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

COMMENTARY NUMBER 972

September Labor Numbers and Money Supply, August Trade Deficit, Construction Spending

October 7, 2018

Second-Half 2018 Economic Growth Prospects Continue to Weaken, With Tightening Systemic Liquidity and a Deepening Trade Deficit

Annual M3 Growth Sank to a 13-Month Low in September 2018, with the Level of the Monetary Base on the Brink of Breaking to a Five-Year Low

Unemployment Dropped to 3.7%, with Employed Jumping by 420,000, While Payroll Growth Slowed to 134,000 from an Upwardly Revised 270,000; Hurricane Distortions Likely Depressed Both the Unemployment Rate and the Jobs Gain Number, Given Bureau of Labor Statistics Definitional Inconsistencies

September U.3 Unemployment Dropped to a Record Lower 3.68%, from 3.85%; Yet, Broader U.6 Unemployment Rose to 7.45% from 7.39%. On Top of U.6, ShadowStats-Alternate Unemployment Rose to 21.3% from 21.2%

Intense Labor-Market Stresses Remained Consistent with Headline Unemployment Near a Record High, Not at a Record Low

Total August Real Construction Spending, Residential and Nonresidential, Fell for the Third Straight Month; Private Spending Down, Government Spending Up

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PLEASE NOTE: The next regular *Commentary No. 973*, planned for Thursday, October 12th will provide a full review of the September Consumer and Producer Price Indices (CPI and PPI).

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 sholuld be updated fully in the week ahead.

DAILY UPDATE Coverage. Detail on new headline economic data is posted 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 are posted there usually within an hour or two of the release. Those details remain posted until they are covered separately in a subsequent *Commentary*.

The planned ShadowStats Publication Schedule, Schedule Revisions and Notes to Subscribers also are provided 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 (October 7th) ***Opening Comments*** discusses potential hurricane disruptions to the September Labor Details, along with a review of the September 2018 Conference Board Help-Wanted Online Advertising® (HWOL).

The ***Reporting Detail*** provides coverage of September 2018 Employment, Unemployment, the usual Contradictory Indicators of Labor-Market Health and updated Supplemental Labor-Detail Background, the August Trade Deficit, August Construction Spending and September Monetary Conditions.

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

Commentary No. 972 contents, including graphs and tables, are indexed and linked on following page.

Contents – Commentary No. 972 Major Sections and Graphs

OPENING COMMENTS

MIXED ECONOMIC SIGNALS

Hurricane-Disrupted September Payroll and Household Surveys

Private Surveying of September Labor Demand Showed a Monthly Increase

Disruptions to Household and Payroll Employment Surveys Conducted During Hurricane Florence. Suggested in *Commentary No. 970*, Hurricane Florence's landfall in the Carolinas during the week in which the Bureau of Labor Statistics (BLS) standardly conducted its Household and Establishment (Payroll) Surveys for September 2018 (containing the 12th of the month) appears to have had some major impact on the BLS surveyed payroll and unemployment detail in the month.

The BLS noted in its October 5th release, "Hurricane Florence affected parts of the East Coast during the September reference periods for the establishment and household surveys. Response rates for the two series were within normal ranges." That does not mean, however, that the surveyed results were unaffected. With protracted and massive evacuations, school closings and business shutdowns, there had to be impact, including reporting disruptions of employment, unemployment and other labor-market details. In particular, labor-surveying distortions would reflect inconsistent BLS methodologies, such as seen when Hurricane Irene hit Florida during the BLS's September 2017 survey week.

Where data distortions from the 2017-hurricane season and later, related recovery, 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, again ,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.

While there are a number of other differences between the Payroll and Household Surveys, such as the Payroll count excluding, and the Household count including Agriculture, the unusually weak headline, seasonally-adjusted Payroll gain of 134,000 jobs September 2018, was against a seasonally-adjusted Household Survey boom of 420,000 employed in the month. Where the differing BLS hurricane-reporting methodologies tend to understate Payroll Employment, and to overstate Household Survey employed, that likely is what happened.

Consider that where the headline U.3 unemployment rate declined to a record low 3.68% in September 2018, reflecting numbers that directly would be positively influenced by the definitional hurricane distortions, the broader U.6 unemployment rate widened, despite being on top of the narrowed U.3 rate, reflecting numbers otherwise immune to the BLS defined hurricane distortions.

September 2018 Help-Wanted Advertising Gained 3.2%, Driven by an 8.2% Jump in New Ads, Which Also Fell by 2.9% (-2.9%) Year-to-Year, Holding Deep in Non-Expansion Territory. The September 2018 Conference Board Help-Wanted Online Advertising® (HWOL), released on October 3rd and previewed in *Commentary No. 971* of that date, showed Total Ads in the September 2018 HWOL gained month-to-month by 3.2%, having gained 1.0% in August. The aggregate increase was almost entirely from New Ads, which gained 8.2% in the month, having declined by 8.2% (-8.2%) in August.

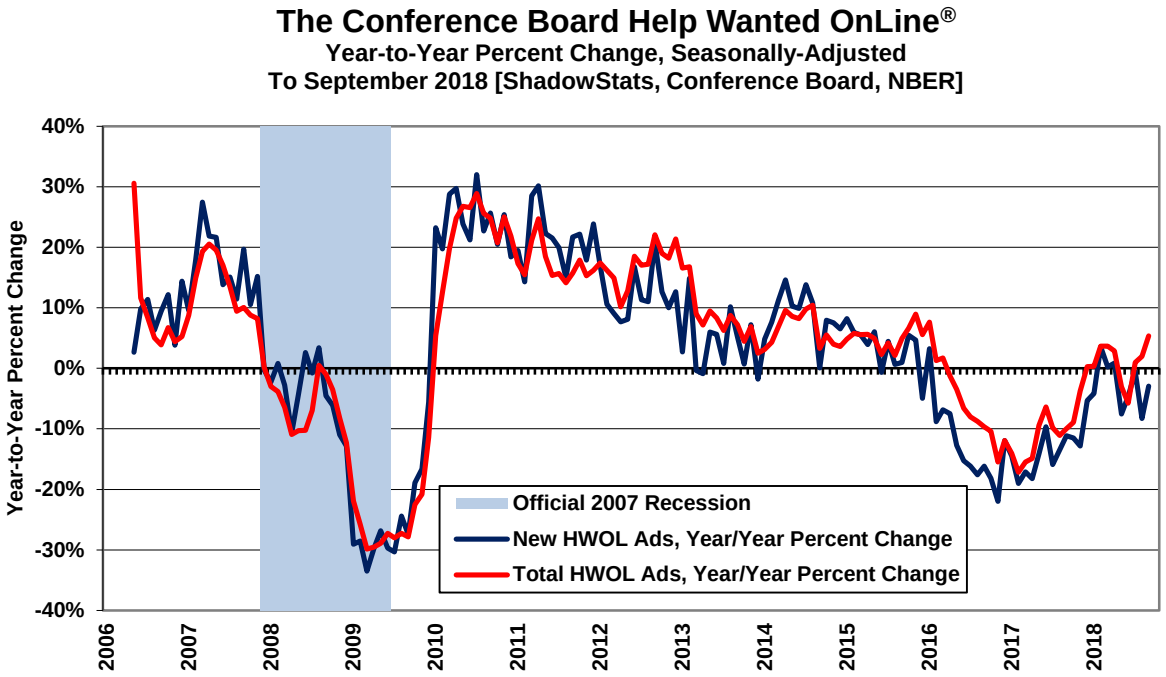
Reflected in *Graph OC-1* here, year-to-year, aggregate HWOL was up by 5.2% in September 2018, versus 2.0% in August 2018, but the series-driving New Ads component was down year-to-year by 2.9% (-2.9%) in September 2018, having declined at an annual pace of 8.3% (-8.3%) in August 2018. The regular year-to-year plot of these series is shown in *Graph OC-1*; a subsequent, experimental/alternative historical *Graph OC*-2 is shown shortly thereafter.

Having turned down for the year in May, June, July, August and September 2018, the protracted year-to-year deterioration in labor-market demand reflected in "New Ads" remains a meaningfully negative, leading indicator to broad economic activity. Against the November 2015 series peaks, September 2018 "Total Ads" was down by 17.1% (-17.1%), with "New Ads" down 30.9% (-30.9%), deep in non-expansion territory. Relative activity in the HWOL series remains suggestive of U.S. labor market conditions not being quite as robust as commonly hyped in Wall Street's (and related media) selective analysis of headline data out of the Bureau of Labor Statistics (BLS).

Annual HWOL growth began to slow in 2010 and turned negative year-to-year in late-2015 and early-2016. The shaded area in *Graph OC-1* reflects the formal bounds of the 2007 to 2009 recession. While the HWOL held in negative annual growth territory into early-2010, beyond the formal economic trough

in June 2009, keep in mind that payroll employment—traditionally a coincident economic indicator to the general economy—did not hit its cycle trough until February 2010.

Graph OC-1: The Conference Board Help Wanted OnLine®, Year-to-Year Change to September 2018



Many thanks to The Conference Board for permission to publish the preceding graph of year-to-year change in its *Help Wanted OnLine®* data. The annual percentage change is plotted for two series: Total Ads (red line) and New Ads (blue line). "Total ads are all unduplicated [online] ads appearing during the reference period. This figure includes ads from the previous months that have been reposted as well as new ads." "New ads are all unduplicated ads which did not appear during the previous reference period. An online help wanted ad is counted as 'New' only in the month it first appears." Related background details and reporting are found here: The Conference Board Help Wanted OnLine®.

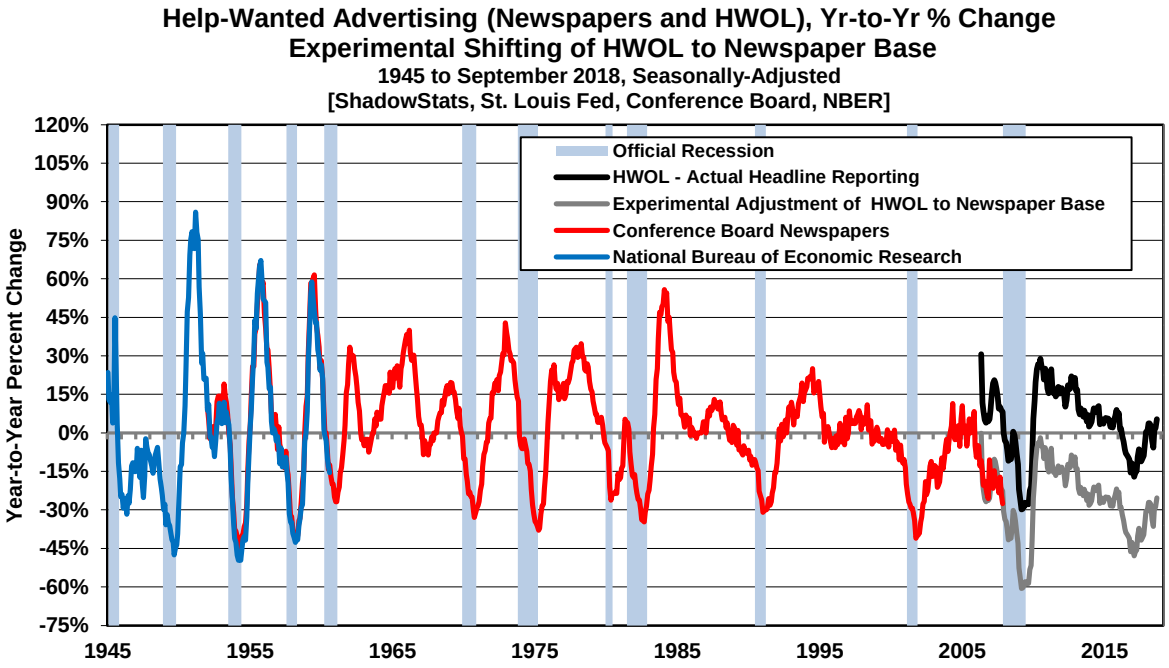
The detail of prior discussions in *Commentary No. 959-A*, *No. 852* and *No. 820*, has been updated for the September 2018 information. These comments and analysis remain those of ShadowStats alone, not those of The Conference Board, including the experimental *Graph OC-2*.

ShadowStats follows a number of business indicators—both conventional and not—looking for reliable reporting of real-world economic activity and for suggestions of shifting patterns in same. The HWOL is one of the best, private leading-indicator measures.

The Conference Board Help Wanted OnLine® Advertising, Historical Background. *[Please note: this section has not been revised from prior reporting, except for the monthly update to the experimental, comparative* Graph OC-2 *and for reference to the current month's reporting.]* The HWOL basic concept has proven itself over the last century, in the context of the closely-paralleled tallying of help-wanted advertising in newspapers. As had been noted previously, annual growth in the current on-line series tracked the economic collapse into 2009, parallel with the last of the series based on newspaper help-wanted advertising (see *Graph OC-2*).

Although the new series tracked the newspapers with parallel shifts in annual growth, the new series relative changes were at more-positive year-to-year change levels, presumably related to the change in the nature (perhaps cost or ease) of the new advertising technology (online versus printed newspaper). As to what the new series would look like, if shifted visually to match the highly correlated, prior and coincident newspaper series, consider experimental *Graph OC-2*. The current plot would be underwater, where the black line reflects the headline HWOL series and related annual growth rates for the actual series, the gray line shows that series fit to overlay the annual growth in the newspaper series. Again, this plot is an experiment of ShadowStats, not the Conference Board.

Graph OC-2: Historical Comparisons of Help-Wanted Advertising versus Economic Activity, Post World War II



The beauty and benefit of a good leading indicator is that it provides a meaningful "advance" signal of a shift in economic activity, before that shift may become obvious in other series. Such is a particularly valuable commodity, when headline data out of the federal government increasingly are politicized and unreliable (see *Special Commentary No. 885*, *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*).

With the preceding ShadowStats comments in mind, the following caution, posted on the Conference Board's web site, speaks for itself:

> **NOTE: Recently, the HWOL Data Series has experienced a declining trend in the number of online job ads that may not reflect broader trends in the U.S. labor market. Based on changes in how job postings appear online, The Conference Board is reviewing its HWOL methodology to ensure accuracy and alignment with market trends.**

First fully covered by ShadowStats in *Commentary No. 820* of July 16, 2016, the HWOL is updated here through September 2018 (released October 3rd). As a leading economic indicator, help-wanted advertising had its roots as far back in time as the initial reporting of Industrial Production, post-World War I. The Conference Board has adapted the concept to reflect the fundamental shift of help-wanted

advertising from printed newspapers to online advertising. The prior newspaper-based series simply was the best leading indicator of its day.

Back in the days when help-wanted advertising was the primary source of classified-advertising revenue for the physically-printed, folding newspapers, the Conference Board's Help-Wanted Advertising Index (newspapers) simply was the most reliable leading indicator available of broad economic activity. It was a component of the Commerce Department's Index of Leading Economic Indicators. It led activity in employment as well as the Gross National Product (GNP) and the now-headline Gross Domestic Product (GDP), which is a subcomponent of the GNP (ex-trade flows in factor income such as interest and dividend payments).

The National Bureau of Economic Research (NBER) has published detail with the St. Louis Federal Reserve on help-wanted advertising indices back to 1919. From the post-World War I era into the 2000s, year-to-year change in the various historical help-wanted series always signaled what would become recognized eventually as a formal recession, when the annual change in the index was a contraction by 15% (-15%) or more, which has happened here. Again, see *Graph OC-2* for the post-World War II era.

Since formal tracking switched to help-wanted advertising on the Internet (HWOL®), around 2005, seen with The Conference Board Help Wanted OnLine®, that series has been through only one, formally-confirmed down-cycle in the economy. The year-to-year growth plots in the accompanying graph begin with the first annual-growth rate availability in May 2006. Again, even with a limited initial history, the new series tracked that headline downturn into 2009, directly in tandem with the final several years of surveys of newspaper help-wanted online advertising (again see *Graph OC-2*), and the HWOL® has broadly tracked to the downside in an environment of what appears to be a "new," still-unfolding recession (see *Special Commentary No. 935*).

Considering the apparent recession signal generated by the HWOL®, there appears to be a formal recession missing from the headline accounting by the NBER (formal arbiter of recessions), starting at the end of 2014, as indicated also by the better-quality government or Federal Reserve economic series, specifically Industrial Production (see *Commentary No. 942-B*), although nothing related to this showed up the recent comprehensive GDP benchmark revisions back to 1929. Again, comparing the HWOL versus the prior newspaper series suggests a downside shift in the HWOL annual-change plot to put it on a consistent basis with the prior newspaper advertising growth rates, which, again, has been published on an experimental basis in *Graph OC-2*.

Time will establish new annual growth parameters that would signal a formal recession. My betting remains that they will look much like the earlier series, and much like the pattern seen in the present series in terms of year-to-year contraction. Those looking for independent confirmation of underlying economic conditions should find this series to be highly valuable. As for the BLS employment and unemployment series, they still need to catch up with the Conference Board's higher-quality, independent leading indicator, despite the ongoing, heavy upside reporting biases deliberately structured into the BLS series and expanded anew into the January 2018 payroll-survey benchmarking. See the discussions in *Special Commentary No. 885*, *Commentary No. 864* and in *Commentary No. 959-B*'s *Birth-Death/Bias-Factor Adjustment (BDM)* section of the *Supplemental Labor-Detail Background*.

REPORTING DETAIL

September 2018 Unemployment and Employment

Continued Inconsistencies and Contradictions, Potential Hurricane Distortions

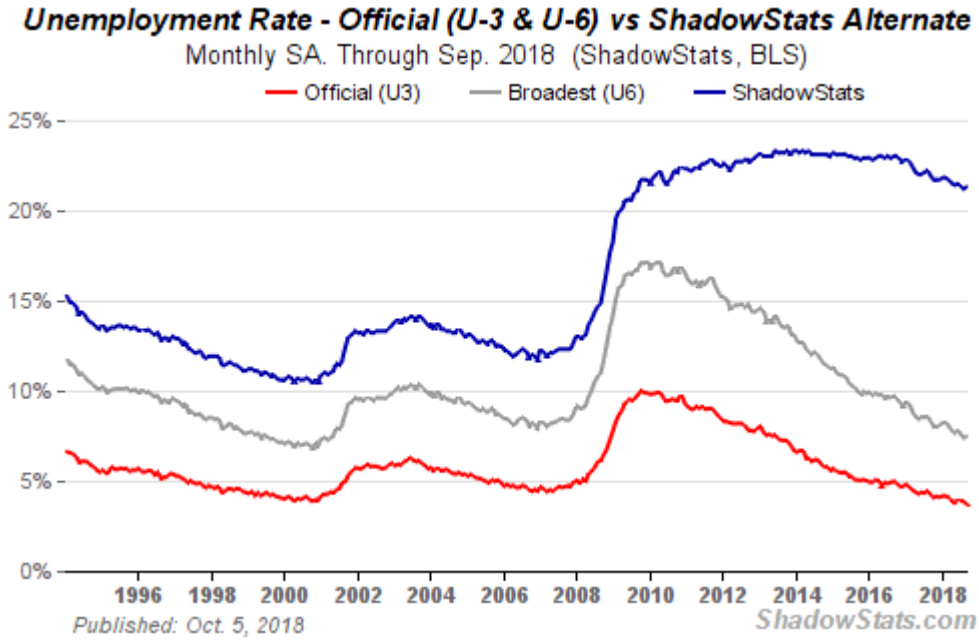
This Is a Good Month Not to Take These Numbers Too Seriously. September 2018 Employment and Unemployment headlines likely were distorted heavily by hurricane impact, discussed in the *Opening Comments*, with an understated unemployment rate and understated payroll growth, as suggested in *Commentary No. 970*. Headline unemployment U.3 dropped to an historic low of 3.68% (lowest since the current series was defined in 1994), still amidst extremely negative labor-market stresses; with broader unemployment measures increasing, U.6 to 7.45%, ShadowStats to 21.3%. Payroll gain dropped to 134,000 in September from upwardly revised 270,000 in August.

Contrary to Continuing, Highly Negative Stress Levels in the U.S. Labor Market, the Last Time a President Smiled at Such a Low Unemployment Rate as 3.68% Was in December 1969. The Bureau of Labor Statistics (BLS), reported October 5th that the headline September 2018 U.3 unemployment rate dropped to a record-low 3.7% for the current series, again, as defined in 1994. The BLS also reported that headline Payroll Employment gained 134,000 jobs in the month, not quite at a level to be statistically different from zero at the 95% confidence interval. Those 134,000 jobs, however would have been 221,000 net of revisions, but there likely were other factors at work, again see the *Opening Comments*. Given the likelihood of major reporting distortions, some of the regular month-to-month assessment will be put on pause until next month, where headline trends should have greater meaning than what is in hand today, for September 2018 detail.

Underlying Reality. Assume for the moment that the headline September 2018 Household Survey and Payroll Survey numbers experienced no meaningful distortions from Hurricane Florence making landfall in the Carolinas during the BLS's survey week for those measures (see the *Opening Comments*). Given standard reporting accuracy, underlying reality would suggest that a headline seasonally-adjusted 134,000 monthly payroll jobs gain in September, likely was a decline of 100,000 (-100,000) jobs plus-or-minus, given upside biases added into the series (see *Supplemental Labor Detail-Section II*, covering Birth-Death Modeling, beginning on page 27). In the context of the *ShadowStats-Alternate Unemployment Rate*

Measure discussion (also in the *Supplemental Labor Detail-Section III*, page 29), the headline September 2018 unemployment having declined to 3.7% for the U.3 rate, likely was much closer to 21.3%, accounting for all discouraged and displaced workers as defined prior to the 1994 overhaul to the series. Such would be as viewed from the perspective of common experience. Extended assessment of labor-reporting distortions, again, is found separately in *No. 885* and in the *Supplemental Labor Detail-Section III*, accounting for displaced workers, which begins on page 29.

