Final Demand Goods inflation in August 2018 was unchanged at "0.00%," having gained 0.09% month-to-month in both July and June. There was positive impact on the aggregate goods monthly reading from underlying seasonal-factor adjustments (tied largely to energy). Not-seasonally-adjusted, August inflation was down by 0.26% (-0.26%) for the month. Unadjusted, year-to-year goods inflation in August 2018 showed an annual gain 3.86%, versus 4.50% in July 2018 and 4.32% in June 2018.

Seasonally-adjusted monthly changes by major components of August 2018 Final Demand Goods:

- "Foods" inflation (weighted at 5.72% of the total index) in August 2018 declined month-to-month by 0.60% (-0.60%), having declined by 0.09% (-0.09%) in July and by 1.11% (-1.11%) in June. Seasonal adjustments were minimally negative for the August change, which was an unadjusted monthly decline of 0.52% (-0.52%). Unadjusted and year-to-year, annual August 2018 foods inflation declined by 1.03% (-1.03%), having declined by 1.19% (-1.19%) in July 2018 and by 1.02% (-1.02%) in June 2018.

- "Energy" inflation (weighted at 5.58% of the total index) rose month-to-month by 0.36% in August 2018, having declined by 0.53% (-0.53%) in July and having gained 0.81% in June. Seasonal adjustments were positive in August, with unadjusted energy showing a monthly decline of 0.52% (-0.52%). Unadjusted and year-to-year, August 2018 energy prices gained 13.62%, versus 17.01% in July 2018 and 17.23% in June 2018.
- "Less foods and energy" ("Core" goods) monthly inflation (weighted at 21.72% of the total index) was "unchanged" at 0.00% month-to-month in August 2018, having gained 0.26% in both July and June. Seasonal adjustments were positive for monthly "Core" inflation, with the unadjusted monthly August inflation declining by 0.09% (-0.09%). Unadjusted and year-to-year, August 2018 "Core" inflation rose by 2.65%, versus 2.83% in July 2018 and 2.56% in June 2018.

Final Demand Services (weighted at 65.33% of the Aggregate Index). Headline Final Demand Services inflation declined month-to-month by 0.09% (-0.09%) August 2018, as it did in July, having gained 0.43% in June. The overall seasonal-adjustment impact on headline services inflation was positive, with, with an unadjusted monthly decline in August of 0.17% (-0.17%). Year-to-year, unadjusted August 2018 services inflation was 2.19%, versus 2.55% in July 2018 and 2.82% in June 2018.

The headline monthly changes by major component for August 2018 Final Demand Services inflation:

- "Services less trade, transportation and warehousing" inflation or the "Other" category (weighted at 40.56% of the total index) rose by 0.26% in August 2018, the same as in July and in June. Seasonal-adjustment impact on the August detail was neutral, where the unadjusted monthly gain also was 0.26%. Unadjusted and year-to-year, August 2018 "other" services inflation was up by 2.65%, versus 2.39% in July 2018 and by 2.30% in June 2018.
- "Transportation and warehousing" inflation (weighted at 4.48% of the total index) declined month-to-month by 0.57% (-0.57%) in August 2018, having gained 0.33% in July 2018 and 0.49% in June. Seasonal adjustments were positive for August, against an unadjusted monthly decline of 0.81% (-0.81%). Unadjusted and year-to-year, August 2018 transportation inflation rose by 5.62%, versus 6.40% in July 2018 and 5.68% in June 2018.
- "Trade" inflation (weighted at 20.29% of the total index) declined month-to-month in August 2018 by 0.85% (-0.85%), the same as in July, having gained 0.68% in June. Seasonal adjustments had a negative impact, where the unadjusted monthly change was a decline of 0.77% (-0.77%). Unadjusted and year-to-year, August 2018 trade inflation increased by 0.78%, versus 2.01% in July 2018 and 3.06% in June 2018.

Final Demand Construction (weighted 1.64% of the Aggregate Index). Although a fully self-contained subsection of the Final Demand PPI, Final Demand Construction inflation receives no formal headline coverage. Month-to-month construction inflation increased by 0.08% in August 2018, versus 0.41% in July, 0.17% in June, having been "unchanged" at 0.00% in May, having jumped by 1.09% in April, by 0.08% in March, 0.08% in February and 0.76% in January. These monthly changes reflect a regular, nonsense monthly distortion in the first month of each quarter, when the BLS introduces new quarterly profit-margin estimates for the sector.

The impact of seasonal factors on the August 2018 Construction reading was neutral, as usual, where the unadjusted monthly change also was a gain of 0.08%. The issues here are a combination of monthly headline cost changes along with a quarterly estimate of contractor profit-margin changes that have little connection to real-world activity.

On an unadjusted basis, year-to-year construction inflation held at 3.24% in August 2018, the same as in July 2018, versus 4.15% in June 2018, 4.06% in May 2018, 4.24% in April 2018 and 3.57% in March, February and January 2018. Unlike the month-to-month data, the annual changes are reasonably comparable. Annual change here recently has moved closer to the estimates of private surveying and other government estimates (GDP deflators), which usually show higher construction-related inflation than does the PPI. Annual inflation in those measures generally appears to be on the rise. Discussed in *Commentary No. 829*, the Construction Sector PPI has little relationship to real world activity. ShadowStats constructed a Composite Construction Deflator (CCD) used in deflating the Census Bureau's monthly estimates of Construction Spending Put in Place in the United States (see *Commentary No. 964-A*).

PPI-Inflation Impact on Pending Reporting of August 2018 New Orders for Durable Goods. As to the pending relative reductions in inflation-adjusted real growth, versus the nominal reporting of August 2018 New Orders for Durable Goods, inflation for manufactured durable goods (reported only on a not-seasonally-adjusted basis) increased month-to-month by 0.11% in August 2018, versus 0.17% in July, 0.35% in June, a revised 0.46% [previously 0.52%] in May, a revised 0.35% [previously 0.29%] in April, an unrevised 0.41% in March, 0.35% in February and 0.41% in January.

Year-to-year annual inflation rose to 3.25% in August 2018, the highest level since 3.29% in August 2011, versus 3.20% in July 2018, 2.96% in June 2018, 2.66% in May 2018, a revised 2.19% [previously 2.13%] in April 2018, an unrevised 2.08% in March 2018, 1.84% in February 2018 and 1.79% in January 2018. August 2018 New Orders for Durable Goods (both nominal and real), will be reported and calculable on September 27th.

[Coverage of Retail Sales begins on the next page.]

Retail Sales (August 2018)

Nominal August Sales Rose 0.09% (0.29% Net of Revisions); Real Sales Fell 0.14% (-0.14%), Up 0.07% Net of Revisions; Inconsistent Seasonal-Factor Changes Boosted Nominal Growth by 0.09%. The slowdown in nominal auto sales hit its third consecutive month, with nominal sales of Motor Vehicle and Parts Dealers, declined versus July, which declined versus June and which declined versus May. Activity here is running counter to unusual reporting this month out of Industrial Production (see the next section)/

The sharp slowing in August monthly retail sales growth largely reflected a relative upside revision to the previous reporting of July 2018 activity. Nonetheless, net of inflation, real headline monthly activity effectively ground to a halt in August 2018, down by a headline 0.14% (-0.14%), up by just 0.07% net of revisions. Where real annual growth picked up 3.85%, up by 15 basis points from July, that was more than accounted for by year-ago hurricane distortions to the deflating CPI-U, as discussed in today's *Opening Comments*.

Frequently discussed, seasonal adjustments here remained unstable, particularly tied to the volatile gasoline-station sales, where neither the Bureau of Labor Statistics (BLS) nor the Commerce Department (Commerce) seems able to come up with meaningful, consistent or stable seasonal adjustments tied to the otherwise erratic gasoline prices.

In the context of impaired and faltering consumer liquidity conditions, reviewed in today's *Opening Comments*, *Consumer Liquidity Watch – No. 4* (see also the soon to be updated *CLW-4*) and *Commentary No. 965*, the U.S. Consumer is in trouble, and that has negative implications, particularly for retail sales and the 72% of the aggregate nominal (73% of real) U.S. GDP driven directly by consumer activity.

Headline Nominal Retail Sales—August 2018. The Census Bureau reported its "advance" estimate of August 2018 *Retail Sales* on Friday, September 14th. The headline, seasonally-adjusted monthly gain of 0.09% +/- 0.59% was statistically-insignificant (all confidence intervals are expressed at the 95% level), while the upwardly revised July monthly gain of 0.68% [previously 0.51%] +/- 0.23% was significant.

That July nominal gain was on top of a revised monthly gain of 0.24% [previously 0.20%] in June, versus an unrevised 1.24% in May, 0.34% in April, 0.72% in March, 0.10% in February and a decline of 0.12% (-0.12%) in January. Again, net of the prior-month's revision, the August's 2018 nominal monthly sales gain was 0.29% instead of the headline 0.09%.

Year-to-Year Annual Nominal Change. The August 2018 nominal year-to-year change in Retail Sales showed a statistically-significant increase of 6.64% +/- 0.82%, versus revised annual gains of 6.69% [previously 6.41%] in July 2018, versus a revised 6.11% [previously 6.07%, initially 6.60%] in June

2018, and unrevised annual gains of 6.38% in May 2018, 4.76% in April 2018, 5.09% in March 2018, 4.53% in February 2018 and 3.95% in January 2018.

August 2018 "Core" Retail Sales, Net of Food and Gasoline. In theory, the nominal August 2018 retail sales environment should have been relatively flat for grocery stores, with seasonally-adjusted food prices rising by 0.09% (up by 0.13% unadjusted), and positive for gasoline stations, with seasonally-adjusted gasoline up by 3.01%, per the Bureau of Labor Statistics (BLS). That said, adjusted retail sales grocery-store sales rose by 0.01%, per the Census Bureau, with seasonally-adjusted gasoline-station sales up by 1.65% [unadjusted gasoline prices declined by 0.34% (-0.34) in the month].

Given the extreme volatility in headline gasoline prices and sales volume, seasonally-adjusted and otherwise, one has to wonder as to the nature, consistency and significance of the headline reporting and seasonal adjustments being used between these two series, as combined by the Saint Louis Fed in its monthly calculations of Real Advance Retail Sales. Consistent reflection of headline gasoline prices versus gasoline-station sales would have resulted in weaker Real Retail Sales growth in May, June and July and stronger sales growth in August.

That said, under normal conditions, the bulk of non-seasonal variability in fundamental food and gasoline sales is in pricing, instead of demand. Consistent with the Federal Reserve's historical preference for ignoring food and energy prices (as though people can live without consuming same), when "Core" inflation is lower than full inflation (at times when the Fed is looking to downplay inflation), "Core" retail sales are estimated here using two approaches:

Version I: Nominal August versus July 2018 seasonally-adjusted retail sales series—net of total grocery store and gasoline-station sales—decline by 0.07% (-0.07%), versus the official headline aggregate sales gain of 0.09%.

Version II: Nominal August versus July 2018 seasonally-adjusted retail sales series—net of the monthly *change* in grocery store and gasoline-station revenues—declined by 0.06% (-0.06%), versus the official headline aggregate sales gain of 0.09%.

Structural Liquidity Issues Continue to Impair Retail Sales. An extreme and intensifying consumer-liquidity bind increasingly should be constraining retail sales and other consumer activity (see particularly the earnings and consumer credit details in the *Consumer Liquidity Watch – No. 4* and pending update *CLW-5*). Without sustainable growth in, and with ongoing patterns of consecutive contractions or no growth in real earnings, and without the ability and/or willingness to take on meaningful new credit 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, at least in theory. 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.

Of note, the consumer-dependent 72.7% portion of benchmarked revamped second-quarter GDP shrank from 72.8% in first-quarter 2018, and from 73.1% in fourth-quarter 2017 real GDP activity, reflecting mounting constraints on both consumer consumption and investment. The consumer drives the economy, and a pullback there increasingly should be reflected in almost all other sectors of the economy.

As headline consumer inflation continues its upside climb in the year ahead, and as overall headline Retail Sales should continue to suffer from the continuing consumer liquidity squeeze, real Retail Sales growth should trend meaningfully lower as suggested in the August 2018 detail.

Real Retail Sales Corrected for Understated Inflation and Otherwise. *Graphs 8* and *10* show the headline levels of inflation-adjusted Real Retail Sales activity (deflated by the CPI-U), while *Graphs 9* and *11* show year-to-year percent change. Headline real retail sales peaked with the broad economy (GDP) in fourth-quarter 2007 (December 2007) and collapsed into 2009. The March 2009 trough was followed by a "recovery" into 2012, recovering its pre-recession high, and an "expansion" 2013-to-date, with headline activity moving beyond its pre-recession peak level. Those patterns also are reflected here in *Graph 6*.

That "recovery" and "expansion" shown in the headline graphs, however, largely reflected the U.S. government's deliberate understatement of headline CPI-U inflation. Most economic numbers are viewed net of inflation, so as to get a sense of underlying physical activity and volume in the economy.

For example, if a retail storeowner noted that sales in July 2018 were up year-to-year by 3.7% from the year-before, there would be some value in knowing that 2.7% of that gain was in inflation, with physical sales (real sales) volume up by 1.0%.

If the inflation estimate used were understated, the resulting "real" or "inflation-adjusted" growth would be overstated. Using the prior example, if sales were up by 3.7%, but inflation was really 4.0%, instead of 2.%, physical sales volume would have declined by 0.3% (-0.3%) instead of having gained 1.0%.

Discussed in the *Public Commentary on Inflation Measurement*, the U.S. government began changing CPI reporting methodologies back in 1980s so as to reduce headline inflation and inflation-adjusted government outlays, such as Cost of Living Adjustments for Social Security recipients. Also see *Chapter 9* of *2014 Hyperinflation Report—Great Economic Tumble – Second Installment*. These inflation-adjustment issues are separate from the adjustment issues mentioned in the opening paragraph of this section.

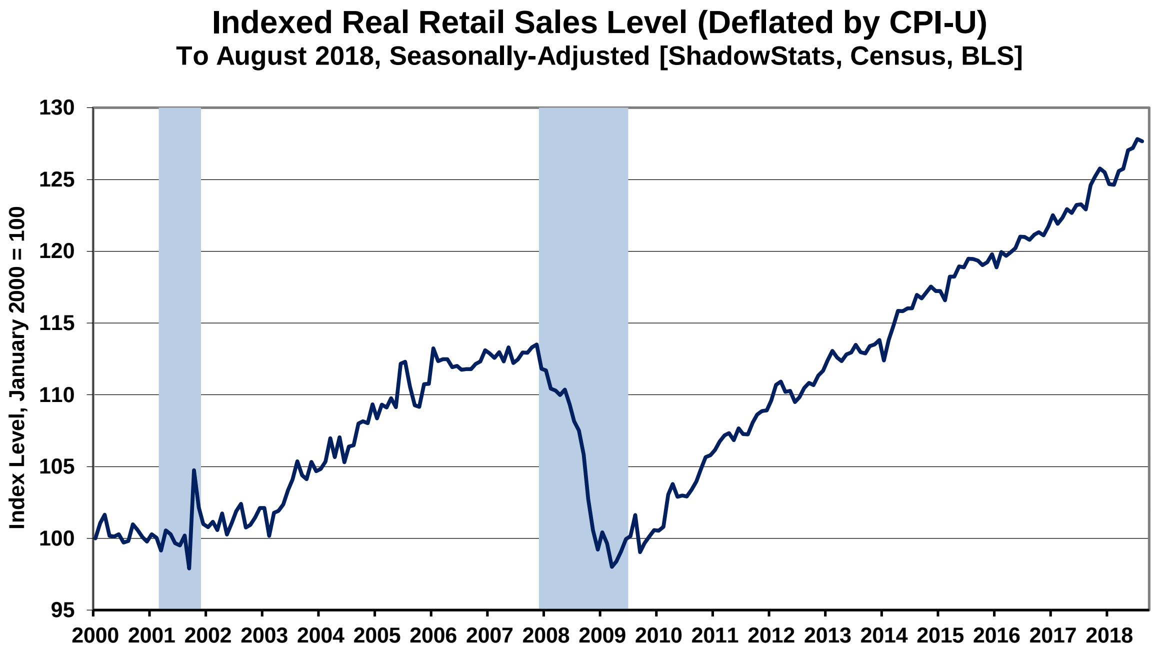
Graphs Reflecting Alternate Inflation-Adjustment. Both of the accompanying *Graphs 6* and *7* of Real Retail Sales are indexed to January 2000 = 100.0, so as to maintain consistency with the series of graphs related to corrected inflation-adjustment. Parallel, regular plots of the ShadowStats "corrected" Industrial Production Index are found in that section (see *Graphs 13* and *14* on page 47). See *Graphs 6* to *9*, beginning on page 13 of *Commentary No. 967* for the "corrected" New Orders for Durable Goods, and the *Opening Comments* of *Special Commentary No. 968-Extended* for the GDP series.

