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

COMMENTARY NUMBER 924

November Labor, Private Surveying and M3, October Trade Deficit and Construction Spending

December 8, 2017

Private Surveying of November Labor Conditions Showed Continuing Annual Contraction and Ongoing Non-Expansion

Still-Heavily-Distorted, November Unemployment Rates Notched Minimally Higher: U.3 Rose to 4.12% versus 4.07%, U.6 Rose to 7.96% from 7.91%, and the ShadowStats-Alternate Rose to 21.7% from 21.6%

Hurricane-Warped Unemployment and Employment Household-Survey Details Face Near-Term Corrections with the January 5th Benchmark Revisions

Low-Level Annual Payroll Growth Continued to Signal New Recession

Seasonal-Adjustment Gimmicks Bloated Headline Payroll Gains, where Unadjusted Payrolls Revised Lower but Adjusted Levels Revised Higher; Payroll-Survey Benchmark Revisions Loom for February 2nd

Fourth-Quarter 2017 Real Merchandise Trade Deficit on Early Track for Worst Showing Since First-Quarter 2007

October 2017 Nominal Balance of Payments Trade Deficit Increased by 8.6% versus September 2017, by 13.1% versus October 2016

Shy of Recovering Its Pre-Recession Peak by 22.0% (-22.0%), Real Construction Spending Continued in Annual Decline, as Last Seen During the 2006 Housing Collapse

Amidst Expectations of a December 13th FOMC Rate Hike, November 2017 M3 Annual Growth Eased Back to 4.6% from 4.8% in October, as Monetary-Base Annual Growth Jumped to a Four-Year High of 8.1%

PLEASE NOTE: The next Regular Commentary, Wednesday, December 13th, will review the November Consumer and Producer Price Indices (CPI and PPI) and that day's FOMC actions, followed by a missive on December 15th covering November Retail Sales and Industrial Production.

Best wishes —John Williams (707) 763-5786

Today's (December 8th) *Opening Comments and Executive Summary.* The *Opening Comments* reviews *The Conference Board Help Wanted OnLine® Advertising* for *November 2017* in the context of the latest headline labor, trade and construction details. The *Executive Summary* (page 6) reviews highlights of the November Employment and Unemployment and the October Trade Deficit and Construction Spending.

The ***Reporting Detail*** (page 14) expands the discussion and graphics on the November Employment and Unemployment data (page 14), along with accompanying notes on major background issues with the headline reporting of the monthly labor data in the ***Supplemental Labor-Detail Background*** (page 30). More-extensive coverage also follows for the October Trade Deficit (page 37) and Construction Spending (page 40).

The ***Hyperinflation Watch*** (page 49) reviews the latest monetary conditions, including the initial estimate of year-to-year change in the November 2017 ShadowStats Ongoing M3 Estimate and current monetary-base circumstances, all in the context of next week's FOMC meeting.

The ***Consumer Liquidity Watch*** (page 52) has been updated for the early-November Consumer Sentiment reading from the University of Michigan and October Consumer Credit Outstanding.

The ***Week, Month and Year Ahead*** (page 62) provides background on recent *Commentaries* and previews next week's releases of the November CPI, PPI, Retail Sales and Industrial Production.

OPENING COMMENTS

Day of Reckoning for Hurricane-Disrupted Unemployment Detail: January 5th. Contrary to the happy hype in the popular media, the U.S. economy is not booming along and the headline U.3 unemployment rate is not holding at a 17-year low of 4.1%. As detailed and explained in the opening paragraphs of the Employment and Unemployment section in the *Reporting Detail* (page 14), current headline reporting of the U.S. unemployment rate and underlying detail are meaningless, due to a confluence of extraordinarily-negative factors: (1) an irregular and massive shock to the numerical reporting system from hurricane disruptions, and (2) the unconscionable practice by the Bureau of Labor Statistics of not publishing comparable month-to-month unemployment statistics but once per year.

The next one-time-per-year consistent monthly reporting of the seasonally-adjusted unemployment data will be on Friday, January 5, 2018, along with the headline reporting of the December 2017 data in conjunction with annual benchmark revisions. If I am reading these numbers correctly, such could send a shockwave through the system as to economic expectations, barring other data, such as surprise weakness in next week's November Retail Sales and Industrial Production beginning the process. Discussed here

regularly (see *Commentary No. 923*), the broad U.S. economy never recovered from the 2007 recession, and it has started to turn down anew, as discussed later with November Payroll Employment data and with the October Trade Deficit and the inflation-adjusted Construction Spending details.