Graph 1: Comparative Unemployment Rates U.3, U.6 and ShadowStats



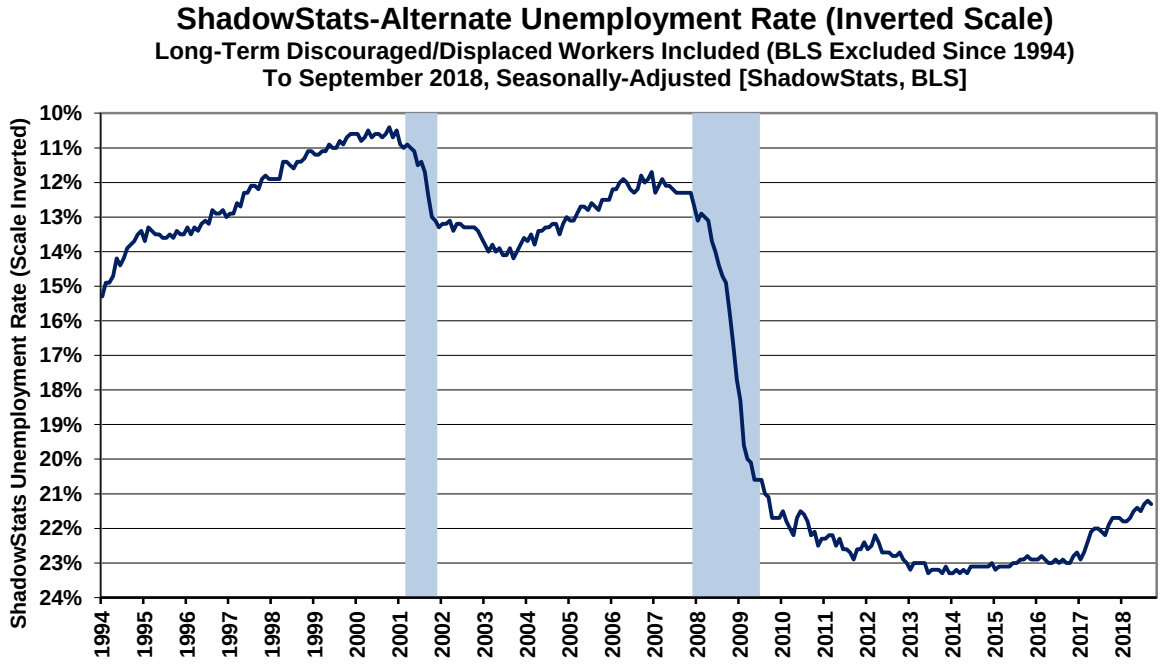
Household Survey: Counting All Discouraged and Displaced Workers, on Top of a Declining U.3 at 3.7%, and a Rising U.6 at 7.5%, September 2018 Unemployment Notched Higher to 21.3%. Only one of the unemployment rates plotted in *Graph 1* comes close to explaining the current employment circumstance versus continuing high levels of stress in the labor market, and that remains the ShadowStats-Alternate Unemployment measure.

At the same time that headline September 2018 U.3 employment declined to an historic low level 3.68%, yet underlying reality was not so rosy. Reconciling low unemployment with coincident high levels of labor-market stress, is explored in *Supplemental Labor Detail-Section IV*, beginning on page 31. Meaningful discrepancies between the record-low unemployment rate and extremes of near-record-high readings of labor-market stress broadly are tied to population distortions in the headline detail, which were removed from consideration the 1994 overhaul of Household Survey series and redefinitions of headline unemployment reporting.

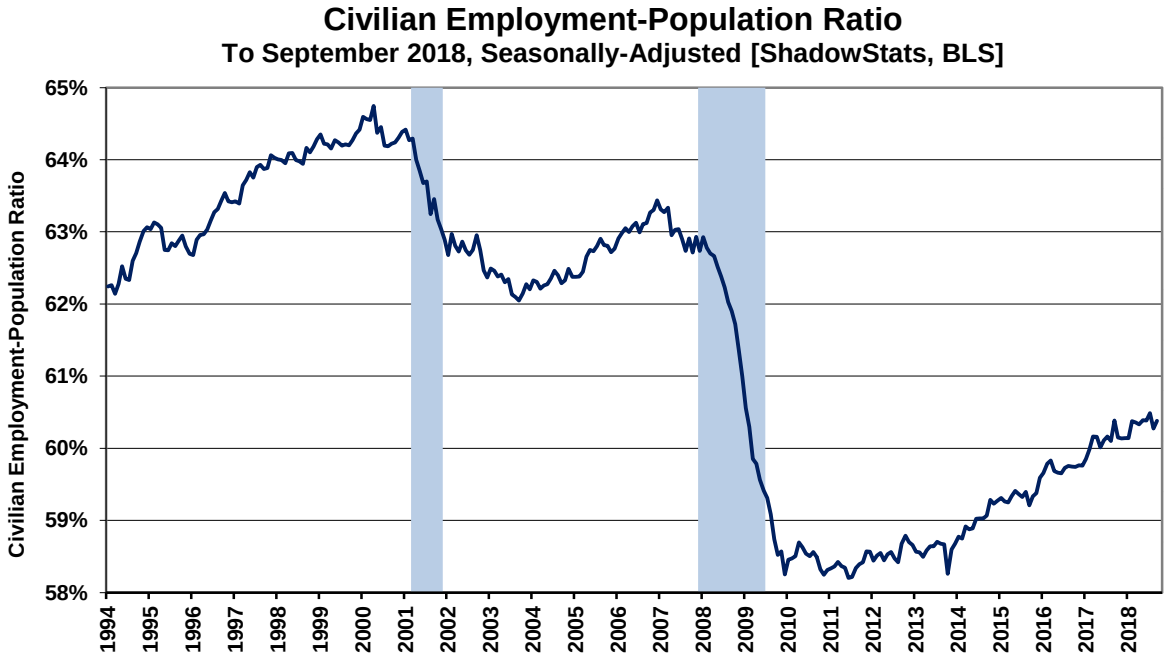
Those stress measures reflect the impact of long-term discouraged and displaced workers, no longer counted in the headline government numbers, but they still are included in the ShadowStats unemployment estimate. While the current headline U.3 unemployment generally would qualify as "full employment," such remains unconfirmed by historically-low Employment-to-Population and Labor-Force-to-Employment (Participation) Ratios, both of which were little changed in September, at levels more consistent with a headline unemployment rate of about 10.3% instead of 3.7%.

The difference is the unusually large number of discouraged and displaced workers in this business/ employment cycle, not counted in the headline U.3, as well as a goodly number not included in U.6 (see definitions and detail in *Supplemental Labor Detail-Section IV* page 31, and *Commentary No. 953-B*).

Graph 2: Inverted-Scale — ShadowStats Alternate Unemployment Measure
(Same as Graph SLD-6 in the Supplemental Labor Detail)

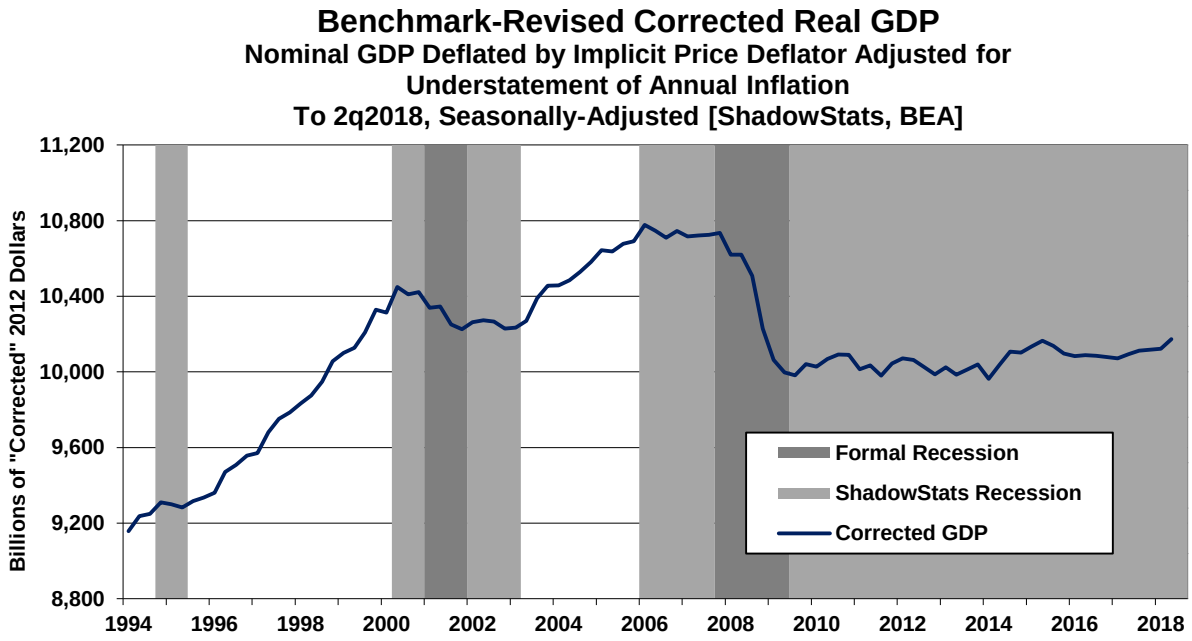


Graph 3: Civilian Employment-to-Population Ratio
(Same as Graph SLD-3 in the Supplemental Labor Detail)



The inverted scale of the ShadowStats Alternate Unemployment Rate (*Graph 2*) is a surrogate for the magnitude of discouraged and displaced workers, who also are reflected in the *Graphs 3* and *SLD-3* of the *Civilian Employment-to-Population Ratio* and *Graph SLD-4* of the *Labor-Force Participation Rate*, all in the *Supplemental Labor Detail*.

Graph 4: Corrected Real GDP through 2q2018, Third-Estimate



Other Major Indicators Do Not Show an Expanding—Let Alone Recovered—Economy. Regularly plotted here are various graphs that mirror the patterns of *Graphs 2* and *3*, and *Graph SLD-4*, 1994-to-date where available. These graphs do not confirm the purported headline recoveries in either the headline GDP or headline employment and unemployment. That detail was expanded most recently in *Section II* of *Special Commentary No. 968-Extended*, where some of those and related series are updated in this section. Plots of related economic series also were updated in the *Opening Comments* of prior *Commentary No. 971*, reviewing underlying economic reality. The plots there covered 2000 to date, the graphs here cover 1994-to-date, paralleling the history of the current Household Survey detail.

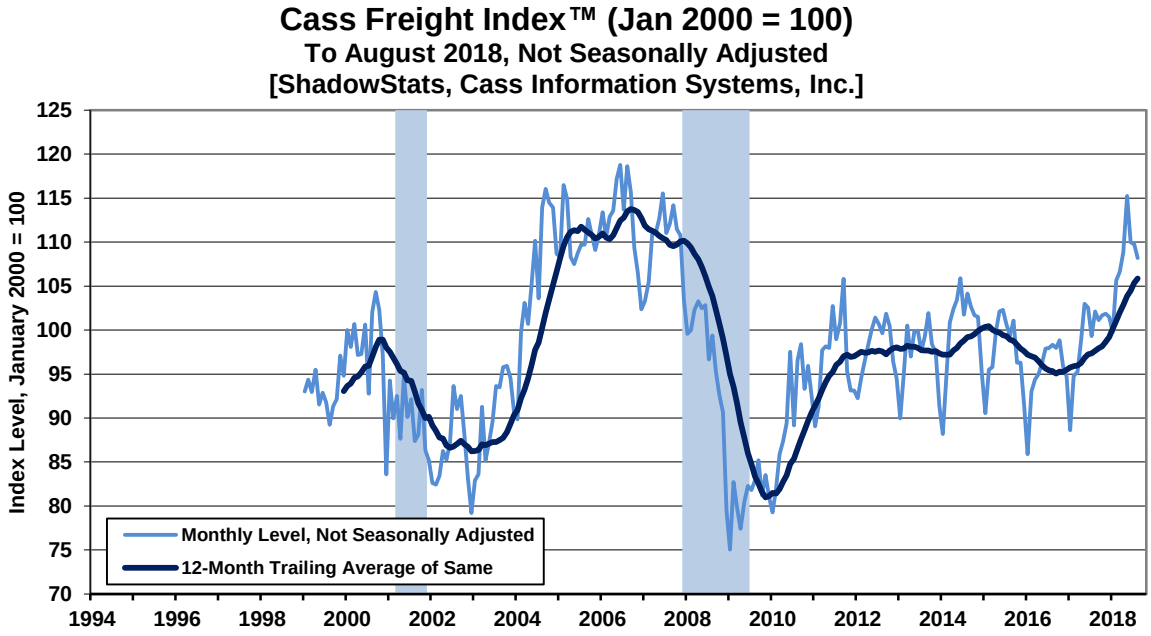
Consider *Graph 4*, which shows the ShadowStats version of that GDP, also plotted from 1994, but now through the September 27th third- and near-term-final second-estimate of third-quarter 2018 GDP, where the plot has been corrected for the understatement of inflation used in deflating the headline GDP (estimated at about two-percentage points per year).

Other graphs range from the August 2018 Cass Freight Index (*Graph 5*) to July 2018 U.S. Petroleum Consumption (*Graph 6*), the August 2018 Consumer Goods Sector of U.S. Industrial Production (*Graph 7*), along with August Real Construction Spending (*Graph 8*) and August Housing Starts (*Graph 9).* Where these series generally are uptrending, they all show patterns of non-expansion. Economic "expansion" traditionally is defined as growth beyond the prior (pre-recession) peak in activity.

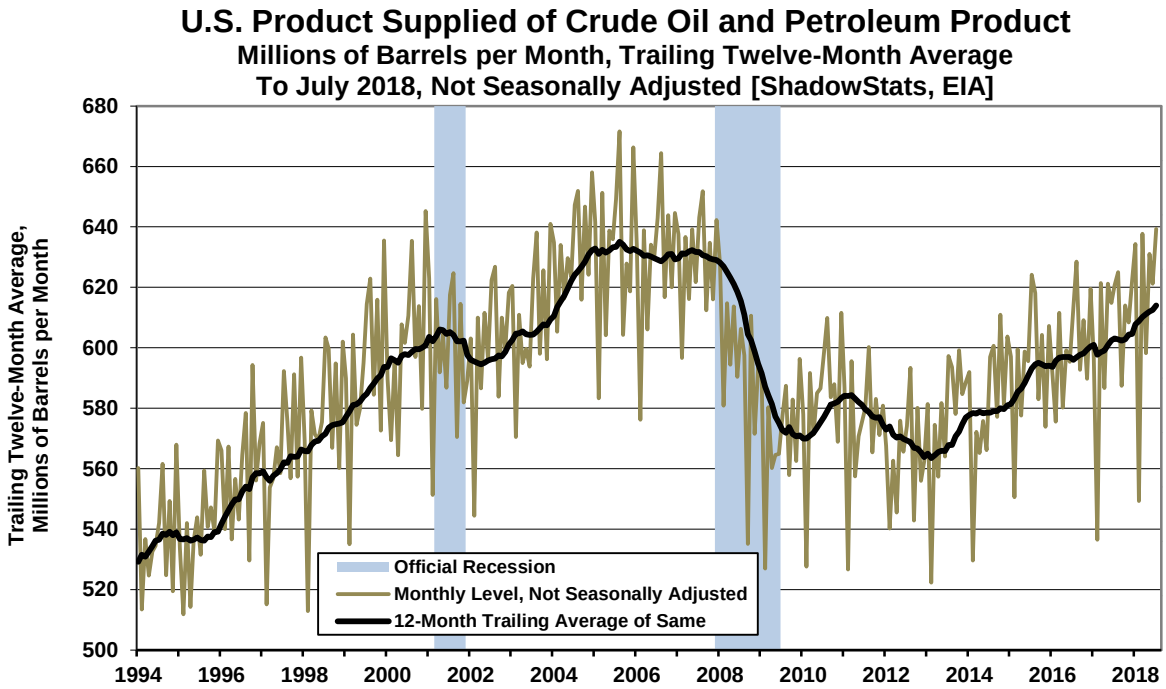
These economic plots, as well as plots of the labor-market stress measures of the Employment-Population Ratio and Participation-Rate (see *Graphs SLD-3* and *SLD-4*) tend to support the pattern of unemployment change seen in the ShadowStats Alternate Unemployment Measure, as discussed in the *Supplemental*

Labor Detail (Section IV) beginning on page 31. They also tend to support the ShadowStats Alternate GDP estimate, as discussed in the *Opening Comments* and *Section II* of *Special Commentary No. 968-Extended*.

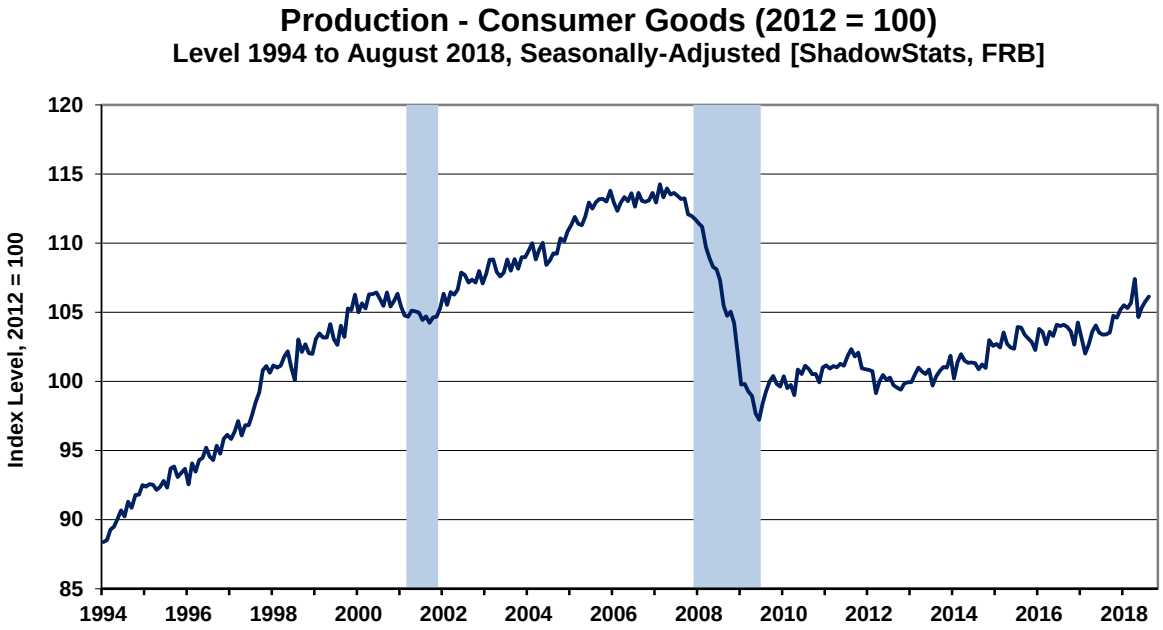
Graph 5: Cass Freight Index for North America (1994 to August 2018), Indexed to January 2000 = 100



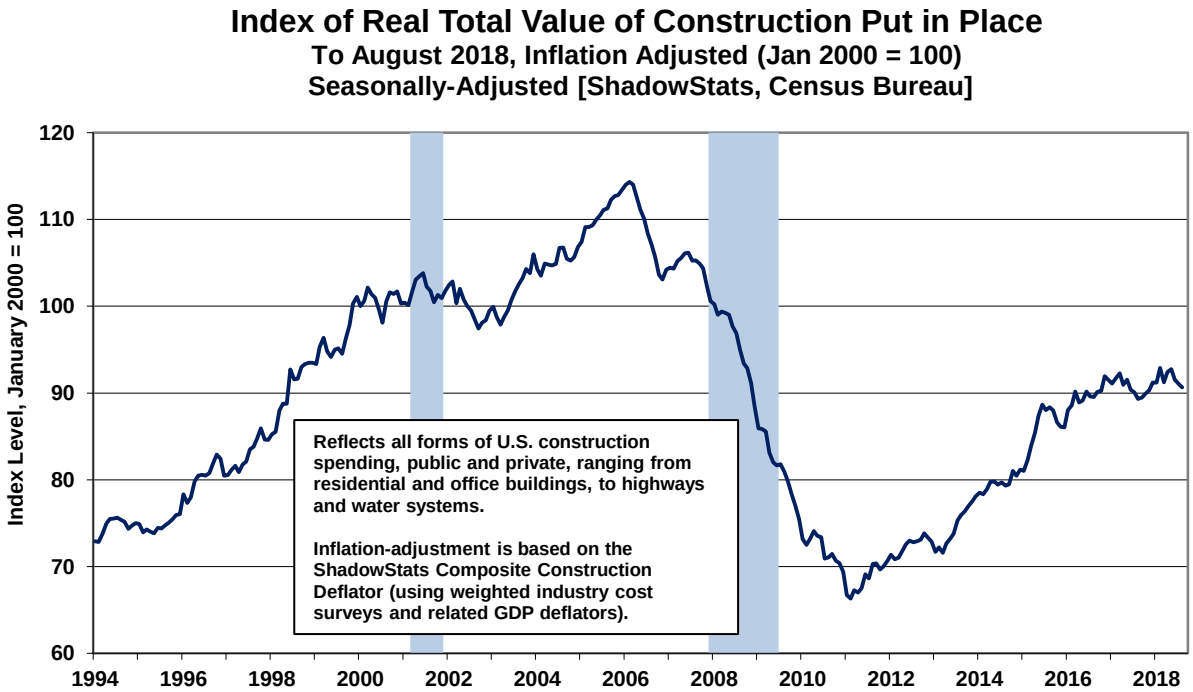
Graph 6: U.S. Petroleum Consumption 1994 to July 2018