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, as is evident in a comparison of *Graph 6* with *Graph 8* plotted in headline CPI-U deflated dollars.

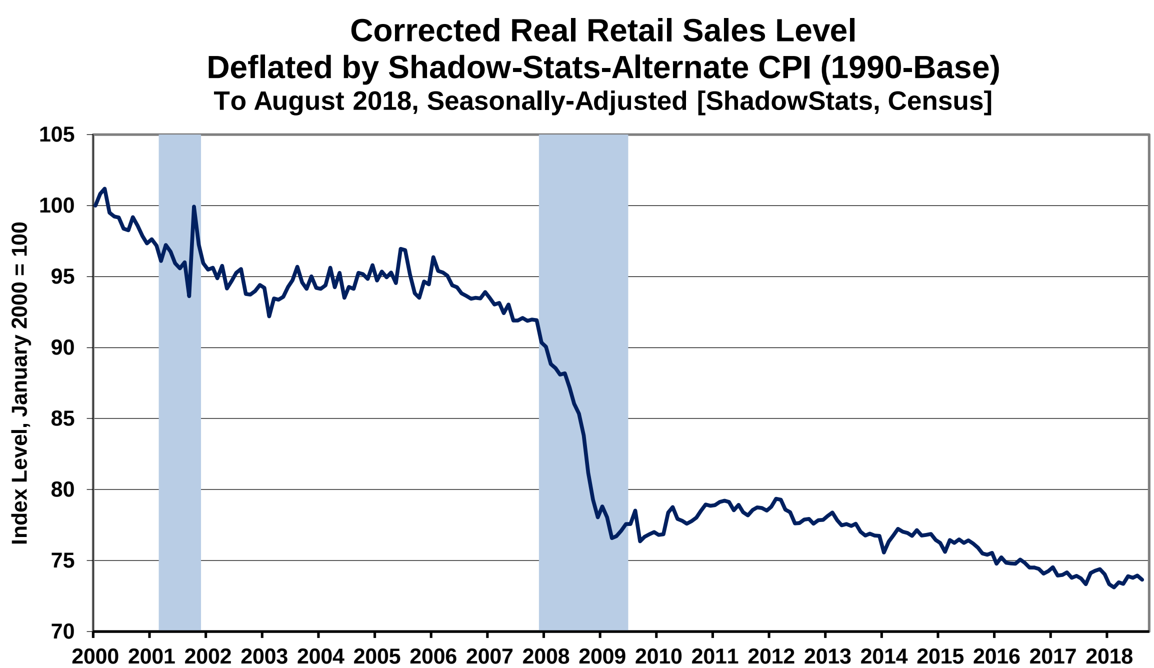
Instead of being deflated by the CPI-U, the "corrected" Real Retail Sales numbers—in *Graph 7*—use the ShadowStats-Alternate Inflation Measure (1990-Base) for deflation.

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 more consistent with consumer indicators such as Real Average Weekly Earnings and other faltering consumer liquidity conditions, seen in *Consumer Liquidity Watch – No. 4* than is seen with headline Real Retail Sales detail.

Graph 6: Headline Real Retail Sales Level, Indexed to January 2000 = 100



Graph 7: "Corrected" Real Retail Sales Level, Indexed to January 2000 = 100



Headline Real Retail Sales—August 2018—Real Sales Declined by 0.14% (-0.14%) in the Month, Gained 0.07% Net of Revisions, Annual Growth at 3.85%. Calculated by the Saint Louis Federal Reserve, *Real Retail Sales* deflates the Commerce Department's Nominal Retail Sales numbers using the headline *Consumer Price Index CPI-U*, as published by the Bureau of Labor Statistics on September 13th, and covered earlier in this *Reporting Detail* section. The headline levels of, and year-to-year changes in, monthly Real Retail Sales are plotted in *Graphs 8* to *11*.

The August 2018 Consumer Price Index showed the seasonally-adjusted CPI-U up month-to-month by 0.22%, versus 0.17% in July, 0.13% June, 0.21% in May and 0.22% in April, a decline of 0.06% (-0.06%) in March and gains of 0.15% in February and 0.54% in January (see the *Consumer Price Index* section for detail).

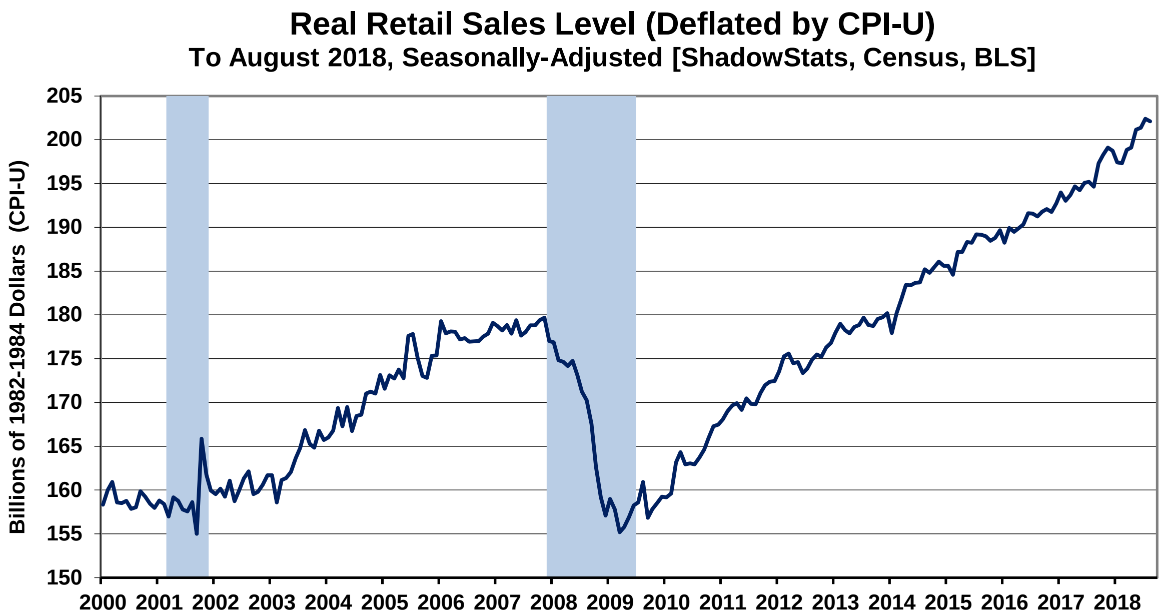
Deflated by the CPI-U, August 2018 Real Retail Sales declined month-to-month by 0.14% (-0.14%) [up by 0.07% net of prior-period revisions], a revised monthly gain of 0.50% [previously 0.34%] month-to-month in July, a revised 0.11% [previously 0.07%] in June, 1.03% in May, 0.12% in April, 0.78% in March and monthly declines of 0.05% (-0.05%) in February and 0.66% (-0.66%) in January. That headline real monthly contraction in August 2018 Retail Sales of 0.14% (-0.4%), again, was a gain of 0.07% net revisions.

Inconsistent Seasonal Adjustment Revisions Artificially Boosted Headline August 2018 Activity. In the context of inconsistent headline reporting of year-ago revisions just for July 2017 (downside) and August 2017 (upside), year-to-year real growth was boosted artificially by 0.16% in August 2018. That boost more than accounted for the headline real monthly growth of 0.07%, net of revisions. The underlying ShadowStats outlook of minimally-recovering (see the *Opening Comments*), non-expanding broad economic activity, based partially on key headline reporting being systematically overstated, has not changed (again, see *Real Retail Sales Corrected for Inflation Understate and Otherwise*).

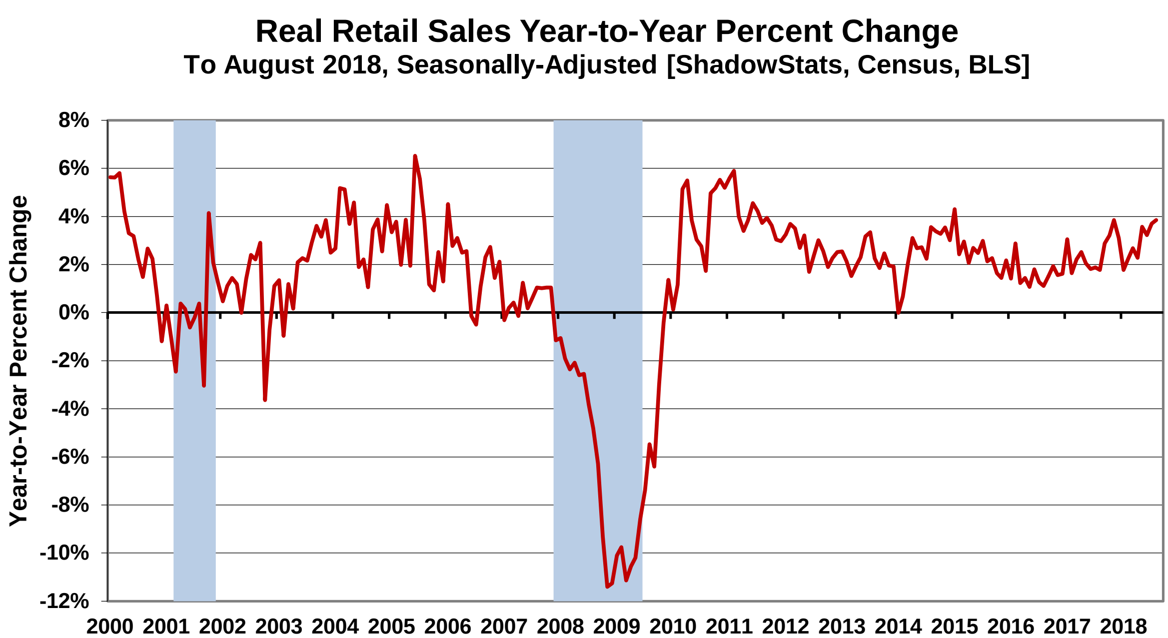
Real Retail Sales Graphs. The first of four graphs following, *Graph 8* shows the level of real retail sales activity (deflated by the CPI-U) since 2000; *Graph 9* shows the year-to-year percent change for the same period. Annual real growth had slowed markedly into fourth-quarter 2015 and 2016, generating an intense recession signal. Again, with recent volatility, including natural-disaster-recovery activity and the related near-term peak in annual real growth in November 2017, that recession signal had been put in temporary abeyance. Yet, with first-quarter 2018 real annual growth at 2.2%, a solid recession signal had been restored, only to disappear anew with year-to-year real retail sales growth in second-quarter 2018 now up by 3.0% in revision. *Graphs 10* and *11* show the level of, and annual growth in, real retail sales (and predecessor series) in full post-World War II detail.

Inflation-Adjusted Series Showed a Somewhat Strong Second-Quarter 2018 Quarterly Gain, Off a Sharp First-Quarter Quarterly Contraction, with an Early Slowing in Third-Quarter Activity . As reported by the Saint Louis Federal Reserve in its regular deflation of nominal retail sales using the CPI-U, the headline, inflation-adjusted or real first-quarter 2018 Retail Sales contracted at an annualized quarterly pace of 1.67% (-1.67%), the weakest quarter since second-quarter 2012. Such at least partially reflected a sharp easing from fourth-quarter natural-disaster-recovery boosts. With the third estimate of second-quarter 2018 reporting in hand, real annualized second-quarter 2018 real growth revised to 5.53% [previously 5.47%, initially 6.10%]. Based solely on the second estimate of July 2018 and the first estimate of August 2018 activity, third-quarter 2018 annualized real growth is on early track for 3.46%.

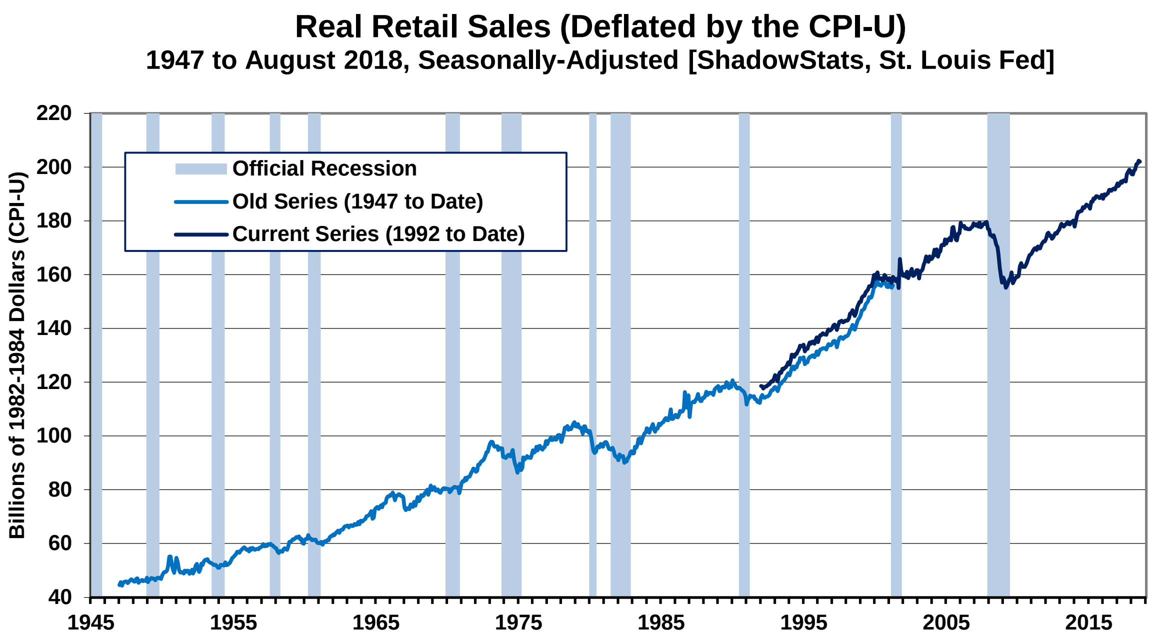
Graph 8: Level of Real Retail Sales (2000 to Date)



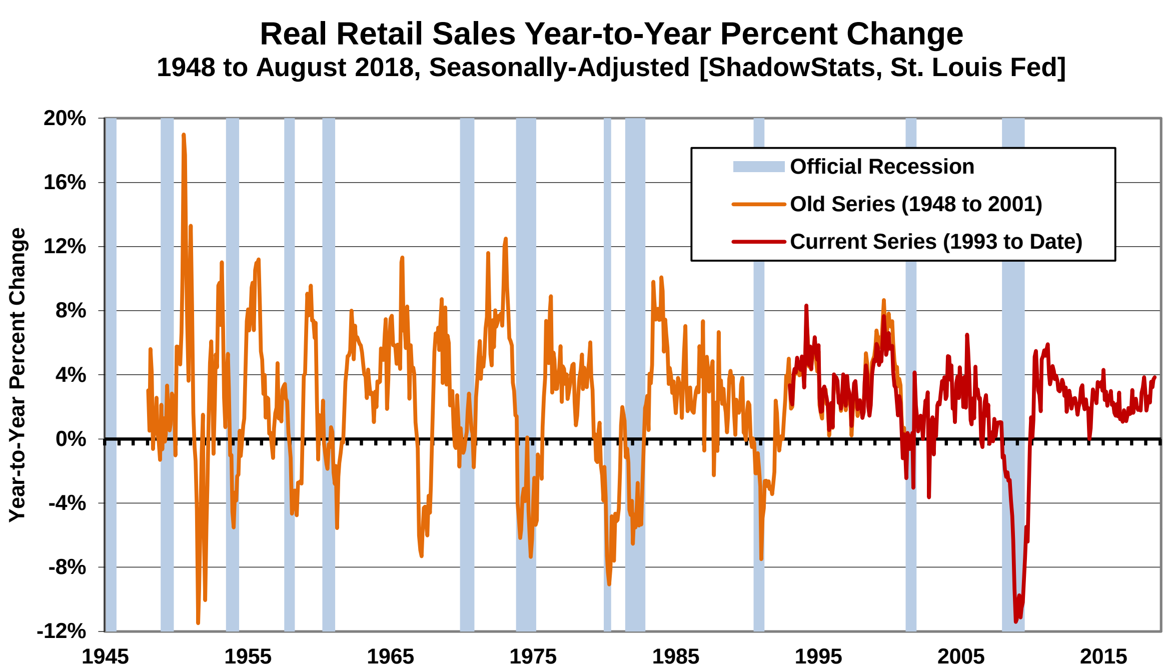
Graph 9: Real Retail Sales (2000 to Date), Year-to-Year Percent Change



Graph 10: Level of Real Retail Sales (1947 to Date)



Graph 11: Real Retail Sales (1948 to Date), Year-to-Year Percent Change



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Industrial Production (August 2018)

Mirage of Strong Growth August Production Came from Downside Revisions to Prior Reporting; Gains of 0.4% in Production and 0.2% in Manufacturing, Were 0.2% and 0.0% Net of Revisions. Industrial Production gained 0.41% in August 2018, which would have been a gain of 0.22%, net of downside revisions to July activity.