Back in the real world, private surveying of current labor market conditions has not been quite as rosy as seen by the Bureau of Labor Statistics.

November Help-Wanted Advertising Signaled Ongoing Recession, Continuing Economic Non-Expansion. Although mixed in month-to-month change ("Total Ads" up and "New Ads" tumbling for the month) The Conference Board Help-Wanted Online Advertising® (HWOL) for November 2017 continued showing significant annual, year-to-year deterioration in labor-market demand, which remains a meaningfully-negative, leading indicator to underlying, broad economic activity.

ShadowStats follows a number of business indicators—both conventional and not—looking for reliable reporting of real-world economic activity and for indications of shifting patterns in same. The HWOL is one of the best, private leading-indicator measures. Increasingly, a number of major government economic indicators, including recent production, employment and housing and construction measures, had been showing "unexpected" weakness, or continued non-recovery and renewed downturn in the post-2007 economic collapse period. Those trends should continue in play net of any short-lived, Atlantic hurricane-related reporting disruptions, and the unwinding of same.

The Conference Board Help Wanted OnLine® Advertising, November 2017. With the counts of November 2017 "Total Ads" and "New Ads" down year-to-year respectively by 3.7% (-3.7%) and 13.1% (-13.1%), the annual contractions broadly continued at depths last seen going into the trough of the business collapse into 2009/2010. Where the annual contraction in November 2017 "Total Ads" narrowed [previously down by 8.9% (-8.9%)], the annual contraction in "New Ads" deepened [previously down by 11.2% (-11.2%)]. The "New Ads" series provides the better indication of unfolding economic trends.

Where seasonally-adjusted month-to-month change rose by 3.0% for "Total Ads," the third straight month-to-month gain, the series had declined month-to-month for the preceding three months. Month-to-month change in activity, however, declined by 6.2% (-6.2%) for "New Ads" in November, having gained in the two prior months and having declined month-to-month for the three months preceding that. The monthly patterns have been irregular, down in fourteen of the last twenty-four months for the "Total," and down in thirteen out of the last twenty-four months for the "New" Ads.

The tracked, seasonally-adjusted monthly measures, however, have declined year-to-year in each of the last twenty-one months for the "Total Ads," and in each of the last twenty-two months (twenty-three of the last twenty-four months) for the "New Ads," including November 2017. The annual decline has narrowed recently, but the annual downturn generally had continued at or deeper than 10% (-10%) for both series, as reflected in *Opening Comments Graph OC-1*. Again, though, the November 2017 annual detail showed a sharply narrowed "Total Ads" annual decline and a deepened "New Ads" annual decline.

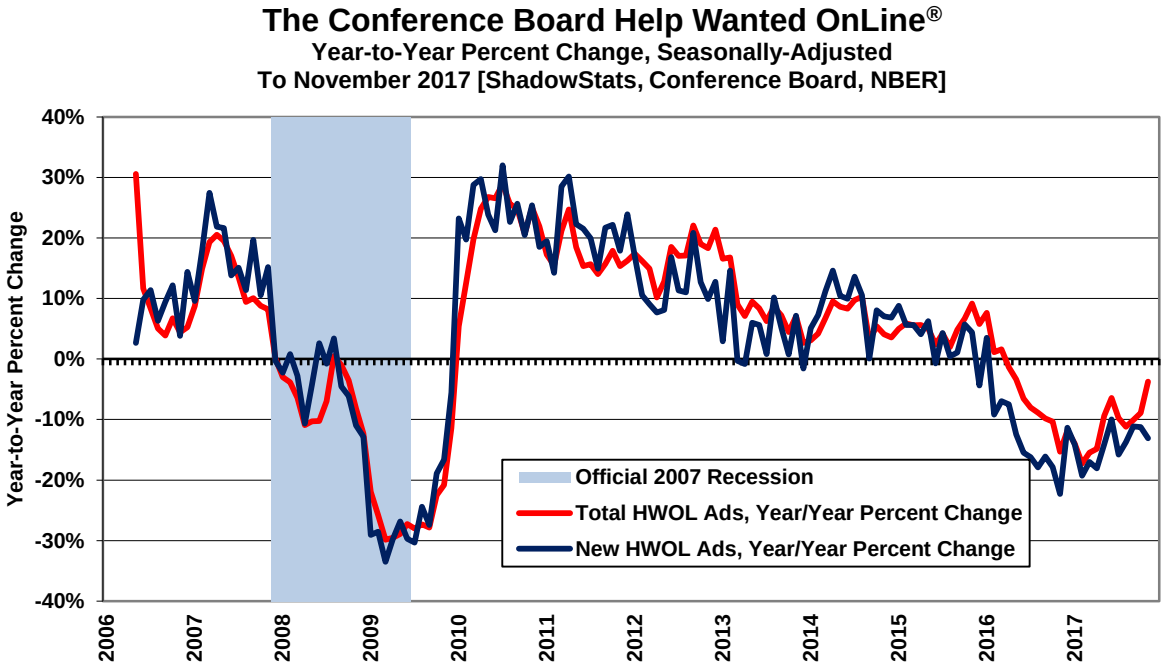
Annual growth began to slow in 2010 and turned negative year-to-year in late-2015 and early-2016. The shaded area in the graph reflects the formal bounds of the 2007 to 2009 recession. While the HWOL held in negative annual growth territory into early-2010, beyond the formal economic trough in June 2009,