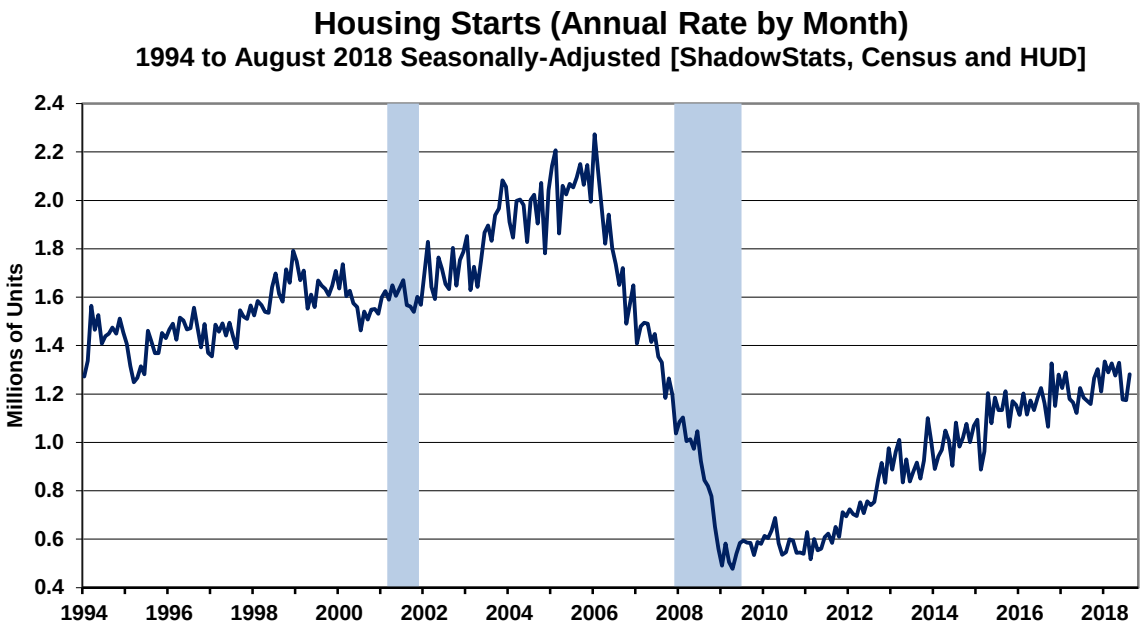
Graph 7: Consumer Goods in Industrial Production (1994 to August 2018)



Graph 8: Real Construction Spending (1994 to August 2018), an Extended Version of Later Graph 21



Graph 9: Housing Starts, Annual Rate by Month (1994 to August 2018)



Headline Unemployment Rates. The headline September 2018 U.3 unemployment rate of 3.7% [3.68% at the second decimal point] declined to record low for the current series, the second historic low set this year, in this series that was defined 1994. That was down from 3.9% [3.85%] in August, versus 3.9% [3.87%] in July, 4.0% [4.05%] in June, which was up from 3.8% [3.75%] in May. That May 2018 U.3 unemployment rate of 3.75%, at the second decimal point, was the lowest level in the history of the U.3 modern series, as defined in 1994. That was against 3.9% [3.93%] in April, 4.1% [4.07 %] in March, 4.1% [4.14%] in February, and 4.1% [4.15%] January.

The month-to-month decline of 0.17% [-0.17%] in the headline August 2018 U.3 was statistically-significant (+/- 0.23% at the 95% confidence interval). Other than for the once-per-year December benchmarking, such consideration broadly is nonsense, given that the comparison of monthly numbers otherwise is on an inconsistent basis, a circumstance that resumed for the next eleven months beginning with the January 2018 headline detail (see the *Supplemental Labor-Detail Background – Section I*, beginning on page 23).

On an unadjusted basis, unemployment rates are not revised and, in theory, are consistent in post-1994 methodology. The unadjusted unemployment rate U.3 declined to 3.56% in September 2018, versus 3.93% in August, 4.11% in July, 4.17% in June, 3.56% in May, 3.68% in April, 4.13% in March, 4.39% in February and 4.49% in January.

Lowest Headline Unemployment Since Richard Nixon Was President. Discussed in *Commentary No. 953-A* and *Commentary No. 953-B*, which reviewed the May 2018 historic-low U.3 rate, the 5.75% unemployment rate, ignoring the headline beginning date in 1994 for the current unemployment series, otherwise was the lowest headline unemployment rate since December 1969 of 3.5%. That explains the

"49-Year Low Unemployment" headlines in the popular press. Presumably, then we are to the halcyon days of the Nixon Administration.

Broader Unemployment Measures. Unemployment rate U.6 is the broadest unemployment rate currently published by the BLS, it was introduced along with the 1994 redefinitions, in which "discouraged workers" disappeared from the unemployment rolls after one year, irrespective of whether or not they still were "discouraged." U.6 includes accounting for those marginally attached to the labor force (including short-term discouraged workers) and those who are employed part-time for economic reasons (*i.e.*, they cannot find a full-time job).

On top of the seasonally-adjusted September 2018 U.3 unemployment rate, upside pressure on the unadjusted monthly count of marginally-attached workers (including discouraged workers) and a gain in the adjusted number of people working part-time for economic reasons, the adjusted September 2018 U.6 unemployment rose to 7.45% (rounds to 7.5%). That was against 7.39% in August, versus 7.54% in July, 7.79% in June, 7.65% (rounds to 7.6%) in May. May 2018 was down from 7.79% in April, 8.00% in March, 8.24% in February and 8.19% in January.

The unadjusted U.6 unemployment rate was 7.12% in September 2018, versus 7.43% in August, 7.43% in July, 8.07% in June, 7.31% in May, 7.40% in April, 8.10% in March, 8.60% in February and 8.85% in

Monthly counts in September 2018 showed an increased level of 1.577 million marginally attached workers (never seasonally adjusted), of which 383,000 were discouraged workers. That was against an August level of 1.443 million marginally attached workers, of which 434,000 were discouraged workers.

That latest, official "discouraged" number, again, reflected the flow of the headline unemployed—giving up looking for work—leaving the headline U.3 unemployment category and being rolled into the U.6 measure as short-term "marginally-attached discouraged workers," net of the further increase in the number of those moving from short-term discouraged-worker status into the netherworld of long-term discouraged-worker status. Those numbers are net of those who re-enter the labor force.

It is the displaced worker—the long-term discouraged-worker category—that defines the ShadowStats-Alternate Unemployment Measure. There is a continuing rollover from the short-term to the long-term category, with the ShadowStats measure encompassing U.6 and the short-term discouraged workers, plus the long-term discouraged workers. In 1994, "discouraged workers"—those who had given up looking for a job because there were no jobs to be had—were redefined so as to be counted only if they had been "discouraged" for less than a year. This time-qualification defined away a large number of long-term discouraged and displaced workers who otherwise were building as a portion of the U.S. population. The remaining redefined short-term discouraged and redefined marginally-attached workers were included in U.6.

ShadowStats Alternate Unemployment Estimate. Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced long-term discouraged workers—a broad measure of unemployment more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for September 2018 was 21.3%, versus 21.2% in August, 21.3% in July, 21.5% in June, 21.4% in May, 21.5% in April, 21.7% in March and 21.8% in February and January. The ShadowStats estimate generally shows the toll of long-term unemployed leaving the headline labor force—effectively becoming

long-term discouraged/displaced workers— discussed in the *Supplemental Labor-Detail Background – Sections III and IV* beginning on page 36.

Headline September Payroll Jobs Gain of 134,000 was 221,000 Net of Revision, Albeit Still Distorted by Hurricane Florence; Annual Growth at 1.74 at Upper End of Recession-Signal. In the context of heavily distorted headline reporting (see the hurricane-related disruptions discussed in the *Opening Comments*) and inconsistent and non-comparable seasonal-adjustments, the headline month-to-month payroll employment gain in August 2018 was 134,000, well shy of expectations. Where that was on top of unexpected upside revisions to activity in both August and July, and the combination could bring the aggregate totals into line with expectations, yet potential hurricane distortions would have tended to suppress the headline September gain. Clarity there will await next month's revisions.

Net of prior-period revisions, the headline monthly jobs gain in September 2018 was 221,000 instead of the headline 134,000 (most assuredly distorted by Hurricane Florence). Annual growth in payrolls jumped to 1.74% in September 2018, versus an upwardly revised 1.76% [previously up 1.65%] in August 2018, with July 2018 at 1.65% [previously 1.64%].

Keep in mind that where the Household Survey counts an employed person only once, irrespective of how many jobs or part-time jobs he or she may hold, the Payroll Survey counts only the number of jobs, irrespective of the number of people holding those jobs. In that circumstance, a person holding two or more part-time jobs is counted as employed with each job. The September 2018 indication of multiple job holders in the Household Survey declined by 237,000 (-237,000), again likely distorted by Florence. The best way of looking at these numbers is to consider them as likely to have more than the usual headline disruptions, and see how they smooth out in the next month or so.

While there are a number of other differences between the Payroll and Household Surveys, such as the Payroll count excluding, and the Household count including Agriculture, the headline, seasonally-adjusted Payroll gain of 134,000 September 2018 was against a seasonally-adjusted Household Survey decline of 420,000. Where the differing BLS hurricane-reporting methodologies tend to understate Payroll Employment, and to overstate Household Survey employed, that likely is what happened.

Non-Comparable and Inconsistent Seasonally-Adjusted Monthly Changes. The adjusted September 2018 payroll gain detail standardly would have been stated on a consistent basis only with the August 2018 and July 2018 headline details, but not with prior periods, from which recent headline growth has shifted borrowed or subtracted (see the *Supplemental Labor-Detail Background -Section I*, beginning page 28, for discussion on the various reporting distortions and gimmicks).

Headline Payroll Detail. Again, in the context of potential hurricane-induced reporting disruptions, the headline September 2018 payroll gain of 134,000 formally was not statistically-significant from zero +/- 135,000 (although that 95% confidence interval more appropriately should be closer to the range +/- 300,000 at the 95% confidence interval, where all confidence intervals used are at the 95% level). That followed revised monthly gains of 270,000 [previously 201,000] in August, versus 165,000 [previously 147,000, initially 157,000] in July (see *Graphs 10* and *11*).

Annual percentage change in payroll employment picked up, although it remained in or close to recession-signal territory with a 1.74% year-to-year increase in September 2018, versus a revised 1.76%

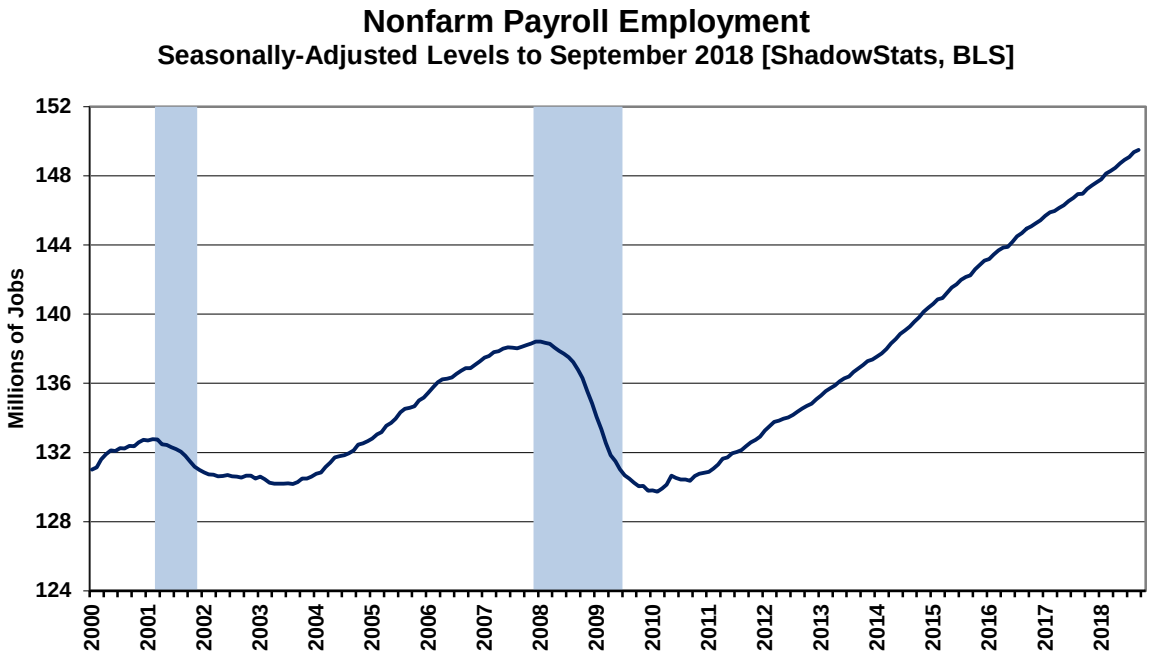
[previously 1.65%] year-to-year increase in August 2018 and a revised 1.65% [previously 1.64%, initially 1.65%] in July 2018, versus an unrevised 1.67% year-to-year increase in June 2018, 1.64% in May 2018, 1.55% in April 2018, 1.59% in March 2018, 1.56% in February 2018 and 1.42% in unadjusted January 2018 payrolls. The January 2018 annual gain was the weakest standard level of annual growth since coming out of the headline 2007 recession in August 2011, other than for a benchmark-revised, hurricane-induced trough of 1.38% in September 2017 (see *Graphs 12* and *13*).

Contrary to claims by economists at the San Francisco Fed, such low-level annual growth rates are far from being healthy or normal. They are seen either coming out of recession, or going into recession, but never seen consistently in the regular variability of ongoing, sustainable, normal economic activity, as discussed in *Commentary No. 843*. Current levels of annual growth in unadjusted payrolls likely are near the downside threshold of heading into recession.

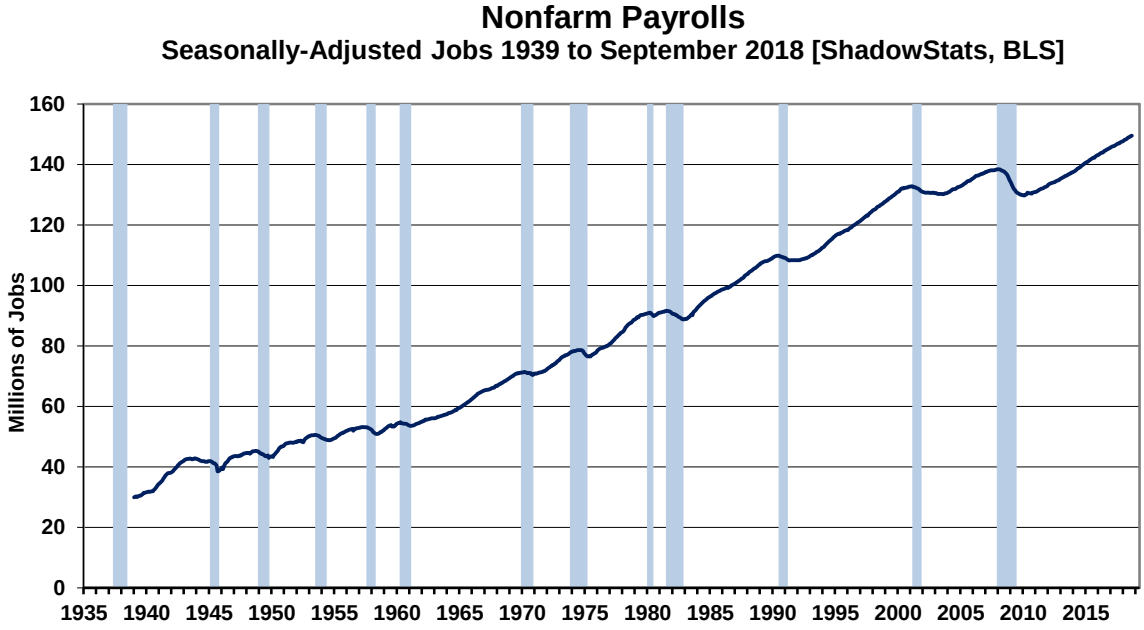
Graphs 10 to *13* show the headline payroll series, level and annual change, both on a shorter-term basis, since 2000, and on a longer-term historical basis, from the onset of the series in 1939. In perspective, the longer-term graph of the headline payroll-employment levels shows the extreme duration of what had been the official non-recovery in payrolls, the worst such circumstance of the post-Great Depression era.

[Graphs 10 to 15 begin on the next page.]

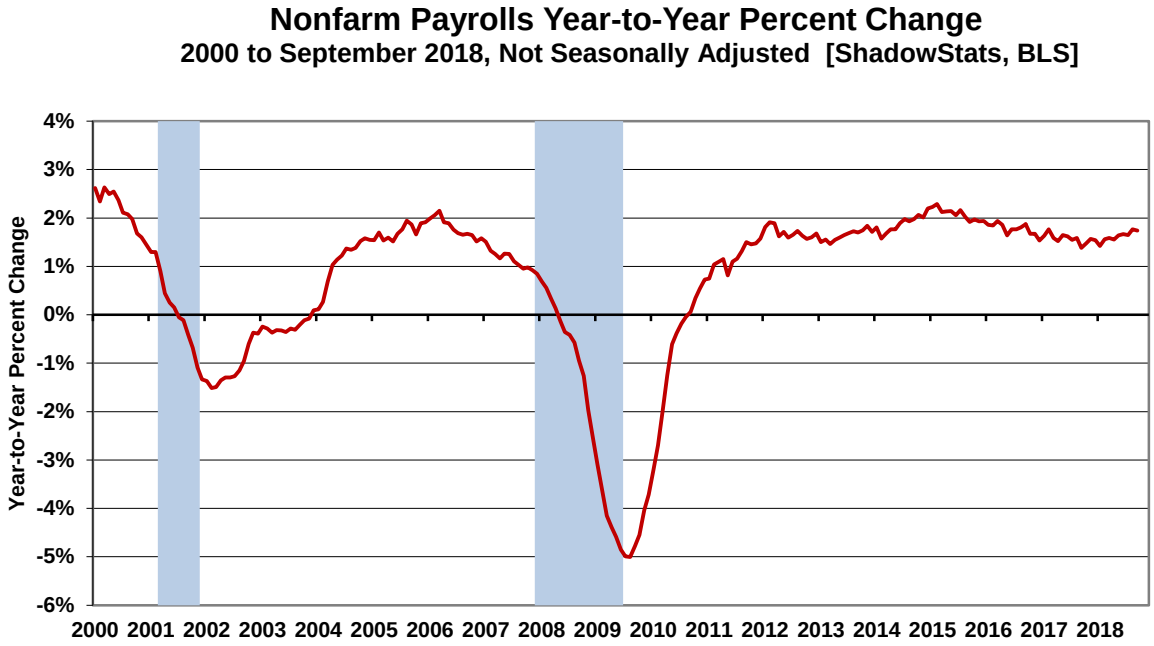
Graph 10: Nonfarm Payroll Employment, 2000 to Date (Scale Proportionate to Graph 14)



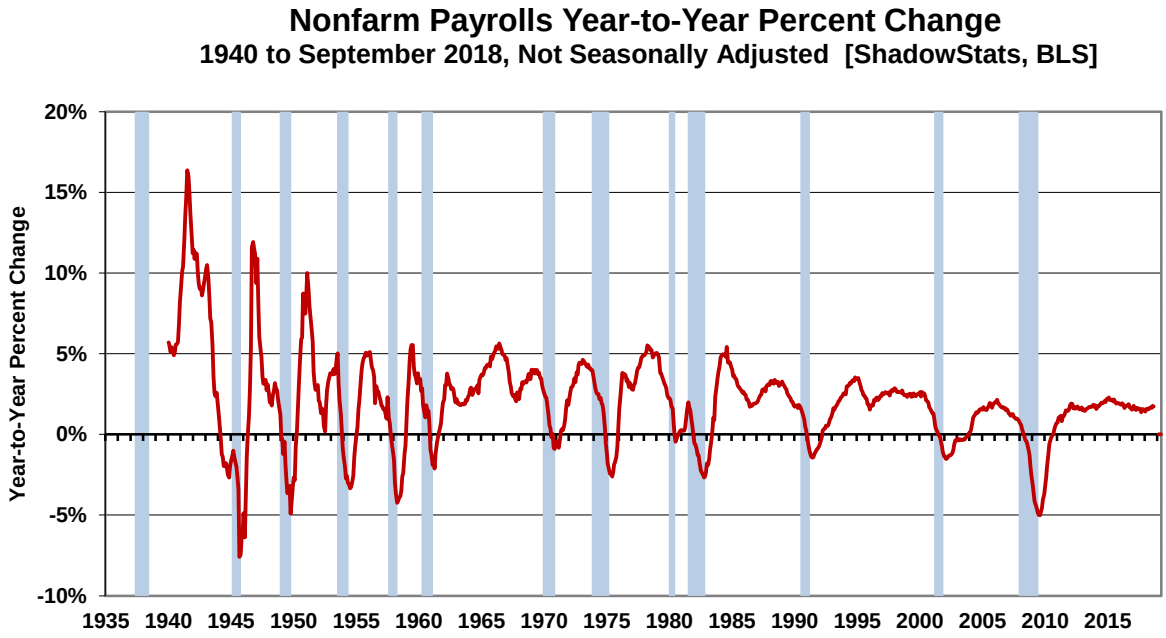
Graph 11: Nonfarm Payroll Employment, 1939 to Date