In particular, the dominant Manufacturing Sector showed a headline monthly gain of 0.25% (rounds to 2.0%), which was up by 0.04% (rounds to “unchanged” at 0.0%) net of downside revisions to July activity. Also boosted by downside revisions, surging auto production ran counter to successive monthly declines in nominal auto sales in the May to August Retail Sales period (see the *Retail Sales* section).

Separately, what had been an unusual monthly decline in the July 2018 Mining Sector, turned to a plus in revisions, but again, only because June activity was revised to the downside by more than July was. Headline August growth in the Mining Sector of 0.7% would have been 0.6%, net of downside revisions, while the headline growth of 1.2% in Utilities would have been 0.9% net of downside revisions.

Manufacturing Sector Completed a Record 128th Straight Month of Economic Non-Expansion. Again, the headline first decimal point, 0.2% monthly gain in August Manufacturing would have been 0.0%, net of downside revisions to July activity. Nonetheless, headline August Manufacturing activity held shy by 5.0% (-5.0%) and 5.4% (-5.4%), respectively, of recovering its pre-recession peak on a monthly basis against December 2007, and on a quarterly basis for second-quarter 2018 versus fourth-quarter 2007.

Accordingly, the Manufacturing series now has logged a record string of 128 straight months or just shy of 43 straight quarters of economic non-expansion, a circumstance never seen before in the 100-year history of Industrial Production reporting.

Mining and Utilities Sectors Also Showed Headline Monthly Gains in August 2018. On top the headline monthly gain in Manufacturing Sector activity, the Mining and Utilities Sectors both made positive monthly contributions. The Mining Sector gained 0.67% in August [0.56% net of prior-period revisions, dominated as usual by Oil and Gas Extraction, which more than offset monthly contractions in Oil and Gas Exploration and in Coal and Gold Mining.

Separately, weather-dominated Utility usage gained 1.18% in the month, which was 0.87% net of prior period revisions.

Activity in each major Sector of Industrial Production was revised lower in July 2018, with the effect of boosting the relative headline monthly growth for the August 2018 Industrial Production Series.

Table 1: Industrial Production and Its Major Sectors

Table 1: Index of Industrial Production (IIP) and Major Sectors to August 2018 by Month, 2012 = 100.000 for All Indices								
Measure	**Weight**	**Aug '18**	**Jul**	**Jun**	**May**	**Apr**	**Mar**	**Feb**
IIP Index	**100.0%**	**108.232**	**107.788**	**107.400**	**106.749**	**107.646**	**106.449**	**105.917**
- Prior		--	107.999	107.878	106.843	107.734	106.463	105.917
Mo/Mo		**0.41%**	**0.36%**	**0.61%**	**-0.83%**	**1.13%**	**0.50%**	**0.45%**
- Prior		--	0.11%	0.97%	-0.83%	1.19%	0.52%	0.45%
Yr/Yr		**4.88%**	**4.02%**	**3.50%**	**2.93%**	**3.79%**	**3.63%**	**3.68%**
- Prior		--	4.23%	3.96%	3.02%	3.88%	3.64%	3.68%
Manufacturing	**75.5%**	**104.608**	**104.348**	**104.002**	**103.309**	**104.258**	**103.689**	**103.804**
- Prior		--	104.557	104.257	103.422	104.365	103.678	103.804
Mo/Mo		**0.25%**	**0.33%**	**0.67%**	**-0.91%**	**0.55%**	**-0.11%**	**1.47%**
- Prior		--	0.29%	0.81%	-0.90%	0.66%	-0.12%	1.47%
Yr/Yr		**3.13%**	**2.64%**	**2.02%**	**1.47%**	**1.97%**	**2.53%**	**2.18%**
- Prior		--	2.85%	2.27%	1.58%	2.07%	2.52%	2.18%
Mining	**14.1%**	**124.052**	**123.221**	**122.395**	**120.284**	**119.366**	**118.408**	**117.087**
- Prior		--	123.362	123.747	120.316	119.413	118.568	117.087
Mo/Mo		**0.67%**	**0.67%**	**1.76%**	**0.77%**	**0.81%**	**1.13%**	**2.82%**
- Prior		--	-0.31%	2.85%	0.76%	0.71%	1.27%	2.82%
Yr/Yr		**14.15%**	**12.73%**	**11.75%**	**10.87%**	**10.67%**	**10.98%**	**10.01%**
- Prior		--	12.86%	12.99%	10.90%	10.71%	11.13%	10.01%
Utilities	**10.4%**	**105.376**	**104.152**	**104.076**	**105.693**	**108.516**	**102.573**	**98.426**
- Prior		--	104.470	104.975	105.726	108.511	102.573	98.426
Mo/Mo		**1.18%**	**0.07%**	**-1.53%**	**-2.60%**	**5.79%**	**4.21%**	**-9.57%**
- Prior		--	-0.48%	-0.71%	-2.57%	5.79%	4.21%	-9.57%
Yr/Yr		**4.78%**	**2.02%**	**2.86%**	**2.85%**	**8.11%**	**1.99%**	**6.73%**
- Prior		--	2.33%	3.75%	2.88%	8.10%	1.99%	6.73%
Sources: Federal Reserve Board, ShadowStats								

Headline Monthly and Annual Details. The September 14th publication of August 2018 Industrial Production activity by the *Federal Reserve Board* popularly was touted as showing strong monthly growth, but the headline "strength" in the August 2018 numbers was little more than relative strength month-to-month created simply by lowering the levels of activity that had been reported in prior months, as can be seen in *Table 1* comparing current index levels with the prior estimates.

The August 2018 aggregate Industrial Production headline monthly gain of 0.41% [0.22% net of revisions] followed a revised gain of 0.36% [previously 0.11%], that new headline index of 107.788 was down by 0.01% [-.0.01%] from what previously had been reported as 107.878 in June, instead of the 0.36% gain against the downwardly revised new June estimate of 107.400.

The easiest way to review these numbers is to study the revised detail, particularly the index levels, as opposed putting difficult descriptors into text, which probably will not give as clear a picture as just looking at the numbers. Accordingly, what follows in text is limited to just the near-term headline detail.

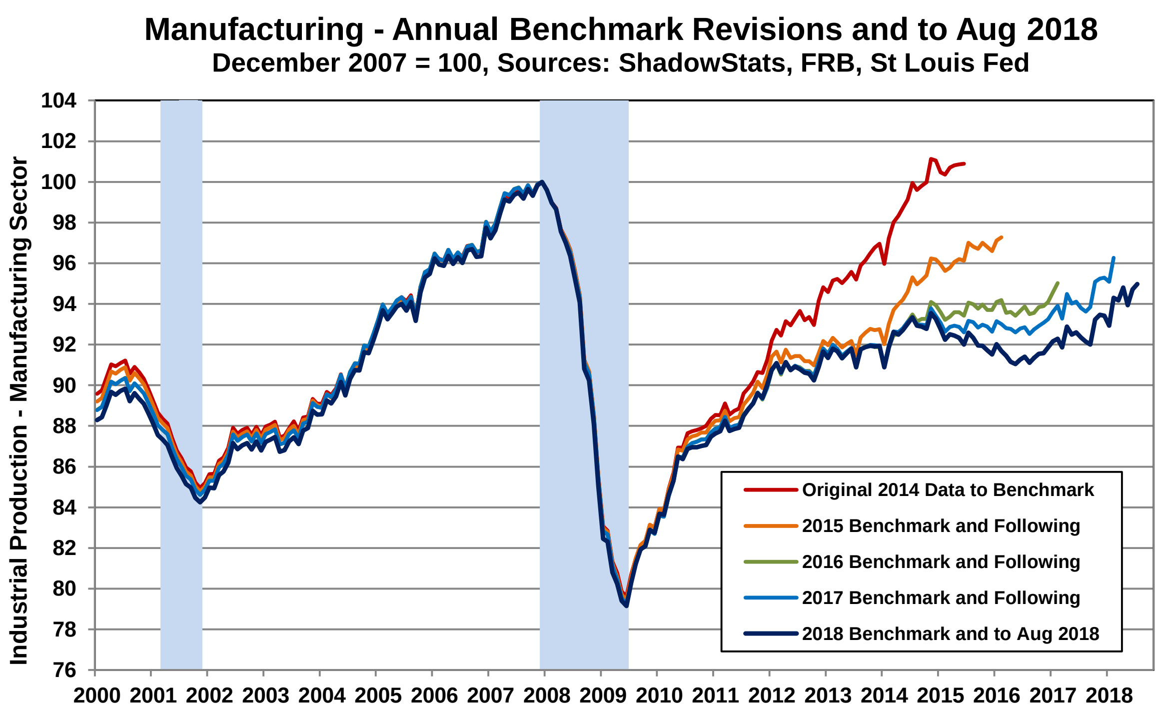
Year-to-year, August 2018 Industrial Production gained 4.88%, versus a revised 4.02% [previously 4.23%] in July 2018.

Growth by Major Sector. Detailed by major industry group (see *Graphs 18, 20, 27* and *29*), the August 2018 aggregate Industrial Production monthly gain of 0.41%, broke out by component sector as a gain of 0.25% in Manufacturing, a gain of 0.67% in Mining, with Oil and Gas production more than offsetting declines in Exploration and Coal and Gold Mining, and a gain of 1.18% in Utilities.

In the wake of the July 27th Comprehensive Benchmark Revision to GDP, the ShadowStats estimate of the GDP Series Corrected for Understatement of Headline Inflation increasingly resembled patterns of activity seen the in Manufacturing Sector, as plotted and compared in today's *Opening Comments* section with the CASS Freight Index™ (see *Sections I* and *II* of *Special Commentary No. 968-Extended* of September 6th for the comparative details with the benchmarked GDP and Real New Orders for Durable Goods, Ex-Commercial Aircraft and other series.

Separately, the recent GDP Benchmarking showed no obvious impact to the aggregate historical GDP activity from recent downside benchmark revisions to Industrial Production, Manufacturers' Shipments and New Orders for Durable Goods, etc., such as reflected here in *Graph 12*.

Graph 12: Annual Benchmark Revisions to the Dominant Manufacturing Sector of Industrial Production



Production Activity and Graphs—Corrected and Otherwise. Reflecting the broadly-negative, March 23rd annual benchmark revisions to Industrial Production, and subsequent monthly revisions through the headline August 2018 detail, index-level and annual-growth production details are found in and plotted in *Graphs 16* to *19*, along with the drill-down graphs of major subcomponents of the production series in *Graphs 20* to *35*.

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 into second-quarter 2016, 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. Looking at the accompanying post-benchmarking *Graph 13*, and the longer-term *Graphs 16* and *17*, it looks like there was a missing recession call beginning at the end of 2014, but nothing like that was suggested in the GDP benchmark revisions.

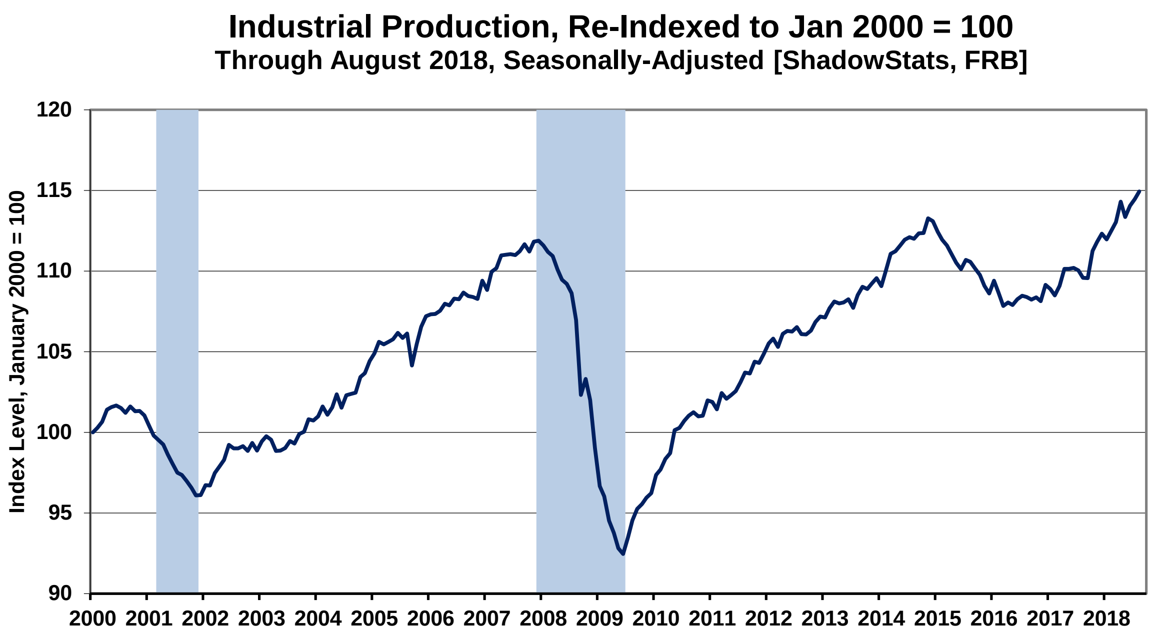
With the reporting of quarterly details in 2017 and first- and second-quarter 2018, production showed both annual and quarterly gains, except for a hurricane-disrupted quarterly contraction in third-quarter 2017. The headline activity still remained below pre-recession highs seen in 2007, except for a brief recovery in third-quarter 2014, and one-quarter's expansion in fourth-quarter 2014, below which first-quarter 2018 fell, although second-quarter 2018 has now recovered.

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 reporting recovered the monthly pre-recession high, for a second time, with a reset to December 2017, in the context of the recent benchmark revisions. Given that benchmarking and subsequent reporting, the initial first-quarter 2018 Industrial Production reporting, the series had regained the fourth-quarter 2014 recovery peak for second time, albeit only by 0.12%, having lost that status in the March 2018 benchmarking. Yet, first-quarter 2018 reporting lost that recovery, again with the headline April 2018 revisions, down by 0.43% (-0.43%) versus that fourth-quarter 2014 peak. As of the latest August 2018 headline reporting, that level had been topped by 0.88%, where it was last regained in June 2018.

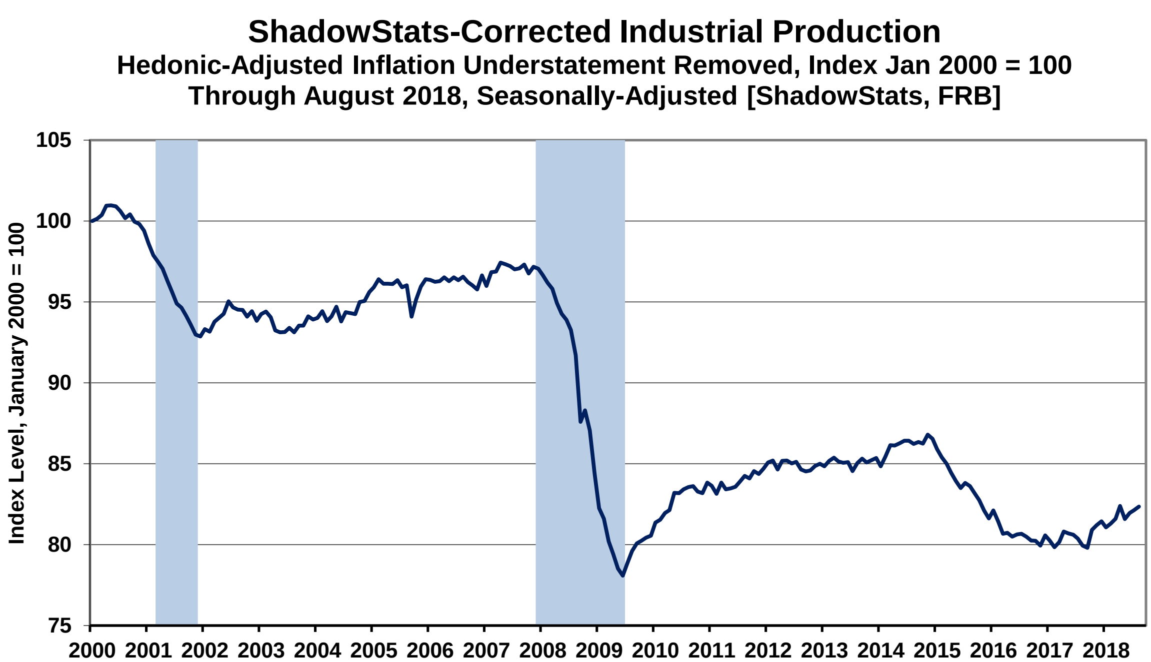
Graphs 13 and *14* address reporting-quality issues tied just to the overstatement of headline growth in the total Industrial Production series that results directly from the Federal Reserve Board using too-low an estimate of inflation in deflating some components of its production estimates into real-dollar 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; this overstates 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 13 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 6* and *7* in the prior *Retail Sales* on page 39), and as discussed there in the *Graphs Reflecting Alternate Inflation-Adjustment* section**.** The indexing does not affect the appearance of the graph or reported growth rates (as can be seen with a comparison of *Graph 13* here to later *Graph 19,* which has the standard, headline indexing).