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

Many thanks to The Conference Board for permission to publish the accompanying 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). Where, "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." While, "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®.

While much of this text is repetitive of prior discussions in *Commentary No. 919-A*, *No. 852* and *No. 820*, the detail here has been updated for the latest information. These comments and analysis remain those of ShadowStats alone, not those of The Conference Board.

Graph OC-1: The Conference Board Help Wanted OnLine® to November 2017



Historical Background. *[Please note: this section generally has been repeated, unrevised from prior reporting, other than for updated links. It provides general background and historical perspective for the series.]* 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. The current on-line series tracked the economic collapse into 2009, parallel with the last of the series based on newspaper help-wanted advertising. 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 November 2017 (released December 6th). 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 constructed 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 contracted by 15% (-15%) or more, which has happened here.

Since formal tracking switched to help-wanted advertising on the Internet, around 2005, as 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. Even with a limited initial history, the new series tracked that headline downturn into 2009 (in tandem with the final surveys of newspaper help-wanted online advertising, which continued for a while), and it has tracked to the downside in the current environment of what appears to be a "new," still-unfolding recession (see *No. 859 Special Commentary*).

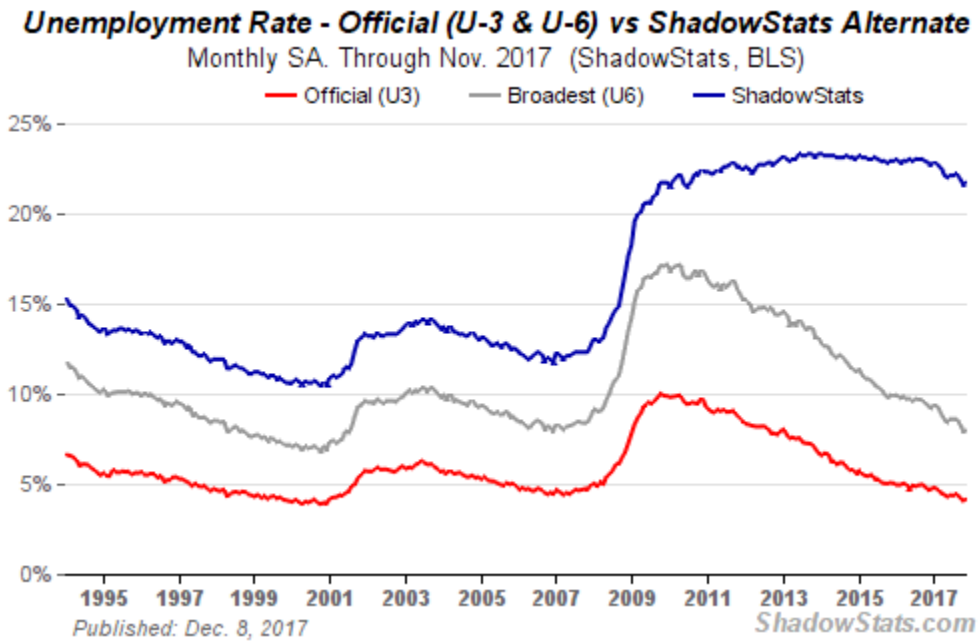
Time will establish new annual growth parameters that would signal a formal recession. My betting remains that they will look much like the earlier series, and much like the pattern seen in the present series in terms of year-to-year contraction. Those looking for independent confirmation of underlying economic conditions should find this series to be highly valuable. As for the BLS employment and unemployment series, they should begin to catch up with the Conference Board's high-quality, independent leading indicator, despite the heavy upside reporting biases deliberately structured into the BLS series and expanded anew into the initial 2017 payroll-survey benchmarking. See the discussions in *Special Commentary No. 885*, *Commentary No. 864* and in the *Birth-Death/Bias-Factor Adjustment (BDM)* section of the *Supplemental Labor-Detail Background* in today's *Reporting Detail*.