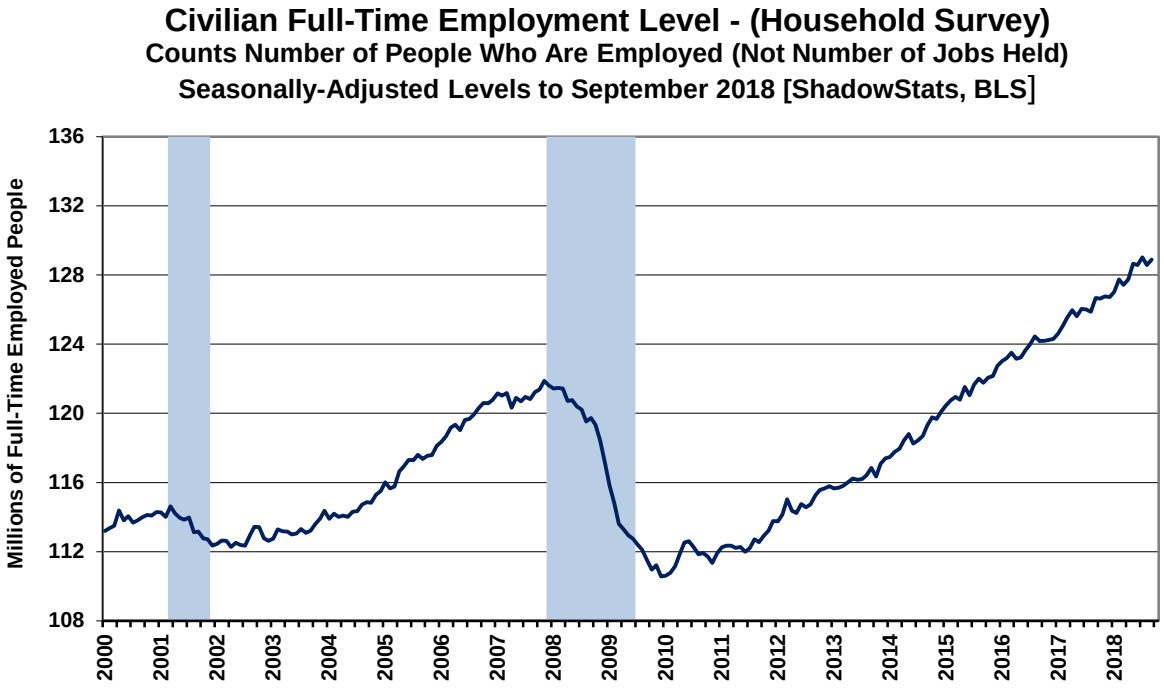
Graph 12: Payroll Employment, Year-to-Year Percent Change, 2000 to Date



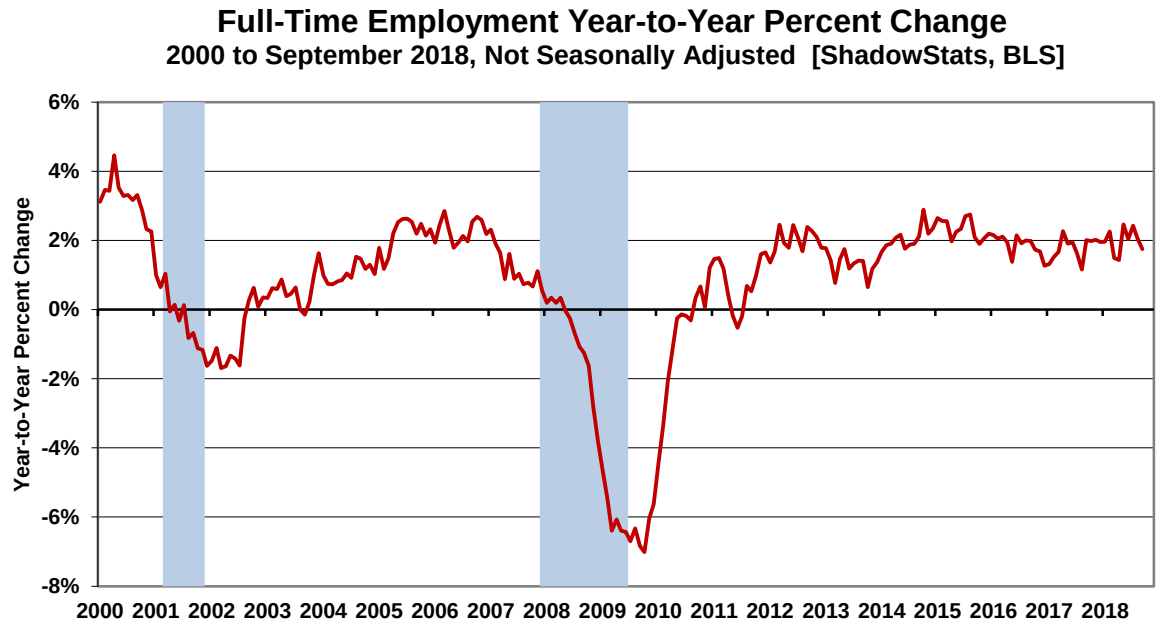
Graph 13: Payroll Employment, Year-to-Year Percent Change, 1940 to Date



Graph 14: Full-Time Employment (Household Survey), 2000 to Date (Scale Proportionate to Graph 10)



Graph 15: Full-Time Employment (Household Survey), Year-to-Year Percent Change, 2000 to Date



[The Supplemental Labor-Detail Background begins on the next page.]

Supplemental Labor-Detail Background

Reasons Why Headline Employment and Unemployment Numbers Usually Fail to Match Common Experience. The accompanying material provides background detail on reporting biases, reporting gimmicks, Pollyannaish redefinitions of methodology ("Pollyanna Creep" in the ShadowStats lexicon, as discussed recently in the *Opening Comments* of *Special Commentary No. 968-Extended*), surveying and reporting inconsistencies and other issues with the monthly headline labor data from the Bureau of Labor Statistics (BLS) surveys: the Establishment Survey (nonfarm payrolls) and the Household Survey (unemployment and employment detail). The text here usually is not revised much each month from its prior version, other than for updated monthly numbers through the latest headline detail (currently September of 2018).

The current headline numbers also are referenced and discussed separately in the standard employment and unemployment text of the *Reporting Detail.* Note: Accompanying Household (December 2017) and Payroll-Survey (January 2018) comments reflect the indicated, most-recent annual benchmarkings.

SECTIONS

(I.) Headline Distortions from Shifting Concurrent Seasonal-Adjustment Factors
(II.) Payroll-Employment Monthly Bias Factors (Birth-Death Modeling)
(III.) ShadowStats Alternate-Unemployment Rate (Accounting for Displaced Workers)
(IV.) Reconciling Record "Low" Unemployment with Record-High Labor-Market Stress

(I.) Headline Distortions from Shifting Concurrent Seasonal-Adjustment Factors

There remain serious and deliberate flaws with the government's seasonally-adjusted, monthly reporting of both employment and unemployment (there are parallel issues with the Retail Sales, New Orders for Durable Goods and Trade Deficit series). Each month, the BLS uses what is known as a "concurrent-seasonal-adjustment process" to adjust both the payroll and unemployment data for the latest seasonal patterns. The new headline numbers are used each month as the new base month for monthly seasonally-adjustments going back in time. A new seasonally-adjusted history is recalculated for every month, going back five years, so as to be consistent with the new seasonal patterns generated for the current headline number. While the procedure is unnecessarily complex, there is no problem with the basic concept. The problem is that historically-comparable revised data are not published along with the new headline detail by the Bureau of Labor Statistics (BLS), Department of Commerce (Commerce) or the Bureau of Economic Analysis (BEA).

For example, detailed in the regular monthly BLS press release covering employment/unemployment BLS (second page of the *Technical Note*, subheading *Seasonal Adjustment*):

> For both the household [unemployment] and establishment [payroll] surveys, a concurrent seasonal adjustment methodology is used in which new seasonal factors are calculated each month using all relevant data, up to and including the data for the current month. In the household survey, new seasonal factors are used to adjust only the current month's data. In the establishment [payroll] survey, however, new seasonal factors are used each month to adjust the three most recent monthly estimates. The prior 2 months are routinely revised to incorporate additional sample reports and recalculated seasonal adjustment factors. In both surveys, 5-year revisions to historical data are made once a year.

Discussed in the following paragraphs, the historical data never are published on a month-to-month consistent basis for the Payroll Survey, even with accompanying headline benchmark revisions. The Household Survey is published only once per year on a consistent basis, in December (see the opening note above), but the numbers become inconsistent, once again, with the ensuing January reporting. Headline month-to-month inconsistencies in the seasonally-adjusted Household Survey are highly variable every month, but that detail never is published and is not knowable by the public.

Effective Reporting Fraud. The problem remains that the BLS does not publish the monthly historical revisions along with the new headline data. As a result, current headline reporting is neither consistent nor comparable with published historical data, including the most-recent months, and the unreported actual monthly variations versus headline detail can be meaningful. The deliberately-misleading reporting effectively is a fraud. The problem is not with the BLS using concurrent-seasonal-adjustment factors; it is with the BLS not publishing the consistent data, where those data are calculated each month and are available internally to the Bureau. The BLS expressed reasons for not publishing the revised monthly numbers on a consistent basis: "Numerous revisions during the year, however, should be avoided, because they tend to confuse data users and to increase publication costs substantially."

If that indeed were the reason for not publishing consistent monthly data, then the BLS would do itself and the public a favor by using its prior annual or semi-annual revisions to the seasonal factors, where the data at least were published in a manner where monthly changes were consistent on a month-to-month basis.

Household Survey. In the case of the published Household Survey (unemployment rate and related data), the seasonally-adjusted headline numbers usually are not comparable with the prior monthly data or any month before. Accordingly, the published headline detail as to whether the unemployment rate was up, down or unchanged in a given month is not meaningful in terms of statistical significance, and what actually happened is not knowable by the public. Month-to-month comparisons of these popular numbers are of no substance, other than for market hyping or political propaganda. In theory, the headline month-to-month reporting in the Household Survey is made consistent only in the once-per-year reporting of December data, with annual revisions back for five years. Again, though, all historical comparability disappears, with the ensuing headline January reporting, and with each monthly estimate thereafter, until the next December's benchmarking.

Consider *Graphs SLD-1* and *SLD-2*, where data are available from the BLS to calculate the month-to-month seasonal-adjustment variability in the Payroll Survey. Similar detail is not available for the Household Survey, yet the monthly instability likely is of similar magnitude. Shown here as an example with the Payroll Survey, the headline January 2017 payroll level was prepared on a consistent basis with the levels of December 2016 and November 2016, but not with October 2016, with the result the headline monthly gains were consistent only for January and December. With the Household Survey, except for December, seasonally-adjusted monthly detail is not comparable with any other month, so seasonally-

adjusted, month-to-month Household Survey comparisons have no meaning, even for the headline month, except temporarily for the one month of December.

Payroll or Establishment Survey. In the case of the published Payroll Survey data (payroll-employment change and related detail), again, the current monthly changes in the seasonally-adjusted headline data are comparable only with the prior month's month-to-month reporting, not before. Due to the BLS modeling process, the historical data never are published on a consistent basis, even with publication of the annual benchmark revisions (see the comments with *Graphs SLD-1* and *SLD-2*).

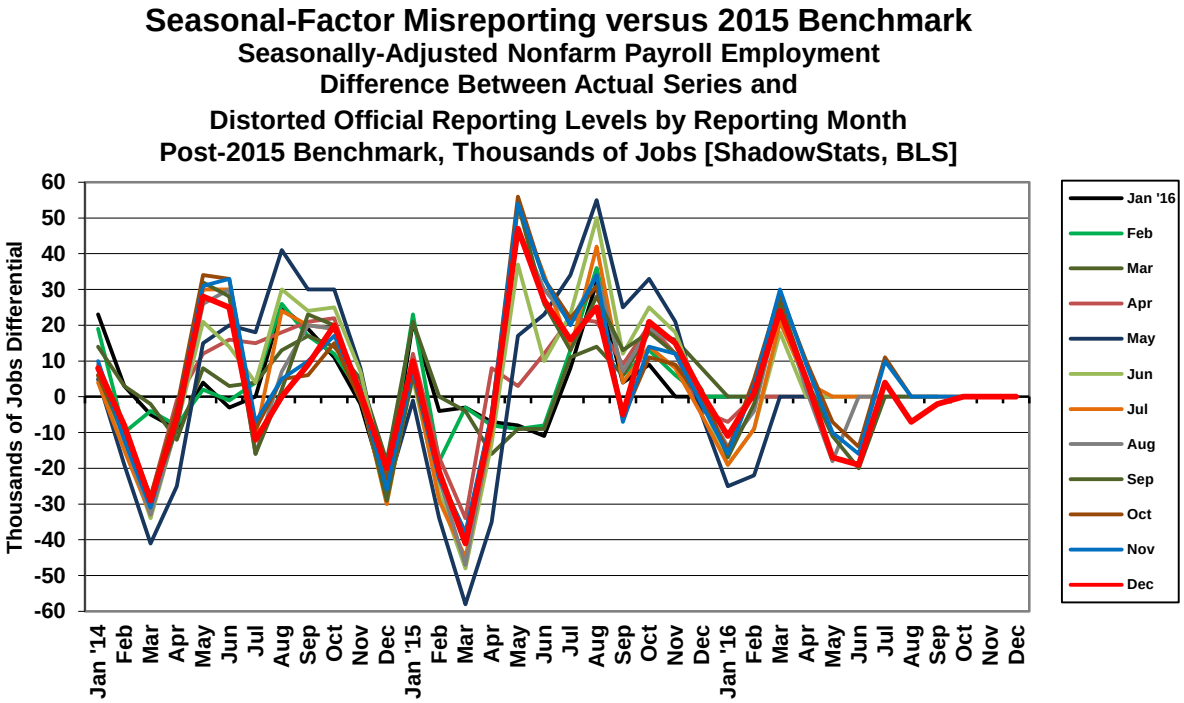
Where the BLS does provide modeling detail for the Payroll Survey, allowing for third-party calculations, no such accommodation has been made for the Household Survey. ShadowStats affiliate ExpliStats has done such third-party calculations for the payroll series, and the resulting detail of the differences between the current headline reporting and the constantly-shifting, consistent and comparable history are reflected here in *Graph SLD-1*, showing the full monthly variability in the 2016 historical seasonal adjustments in the period since the 2015 payroll benchmark revision. As seen here, consistent data never are published. The benchmark-revised system is run in the background for three months before the headline January (benchmarking) publication, which allows the initial headline publishing to stray from the actual initial benchmarking. *Graph SLD-1* shows how far the system strayed from the initial 2016 benchmarking, in its formal benchmark reporting of January 2017.

Where the red line reflected seasonal-factor straying through December 2016 from the 2015 benchmarking, the blue line indicates the straying in January 2017 versus the initial 2016 benchmarking. The January 2017 detail suggested a reversal of seasonal factors, consistent with the benchmarking detail and the new "selective" seasonal adjustment processes. Such variability in seasonal factors, though, rarely is seen in a stable economic series. These data again suggest heavily-gamed headline reporting.

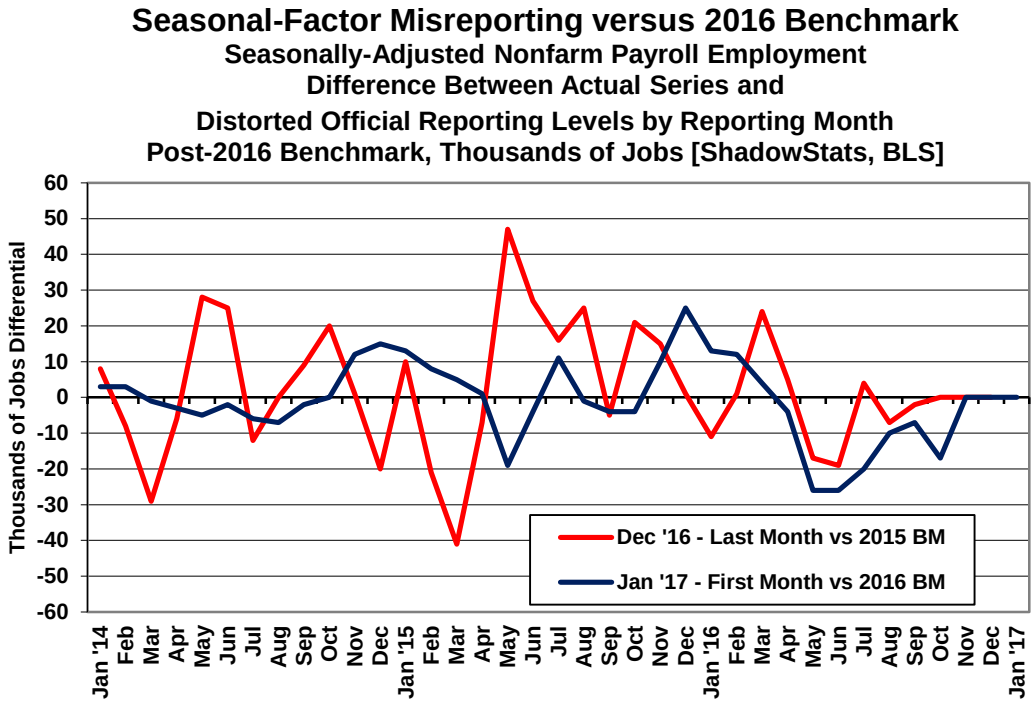
Seen in the detail, the differences go both ways and often are much larger. Such was the case for example in November 2014, coming out of the 2014 benchmark revision, as detailed and discussed in the *Opening Comments* of *Commentary No. 784*. Subscribers interested in the modeling of specific industry payroll components on a consistent month-to-month basis—not otherwise available— should contact johnwilliams@shadowstats.com or at (707) 763-5786.

[Graphs SLD-1 and SLD-2 follow on the next page.]

Graph SLD-1: Concurrent-Seasonal-Factor Irregularities – December 2016 Detail versus 2015 Benchmarking



Graph SLD-2: Concurrent-Seasonal-Factor Irregularities – January '17 Detail versus 2016 Benchmarking



(II.) Payroll-Employment Monthly Bias Factors (Birth-Death Modeling: BDM)

In the ongoing, general overstatement of monthly payroll employment (see *Special Commentary No. 885*, entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*), the BLS adds in upside monthly biases to the payroll employment numbers. The continual overstatement is evidenced usually by regular and massive, annual downward benchmark revisions (2011, 2012, 2017 and preliminary 2018 excepted). The preliminary estimate of 2018 payroll benchmark revision was minimal, a positive 43,000 payroll jobs (see *Commentary No. 967*), with the 2017 benchmark revision of February 2, 2018 on the upside by 138,000 (initially by 95,000).

Noted in *No. 885*, "During the Reagan Administration, the Bureau of Labor Statistics (BLS) underestimated employment growth, coming out of the 1983 recession. [As expressed by a spokesperson for the BLS] That "political embarrassment" for the BLS resulted in the introduction of monthly, upside-bias factors to payroll-employment reporting. Those biases evolved into the current Birth-Death modeling for the payroll series."

Recent History. As a separate matter, though, formalized, corrective downside revisions to prior history increasingly have been more than offset by upside revisions to the monthly bias factors, going forward, as was the case in 2016 (see *Commentary No. 864*). The initial estimate (summary number) for the 2016 benchmarking was for a downside revision in total payrolls for March of 2016 by 150,000 (-150,000), down for March 2016 by 224,000 (-224,000) in just private-sector employment (see *Commentary No. 830*). Those changes, however, were massaged and recast to an aggregate downside revision of 81,000 (-81,000) jobs. That change then was used to impute adjustments back to April 2015, and it should have been carried forward to December 2016, but that did not happen, see *Opening Comments* of *No. 864*.

Despite the published downside revision of 206,000 (-206,000) to March 2015 payrolls in the 2015 benchmarking (see *Commentary No. 784* and *Commentary No. 784-A*), the BLS upped its annual upside-bias factors since then by 65,000. Such discrepancies, however, are not unusual for the BLS.

Considering related actions of recent years, discussed in the benchmark detail of *Commentary No. 598*, the benchmark revision to March 2013 payroll employment was to the downside by 119,000 (-119,000), where the BLS had overestimated standard payroll employment growth.

With the March 2013 revision, though, the BLS separately redefined the Payroll Survey so as to include 466,000 workers who had been in a category not previously counted in payroll employment. The latter event was little more than a gimmicked, upside fudge-factor, used to mask the effects of the regular downside revisions to employment surveying, and likely was the excuse behind an increase then in the annual bias factor, where the new category could not be surveyed easily or regularly by the BLS. Elements here likely had impact on the unusual issues with the 2014 benchmark revision.

Abuses from the 2014 benchmarking were detailed in *Commentary No. 694* and *Commentary No. 695*. With the headline benchmark revision for March 2014 showing understated payrolls of 67,000 (-67,000), the BLS upped its annual add-factor bias by 161,000 for the year ahead.