Graph 13: Indexed Headline Level of Industrial Production (Jan 2000 = 100)



Graph 14: Headline ShadowStats-Corrected Level of Industrial Production (Jan 2000 = 100)



Graph 14 is a recast version of *Graph 13,* 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 14* 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 *Special Commentary No. 935*). Unlike the headline Industrial Production data and the headline GDP numbers, "corrected" Industrial Production levels never recovered their 2007 pre-recession highs, although, again, the headline aggregate Production index quickly backed off its official "recovery" in late-2014 in last month's benchmarking, only to recovery the 2014 highs again with the headline March 2018, and to lose them anew with the April and May 2018 detail, but regained in June 2018. That said, the dominant manufacturing sector of industrial production never has recovered its December 2007 pre-recession peak, a record period of 10-plus years of economic non-expansion in the 100-year history of the Industrial Production series.

As of August 2018, the now 128-straight months of Manufacturing non-expansion, indeed remains unprecedented in its duration within the 100-year history of the Industrial Production series. While the recently-benchmarked GDP and its second estimate second-quarter 2018 real GDP reporting showed that series to have expanded by 17.5% above its pre-recession peak, the dominant Manufacturing Sector of Industrial Production still held shy of recovering its pre-recession high by 5.4% (-5.4%) as of second-quarter 2018.

Quarterly and Annual Production Changes. In the context of March 23, 2018 benchmark revisions sharply to the downside for annual growth and annualized quarterly growth, and the second estimate of third-quarter 2018 numbers, year-to-year growth rates in quarterly production had continued to slow and then decline, ranging from a positive 1.76% in first-quarter 2015, to year-to-year declines of 0.92% (-0.92%) in second-quarter 2015, 1.49% (-1.49%) in the third-quarter 2015 and 3.37% (-3.37%) in fourth-quarter 2015.

Annual declines continued, down by 2.99% (-2.99%) in first-quarter 2016, by 2.25% (-2.25%) in second-quarter 2016 and by 1.91% (-1.91%) in third-quarter 2016. Fourth-quarter 2016 production contracted year-to-year for the seventh-straight quarter by 0.55% (-0.55%).

First-quarter 2017 annual change rose by 0.16%, the first annual gain since first-quarter 2015. Second-quarter 2017 production gained year-to-year by 1.93%, with third-quarter 2017 showing a hurricane-impaired annual gain of 1.20%.

Reflecting detail published with the headline August 2018 numbers, fourth-quarter 2017 growth was a hurricane-boosted 2.99%, with first-quarter 2018 reporting showing un revised annual growth of 3.38% and second-quarter 2018 showing a third estimate of 3.41% [previously 3.62%, initially 3.58%]. Based solely on July and August 2018 activity, third-quarter 2018 was on early track for annual growth of 4.53%.

Annualized Quarter-to-Quarter. Going back to first-quarter 2015 industrial production contracted at an annualized quarterly pace of 3.22% (-3.22%), having gained by 2.74% in fourth-quarter 2014. That was followed by a quarterly contraction of 5.04% (-5.04%) in second-quarter 2015, with a third-quarter 2015 contraction of 0.27% (-0.27%) [previously a gain], followed by a fourth-quarter 2015 contraction of 4.71% (-4.71%).

The first-quarter 2016 annualized quarterly contraction was 1.86% (-1.86%), with second-quarter 2016 down at an annualized 2.09% (-2.09%). Third-quarter 2016 gained at an annualized pace of 1.11%, the first quarterly gain in seven quarters, followed by a gain of 0.70% in fourth-quarter 2016.

The first-quarter 2017 annualized quarterly gain was 0.98%. The second-quarter 2017 gain was 5.01%, with hurricane-disrupted third-quarter 2017 growth now showing an annualized quarterly contraction of 1.54% (-1.54%).

Reflecting detail published with the headline August 2018 numbers, the fourth-quarter activity was up by an unrevised, disaster-recovery-boosted 7.75%, with the first-quarter 2018 at a revised 2.52% [previously 2.53%, 2.42%, 2.44%, initially 2.33%] and with the third reporting of second-quarter 2018 at 5.12% [previously 5.97%, initially 5.96%].

Production Graphs. The regular two sets of long- and short-term plots of industrial production levels and annual growth rates (*Graphs 16* to *19*) set the background for the drill-down detail graphs of various components of the aggregate industrial series (*Graphs 20* to *35*).

Graphs 16 and *17*, and *Graphs 18* and *19* show headline industrial production activity to date. *Graph 17* shows the monthly year-to-year percent change in the aggregate series, in historical context since World War I. Post annual benchmarking revisions of recent years, annual growth has slowed consistently as seen in *Graphs Benchmark-1* to *4* in *Commentary No. 942-B*.

Graph 16 here shows the monthly level of the production index since its inception, post-World War I, with a topping-out and renewed downturn—deepening quarterly contractions in first- and second-quarter 2015 and now, benchmark-revised into second-quarter 2016, turning to the plus-side in second-half 2016 into second-quarter 2017 and the recent third-quarter 2017 hurricane disruptions and accompanying near-term volatility, with mixed reporting into August 2018. Such patterns of monthly and quarterly year-to-year declines post late-2014 to the onset of 2017 (see *Graph 17*) were seen last in the economic collapse into 2009, and historically never seen outside of what would be recognized as formal recessions. *Graphs 18* and *19* show the same series in near-term detail, beginning in January 2000. Such remains in the context of a hurricane-impaired third-quarter reading and a hurricane-boosted fourth-quarter 2017 into slowing first-quarter and mixed second-quarter 2018 activity.

Seen most clearly in *Graph 20*, 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 previously only in formal recessions. Such suggests a "missing recession call" with a pre-recession peak of fourth-quarter 2014, but that did not surface in the current GDP benchmarking. In the context of the 2018 production benchmark revisions, year-to-year growth remained well off the recent relative peak for the series, which was 8.46% in June 2010, going against the official June 2009 trough of the economic collapse. Indeed, as shown in *Graph 17*, the June 2009 (the end of second-quarter 2009) year-to-year contraction of 15.33% (-15.33%) was the steepest annual decline in production since the shutdown of wartime production following World War II.

Still Fighting the Great Recession. Headline August 2018 Industrial Production currently is relatively stagnant at a minimally-recovered level, versus its pre-Great Recession peak. August 2018 activity was up by 2.78% versus its December 2007 pre-recession peak, while second quarter 2018 GDP now stands at 17.46% above its fourth-quarter 2007 pre-recession peak.

Second-quarter 2018 production activity stood 2.04% above its fourth-quarter 2007 pre-recession peak. Following the fourth-quarter 2007 peak, the quarterly production series declined through its cycle trough of second-quarter 2009. That was down by 16.68% (-16.68%) from its pre-recession high. The recently-benchmarked GDP quarterly trough had the same timing, down by 3.98% (-3.98%) from its pre-recession high.

Production and Underestimated Headline Inflation. Versus the pre-Great Recession peak, official headline production levels have moved higher since their June 2009 trough, showing a pattern of stagnation in 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, with hurricane hit quarterly contraction, then generally boosted into late-year, by hurricane-recovery boosted activity, with a slowing uptrend into May and June 2018

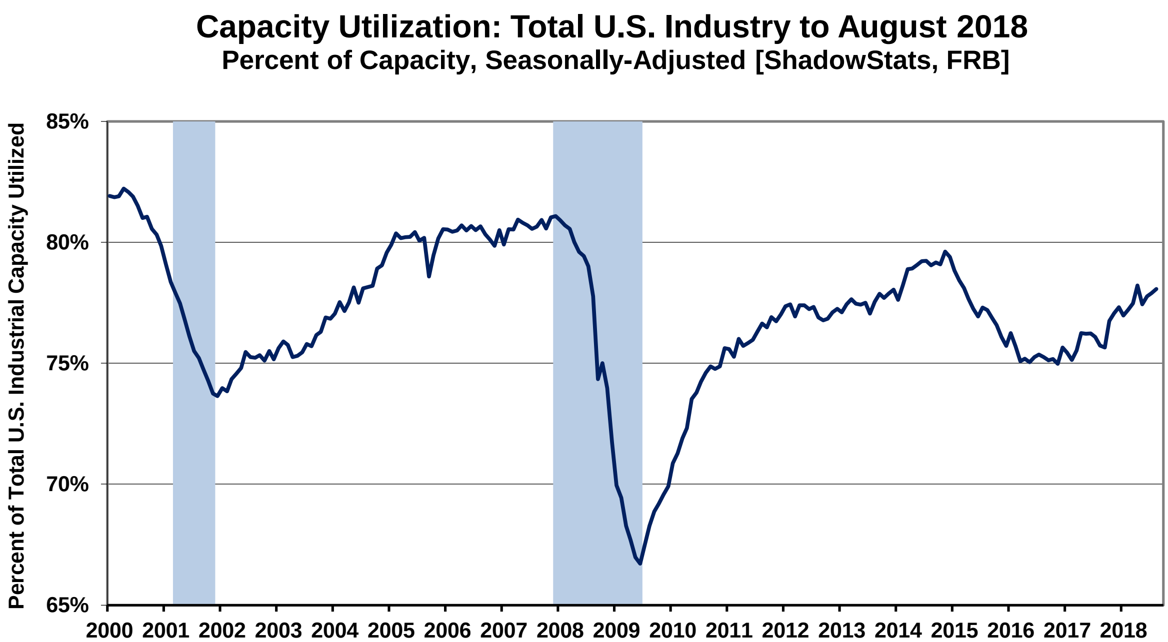
Yet, corrected for the understatement of inflation used in deflating portions of the industrial production index, as shown earlier in *Graphs 13* and *14*, that series contracted quarter-to-quarter throughout 2016 and with some bottoming, leveling off and minimal uptick in 2017, with an upturn/uptrend in the post-disaster recovery into 2018, but still well shy of recovery or expansion.

***Having Hit a Near-Term Peak in April 2018, Total U.S. Industrial Capacity Utilization Took a Relative Hit in May and Rose in June and Eased in July, with April Still the Peak. June Remained below April*.** The Federal Reserve's measure of Capacity Utilization is an estimate of total Industrial Production versus total Productive Capacity of the United States. ShadowStats has reservations as to the Fed's ability to measure or estimate productive capacity accurately, as reinforced recently by the nature of the revised plots of Capacity Utilization in the benchmark revisions of *Commentary No. 942-B*. Accompanying *Graph 15* of the series has been updated for the August 2018 Capacity Utilization Rate of 78.08%, down from downwardly revised estimates of 77.90% in July, 77.76% in June, versus 77.43% in May, with all later reporting below the revised April 2018 near-term peak of 78.22 [previously 78.29%, 78.18%, 78.06%, initially 77.99%].

Against its December 2007 pre-recession peak level of 81.10%, August 2018 Capacity Utilization reading held shy of recovering that peak *level* by 3.72% (-3.72%), or by 302 (-302) basis points in terms of the peak *percentage number.* That is despite August 2018 Industrial Production holding at 2.78% above its December 2007 pre-recession peak, and with the August 2018 Manufacturing Sector holding shy of recovering its December 2007 pre-recession peak by 4.98% (-4.98%).

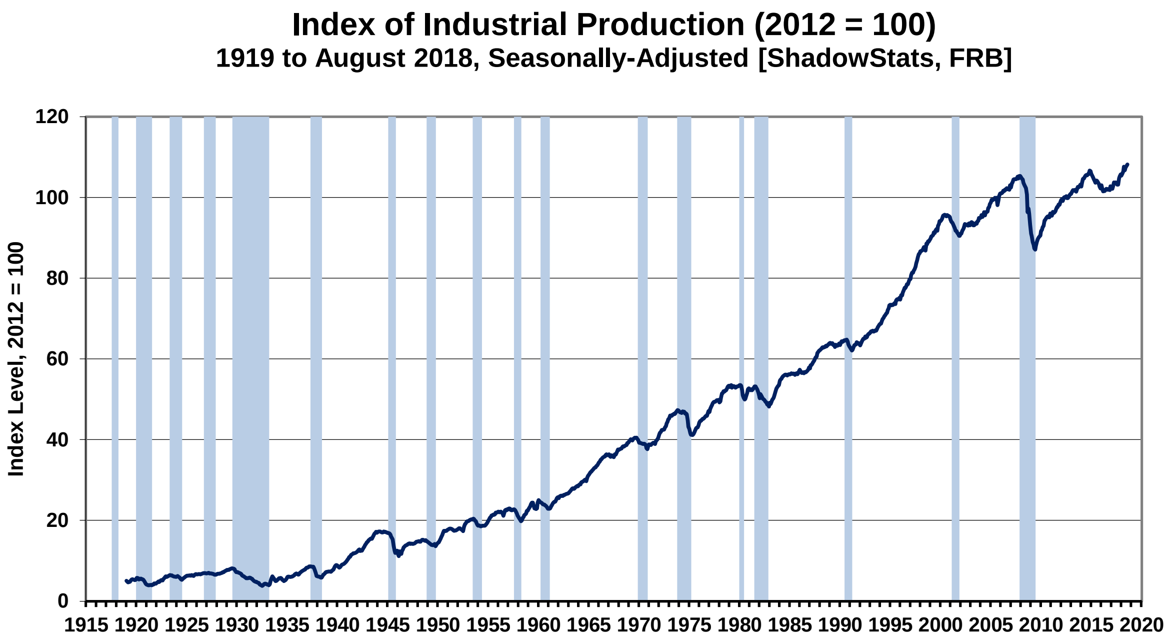
Sharp Downturns in Capacity Utilization Usually Signal the Onset of a Recession. Where sharp downturns in Utilization historically usually mark onsets of formal recessions, such would support the concept of a renewed "headline" recession, a double-dip downturn that began at the end of 2014, as indicated by the Industrial Production series. That remains ShadowStats' estimate of the timing of a likely "headline" double-dip recession, which formally began at the end of 2007, bottomed in 2009, peaked in late in 2014 and then bottomed anew in 2016, although nothing confirming that showed up in the recent GDP benchmarking. Contrary to consensus hype of fully recovered and expanding economic activity, as seen in the Manufacturing Sector, much of the headline U.S. economy never has recovered fully from the 2007 downturn.

Graph 15: Utilization of Total U.S. Industrial Production and Manufacturing Capacity (2000 to Date)

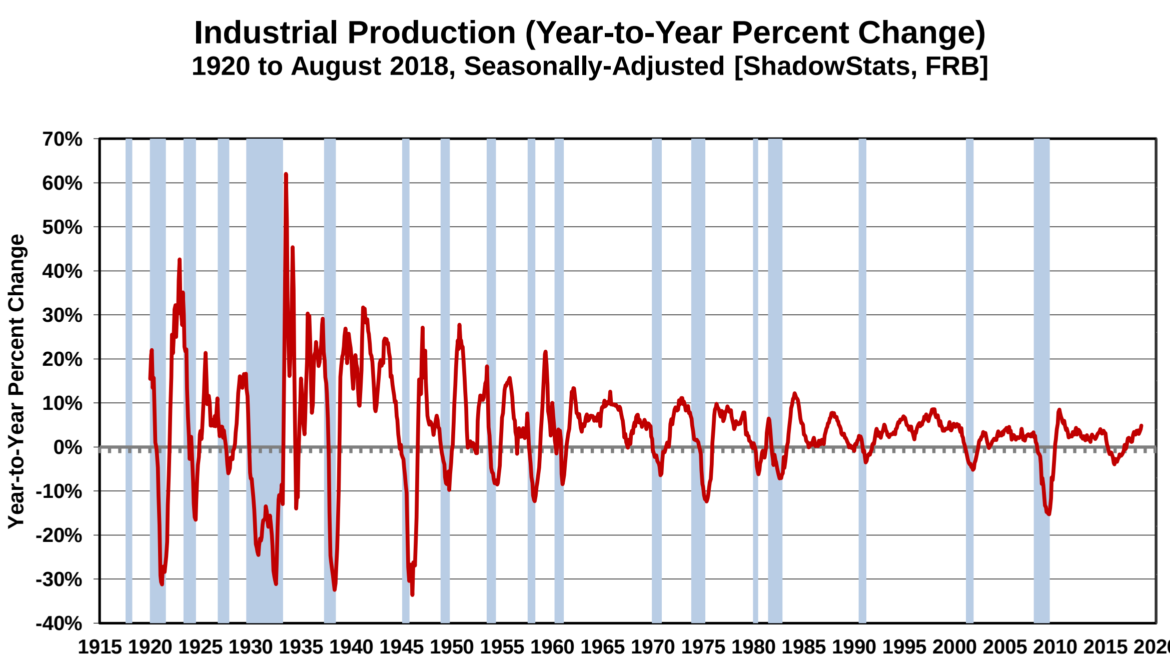


[Graphs 16 to 19 begin on the next page.]