EXECUTIVE SUMMARY: Employment and Unemployment—November 2017—Payrolls Continued to Signal a New Recession, Unemployment Reporting Remained Heavily Distorted. Extensive comments on the nature of hurricane distortions on headline unemployment and employment reporting, and implications of same, are covered in the *Reporting Detail*. Again, the circumstance here is not one supportive of a purported expanding U.S. economy.

Outside of hurricane-warped data, in the context of the regular reporting distortions discussed in *Special Commentary No. 885* as well as in the *Supplemental Labor-Detail Background*, incorporated here by reference, broad labor circumstances generally have weakened sharply. Allowing for the hurricane-related disruptions to the payroll data, and revisions to same, headline annual payroll growth in November 2017 slowed to level only seen on the downside, going to a recession and continued to signal same.

The headline monthly payroll jobs gain of 228,000 in November 2017, likely was flat-to-minus in reality (see *Supplemental Labor-Detail...*). In the context of the *ShadowStats-Alternate Unemployment Rate Measure* discussion (also in the *Supplemental Labor-Detail...*), the headline 4.1% November 2017 U.3 unemployment rate was much closer to 21.7%, when viewed from the context of common experience and subject to pending benchmark revisions to the underlying detail on January 5th.

Graph 1: Comparative Unemployment Rates U.3, U.6 and ShadowStats
(Same as Graph 10 in the Reporting Detail)



Unemployment. Reflected in *Graph 1*, the headline unemployment rate U.3 rose to 4.12% in November 2017, versus 4.07% in October. U.6 (U.3 plus those employed part-time for economic reasons, and those marginally attached to the labor force, including discouraged workers) rose to 7.96%, versus 7.91%, and the ShadowStats-Alternate measure (U.6 plus all estimated long-term discouraged and displaced workers) rose to 21.7% versus 21.6%.

Regular coverage and graphs of employment-stress measures (related to discouraged and displaced workers), such as the Employment-to-Population Ratio (Employed/Working-Age Population), which declined minimally from 60.16% in October to 60.14% in November, and the Participation Rate (Labor Force/Working-Age Population), which rose minimally from 62.71% to 62.72%, are detailed the *Reporting Detail* section, along with related economic series (see *Graphs 11* to *19*).

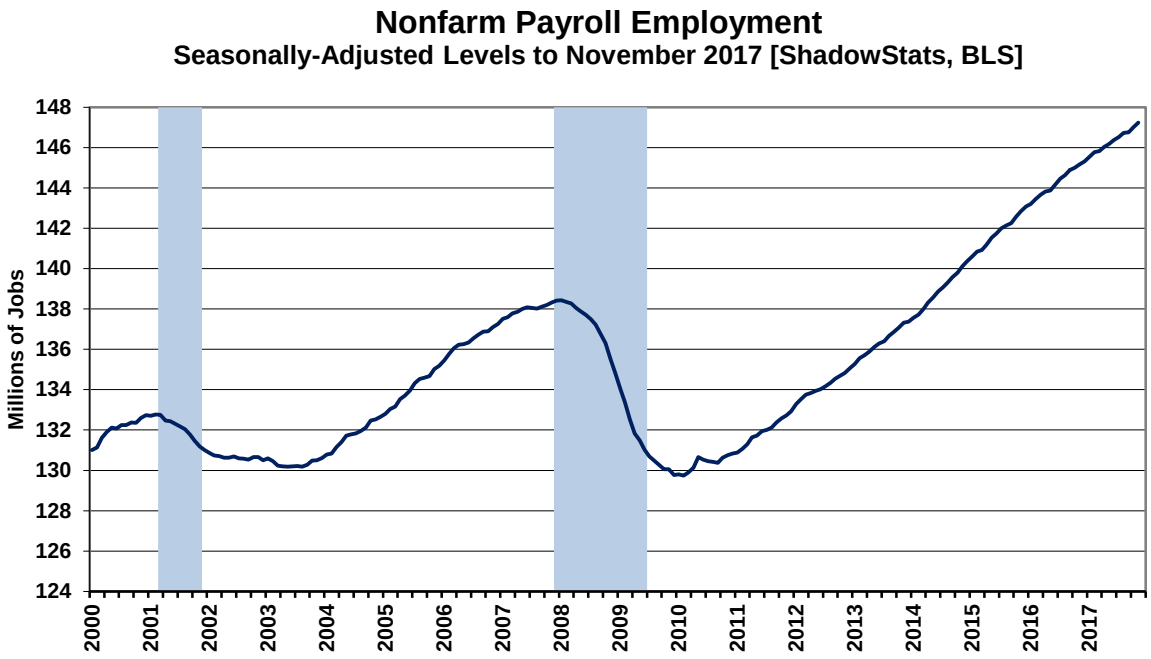
Payroll Survey Gain Reflected Some Catch-Up, but Annual Growth Slowed Deep into Recession-Signal Territory. Reflected in *Graph 2*, the headline payroll-employment gain in November 2007 was 228,000, versus revised monthly gains of 244,000 in October and 38,000 in September. Recent monthly changes reflected hurricane distortions to the September data, and recovery from same in the subsequent detail.