Historically, the upside-bias process was created simply by adding in a monthly "bias factor," so as to prevent the otherwise potential political embarrassment to the BLS of understating monthly jobs growth. The creation of "bias factor" process resulted from such an actual embarrassment, with the underestimation of jobs growth coming out of the 1983 recession. That process eventually was recast as

the now infamous Birth-Death Model (BDM), which purportedly models the relative effects on payroll employment of jobs creation due to new businesses starting up, versus jobs lost due to bankruptcies or closings of existing businesses.

September 2018 Add-Factor Bias. In context of the 2017 benchmarking (see the *Opening Comments* of *Commentary No. 934-B*) and the initial estimate for the 2018 benchmarking (see *Commentary No. 967*), the not-seasonally-adjusted monthly add-factor bias in September 2018 was a monthly subtraction of 67,000 (-67,000), previously a subtraction of 49,000 (-49,000). The revamped, aggregate upside annual bias for the trailing twelve months through September 2018 is estimated from the current headline bias reporting at 986,000, up by 94,000 or 10.5% from the last prior count of 892,000 in December 2017. That is a monthly average now of 82,167, versus 74,333 in December 2017, jobs created out of thin air, on top of some indeterminable amount of other jobs that are lost in the economy from business closings. Those losses simply are assumed away by the BLS in the BDM, as discussed below. Put another way, that upside bias of 986,000 in unadjusted payrolls in the twelve months through September 2018 accounted for 38.5% of the headline unadjusted 2,564,000 payroll jobs gain the same period On a seasonally adjusted basis, that twelve-month payroll gain was 2,537,000.

Problems with the Model. The aggregated upside annual reporting bias in the BDM reflects an ongoing assumption of a net-positive jobs creation by new companies versus those going out of business. Such becomes a self-fulfilling system, as the upside biases boost reporting for financial-market and political needs, with relatively good headline data, while often also setting up downside benchmark revisions for the next year, which traditionally are ignored by the media and the politicians. The BLS cannot measure meaningfully the impact of jobs loss and jobs creation from employers starting up or going out of business, on a timely basis (within at least five years, if ever), or by changes in household employment that were incorporated into the 2017 redefined payroll series. Such information simply is guesstimated by the BLS, along with the addition of a bias-factor generated by the BDM. Private surveying runs counter to the BLS contentions.

Positive assumptions—commonly built into government statistical reporting and modeling—tend to overstate official estimates of general economic growth. Along with happy guesstimates, there usually are underlying assumptions of perpetual economic growth in most models. Accordingly, the functioning and relevance of those models become impaired during periods of economic downturn, and the current, ongoing downturn has been the most severe—in depth as well as duration—since the Great Depression.

Indeed, historically, the BDM biases have tended to overstate payroll employment levels—to understate employment declines—during recessions. There is a faulty underlying premise here that jobs created by start-up companies in this downturn have more than offset jobs lost by companies going out of business. Recent studies continue to suggest that there has been a net jobs loss, not gain, in this circumstance. Nonetheless, if a company fails to report its payrolls because it has gone out of business (or has been devastated by a hurricane), the BLS assumes the firm still has its previously-reported employees and adjusts those numbers for the trend in the company's industry.

The presumed net additional "surplus" jobs created by start-up firms are added on to the payroll estimates each month as a special add-factor. On top of that, the monthly BDM add-factors have been increased now to an average of 82,167 jobs per month for the current year. As a result, in current reporting, the aggregate average overstatement of employment change easily exceeds 200,000 jobs per month (the underlying positive base-assumption upside bias, plus the monthly Birth-Death Model add-factor).

(III.) ShadowStats Alternate-Unemployment Rate – Accounting for Displaced Workers

At the same time, as reviewed in *Section IV: Reconciling Record "Low" Unemployment with Record-High Labor-Market Stress***,** the recent historic low in headline unemployment (and current near-record low) was despite continued signals of extreme stress in labor-market conditions. The dominant issue with that dichotomy remains that the headline unemployment numbers out of the BLS have not counted the aggregation of long-term discouraged or displaced workers, since the 1994 redefinitions of the unemployment reporting. Those issues have become a factor here in the context of the severity of the economic collapse from 2007 into 2009.

In 1994, the Bureau of Labor Statistics (BLS) overhauled its system for estimating unemployment, including changing survey questions and unemployment definitions. In the new system, measurement of the previously-defined discouraged or displaced workers disappeared. These were individuals who had given up looking for work, because there was no work to be had. These people, who considered themselves unemployed, had been counted in the old survey, irrespective of how long they had not been looking actively for work. These were individuals who were and would be considered displaced workers, due to circumstances of severely-negative economic conditions or other factors such as changing industrial activity resulting from shifting global trade patterns.

The new survey questions and definitions had the effect of minimizing the impact on unemployment reporting for those workers about to be displaced by the then just-implemented North American Free Trade Agreement (NAFTA). At the time, I (John Williams) had close ties with an old-line consumer pollster and his polling company, whose substantial economic monthly surveys were compared closely with census-survey details. The new surveying changed the numbers, and what had been the discouraged-worker category soon became undercounted or effectively eliminated. Change or reword a survey question, and change definitions, you can affect the survey results meaningfully.

The post-1994 survey techniques also fell far shy of adequately measuring the long-term displacement of workers tied to the economic collapse into 2008 and 2009, and from the lack of subsequent economic recovery. In current headline reporting, the BLS has a category for those not in the labor force who currently want a job. Including the currently-defined level of "marginally attached workers," which incorporates the currently-defined and undercounted "discouraged workers" category used in the U.6 calculation, those not in the labor force currently wanting a job was a seasonally-adjusted 5.237 million in September 2018 (5.070 million not seasonally adjusted). While some contend that that number includes all those otherwise-uncounted discouraged workers, such is extremely shy of underlying reality due to changes in survey methodology since 1994.

The ShadowStats Alternate Unemployment number—a broad unemployment measure more in line with common experience—is my estimate. The approximation of the ShadowStats "long-term discouraged worker" category—those otherwise largely defined out of statistical existence in 1994—reflects proprietary modeling based on a variety of private and public surveying over the last two-plus decades. Other than using the BLS's U.6 estimate as an underlying monthly base with my modeled adjustments, I have not found a way of accounting adequately for the current unemployment circumstance and common experience using just the monthly headline data published by the BLS.

Some broad systemic labor measures from the BLS, though, are consistent in pattern with the ShadowStats measure, even allowing for the shifts tied to an aging population with retiring "baby boomers." Again, discussed the following *Section IV: Reconciling Record "Low" Unemployment with*

Record-High Labor-Market Stress, and shown in the *Reporting Detail*, the graph of the inverted ShadowStats unemployment measure has a strong correlation with the employment-to-population ratio, in conjunction with the labor-force participation rate (see *Graphs 2* and *3* there and *Graph SLD-4* in the next section). Other measures, such as the ShadowStats-Alternate GDP Estimate, the Cass Freight Index, U.S. Petroleum Consumption, Production of Consumer Goods, Construction Spending and Housing Starts are highlighted in subsequent *Graphs 4* to *9* in today's *Reporting Detail* and in *Commentary No. 971*, updating the *Opening Comments* and *Section II* of *Special Commentary No. 968-Extended*.

Headline September 2018 Detail. Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced workers, of long-term discouraged workers—a broad unemployment measure more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for September 2018 was 21.3%, versus 21.2% in August, 21.3% in July, 21.5% in June 2018, 21.4% in May, 21.5% in April, 21.7% in March, 21.8% in February, 21.8% in January. That was against 21.7% in December 2017, 21.7% in November, 21.7% in October, 21.9% in September, 22.2% in August, 22.1% in July, 22.0% in June, 22.0% in May, 22.1% in April, 22.4% in March, 22.7% in February, and 22.9% in January 2017. Built upon the headline U.3 and U.6 estimates, the September 2018 ShadowStats reading was down by 200 (-200) basis points or 2.0% (-2.0%) from the 23.3% series high seen in May 2014.

In contrast, the likely hurricane-disrupted September 2018 headline U.3 unemployment rate of 3.7% was down by 630 (-630) basis points or by 6.3% (-6.3%) from its peak of 10.0% in October 2009. The broader U.6 unemployment measure of 7.5% in September 2018, was down by 970 (-970) basis points or 9.7% (-9.7%) from its peak of 17.2% April 2010.

A subscriber raised the question once as to why the ShadowStats Alternate Unemployment Estimate had been holding around 23%, at the time. Recalculated each and every month, the ShadowStats estimate generally picks up the net flows of headline "discouraged" workers, who have been redefined out of existence after having been inventoried in the BLS accounting of the U.6 rate for about eleven months (where individuals have not looked actively for a job in one year). In turn, U.6 picks up as "discouraged workers" those in U.3 who have not actively looked for work in the last four weeks. It is the resulting reduction in the U.3 and U.6 "unemployed" and the related labor forces used in calculating those respective headline unemployment rates that has accounted for the bulk of the reduction in those headline rates, with much of the difference flowing into and holding reasonably steady in the ShadowStats alternate measure.

Seen in the usual graph of the various unemployment measures (*Graph 1* in the *Reporting Detail*), there indeed is a noticeable divergence in the ShadowStats series versus U.6 and U.3, with the BLS headline U.3 unemployment measure broadly flat-to-minus at low levels recently, against higher level, albeit often softening U.6 and a still-higher level, more slowly softening ShadowStats number, which had been flat for some months, only the hurricane-impacted U.3 notched lower in September, while the U.6 and ShadowStats measures, not affected by weather disruptions, notched higher in September.

The reason for the longer-term divergence versus the ShadowStats measure, again, is that U.6 only includes discouraged and marginally-attached workers who have been "discouraged" for less than a year. As the discouraged-worker status ages, those that go beyond one year fall off the government counting, even as new workers enter "discouraged" status. A similar pattern of U.3 unemployed becoming

"discouraged" or otherwise marginally attached, and moving into the U.6 category also accounted for the early divergence between the U.6 and U.3 categories.

With the continual rollover, the flow of headline workers continues into the short-term discouraged workers category (U.6), and from U.6 into long-term discouraged worker or displaced-worker status (the ShadowStats measure). There was a lag in this happening as those having difficulty during the early months of the economic collapse, first moved into short-term discouraged status, and then, a year later they began moving increasingly into longer-term discouraged or displaced status, hence the lack of earlier divergence between the series. The movement of the discouraged unemployed out of the headline labor force had been accelerating. While there is attrition in long-term discouraged numbers, there is no set cut off where the long-term discouraged workers cease to exist. See the *Alternate Data* tab at www.ShadowStats.com for historical detail.

Generally, where the U.6 largely encompasses U.3, the ShadowStats measure encompasses U.6. To the extent that a decline in U.3 reflects unemployed moving into U.6, or a decline in U.6 reflects short-term discouraged workers moving into the ShadowStats number, the ShadowStats number continues to encompass all the unemployed, irrespective of the series from which they may have been ejected and correspondingly has been reasonably stable over a longer timeframe.

Great Depression Comparisons. Discussed in these regular *Commentaries* covering the monthly unemployment circumstance, an unemployment rate in the 21% to 23% range might raise questions in terms of a comparison with the purported peak unemployment in the Great Depression (1933) of 25%. Hard estimates of the ShadowStats series are difficult to generate on a regular monthly basis before 1994, given meaningful reporting inconsistencies created by the BLS when it revamped unemployment reporting at that time. Nonetheless, as best estimated, the current ShadowStats level likely is about as bad as the peak actual unemployment seen in the 1973-to-1975 recession and the double-dip recession of the early-1980s.

The Great Depression peak unemployment rate of 25% in 1933 was estimated well after the fact, with 27% of those employed then working on farms. Today, less than 2% of the employed work on farms. Accordingly, a better measure for comparison with the ShadowStats number might be the Great Depression peak in the nonfarm unemployment rate in 1933 of roughly 34% to 35%.

(IV.) Reconciling Record "Low" Unemployment with Record-High Levels of Labor-Market Stress

It All Is in the Gimmicked Unemployment Definitions. *Graphs SLD-3* (same as *Graph 3* in the *Reporting Detail*) and *SLD-4*, updated through September 2018, plot measures of broad labor-market health. *Graph SLD-3* shows the ratio of headline employment to the working age population, the *Employment-Population Ratio*. *Graph SLD-4* shows labor-force participation (the total of the headline employed plus headline unemployed) as a percent of the working age population, the *Participation Rate*. The higher those ratios, the healthier is the economy. Correspondingly, the weaker those ratios the more intense is the labor-market stress. Also consider *Graph SLD-5*, which plots the updated headline U.3 Unemployment Rate, but with an inverted scale, since the 1994 onset of the current unemployment series.

September 2018 U.3 unemployment just set a new record-low 3.68% (rounds to a record-low 3.7% at the first decimal point, as used for headline reporting), down from 3.85% (rounds to 3.9%) in August, having hit a near-term peak in June 2018 of 4.05% (rounds to 4.0%), versus 3.75% (3.8%) in May 2018.

At the second decimal point, that May 2018 unemployment rate had set a then historic low for the current series, which was defined in 1994. At the first decimal point, May 2018 unemployment tied the then record low of 3.8% of April 2000. Where the low April unemployment was then the early high point with the inverted scale of *Graph SLD-5*), April 2000 also was the happy high point for the *Employment-Population Ratio* and the *Participation Rate*. That is as it should be. The problem comes with the September 2018 "low" unemployment rate (the latest high point in *SLD-5*) going against relatively low points (severe levels of labor-market stress) in *Graphs SLD-3* and *SLD-4*, which have deteriorated further in recent reporting from where they were at the prior "low" unemployment rate in May 2018.

Those three graphs move pretty much in unison (particularly *SLD-3* and *SLD-5*) until they pass the second blue recession bar, when the unemployment rate turns lower (rises in with the inverted-scale in *SLD-5*), while the measures of labor-market stress begin to bottom-bounce. Now consider *Graph SLD-6* of the inverted-scale ShadowStats Alternate Unemployment rate (same as *Graph 2* in the *Reporting Detail*, which includes long-term discouraged or displaced workers).

The problem and the conflict with the headline numbers out of the Bureau of Labor Statistics is that the current unemployment series was redefined in 1994 (at the onset of NAFTA) so as not to count "discouraged workers" for more than one year. Otherwise, that population (and share of the total population) would aggregate, rather than be retired after twelve months [see prior *Section III: ShadowStats Alternate-Unemployment Rate (Accounting for Displaced Workers*)].

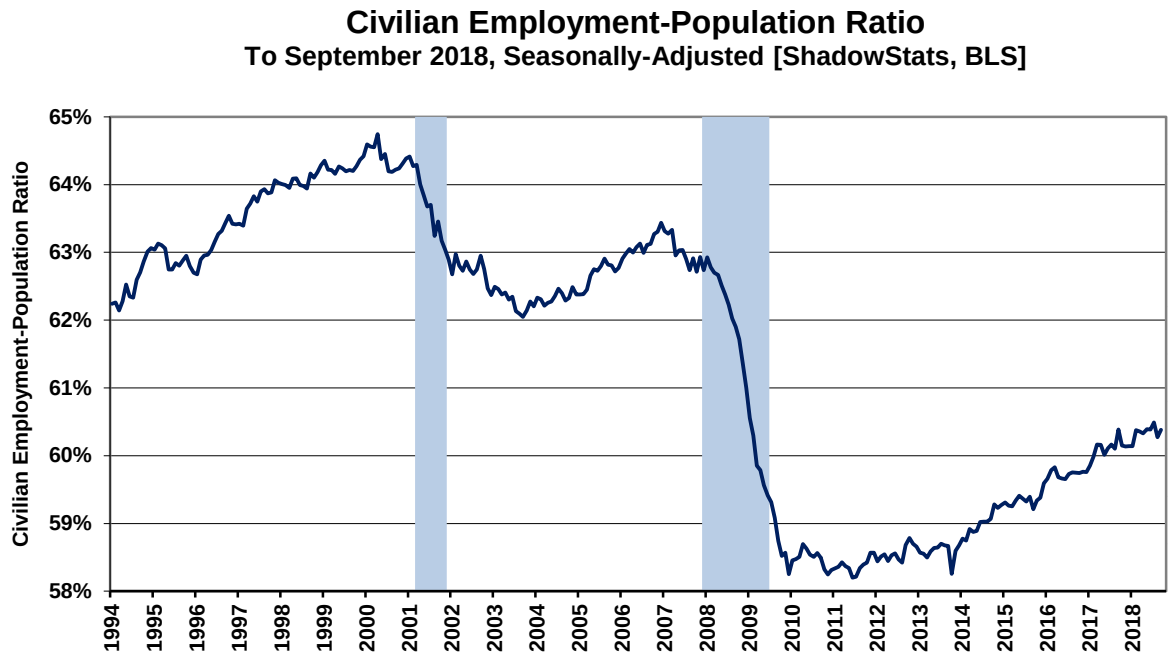
Subsequent to the redefined series, the U.S. economy collapsed into its most severe downturn since the Great Depression, and as the headline unemployment rate dropped (rose on the inverted scale) the ShadowStats measure (also on an inverted scale) continued to track the accumulating discouraged workers. The ratio differences here reflect issues with population. Some argue the difference here is due to an increased portion of the population entering retirement. While that is a partial factor, many who retired or who had planned to retire have found that they cannot afford to do so, at present, as had been planned originally.

Allowing for the build-up of the discouraged/displaced worker population allows for some non-conventional employment/unemployment estimates. With calculations shown in the footnotes, the current *Employment-Population Ratio* and *Participation-Rate* suggest that a realistic unemployment rate, as the public might sense it, would be closer to 10% in instead of 3.8% (currently 3.9%) [the calculations here are based on the recent May 2018 historic low in U.3]. With the *Participation-Rate* suggesting room for another 11.1 million employed. Separately, despite the record-low U.3 in September 2018, the headline count of those not in the headline labor force "wanting a job" was 5.237 million.

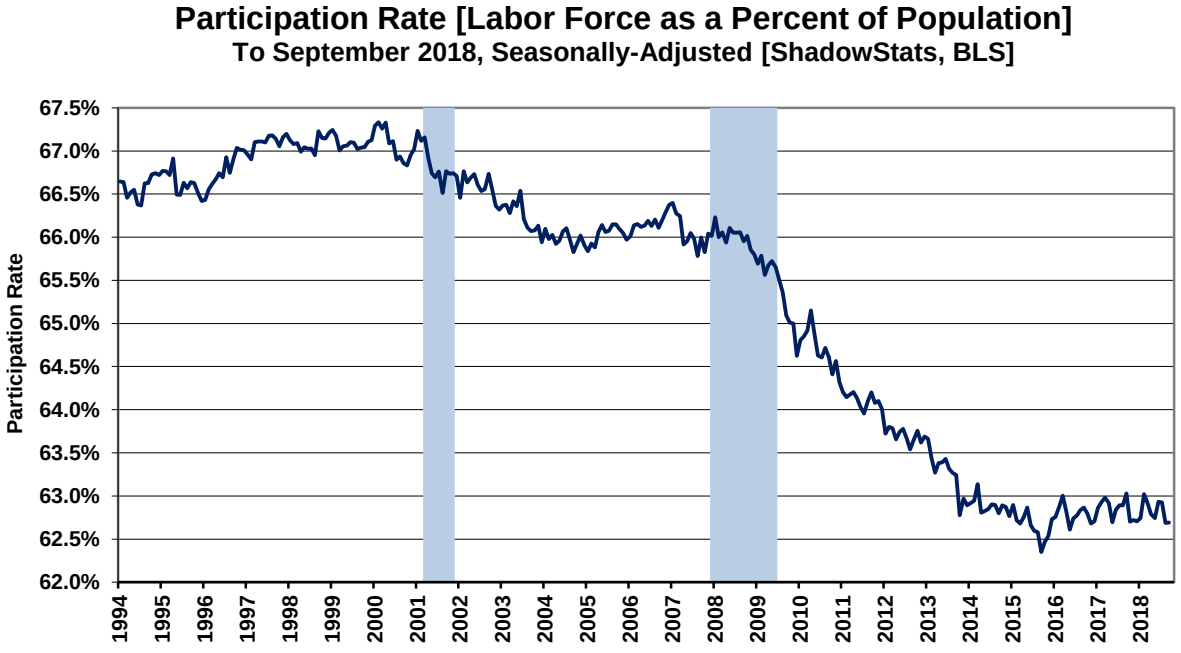
[Graphs SLD-3 to SLD-6 begin on the next page.]