Graph 16: Index of Industrial Production, Full Historical Series 1919 to Date

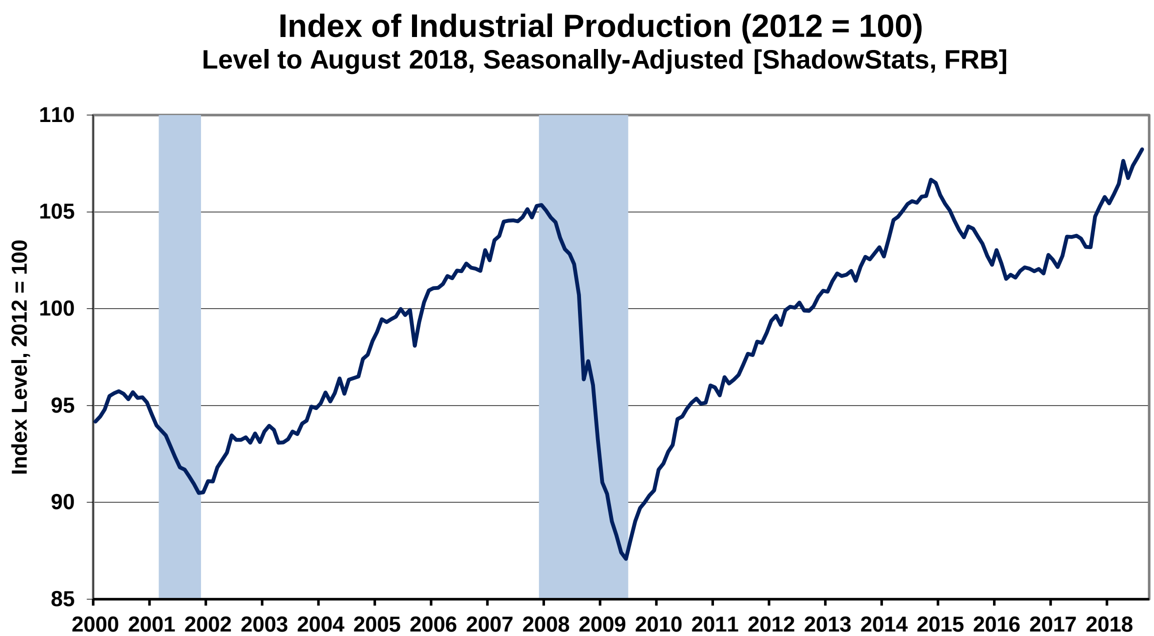


Graph 17: Industrial Production, Year-to-Year Percent Change, Full Historical Series Since 1920

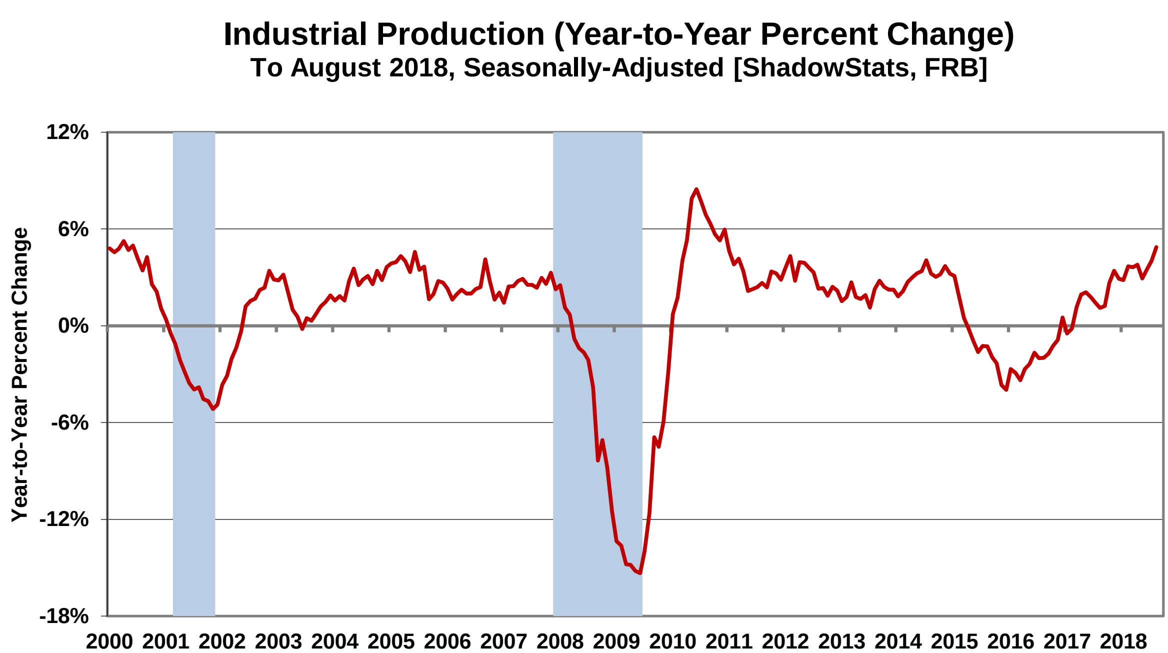


Drilling Down into the June 2018 U.S. Industrial Production Detail. *Graphs 18*, *20*, *26* and *30* show headline reporting of industrial production and its major components January 2000 through August 2018.

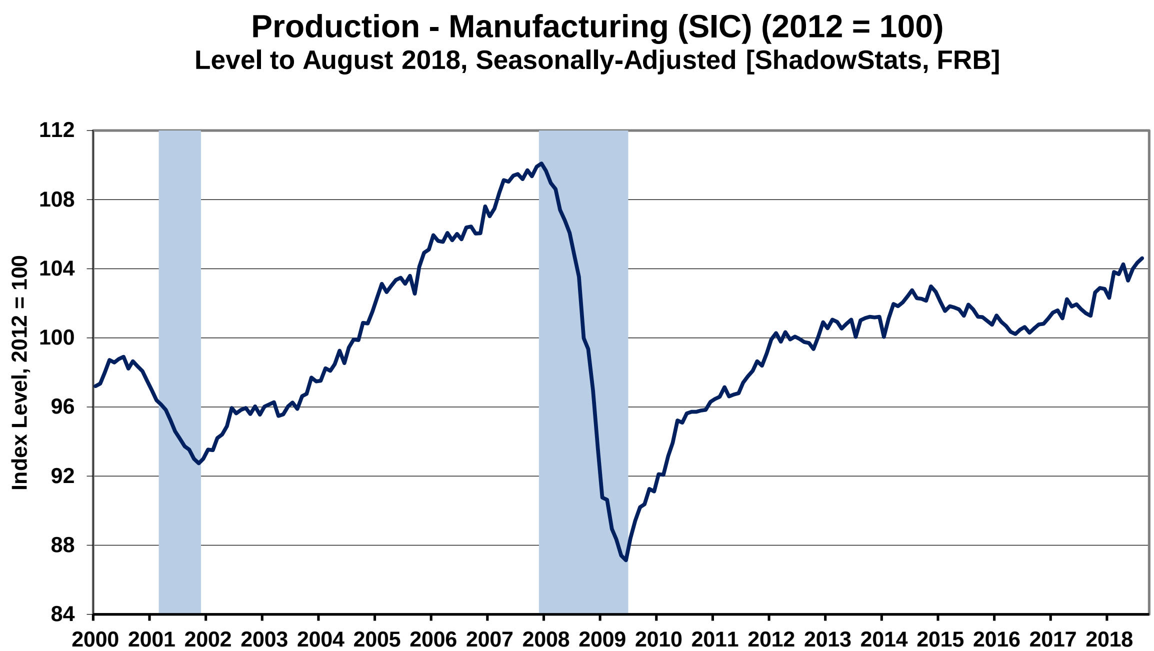
Graph 18: Index of Aggregate Industrial Production, Since 2000



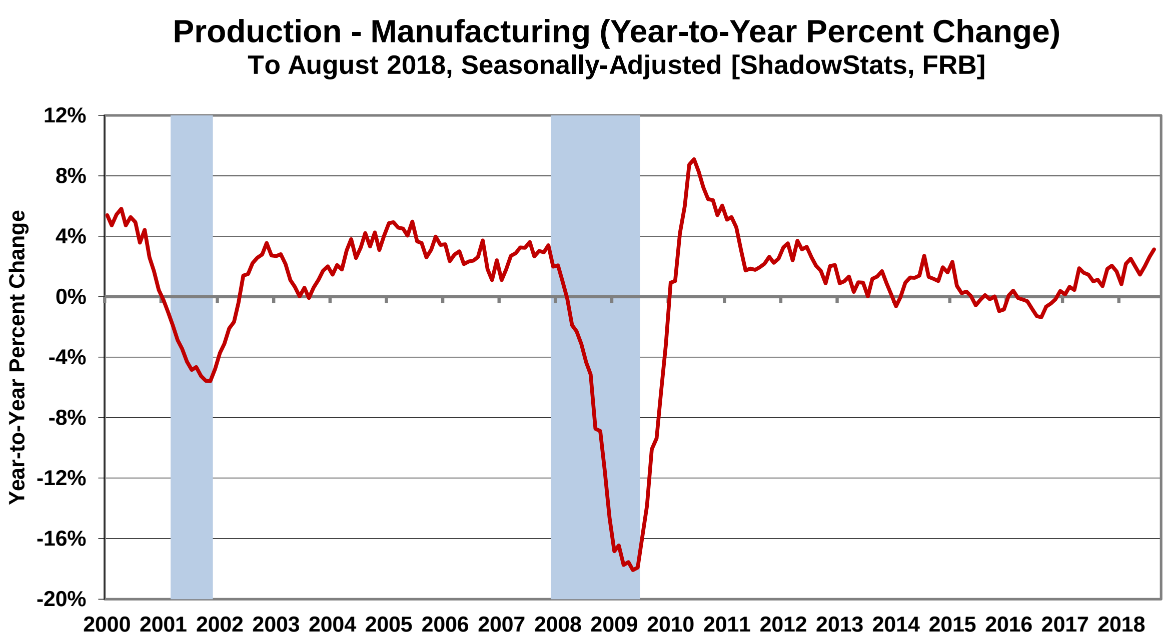
Graph 19: Aggregate Industrial Production, Year-to-Year Percent Change, Since 2000



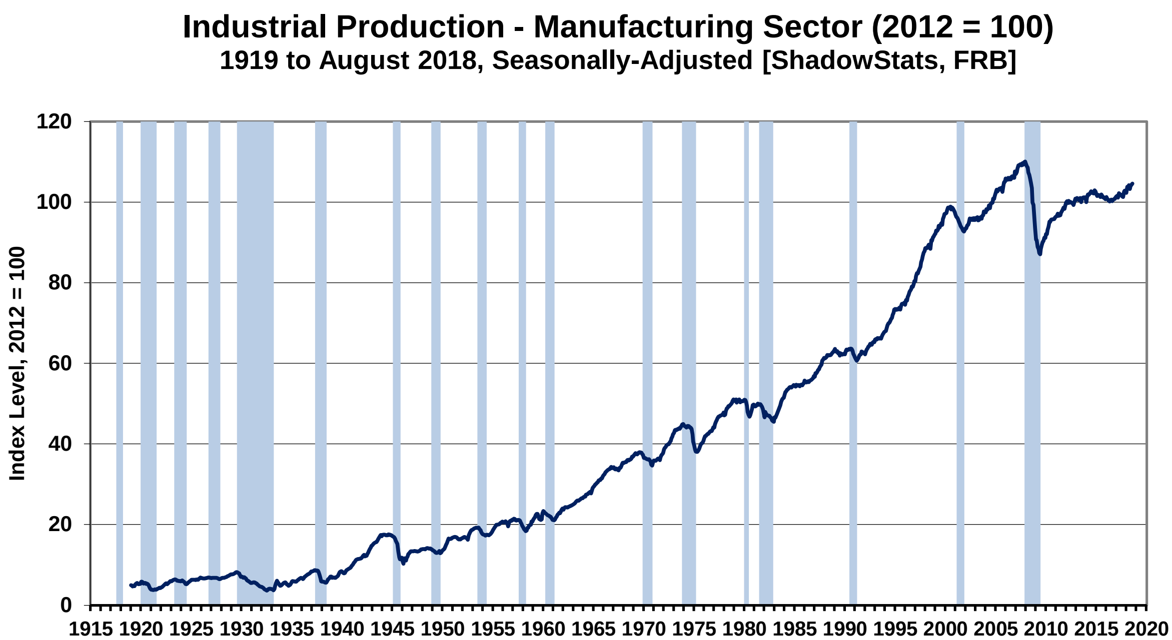
Graph 20: Industrial Production - Manufacturing (75.5% of the IIP in 2017), Since 2000



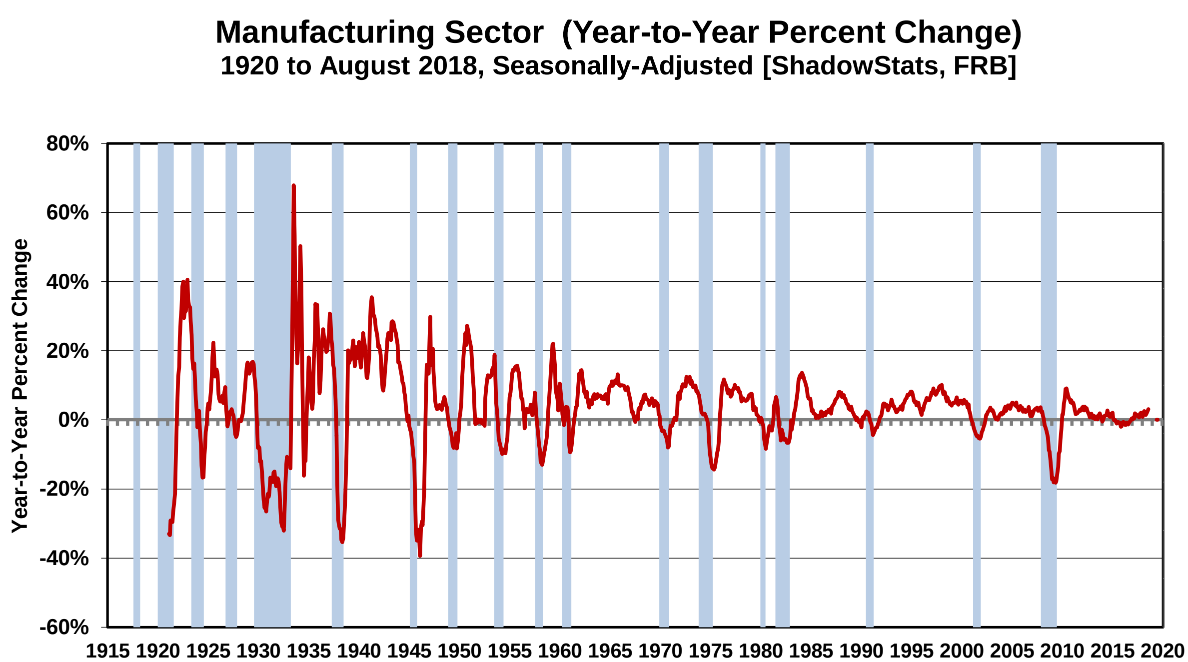
Graph 21: Industrial Production - Manufacturing, Year-to-Year Percent Change, Since 2000
(Same as Graph OC-9 in the Opening Comments)