As reported, the headline year-to-year gain of 1.44% (*Graph 3*) in the not-seasonally-adjusted November 2017 reporting was at a 75-month low (excluding September and October hurricane distortions, and a parallel reading earlier in the year), the lowest level of annual growth since the economy was last coming out of a recession in August 2011, and a level of growth hit on the downside, historically, only going into a recession.

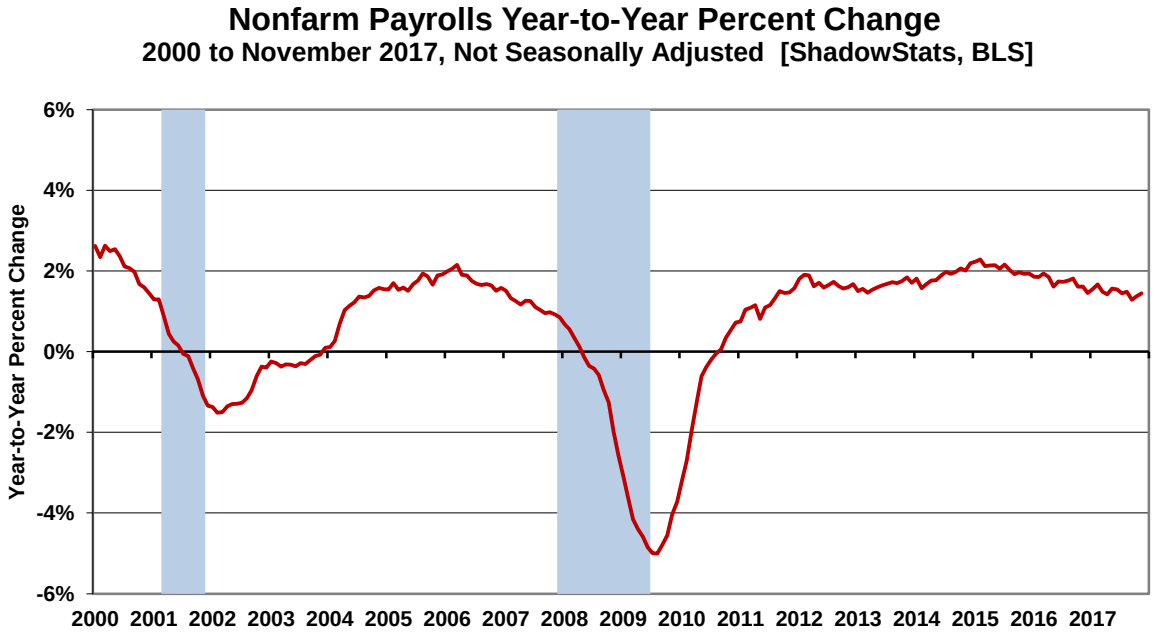
Extended coverage follows in the *Reporting Detail*.

[Graphs 2 and 3 follow on the next page.]