Graph SLD-3: Civilian Employment to Population Ratio

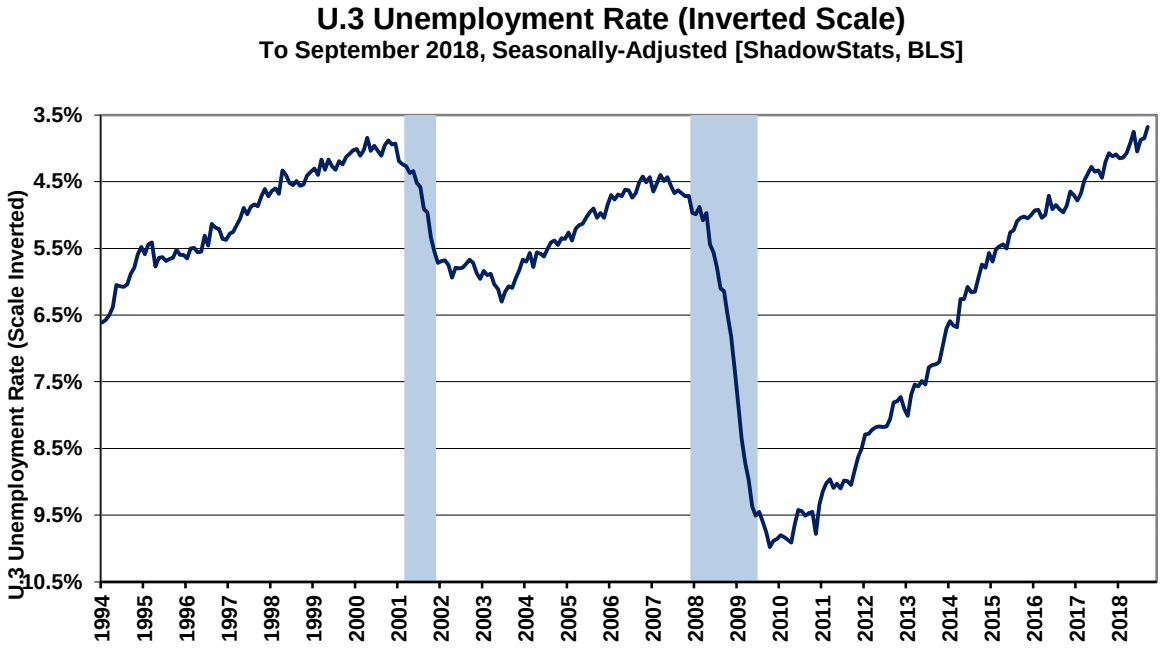
(Same as Graph 3 in the Reporting Detail)



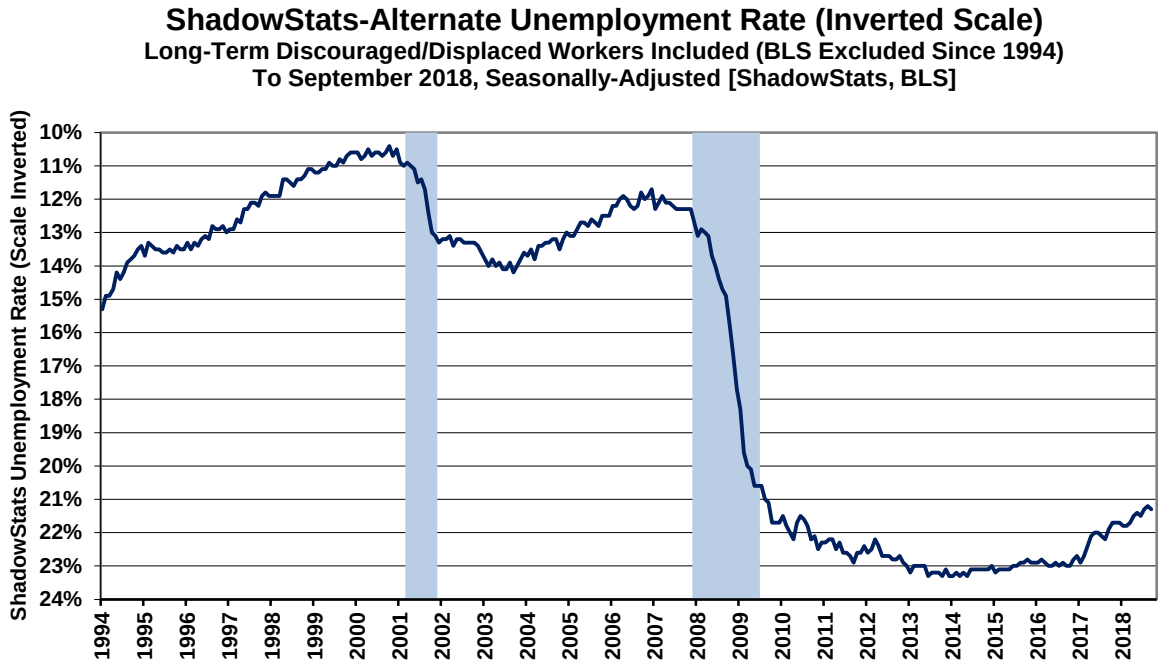
Graph SLD-4: Labor-Force Participation Rate



Graph SLD-5: Inverted-Scale of the Headline U.3 Unemployment Measure



Graph SLD-6: Inverted-Scale of ShadowStats Alternate Unemployment Measure
(Same as Graph 2 in the Reporting Detail)



Economy Remains Far From Full-Employment (Part 1); 3.8%/ 3.7% U.3 Unemployment Historically Is Consistent with 67.3% Participation, Not the Current 62.7%, Which is Consistent with 10.3% U.3. [The following calculations are based on the historic-low 3.75% of May 2018 and related stress numbers of that time. While headline U.3 is has just broken below that historic low, now at 3.68%, and the stress numbers have deteriorated further, the recalculated numbers are not meaningfully different. The accompanying graphs have been updated through the headline August 2018 detail.]

Argued here for many months, the U.S. economy is not at, or close to, full employment. As with much-earlier comments from former Fed Chair Janet Yellen, Treasury Secretary Steven Mnuchin (*Treasury Secretary Mnuchin: Economy is not really at full employment yet*) recently noted, "My comment is we're not really at full employment because of the participation rate." The near-historically-low level of the headline participation rate (labor force/working-age population) is despite the series-low 3.8% headline U.3 unemployment rate. The headline participation rate should be at an all-time high. In like manner, the employment-to-population ratio, also near its historic low, also should be at an historic high. Something very much is amiss in the government's headline Household Survey detail.

Discussed in the *Fedspeak* portion of the *Fed* section of *No. 859 Special Commentary* and the *Opening Comments* of *Commentary No. 870*, certain members of the Federal Reserve Board (*Commentary No. 827*) had suggested that an unemployment rate near 5.0% (U.3 now is at 3.8%) reflected full-employment conditions in the United States. Noted in *Commentary No. 845*, one would expect that "full employment" not only would be consistent with a certain headline unemployment rate, traditionally about 5.0%, but also with a coincident labor-force participation rate, traditionally of about 66%.

For example, at the formal onset of the recession in December 2007, the headline unemployment rate was 5.0%, with the participation rate at a 66.0% near-term peak (higher peaks in participation, in the early 2000's, were coincident with U.3 unemployment of about 4.0%). The last time the U.3 rate was at 3.8% [3.84%] was in April 2000, versus the May 2018 reading of 3.8% [3.75%]—certainly a more-realistic full-employment rate—the participation rate then was the series-high of 67.33%.

Full employment with unemployment at 5.0% or the record-low 3.8% in May 2018, also minimally should be reflected at a relative near-term peak in the participation rate, not close to its historic trough. The May 2018 headline unemployment rate of 3.8%, for example was in the context of a 62.7% participation rate. Yet, that historically-consistent participation rate, in the current circumstance (where the count of Household Survey employed generally is not gimmicked), would generate a consistent, current headline unemployment rate (U.3) of 10.3%, instead of the headline 3.8%.[1]

[1] Consider with the May 2018 working-age population of 257.454 million, the implied labor force at a full-employment participation rate of 67.3% (last seen when headline unemployment was 3.8% in April 2000) would show 0.673 x 257.454 = 173.267. That labor force less current headline employed, 173.267 – 155.474 = 17.793 million implied unemployed, which divided by the labor force of 173.267 = 10.3% unemployment. The problem with the assumptions underlying these numbers and concept, again, remains that the economy is not at full employment, as would be suggested normally by a headline 3.8% U.3; there are serious flaws in the surveying and/or definitional concept of U.3.

[2] Consider with the May 2018 working-age population of 257.454 million, the implied level of employment, given an historically consistent employment-to-population ratio of 64.7% (last seen when headline unemployment was 3.8% in April 2000) would show 0.647 x 257.454 = 166.573 million employed. Yet, the current headline employed count of 155.474 – 166.573 implied employed = a current shortfall of 11.099 million employed, based on historical norms with a headline

The calculations used here are for May 2018, as the series-low U.3 unemployment rate. New calculations will be provided, if the 3.8% (3.75%) is breached meaningfully on the downside. I am not publishing recalculated estimates today of the consistent unemployment rate or, room in labor force, based on the September 2018 headline record-low U.3 details, for two reasons. First, the results effectively are the same. Second, as discussed today's regular *Reporting Detail* comments, the drop in the September 2018 U.3 unemployment rate likely was due to hurricane disruptions and BLS surveying policies, as was the circumstance a year ago, in September 2017, when a major hurricane also made landfall during the BLS's September survey week.

Far From Full-Employment (Part 2): Historic Low 3.8% May 2018 Unemployment Was Consistent a Record-High 64.7% Employment to-Population Ratio, Not the Current Near-Historic Low. The then historic-low 3.8% U.3 unemployment of May 2018 U.3 (now, 3.7% in September 2018) also should have reflected an historic high Employment-to-Population Ratio, not the near-record low indicated for both May and September 2018. In turn, the May headline 60.4% (60.4% in September) Employment-to-Population Ratio was suggestive of a 9.9% U.3 unemployment rate and a missing 11.1 million employed.

The last time[2] U.3 unemployment rate dropped to 3.8% was in April 2000, with the Employment-to-Population Ratio also hitting an historic high of 64.7%. Detailed in the accompanying footnote, historical consistency would suggest a parallel headline unemployment rate for May 2018 at 9.9%, instead of the headline 3.8%, otherwise with a missing 11.1 million "employed" individuals.

The reason for the heavily-distorted current headline unemployment details, largely is definitional, reflecting the unusual nature of the post-recession drop in headline unemployment. The declining unemployment rate heavily has reflected discouraged and displaced, unemployed persons being defined out of the labor force, instead of the more-traditional and positive circumstance of the unemployed being reemployed.

[Coverage of the Trade Deficit begins on the next page.]

[2] Consider with the May 2018 working-age population of 257.454 million, the implied level of employment, given an historically consistent employment-to-population ratio of 64.7% (last seen when headline unemployment was 3.8% in April 2000) would show 0.647 x 257.454 = 166.573 million employed. Yet, the current headline employed count of 155.474 – 166.573 implied employed = a current shortfall of 11.099 million employed, based on historical norms with a headline unemployment rate U.3 of 3.8%.

To the extent one could count those implied missing employed as unemployed, such would suggest a consistent headline U.3 unemployment rate in May 2018 of 9.9% (Unemployed of 17.164 million = headline 6.065 unemployed + the missing 11.099 employed) / (Labor Force of 172.638 = 155.474 headline employed + the headline unemployed of 6.065 + the missing 11.099 employed). The problem with the assumptions underlying these numbers and concept, again, remains that the economy is not at full employment, as would be suggested normally by a headline 3.8% U.3; there are serious flaws in the surveying and/or definitional concept of U.3.

August 2018 U.S. Trade Deficit

Exploding Real Merchandise Trade Deficit Should Hit Both GDP Growth and the Dollar

Third-Quarter Real Merchandise Trade Shortfall on Track for Biggest Deficit in History. The headline August 2018 Trade Deficit widened sharply, with the goods deficit widening well beyond both consensus expectations for nominal deterioration, and beyond the "advance" estimate of the August goods deficit published on September 27th. As a result, the headline Real Merchandise Trade Deficit is on track to show the worst-ever quarterly deficit in third-quarter 2018 (see *Graph 16*). That circumstance has heavily negative implications for third-quarter GDP and beyond, as discussed in *Commentary No. 971*).

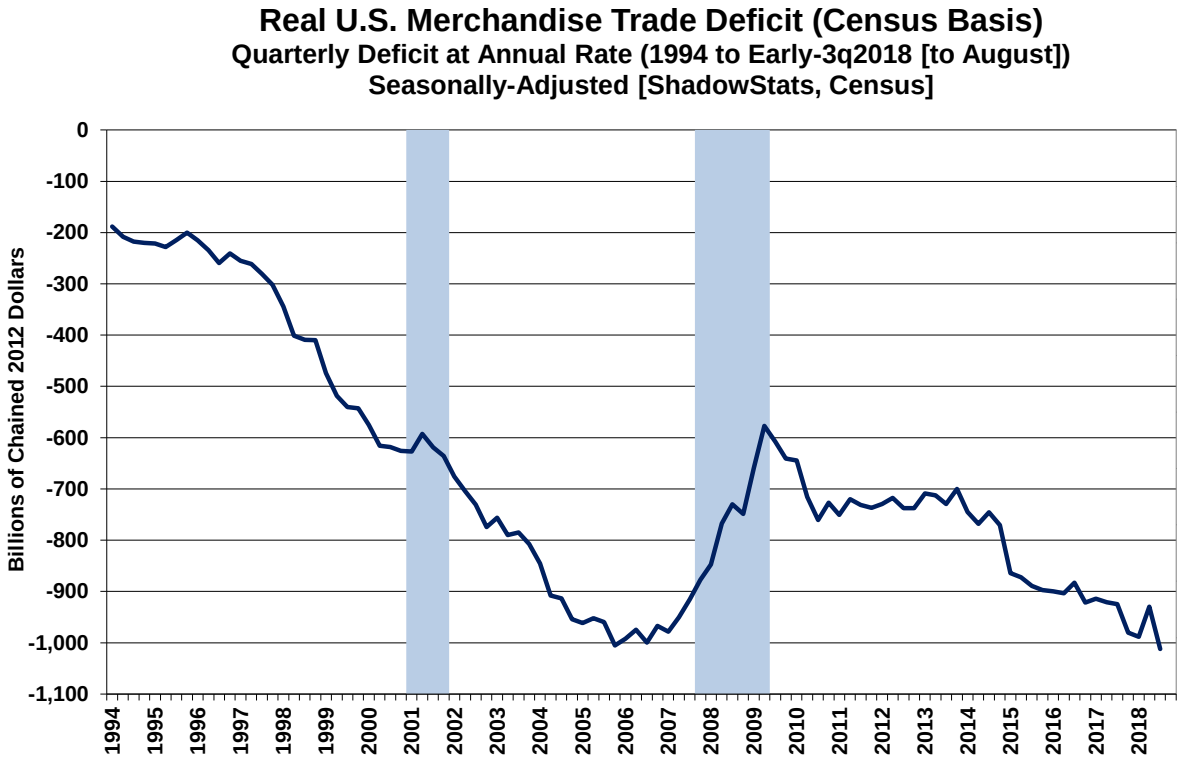
August 2018 Nominal Balance of Payments and Real Merchandise Trade Deficits Widened Sharply. The Census Bureau and the Bureau of Economic Analysis reported October 5th, that the monthly U.S. Balance of Payments trade deficit widened to $53.237 billion in August 2018, versus a revise $50.037 [previously $50.082] billion in July 2018, versus an unrevised $45.739 billion in June 2018. That deterioration reflected a continuing combination of declining exports and increasing imports for the third month. The headline August 2018 nominal deficit of $53.237 billion also widened from an unrevised deficit of $44.221 billion in August 2017.

Real Merchandise Trade Deficit – August 2018. Reporting detail for the Real Merchandise Trade Deficit is plotted in *Graph 16* on a quarterly basis, including the two-month trend for third-quarter 2018. The initial estimate of the August 2018 Real Merchandise Trade Deficit (Chained 2012 Dollars) widened to $86.281 billion, from a revised $82.444 [previously $82.458], against an unrevised $79.348 billion in June, $75.471 billion in May and $77.632 billion in April.

The third-quarter 2018 real merchandise trade deficit currently is on track to widen to an annualized $1,012.4 billion, where the current headline second-quarter 2018 real merchandise trade deficit stands at an annualized $929.8 billion. The third-quarter shortfall at its current pace would be the worst real quarterly trade deficit in modern U.S. history, surpassing the current worst-ever quarterly deficit of fourth-quarter 2005.

This sharply widened shortfall also would take a large chunk out of prospective third-quarter 2018 real GDP growth. Consider, as noted in *Commentary No. 971*, that the current headline second-quarter 2018 GDP growth of 4.2% would have been 2.9%, net of the second-quarter's spurious trade-deficit improvement.

Graph 16: Quarterly Real Merchandise Trade Deficit (First-Quarter 1994 to Early-Trend Third-Quarter 2018)



Watch Out for the U.S. Dollar! As the real U.S. deficit continues its track in ongoing deterioration, fundamental, renewed selling pressure against the U.S. dollar likely will intensify. That financial-market circumstance could evolve and deteriorate sharply, as key headline U.S. economic data continue to soften, unexpectedly, and as consensus expectations begin to turn anew to the potential for renewed Quantitative Easing out of Fed's Federal Open Market Committee (FOMC). This area will be expanded upon in the pending update to *Hyperinflation Watch – No. 3*.

[Coverage of Construction Spending begins on the next page.]

August 2018 Construction Spending

Public-Sector Spending Picked Up, While Private-Sector Spending Tumbled Anew

Private Sector Spending Revised Lower in Deepening Downtrend; Public Spending Revised Higher. Real August 2018 Construction Spending declined for the third-straight month, in a deepening downtrend. Private and Residential Construction Spending revised lower, consistent with liquidity-impaired slowing consumer activity. Growth was seen, however, in upwardly revised Public Spending. As with the net growth in headline August New Orders for Durable Goods, generated by surging Government Defense Orders (see prior *Commentary No. 971*), any growth in August national Construction Spending was generated by increased government Public Spending, not by the liquidity-stressed consumer, who ultimately drives the dominant Residential Spending of the Private Sector. The detail here tends to confirm a renewed downturn in the Residential Construction market as has been seen with Housing Starts, Building Permits and Existing- and New Home Sales (see *Commentary No. 971* for background).

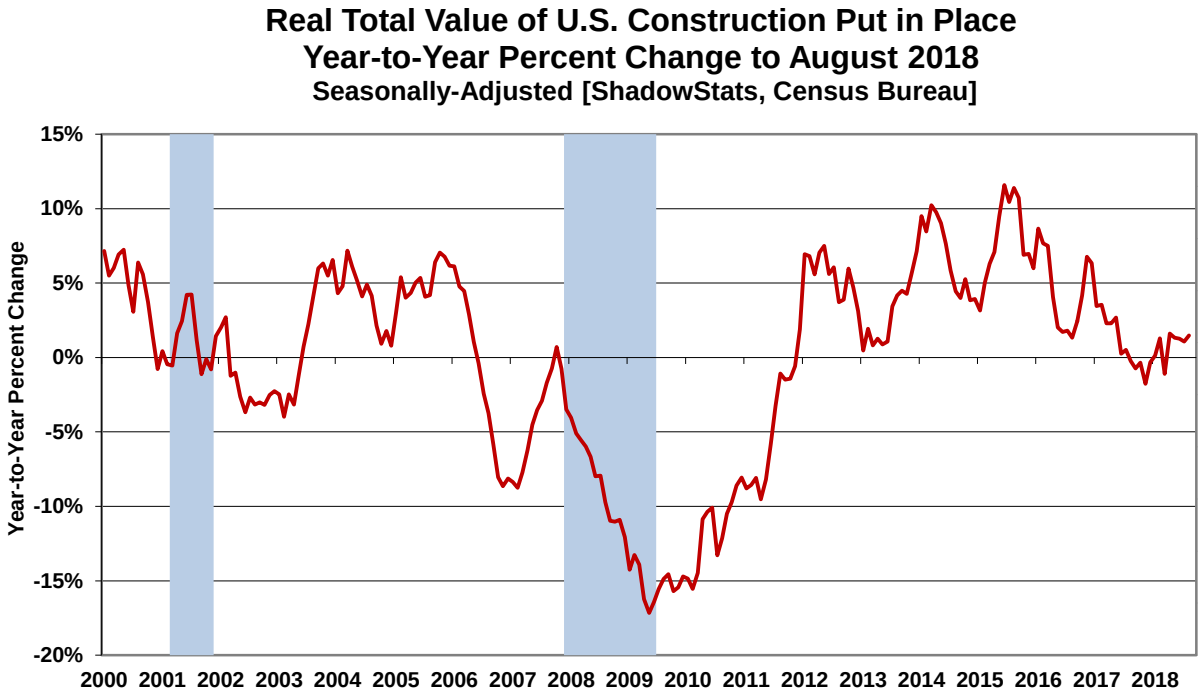
Reported by the Commerce Department on October 1st, in nominal terms, before inflation adjustment, August 2018 Construction Spending rose month-to-month by 0.8%, versus a revised monthly gain of 0.2% [previously 0.1%] in July, a revised decline of 0.7% (-0.7%) [previously 0.8% (-0.8%), initially 1.1% (-1.1%)] in June, and an unrevised gain of 0.7% in May. Year-to-year, the nominal gains were 6.5% in August 2018, versus a revised 6.0% [previously 5.8%] in July 2018, an unrevised annual gains of 5.9% in June 2018 and 5.6% in May 2018.

Construction Inflation—ShadowStats Composite Construction Deflator (CCD). ShadowStats produces a Composite Construction Deflator (CCD) for use in converting current-dollar or nominal (not-adjusted-for-inflation) headline construction spending into inflation-adjusted, real or constant-dollar terms. Detailed in *Commentary No. 829*, previously used measures from the Producer Price Index (PPI) lacked historical consistency and did not measure inflation appropriately for the construction-spending series. Updated for the latest related price indices in the national-income reporting, and private surveying:

- CCD month-to-month inflation was 0.50% in August 2018, 0.74% in July, 0.60% in June, 0.37% in May.

- CCD year-to-year inflation was 4.99% in August 2018, 4.87% in July 2018, 4.60% in June 2018 and 4.25% in May 2018.