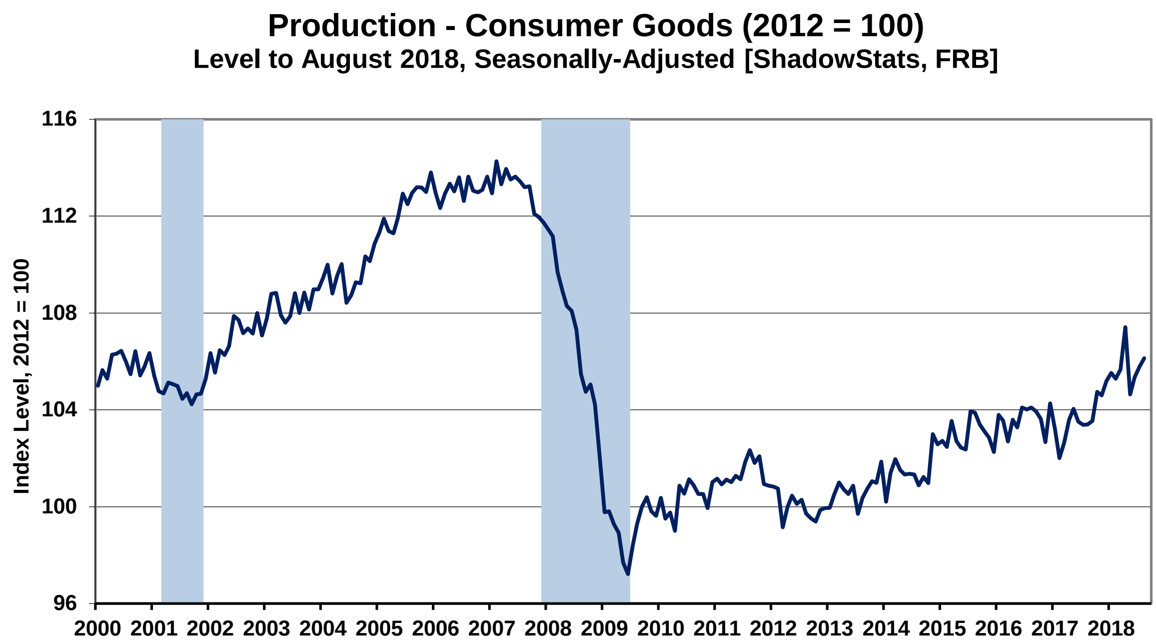
Graph 22: Industrial Production, Manufacturing, Full Historical Series 1919 to Date



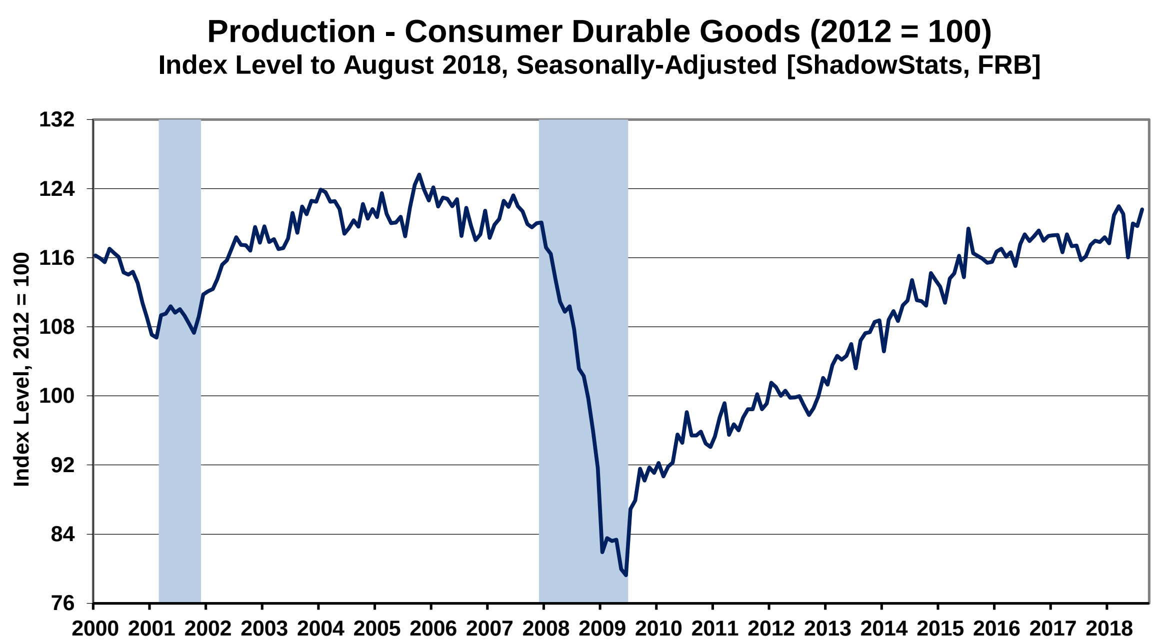
Graph 23: Manufacturing Year-to-Year Percent Change, Full Historical Series Since 1920



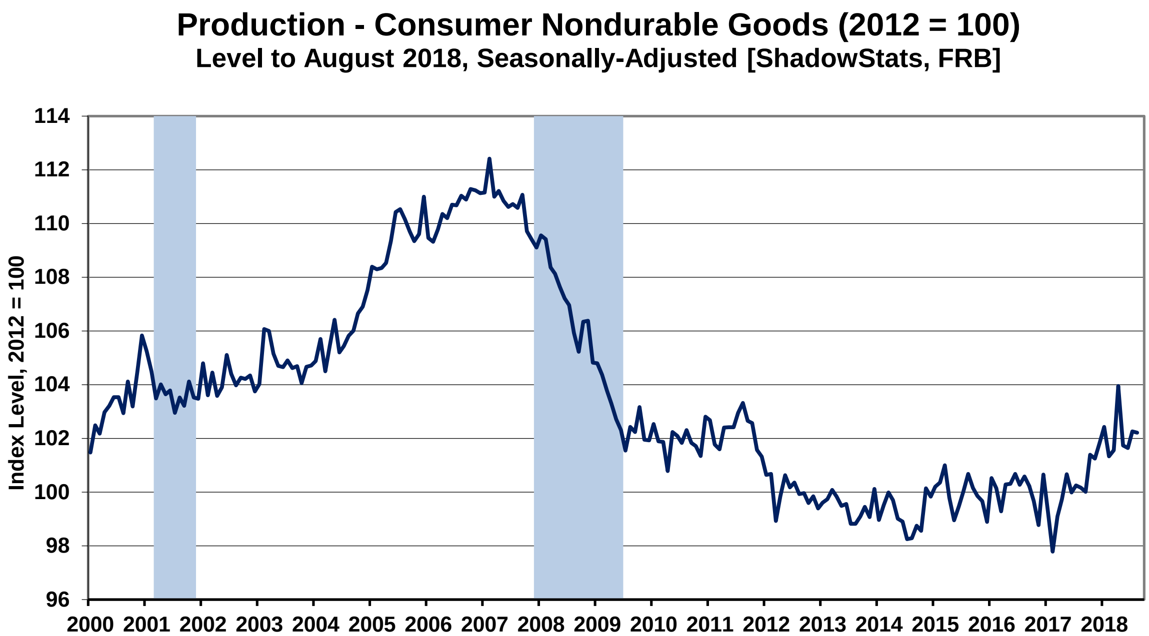
Graph 24: Consumer Goods (28.0% of the Aggregate in 2017), Since 2000



Graph 25: Durable Consumer Goods (6.3% of the Aggregate in 2017), Since 2000



Graph 26: Nondurable Consumer Goods (21.7% of the Aggregate in 2017), Since 2000



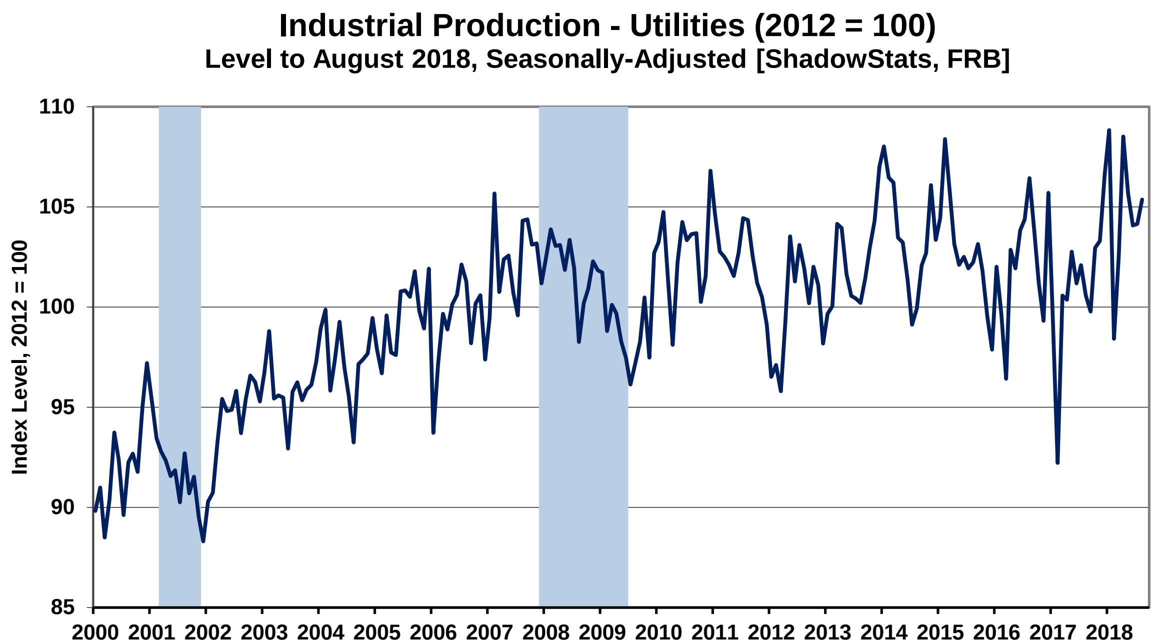
The aggregate production index (*Graph 18*) contracted quarter-to-quarter for six consecutive quarters, from first-quarter 2015 through second-quarter 2016. Year-to-year declines by quarter were seen for seven consecutive quarters, from second-quarter 2015 through fourth-quarter 2016, with first-quarter 2017 activity positive on both a quarterly and annual basis, flipped to fluctuating monthly and quarterly volatility and gains by lingering and varied hurricane disruptions and then waning recovery from same in first-half 2018. Nonetheless, activity generally has continued to pick up coming into August 2018.

Shown in *Graphs 20*, *27* and *29* are the levels of activity in the three major industry sectors, Manufacturing, Utilities and Mining, where all three gained month-to-month in August, generally thanks to downside revisions in July's index levels (see *Table 1*).

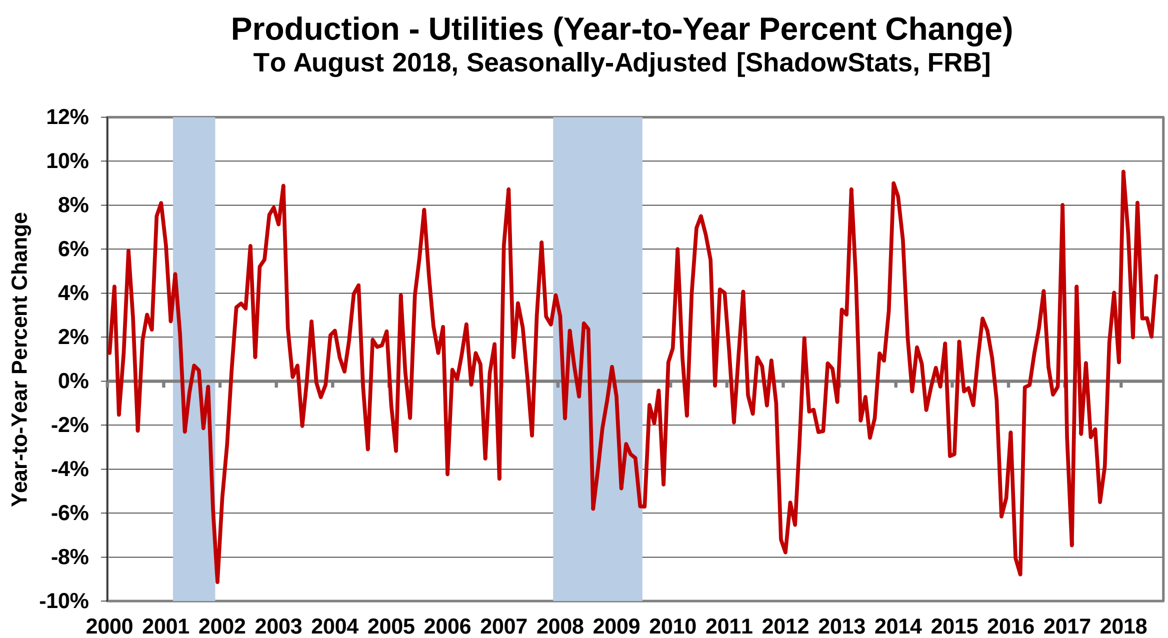
The Manufacturing graphs precede this, while the graphs of Utilities and Mining follow, all updated for the latest detail. *Graphs 21*, *28* and *30*, show the respective plots of year-to-year change for those series. The preceding Manufacturing *Graphs 20* to *35* include various levels of consumer goods production (*Graphs 24* to *35*). The next two *Graphs 27* and *28* reflect Utilities activity, massively volatile as a result of regularly unstable weather patterns.

[Graphs 27 to 30 begin on the next page.]

Graph 27: Industrial Production - Utilities (10.4% of the Aggregate in 2017), Since 2000



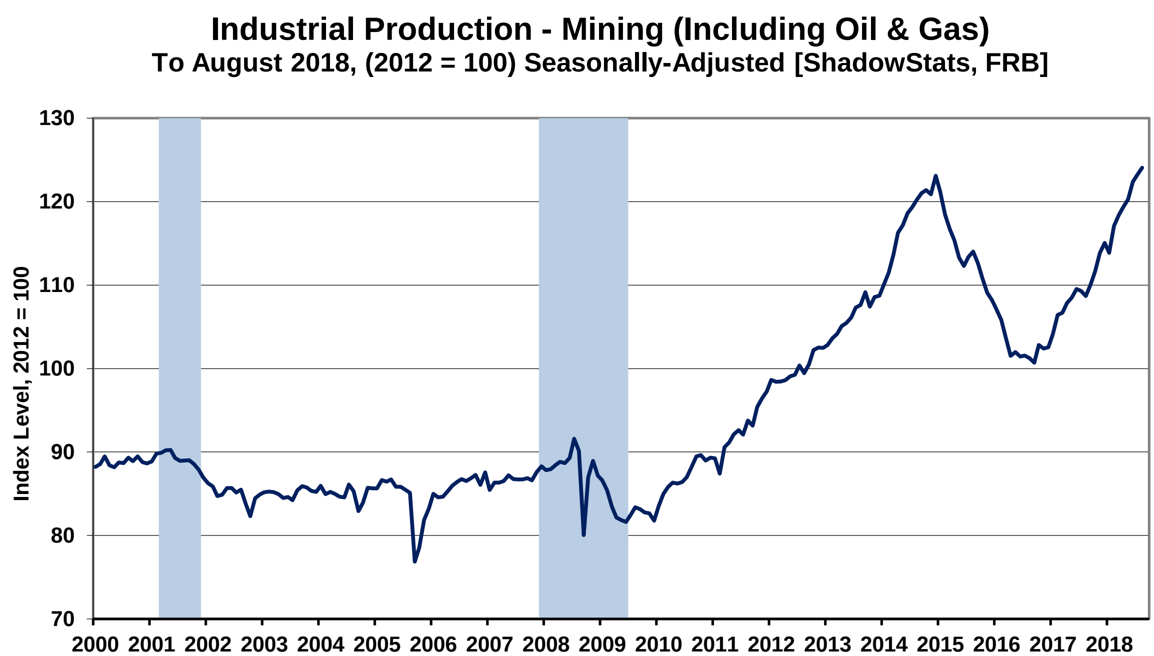
Graph 28 Industrial Production - Utilities, Year-to-Year Percent Change, Since 2000



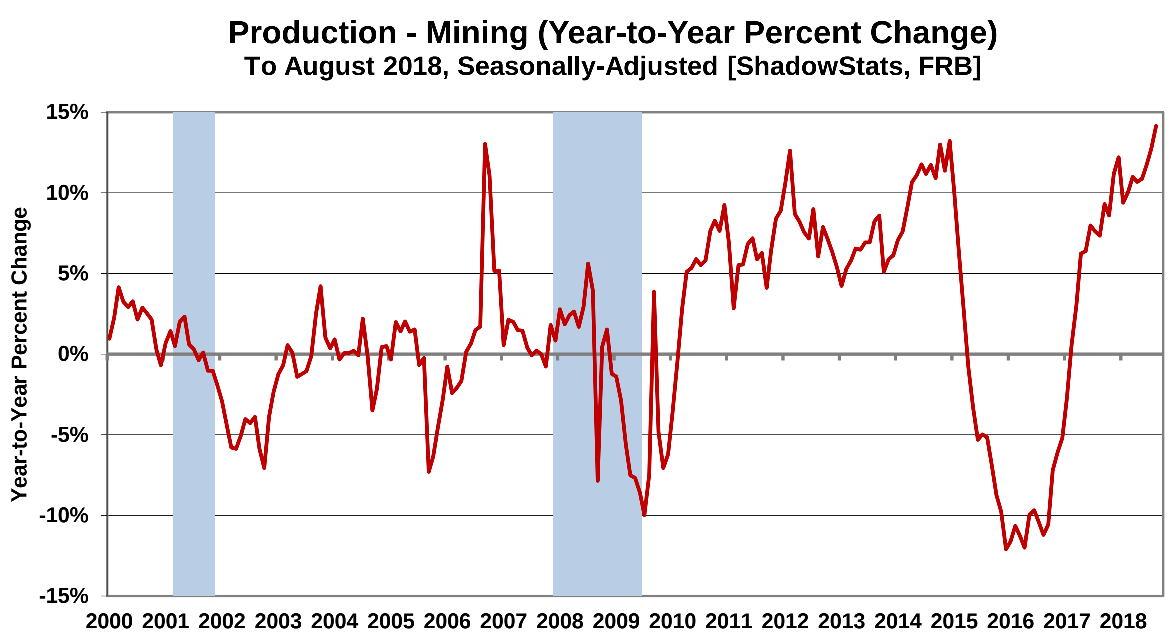
The final set of Mining *Graphs 29* to *35*, encompasses plots of related mining/oil production or exploration activity. Gold and Silver mining (*Graph 31*) decreased month-to-month by 0.12% (-0.12%) in August, having gained by 6.48% in July, but was up by 1.45% year-to-year in August, having been down by down 4.81% (-4.81%) in July 2018, picking up from a trough in annual growth of down by

21.76% (-21.76%) in April 2018. Coal Mining activity (*Graph 32*) was down in August for the second month, having declined in August by 1.28% (-1.28%) versus a drop of 1.92% (-1.92%) in July 2018. Respective rates of annual change were down by 0.49% (-0.49%) in August 2018, versus 0.14% (-0.14%) in July 2018.