Graph 2: Nonfarm Payroll Employment 2000 to Date
(Same as Graph 20 in the Reporting Detail)



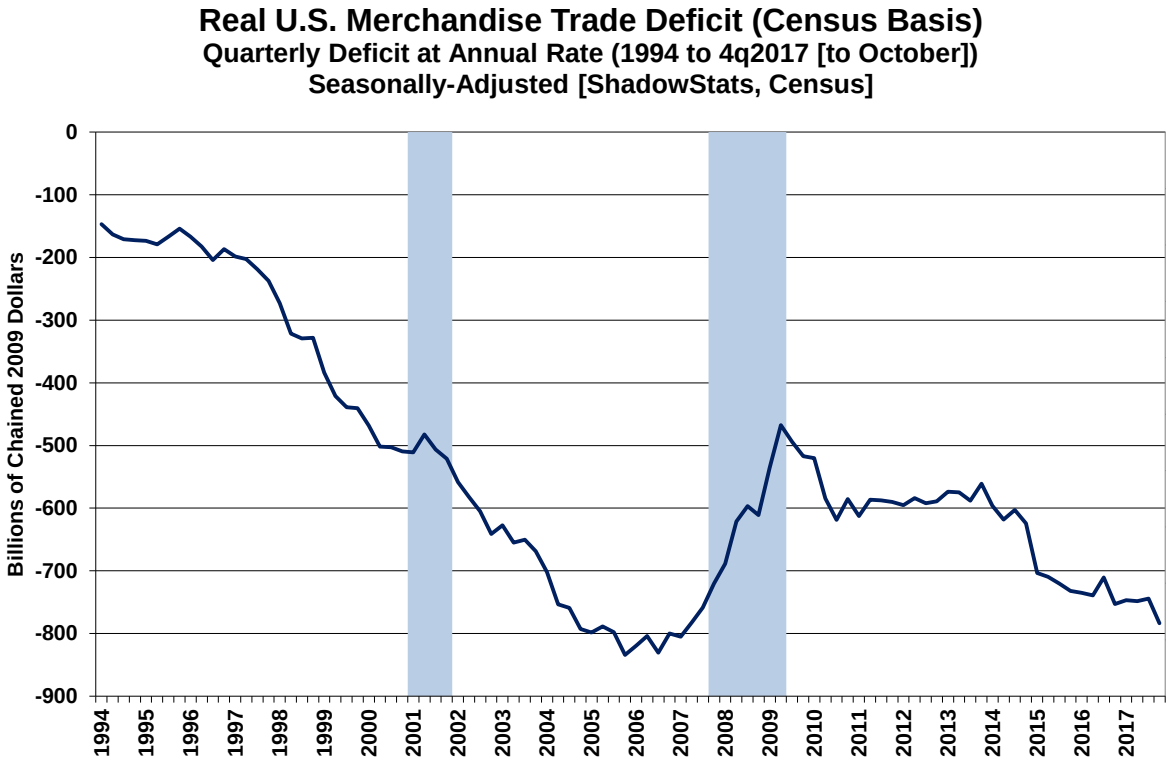
Graph 3: Payroll Employment, Year-to-Year Percent Change, 2000 to Date
(Same as Graph 22 in the Reporting Detail)



Trade Deficit—October 2017—Sharp Monthly Deterioration Suggests Worst Quarterly Real Merchandise Trade Shortfall Since First-Quarter 2007. Before adjustment for inflation, the nominal October 2017 balance-of-payments trade deficit, reflecting trade in both goods and services, deteriorated sharply month-to-month and year-to-year. Such was on top of net-negative revisions to the series (increased deficit from reduced services surpluses and effectively unchanged goods balances) for the six months ended September 2017. Implications were for negative trade-deficit impact on real fourth-quarter 2017 GDP growth, and for negative GDP benchmark revisions in July 2018 to earlier quarters in 2017.

Nominal October 2017 Trade Deficit. The nominal (not adjusted for inflation), seasonally-adjusted monthly trade deficit in goods and services for October 2017 widened on a balance-of-payments basis by $3.841 billion, or by 8.6%, to $48.731 billion, versus a revised $44.890 billion in September 2017. The widening in the monthly deficit reflected a negligible decline of $0.021 billion in monthly exports, more than offset by an increase of $3.822 billion in imports. The headline October 2017 deficit widened by $5.662 billion, or by 13.1%, versus the year-ago $43.069 billion trade shortfall for October 2016. Extended coverage follows in the *Reporting Detail* (see page 37).