Graph 17: Year-to-Year Change in Total Real Construction Spending

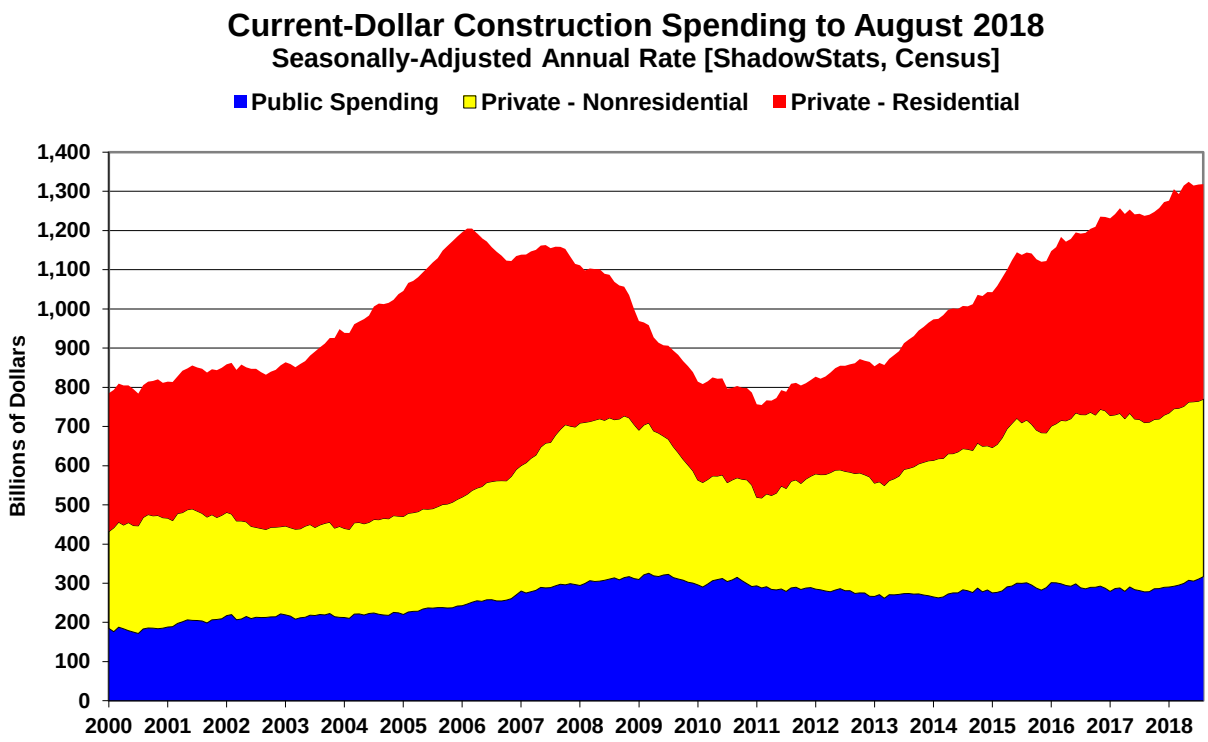


Net of the ShadowStats Composite Construction Deflator, real monthly August 2018 Construction Spending declined by 0.4% (-0.4%), having declined by 0.5% (-0.5%) in July and by 1.3% (-1.3%) in June, versus gains of 0.4% in May and 1.3% in April. Shown in *Graph 17*, year-to-year real gains were 1.5% in August 2018, 1.1% in July 2018, 1.3% in June 2018, 1.3% in May 2018 and 1.6% in April 2018. Those patterns of slowing to flattening annual real growth remain broadly consistent with those seen leading into the 2006 housing collapse.

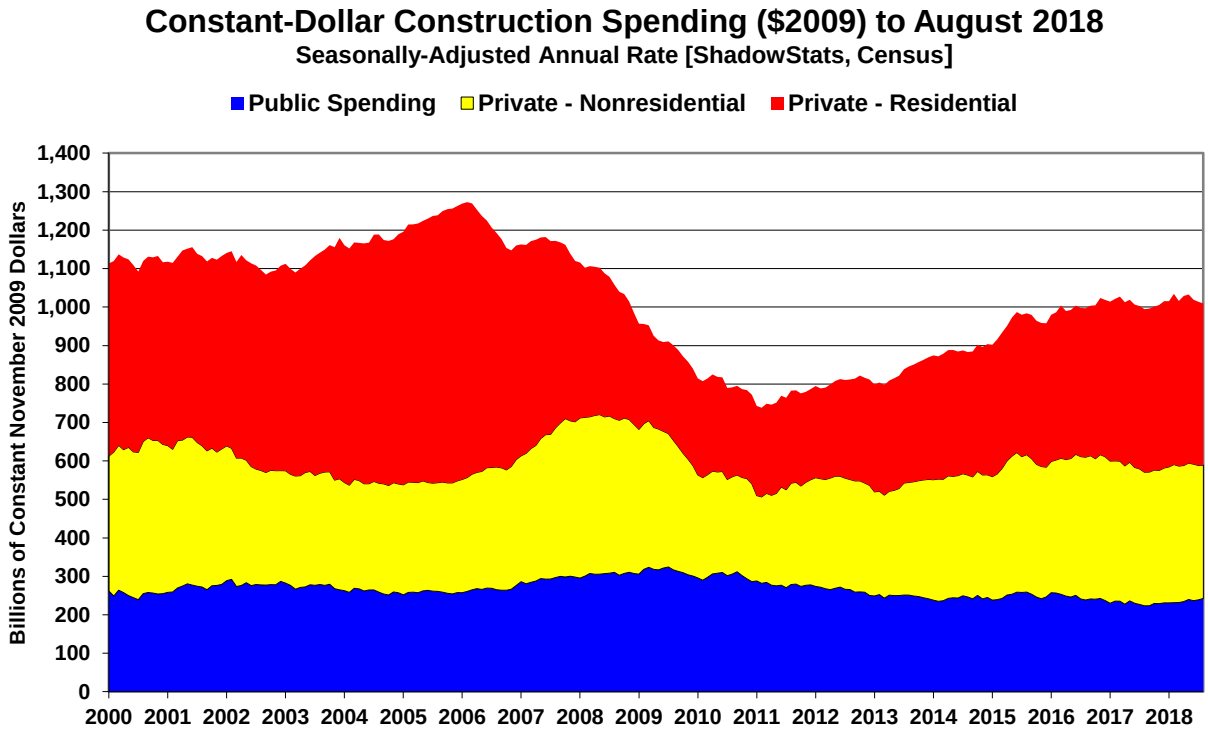
[Graphs 18 to 21 begin on the next page.]

Construction Spending - Aggregate Headline Detail

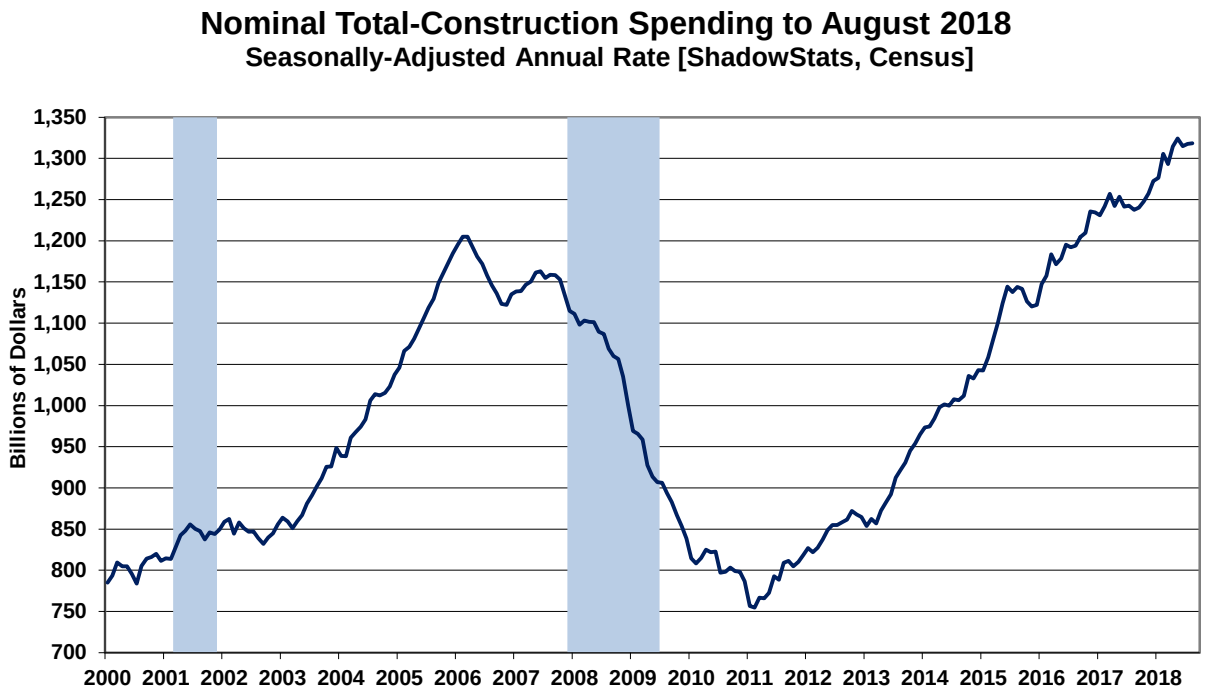
Graph 18: Aggregate Nominal Construction Spending by Major Sector to Date



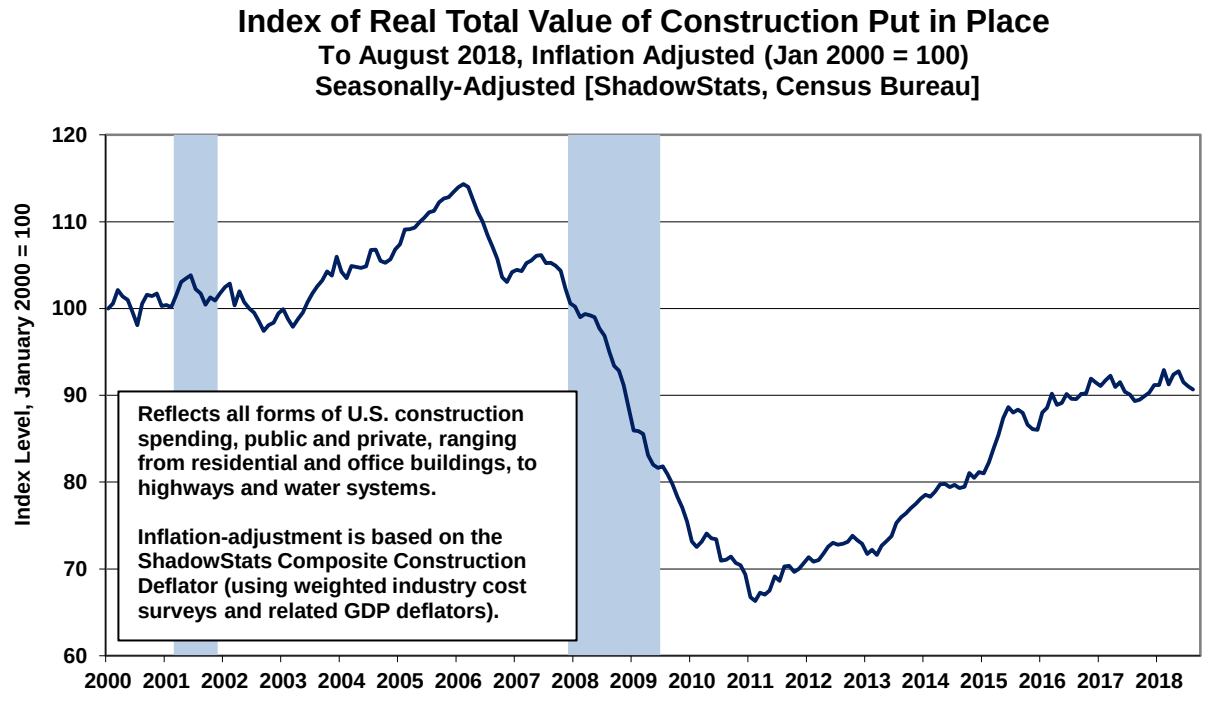
Graph 19: Aggregate Real Construction Spending by Major Sector



Graph 20: Nominal Private Residential Construction Spend

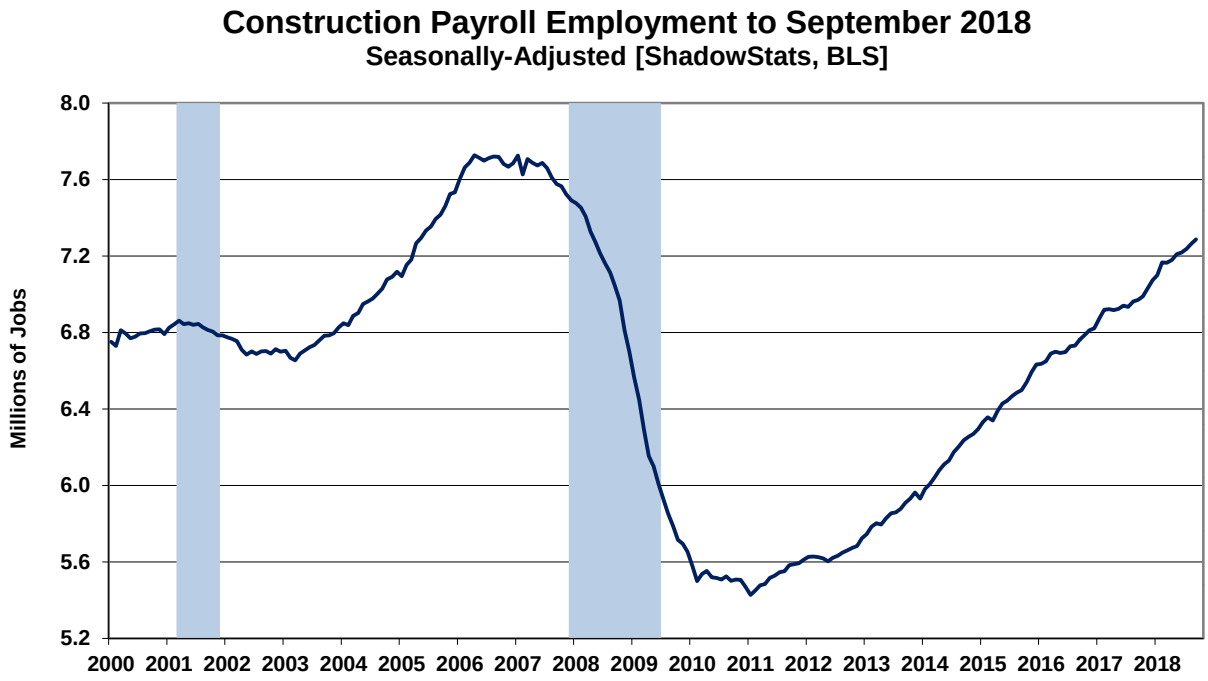


Graph 21: Level of Inflation-Adjusted (Real) Total Construction Spending



Construction Employment on the Rise, Yet Still Shy by 5.7% (-5.7%) of Its Pre-Recession Peak. Released with the headline September 2018 payroll employment numbers on October 5th was the latest surveying on jobs in the Construction Industry. Construction payrolls rose to 7,286,000 in September 2018, up by 23,000 jobs from August, which gained a revised 26,000 [previously 23,000] from July, and was up by a revised 19,000 [previously 18,000] from June. Headline detail showed unadjusted annual gains of 4.18% in September 2018, 4.11% in August 2018 and 4.15% in July 2018. Construction Jobs in September 2018 still were shy by 440,000, or 5.70% (-5.70%) of full recovery to pre-recession levels.

Graph 22: Construction Payroll Employment (2000 to Date)

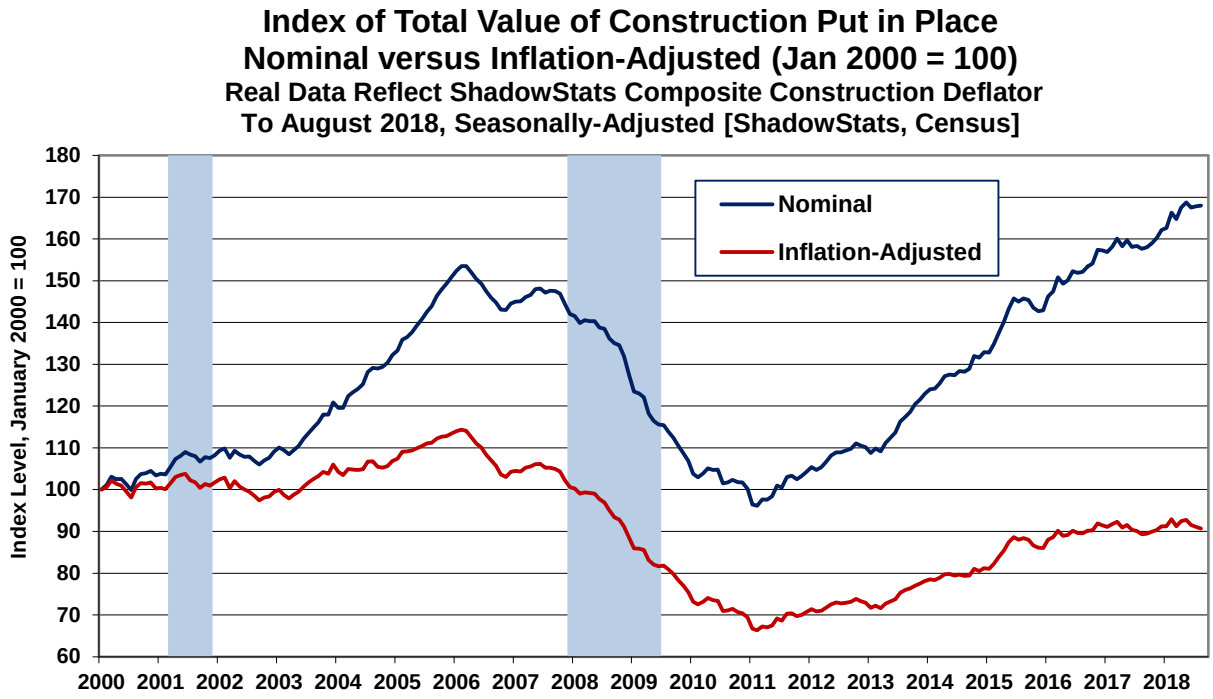


Construction Spending—August 2018—Headline Activity by Sector. Consider that the nominal monthly gain of 0.1% in aggregate August 2018 Construction Spending, versus the revised July monthly gain of 0.2%, included a gain of 2.0% in August Public Construction, versus a decline of 1.7% (-1.7%) in July. Private Construction Spending declined by 0.5% (-0.5%) in August and by 0.2% (-0.2%) in July. Within total Private Construction Spending, Residential Construction declined by 0.7% (-0.7%) in August, having gained 0.2% in July, while Nonresidential Construction declined by 0.2% (-0.2%) in August, versus a drop of 0.8% (-0.8%) in July. This detail is reflected in *Graphs 18* and *19*, and *23* to *26*.

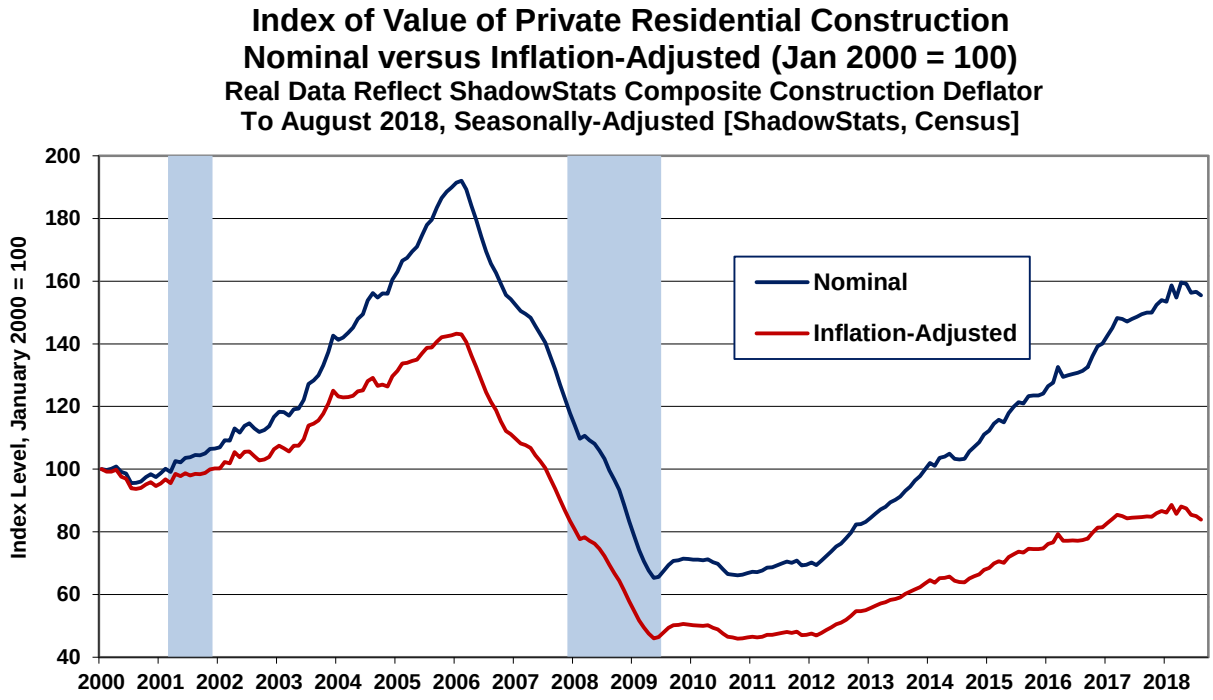
[Graphs 23 to 26 begin on the next page.]