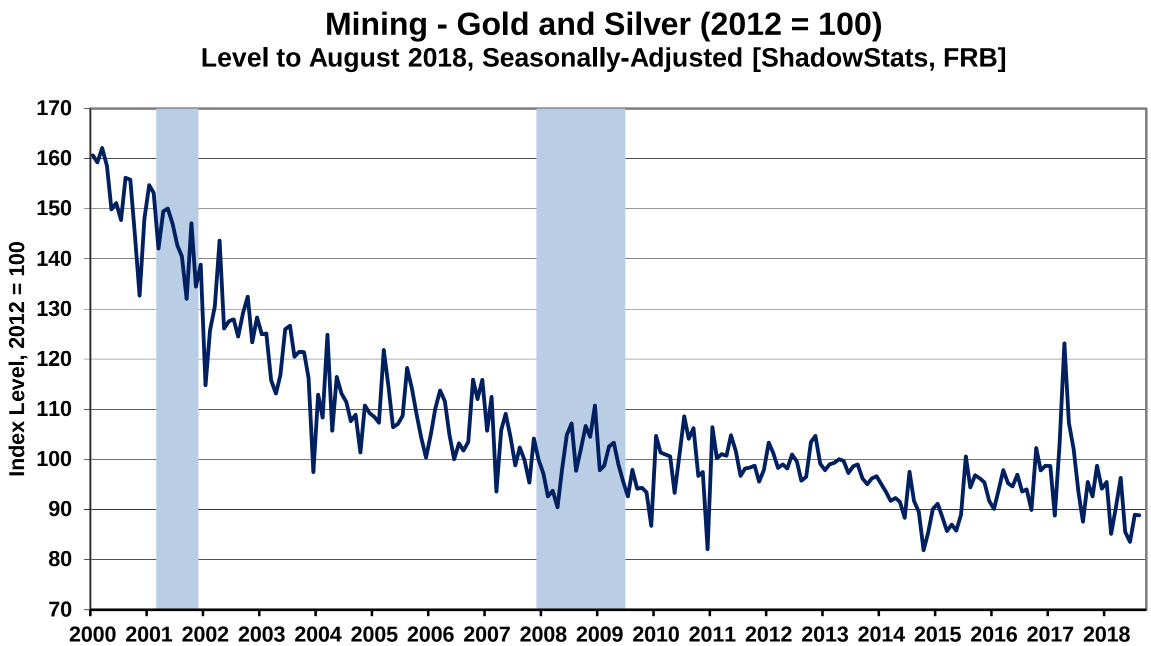
Graph 29: Industrial Production - Mining, Including Oil and Gas (14.1% of the Aggregate in 2017), Since 2000



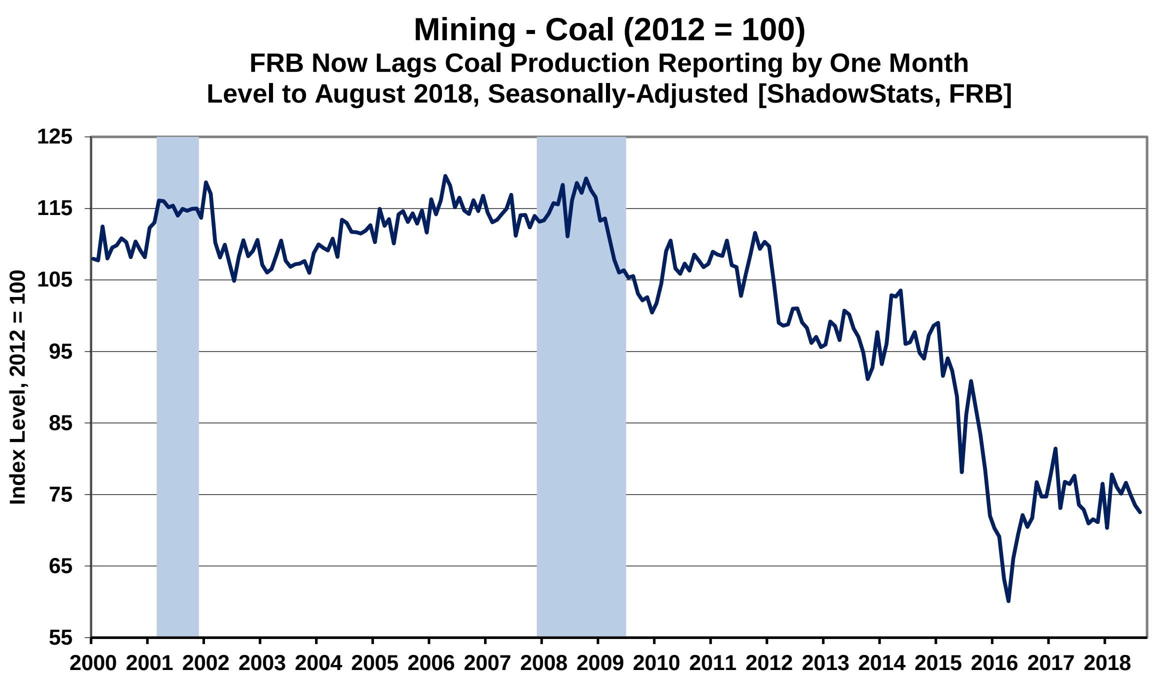
Graph 30: Industrial Production - Mining, Year-to-Year Percent Change, Since 2000



Graph 31: Mining – Gold and Silver Mining (0.2% of the Aggregate in 2017), Since 2000

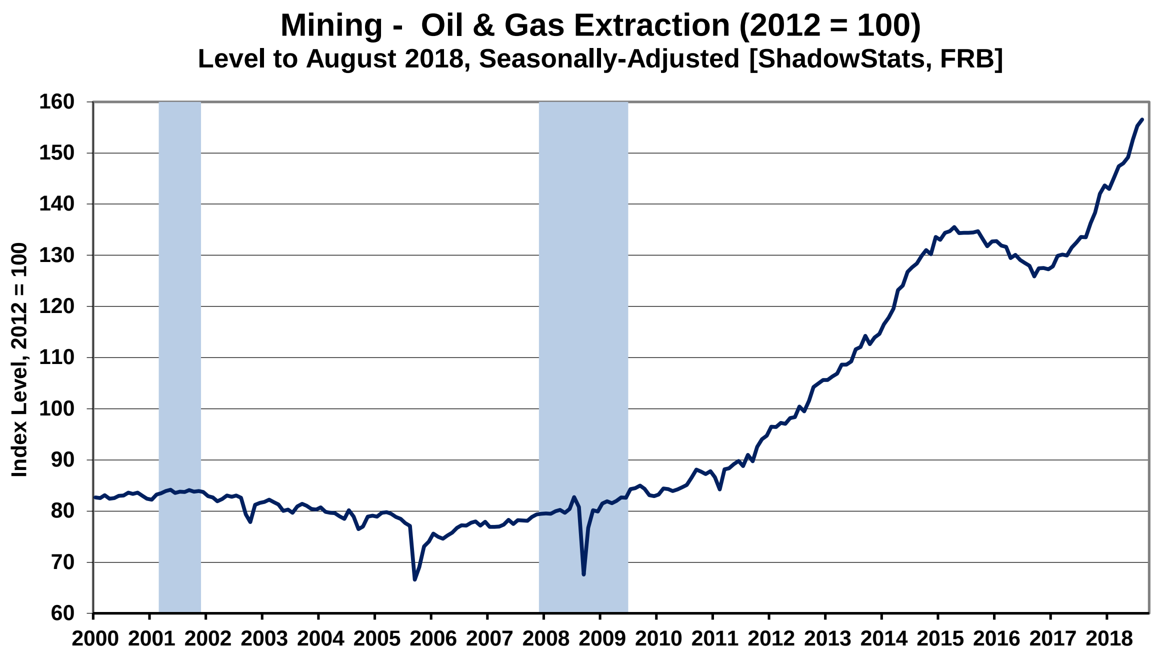


Graph 32: Mining - Coal Mining (0.8% of the Aggregate in 2017), Since 2000

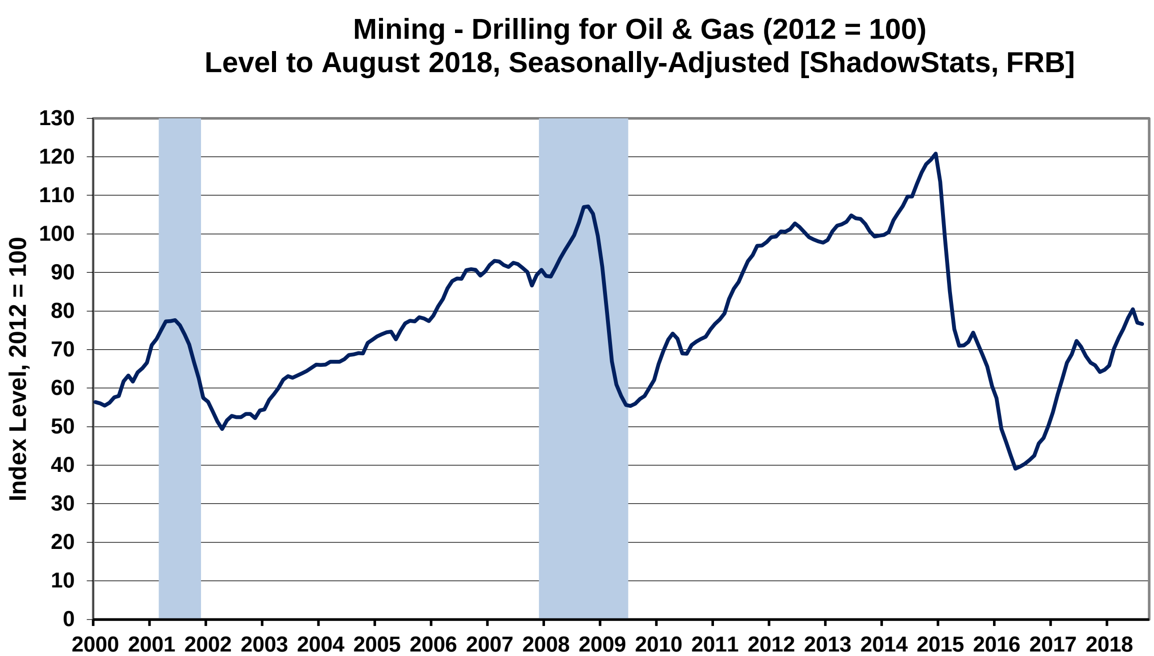


Dominated by positive monthly and annual growth from oil and gas production, the aggregate August 2018 mining sector gained by 0.67%, the same as in July [previously a decline by 0.31% (-0.31%) month-to-month], having gained a revised 1.76% [previously 2.85%] in June (see *Table 1*), with Mining activity up year-to-year by 14.15% in August 2018, dominated by Oil and Gas Extraction and Exploration.

Graph 33: Mining – U.S. Oil & Gas Extraction (10.3% of the Aggregate in 2017), Since 2000



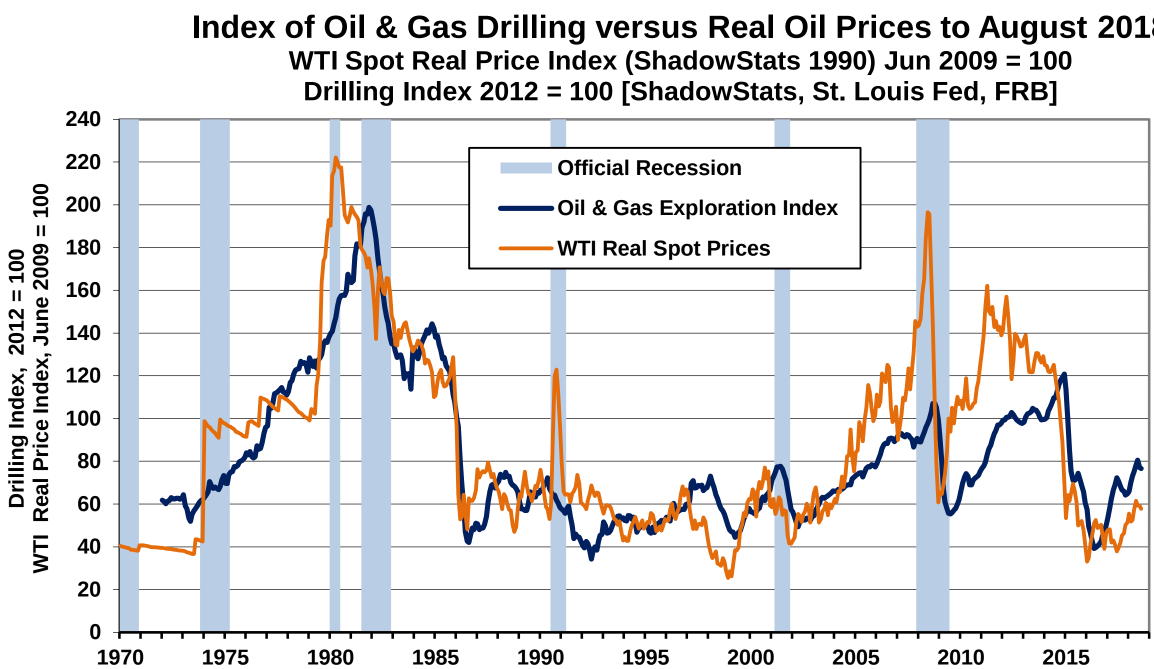
Graph 34: U.S. Drilling for Oil & Gas - Exploration (0.5% of the Aggregate in 2017), Since 2000



Likely boosted by rising oil prices, the dominant oil and gas mining sector rose month-to-month for extraction, but declined for drilling and exploration for a second month (see *Graphs 33* to *36*), with Oil and Gas Extraction up by 0.81% for the month and 17.26% year-to-year, while Oil and Gas Drilling declined by 0.50% (-0.50%) for the month, up by 12.16% year-to-year. Year ago activity shortly should begin to reflect impact from last year's Gulf Coast hurricane activity in September.

With some lag following sharp movements in oil prices (*Graph 35*), oil and gas exploration tends to move in tandem, and an upswing in exploration had been in place with what was at least a short-term bottoming in oil prices in early-2016. Prices rallied into mid-2016, but moved 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 strongly in recent months. Nonetheless, hurricanes and their after effects disrupted exploration in August through November 2017. That turned with an uptick in exploration in December 2017, with surging monthly growth into June 2018. 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).

Graph 25: Mining – U.S. Drilling for Oil & Gas versus Real Oil Prices (WTI ShadowStats 1990 Base), Since 1970



Indeed, rising oil prices tend to increase oil and gas exploration. When the dollar weakens, dollar-denominated oil prices also begin to strengthen, as had been seen recently, even in circumstances with excess supply conditions. With the U.S. dollar in an upswing, currently off its recent bottom, oil prices still have been firming, now more heavily impacted by intensified global political tensions, particularly in the Middle East. At such time as the U.S. dollar meaningfully resumes its decline—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 the *Hyperinflation Watch – No. 3* and soon-to-be-updated *HW-4*). Yet, again, beyond the dollar, recent movement in oil prices appears most-heavily impacted by, and reflective of political developments at home and abroad. Oil prices recently have risen sharply, on top of having rallied enough and for a long-enough period to induce continuing increases in domestic exploration and extraction activity, in the near future, as also has been seen at present.