Graph 4: Real Quarterly Merchandise Trade Deficit (1994-2017)



Quarterly Real Deficits Rival Pre-Recession Levels. Adjusted for inflation, and as detailed in the *Real October 2017 Merchandise Trade Deficit* section of the *Reporting Detail*, the fourth-quarter 2017 early trend in the real merchandise trade deficit is for the worst showing since first-quarter 2007 (see *Graph 4*).

Previously, the fourth-quarter 2016 real merchandise trade deficit had been the worst showing since third-quarter 2007, with the subsequent first-, second- and third-quarter 2017 shortfalls only minimally

narrowed. As a result, the four-quarter moving average of the annual real merchandise trade deficit, through third-quarter 2017, remained the worst, smoothed trade shortfall since fourth-quarter 2007 (see *Graph 26* in the *Reporting Detail*), with that pattern continuing, based on early fourth-quarter 2017 detail. Given the headline October 2017 shortfall, and deteriorations in the revised balance of payments deficit for the six-months ended September 2017, the trade deficit still remains a broadly-negative contributor to headline real GDP growth, with fourth-quarter 2017 GDP a fair bet to take a hit from the deteriorating trade conditions.

Construction Spending—October 2017— Despite an October Gain and Upside Revisions, Annual Downturns Continued Patterns of Decline Last Seen in the Housing Collapse of 2006/2007. In the context of October 2017 real Construction Spending holding shy of recovering its pre-recession peak by 22.0% (-22.0%), annual change continued in a pattern of year-to-year contraction last seen during the housing collapse of 2006, leading into the formal 2007 economic recession, as reflected in *Graph 5*.

For real aggregate construction spending, annualized quarterly change slowed into first-quarter 2017, turned negative in second- and third-quarter 2017, with year-to-year contractions in third-quarter 2017 continuing into October 2017. Though less severe in revision than previously reported, the onset and continuation of annual contractions remained in consistent with the beginning of a new recession.

October Activity. Total nominal construction spending rose month-to-month in October 2017 by a statistically insignificant 1.4% [up 1.2% net of inflation] and up in September by an unrevised 0.3% ["unchanged" net of inflation]. Upside revisions to activity in both September and August, and the headline monthly gain in October activity, all were dominated by relative strength in public spending, which is 98% non-residential in nature.

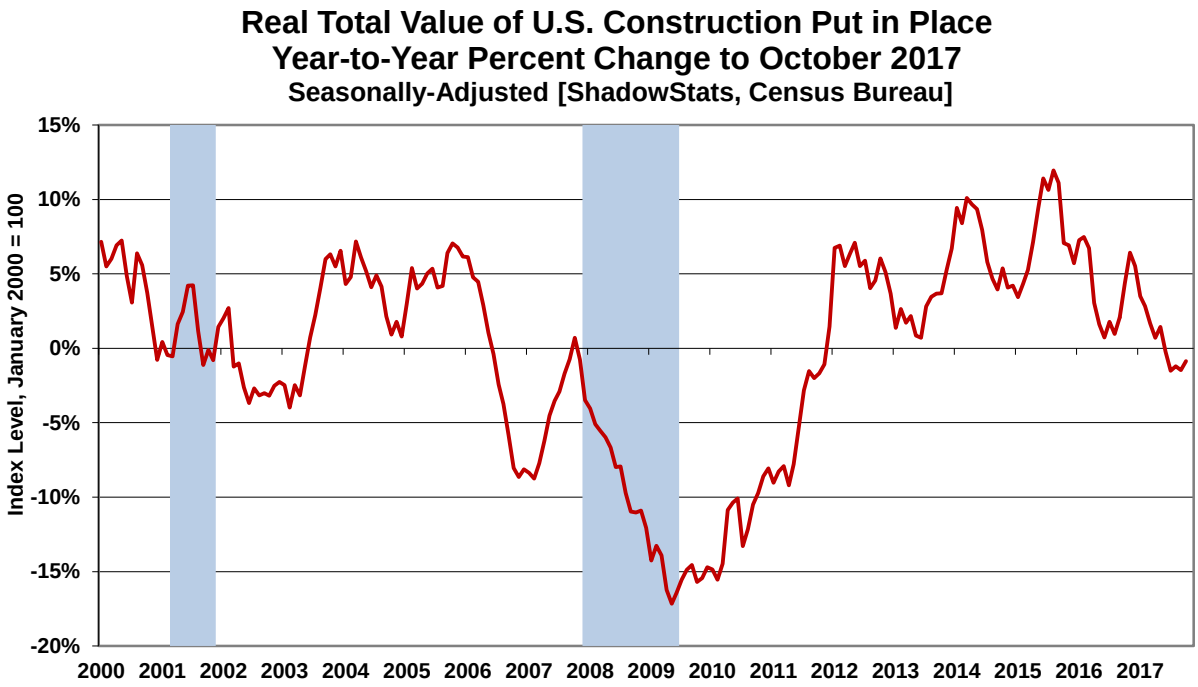
The nominal monthly gain of 1.4% in total October 2017 spending included a gain of 3.9% in public spending. Private construction spending rose by 0.6%, including the residential-construction sector gaining 0.4%, with the nonresidential sector up by 0.9% in the month.