Patterns of Nominal and Real Construction Activity Compared Across Sectors

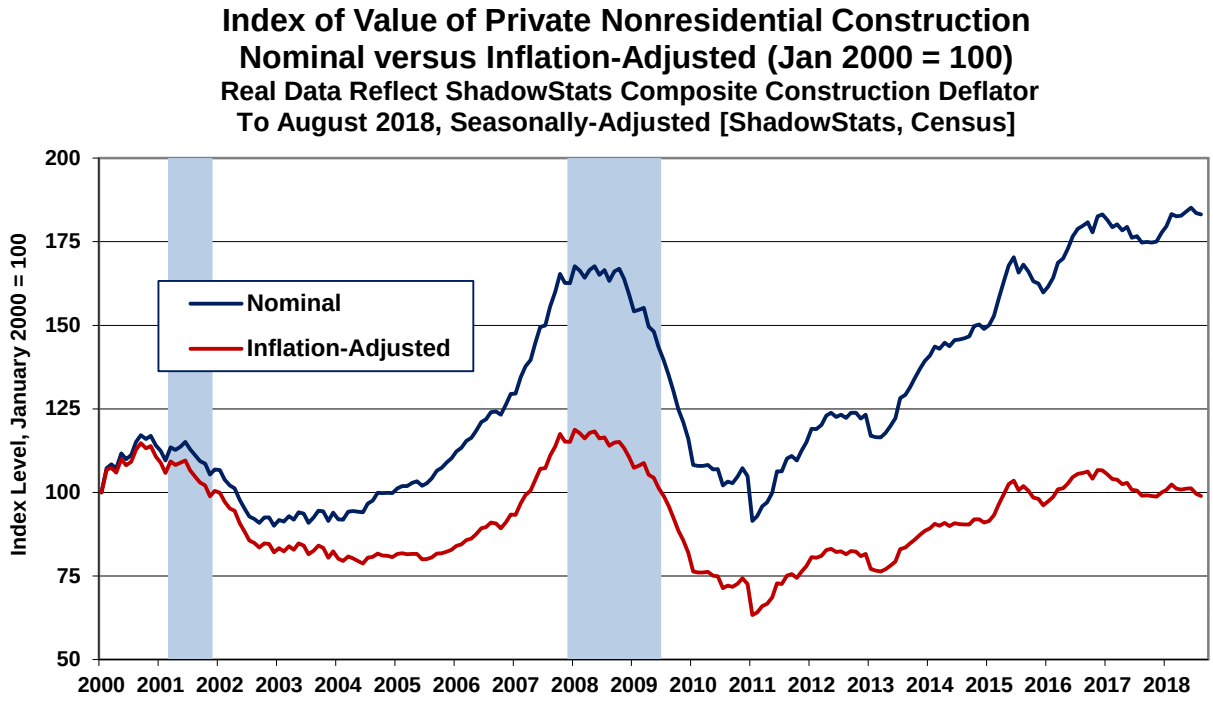
Graph 23: Indexed Nominal versus Real Value of Total Construction



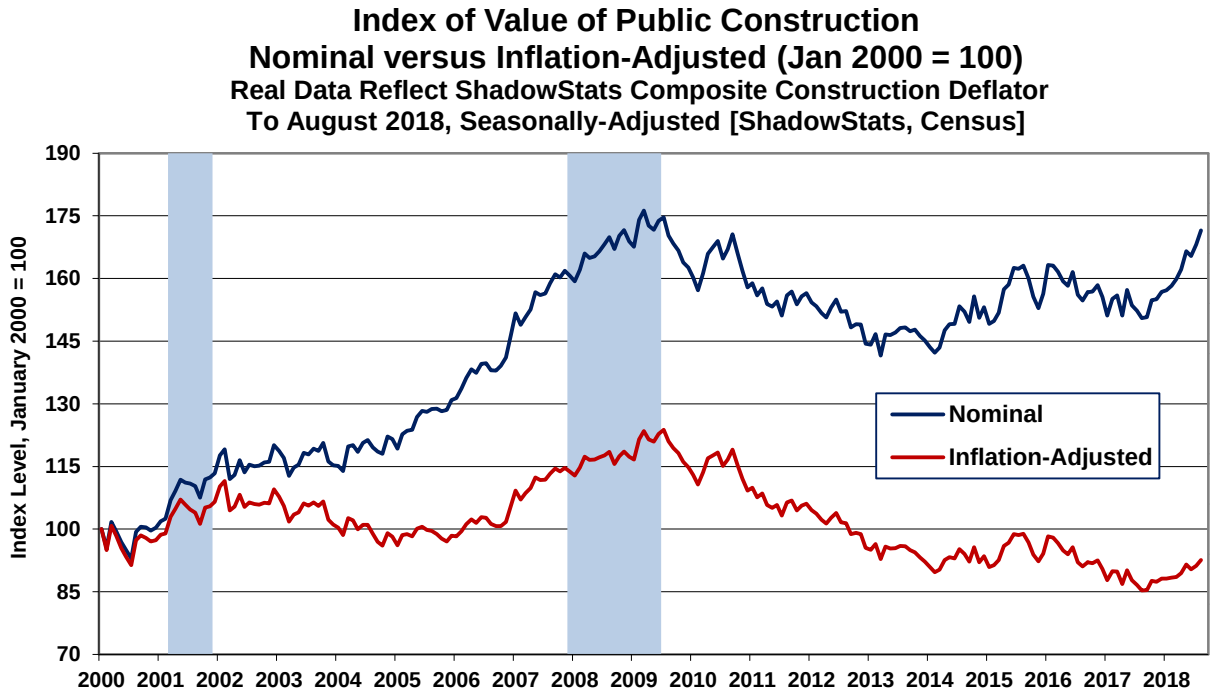
Graph 24: Indexed Nominal versus Real Value of Private Residential Construction



Graph 25: Indexed Nominal versus Real Value of Private Nonresidential Construction



Graph 26: Indexed Nominal versus Real Value of Public Construction



September 2018 Money Supply and the Monetary Base

Systemic Liquidity Continues to Tighten

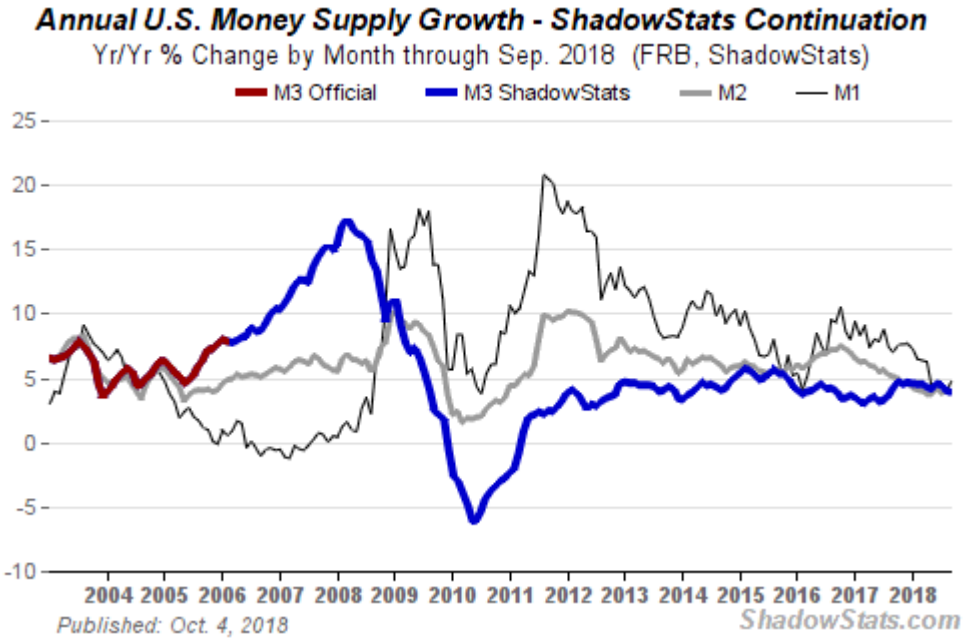
Annual Growth in the Money Supply and Monetary Base Is Slowing or In Deepening Downturn. This quick update on current monetary conditions provides summary numbers and graphs, with full detail following in pending *Hyperinflation Watch – No. 4* update to *Hyperinflation Watch – No. 3*. Mirroring Fed tightening and collapsing Monetary Base, annual growth in September 2018 ShadowStats Money Supply M3 dropped to a 13-month low, based on detail reported on October 4th by the Federal Reserve Board (see *Graph 18*).

Separately, the latest Saint Louis Fed Adjusted Monetary Base estimate was released on September 27th, for the two-week period ended September 26th. The Monetary Base traditionally has been the Federal Reserve's Federal Open Market Committee's (FOMC) tool for targeting growth in the Money Supply (and inflation and economic activity). The annual contraction in the Monetary Base has stalled/narrowed slightly in the minus-eight to minus-nine percent range for the last several two-week periods, down by 7.6% (-7.6%) in the September 26th period. At the same time, the level of the Monetary Base was the lowest it had been since the four weeks ended January 4, 2017, otherwise the weakest since October 2013, when the FOMC still was expanding its quantitative easing.

Given the continued tightening and rate hikes by the FOMC, the annual contraction in the Monetary Base should continue. Given what has been a broadly accelerating pace of annual downturn, we could be seeing the fastest annual contraction of the Monetary Base in its history, within the next month or two (see *Graphs 19* and *20*).

Money Supply M1, M2 and M3 in September 2018. Reflected in *Graph 18*, and detailed on the Alternate Data tab of www.ShadowStats.com, monthly average annual growth in September 2018 M3 growth slowed to 3.89%, which was the slowest pace of annual growth since August 2017. September 2018 growth slowed from a revised 3.96% [previously 3.97%] in August 2018, versus 4.44% [previously 4.47%] in July 2018. The narrower M2 September 2018 annual growth came in 3.96%, versus a revised annual gain in August 2018 of 4.04% [previously 3.99%], versus a revised 3.91% [previously 3.90%] in July 2018. M1 September 2018 annual growth increased to 4.75%, from a revised 3.92% [previously estimated 3.39%] in August 2018, versus a revised 3.89% [previously 3.88%] in July 2018, where the annual growth in July 2018 was a ten-year low (M2 includes M1; M3 includes M2, see the *Money Supply Special Report* for full definitions of those measures).

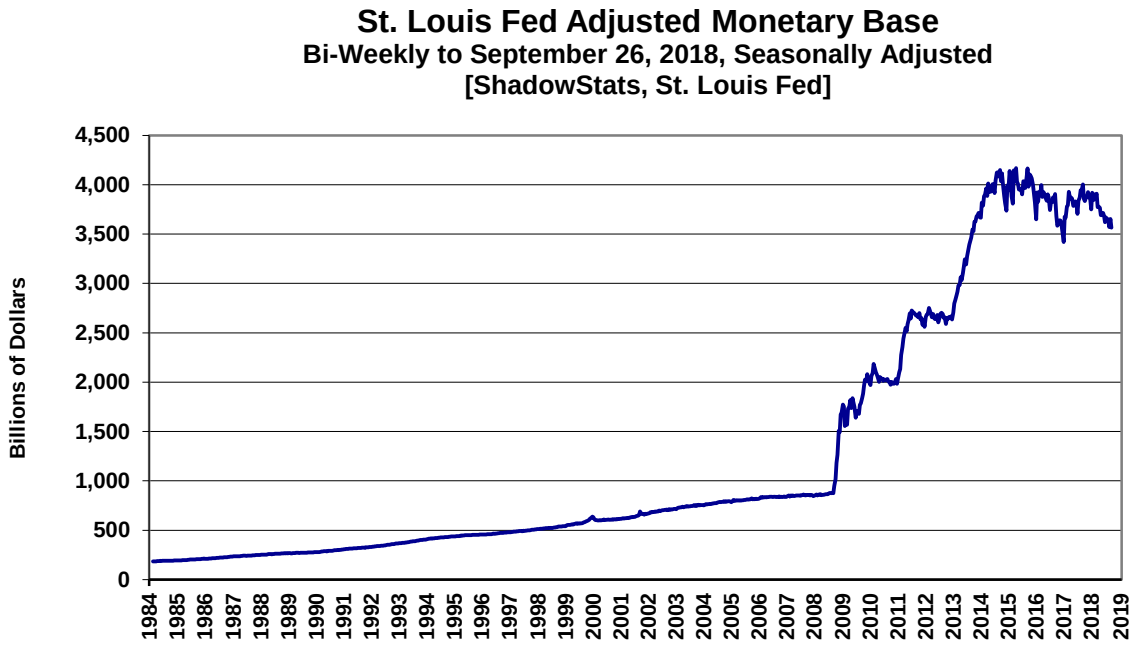
Graph 18: Comparative Money Supply M1, M2 and M3 Yr-to-Yr Changes through September 2018



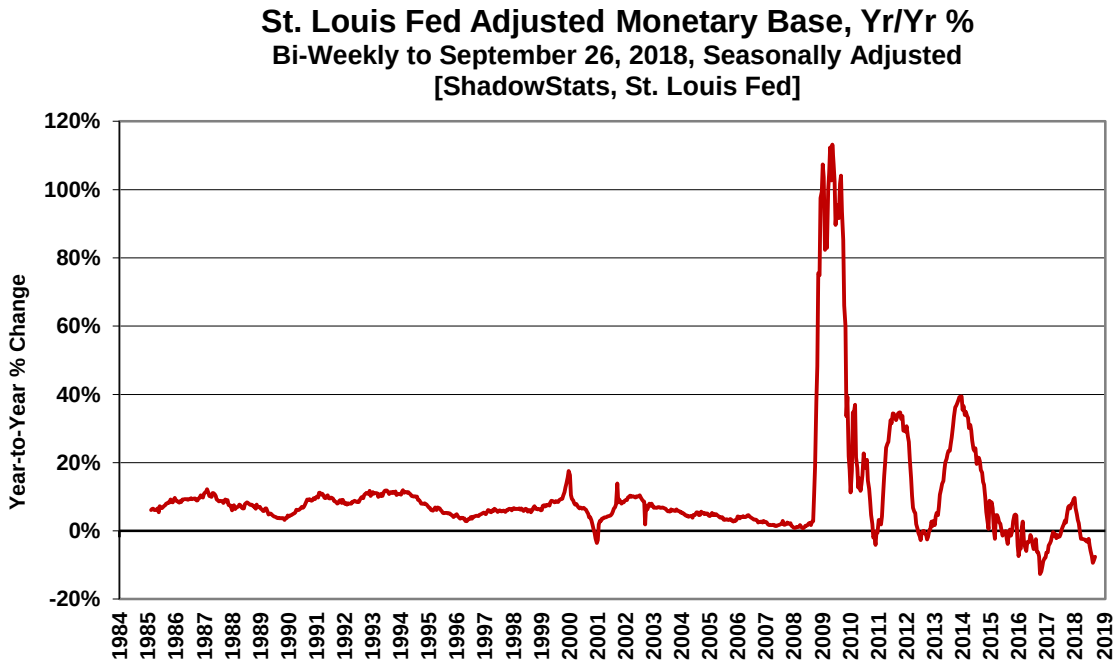
Saint Louis Fed's Adjusted Monetary Base Just Plunged Year-to-Year by 7.6% (-7.6%). The Federal Reserve Board's Federal Open Market Committee has continued to tighten domestic liquidity at an accelerating pace. For the two weeks ended September 26th, the Saint Louis Fed's Monetary Base was down year-to-year by 7.56% (-7.56%), following annual drops of 8.74% (-8.74%) in the two weeks ended September 12th, 9.38% (-9.38%) August 27th, 7.48% (-7.48%) August 15th, 5.92% (-5.92%) August 1st and 5.41% (-5.41%) July 18th, other than the fluttering annual decline of the last couple weeks, such has been in a continuous stream of deepening annual decline since the May 14th, and continual slowing annual growth from a peak of 9.67% in the two-week period ended January 3, 2018, as reflected in *Graph 19*. Again, more detail will follow shortly in the pending *Hyperinflation Watch – No. 4*.

[Graphs 19 and 20 follow on the next page.]

Graph 19: Saint Louis Fed Monetary Base, Billions of Dollars (1984 to September 26, 2018)



Graph 20: Year-to-Year Percent Change, Saint Louis Fed Monetary Base (1985 to September 26, 2018)



[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 Consumer Activity. The headline economic outlook likely will continue to dim rapidly, as seen in the intensifying downturn in the housing and construction markets, in stalling retail sales and production numbers and a rapidly deteriorating trade deficit, despite the headline ShadowStats "Corrected" GDP being off bottom and growing quarter-to-quarter. This circumstance is reviewed in today's *Commentary* discussed in prior *Commentary No. 971* and in the context of continued weakening in consumer-liquidity trends and the likely tipping point for the markets discussed in *Commentary No. 970* (see also *Commentary No. 969-Extended*, *Special Commentary No. 968-Extended*, *Commentary No. 967* and *Commentary No. 966* and *Commentary No. 959-B*).

Also consider as basic background *Hyperinflation Watch – No. 3* and *Consumer Liquidity Watch – No. 4*. Both *Watches* will be updated in the week ahead, reflecting the latest detail of intensifying consumer- and systemic-liquidity issues, exacerbated by last week's FOMC rate hike designed to "slow" the economy. Postings and links to the two *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 to extraordinary financial-market and economic turmoil.

The dollar and financial markets remain at extreme 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:

Producer Price Index—PPI (September 2018). The Bureau of Labor Statistics (BLS) will release its September 2018 PPI estimate on Wednesday, October 10th. Initial highlights of the headline detail will be posted in the ***Daily Update*** section in the top left-hand column of the *www.ShadowStats.com* home page, within an hour or so following the headline release, with full coverage following in *Commentary No. 973* planned for late-October 11th.

> **Odds favor negative, month-to-month wholesale inflation on the goods side of the reporting, reflecting a combination of falling wholesale crude oil and flat gasoline prices in September, exacerbated by negative seasonal adjustments in energy-sector inflation. Against hurricane-bloated energy prices of a year ago, both the goods and aggregate year-to-year inflation should slow.**

The dominant services-sector "inflation," however, is a wildcard, bearing little relationship to hard economic data. It often provides some counter-move to the hard-inflation estimate on the goods side, where services likely would be a positive contributor in the current circumstance. Such comes particularly from counterintuitive "inflation" or "deflation," reflecting rising or falling "margins," in turn reflecting falling or rising costs. Guesstimation in that services sector remains highly problematic, as discussed in *Inflation that Is More Theoretical than Real World?* in *Commentary No. 970*.

Per the Department of Energy (DOE), unadjusted crude oil prices declined wholesale gasoline prices were flat in September 2018. Based on the two most-widely-followed oil contracts, monthly-average oil prices fell by 2.3% (-2.3%) [Brent] and by 4.1% (-4.1%) [WTI]. That was accompanied by minimal gains in unadjusted, monthly-average wholesale gasoline prices of 0.1% [NY Harbor] and 0.5% [Gulf Coast]. Where PPI seasonal adjustments for energy costs are negative in September, petroleum-related unadjusted monthly price changes should have negative impact on the month-to-month adjusted Final Demand Goods component of the PPI.

The depressed level of headline annual PPI inflation in September largely will be due to hurricane disrupted oil and gasoline production and related spiked prices of a year ago, discussed in *Commentary No. 970*. Similar effects should hit headline annual inflation in October 2018. Shy of interim spikes to oil and gasoline prices accelerating the process, look for December 2018 annual CPI-U inflation to be back above three-percent.

Consumer Price Index—CPI (September 2018). The Bureau of Labor Statistics (BLS) will release its September 2018 CPI on Thursday, October 11th. ShadowStats Alternate CPI detail will be posted on the ShadowStats.com Alternate Detail tab, the morning of October 11th, as usual, shortly after the release of the headline CPI data. Initial highlights of the headline detail also will be posted in the ***Daily Update*** section in the top left-hand column of the *www.ShadowStats.com* home page, within an hour or two following the headline release, with full coverage following in *Commentary No. 973* planned for late-October 11th.

> **The headline September CPI-U likely will show a near-consensus monthly gain of about 0.2%, plus-or-minus, in the context of virtually unchanged, not-seasonally-adjusted gasoline prices, with negligible seasonal adjustments. Artificially depressed, unadjusted year-to-year annual inflation for September 2018 should come in around 2.4% plus-or-minus, down from 2.70% in August 2018 and 2.95% in July 2018.**

The depressed level of headline annual CPI inflation in September is due solely to hurricane disrupted oil and gasoline production and related spiked prices of a year ago, as discussed in *Commentary No. 970*. Similar effects should hit headline annual inflation in October 2018. Shy of interim spikes to oil and gasoline prices accelerating the process, look for December 2018 annual CPI-U inflation to be pushing three-percent, once again.

[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*. Updates pending in the next week will be advised by e-mail as 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. 971 (October 3rd) Reviewed August 2018 New Residential Construction, Existing- and New-Home Sales, New Orders for Durable Goods and the third estimate of Second-Quarter 2018 GDP, along with an updated review of underlying economic reality.

Commentary No. 970 (September 26th) Discussed a potential, pending Tipping Point in the U.S. financial markets along with a review of August 2018 CPI, PPI, Retail Sales, Industrial Production and the CASS Freight Index™.

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).

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. 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.

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.