[Week Month and Year Ahead Section begins on the next page.]

WEEK, MONTH AND YEAR AHEAD

Risks of U.S. Dollar and Financial-Market Turmoil Remain Intense, Amidst Mounting Fiscal, Liquidity and Political Concerns, Along With Faltering Headline Economic Activity. In the context of continued weakening in consumer-liquidity trends and the likely tipping point for the markets discussed in today's *Opening Comments*, and *Commentary No. 969-Extended*, *Special Commentary No. 968-Extended*, *Commentary No. 967* and *Commentary No. 966*, *Hyperinflation Watch – No. 3*, *Consumer Liquidity Watch – No. 4* and *Commentary No. 959-B*), the headline economic outlook likely will continue to dim rapidly as seen in the recent, intensifying downturn in the housing and construction markets, and in the stalling retail sales and production numbers, despite the headline ShadowStats "Corrected" GDP being off bottom and growing quarter-to-quarter (again, see *Special Commentary No. 968-Extended*). Both *Watches* will be updated in week ahead, updating consumer- and systemic-liquidity issues, including today's FOMC rate hike and likely policy directions. Postings and links two the *Watches* will be advised by e-mail, along with links provided on the www.ShadowStats.com home page.

Hyperinflation Watch – No. 3 reviewed the broad outlooks for the U.S. economy, the U.S. dollar, gold, silver and the financial markets (again, see the *Opening Comments* of *Commentary No. 967*). Such expanded upon the annual review in *Special Commentary No. 935*. The broad outlook on the economy has not changed. Weaker economic growth and renewed, faltering economic headlines should continue. The fundamental outlook for U.S. dollar and related market circumstances also broadly have not changed from the related vulnerabilities discussed in earlier missives, subject ultimately extraordinary financial-market turmoil (again, see today's *Opening Comments*).

The dollar and financial markets remain at extraordinarily-high risk of intense, panicked declines, possible at any time. 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, during times of high inflation and currency debasement, and/or political- and financial-system upheaval.

Please call (707) 763-5786, if you would like to discuss current circumstances, or otherwise.

Best wishes – John Williams

[Pending Economic Releases are covered on the next page.]

PENDING ECONOMIC RELEASES:

New Orders for Durable Goods (August 2018). The Census Bureau will report August 2018 New Orders for Durable Goods tomorrow, Thursday, September 27th, to be covered initially in *Commentary No. 971* of September 28th. Headline details will be posted shortly after the press release, in the **Daily Update** section, upper left hand column of the www.ShadowStats.com home page. Where expectations usually are reasonably positive for this series, net of the volatile commercial aircraft orders, chances for a downside "surprise" remain strong.

Net of the irregular activity in commercial aircraft orders, aggregate orders likely continued in a pattern of intensifying, downtrending real stagnation, weaker than expected.

Where commercial aircraft orders are booked for the long-term—years in advance—they have only limited impact on near-term production volatility. 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. Again, with expectations likely on the plus-side, ex-aircraft, the headline change in month-to-month activity remains a fair bet to be in unexpected contraction, particularly in real terms, net of rapidly-spiking headline inflation.

In inflation-adjusted or real terms, reflecting PPI-related inflation for "manufactured durable goods," relative month-to-month and year-to-year New Orders activity will be dampened sharply, particularly on an annual basis. Month-to-month related inflation for August 2018 was a gain of 0.11%, versus 0.17% in July and 0.35% in June. Year-to-year, annual inflation rose to 3.25% in August 2018, versus 3.20% in July 2018 and versus 2.96% in June 2018 (see the earlier *Producer Price Index* section).

Gross Domestic Product (Second-Quarter 2018, Third Estimate, Second Revision). The Bureau of Economic Analysis (BEA) will release its third-estimate of, second-revision to Second-Quarter 2018 GDP tomorrow, Thursday, September 27th, along with second estimates of Second-Quarter 2018 Gross Domestic Income (GDI) and Gross National Product (GNP), to be covered in *Commentary No. 971* of September 28th. Headline details will be covered in the **Daily Update** section, shortly after the data release, in the upper left hand column of the www.ShadowStats.com home page.

Where expectations appear to be on the upside of the 4.2% second estimate, there is some chance for a downside revision, given the weakening housing, consumption and production numbers. Any revision is not likely to be large.

[Links to Prior Commentaries, etc. begin on the next page.]

LINKS TO PRIOR COMMENTARIES, SPECIAL REPORTS AND OTHER WRITINGS

Most Recent Watches:

The ***Consumer Liquidity Watch*** of August 10th: *Consumer Liquidity Watch – No. 4*.

The ***Hyperinflation Watch*** of August 12th: *Hyperinflation Watch – No. 3*.

The latest Watches always are available on www.ShadowStats.com and by link from the current *Commentary*. Pending updates in the next couple of days will be advised by e-mail when they are posted.

Prior Writings Underlying the Regular and *Special Commentaries*: Underlying the recent *Special Commentary No. 935 (Part One)* and the pending *Special Commentaries (Part Two)* on Inflation, and *(Part III)* on the Federal Reserve and U.S. banking system, are *Commentary No. 899* and *General Commentary No. 894*, along with general background from regular *Commentaries* throughout 2017.

These missives also are built upon writings of prior years, including *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). In turn, they updated the long-standing 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 Regular Commentaries: *[Listed here are* Commentaries *of the last several months or so, plus recent* Special Commentaries *and a sampling of others covering a variety of non-monthly issues, including annual benchmark revisions, dating back to the beginning of 2017. Please Note: Complete ShadowStats archives back to 2004 are found at www.ShadowStats.com (left-hand column of home page).]*

These regular *Commentaries* should be published at least weekly, with *Consumer Liquidity* and *Hyperinflation Watches* updated every several weeks or so, updating general economic, consumer-liquidity and financial-market circumstances as they develop.

Commentary No. 969-Extended (September 16th) Reviewed the reporting of 2017 Real Median Annual Household Income and related measures of Income Dispersion, along with extended coverage of the August 2010 Employment and Unemployment numbers, including an updated Supplemental Labor-Detail Background Supplement.

Flash Commentary No. 969-Advance (September 7th) Covered initial headline employment and unemployment detail for August 2018 (expanded upon in *No 969-B*), July Construction Spending, the July Trade Deficit and a review of August Monetary Conditions.

Special Commentary No. 968-Extended (September 6th) Reviewed underlying economic reality, in the context of statistical deception used in boosting headline GDP activity, and against the background of extended analysis of the 2010 Comprehensive GDP Benchmarking. Separately covered was extended coverage of the second estimate of second-quarter 2018 (see *Flash Commentary No. 968-Advance*).

Flash Commentary No. 968-Advance (August 29th) provided a summary review of the headline first revision, second estimate of Second-Quarter 2018 GDP and initial estimates of GDI and GNP. Also updated early indications from the latest Consumer Liquidity measures.

Commentary No. 967 (August 24th) discuused the annual squirrely season and reviewed July 2018 New Orders for Durable Goods and New- and Existing-Home Sales and the preliminary benchmark revision to 2018 payroll employment.

Commentary No. 966 (August 17th) reviewed July 2018 Retail Sales, Industrial Production, New Residential Construction and the CASS Freight Index™.

Commentary No. 965 (August 12th) covered the July 2018 Consumer and Producer Price Indices (CPI and PPI), and Real Average Weekly Earnings and deteriorating consumer liquidity conditions.

Commentary No. 964-A (August 3rd) preliminary coverage of July 2018 Employment/Unemployment, Conference Board Help Wanted OnLine® Advertising, M3 and the June Trade Deficit and Construction Spending.

Commentary No. 963 (July 31st) reviewed June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index, all in the context of the GDP revisions and unfolding, underlying economic reality.

Commentary No. 962 (July 27th) provided initial coverage of the first or "advance" estimate of Second-Quarter 2018 Gross Domestic Product (GDP) and the Comprehensive Benchmark Revisions to the series back to 1929. A full update and extended coverage are in today's (September 4th) *Special Commentary.*

Commentary No. 961 (July 26th) provided full coverage on New Residential Investment (Housing Starts, Building Permits and New- and Existing-Home Sales. Preliminary coverage was provided on June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index™, all of which were expanded upon in *Commentary No. 963.*

Commentary No. 960 (July 15th) reviewed the June Consumer and Producer Price Indices (CPI and PPI), Real Earnings and related implications for consumer and systemic liquidity

Commentary No. 959-B (July 11th) provided extended detail on June 2018 Employment and Unemployment, the May 2018 Trade Deficit and updated economic outlook, along with expanded discussion on issues affecting the credibility of the headline employment and unemployment data.

Commentary No. 959-A (July 6th) provided flash headlines and summary details of the June 2018 Employment and Unemployment and the May 2018 Trade Deficit, expanded upon in *Commentary No. 959-B* and headline coverage of June 2018 Conference Board Help Wanted OnLine® Advertising.

Commentary No. 958 (July 3rd) covered May 2018 Construction Spending and the accompanying annual benchmarking to that series.

Commentary No. 957 (July 1st) covered May 2018 New Orders for Durable Goods and the third estimate of First-Quarter 2018 Gross Domestic Product (GDP) and the coincident second estimates of Gross National Product (GNP) and Gross Domestic Income (GDI).

Commentary No. 956 (June 27th) reviewed May 2018 Retail Sales, Industrial Production, New Residential Construction (Housing Starts and Building Permits), New- and Existing-Home Sales, along with detail on the May 2018 Cass Freight Index™ and some potential twists to the pending July 27th Comprehensive Benchmark Revision to the GDP.

Commentary No. 955 (June 18th) analyzed May 2018 inflation as reported with the May 2018 Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* covering FOMC policy, the U.S. dollar and financial markets. Summary headline details also were provided for May Retail Sales, Industrial Production and the Cass Freight Index™.

Commentary No. 954 (June 8th) reviewed the comprehensive annual benchmark revisions to the Trade Deficit, in the context of recent benchmark revisions to other major economic series and implications for the pending GDP benchmark revisions. Such also covered the headline reporting of the April 2018 headline Trade Deficit detail and an updated Consumer Liquidity Watch.

Commentary No. 953-B (June 5th) analyzed the discrepancies between the record-low headline unemployment rate and near-record-high readings of labor-market stress, in the context of extended coverage the May 2018 Employment and Unemployment and April 2018 Construction Spending, previously headlined in *No. 953-A*.

Commentary No. 953-A (June 1st) provided flash headlines and summary details of the May 2018 Employment and Unemployment and April 2018 Construction Spending, expanded upon in the supplemental coverage of *Commentary No. 953-B.* Current monetary conditions were reviewed, along with the initial estimate of annual growth in the May 2018 ShadowStats Ongoing Estimate of Money Supply M3.

Commentary No. 952 (May 30th) reviewed the second estimate of First-Quarter 2018 GDP, initial estimates of first-quarter GNP and GDI, extended detail on the annual benchmarking of the Retail Sales series, and headline coverage of the May 2018 Conference Board Help Wanted OnLine® Advertising.

Commentary No. 951 (May 25th) reviewed April 2018 New Orders of Durable Goods, in the context of the annual revisions (see prior *No. 950*), New- and Existing-Home Sales and brief coverage of the annual benchmarking of the Retail Sales series.

Commentary No. 950 (May 20th) reviewed April Retail Sales, Industrial Production, New Residential Construction (Housing Starts, Building Permits and annual revisions), the Cass Freight Index™ and annual benchmark revisions to Manufacturers' Shipments, including New Orders for Durable Goods.

Commentary No. 949 (May 11th) reviewed inflation as reported with the April 2018 Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* on the U.S. dollar and financial markets.

Commentary No. 948 (May 9th) explored unusual circumstances with April 2018 Employment and Unemployment numbers, along with the April Conference Board Help Wanted OnLine® Advertising, April Monetary Conditions, the March Trade Deficit and Construction Spending, along with the reintroduction of Sentier Research's monthly Real Median Household Income to March 2018.

Commentary No. 947 (April 27th) detailed the first estimate of First-Quarter 2018 GDP and the related Velocity of Money, March New Orders for Durable Goods, New- and Existing-Home Sales and the "advance" estimate of the March 2018 merchandise goods deficit.

Commentary No. 946 (April 22nd) covered March 2018 Retail Sales, Industrial Production, New Residential Construction (Housing Starts and Building Permits), the Cass Freight Index™ and a review of the current state of the GDP reporting and an outlook for first-quarter 2018 activity.

Commentary No. 945 (April 11th) reviewed the March 2018 Consumer and Producer Prices Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* on the U.S. dollar and financial markets.

Commentary No. 944 (April 8th) covered March 2018 Employment and Unemployment, the March Conference Board Help Wanted OnLine® Advertising, March Monetary Conditions and the full February Trade Deficit and Construction Spending.

Commentary No. 943 (March 29th) covered the third-estimate of, second-revision to Fourth-Quarter 2017 GDP and the only estimates to be made in current reporting of the GDI and GDP, as well as the "advance" estimate of the February merchandise trade deficit.

Commentary No. 942-B (March 27th) reviewed the Industrial Production annual benchmark revisions, general reporting-quality issues, February 2018 New Orders for Durable Good, New- and Existing-Home Sales and the Cass Freight Index™.

Commentary No. 942-A (March 23rd) provided a very brief summary of the much more extensive Industrial Production benchmarking details covered in *Commentary 942-B*.

Commentary No. 941 (March 19th) covered February Industrial Production and New Construction Spending (Housing Starts and Building Permits), along with a general discussion in the *Opening Comments* on economic conditions and a preview of the Industrial Production benchmark revisions.

Commentary No. 940 (March 15th) covered February 2018 Retail Sales, CPI, PPI and related Real Average Weekly Earnings, real Annual Growth in M3 and updated financial market prospects.

Commentary No. 939 (March 9th) covered the February 2018 Employment and Unemployment details, the full reporting of the January 2018 Trade Deficit, February Conference Board Help Wanted OnLine® Advertising and February Monetary Conditions.

Commentary No. 938 (March 1st) reviewed January 2018 Construction Spending and the second estimate of Fourth-Quarter 2017 GDP.

Commentary No. 937 (February 27th) covered January 2018, New Orders for Durable, New- and Existing-Home Sales, the "advance" estimate of the January 2018 Merchandise Trade Deficit and the Cass Freight Index™.

Commentary No. 936 (February 19th) covered the January 2018 CPI and PPI, Retail Sales, Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Special Commentary No. 935 (February 12th) was the first part of a three part-series reviewing economic and financial conditions of 2017 and the year-ahead, inflation and the U.S. government's balance sheet and conditions in the U.S. banking system and Federal Reserve options.

Commentary No. 934-B (February 6, 2018) provided extended coverage on the January 2018 Employment and Unemployment details, the 2017 benchmark revisions to Payroll Employment and the January annual recasting of population, along with coverage of the December 2017 Trade Deficit.

Commentary No. 934-A (February 2, 2018) provided initial detail on the January 2018 Employment and Unemployment details and the 2017 benchmark revisions to Payroll Employment, along with coverage of

January Conference Board Help Wanted OnLine® Advertising, January Monetary Conditions and December 2017 Construction Spending.

Commentary No. 933 (January 26, 2018) covered December New Orders for Durable Goods, the Cass Freight Index™ and the first estimate of Fourth-Quarter 2017 GDP.

Commentary No. 932 (January 18, 2018) covered December Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Commentary No. 931 (January 15, 2018) reviewed December 2017 Retail Sales and the CPI and PPI, along with an update on the U.S. dollar, the financial markets and gold graphs.

Commentary No. 930-B (January 8th) expanded upon the December 2017 Employment and Unemployment numbers and Household Survey benchmarking, Conference Board Help Wanted OnLine® Advertising, December Monetary Conditions and the November 2017 Trade Deficit and Construction Spending, otherwise headlined in *No. 930-A*.

Advance Commentary No. 930-A (January 5, 2018) provided a brief summary and/or comments (all expanded in *Commentary No. 930-B*) on December 2017 Employment and Unemployment numbers, Household Survey benchmarking, Conference Board Help Wanted OnLine® Advertising, December Monetary Conditions and the November 2017 Trade Deficit and Construction Spending.

General Commentary No. 929 (December 28, 2017) reviewed current economic and market conditions at year-end 2017.

Commentary No. 926 (December 15, 2017) reviewed the headline November 2017 numbers for Retail Sales (both real and nominal), and Industrial Production, along a discussion on the dampening economic impact of business and consumer "uncertainty."

Commentary No. 909 (September 14, 2017) 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.

Special Commentary No. 904 (August 14, 2017) 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. 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.