Nominal annual growth in construction was 2.9% in October 2017 [down at a year-to-year real pace—net of inflation—of 0.9% (-0.9%)], versus an upwardly revised nominal gain of 2.4% in September 2017 [down at a revised annual real decline of 1.5% (-1.5%)].

Reflected in accompanying *Graphs 6* to *9*, neither the aggregate inflation-adjusted real series (the red line in each graph), nor any of its major-subsidiary components, has recovered levels of pre-recession peak activity, with each element currently trending flat-to-lower, consistent with an unfolding new recession or re-intensifying downturn. This pattern is an element common to nearly all home-sales and housing-construction series (see *Commentary No. 921*, *Commentary No. 922* and *Commentary No. 923*).

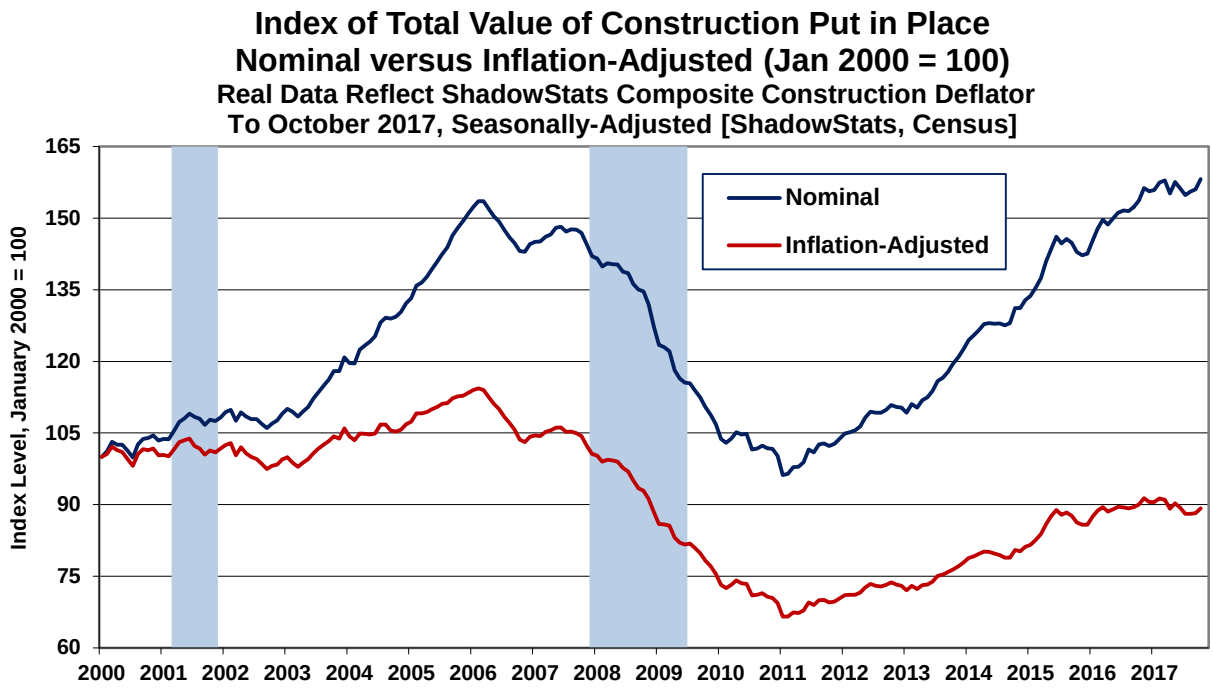
Extended coverage on Construction Spending follows in the *Reporting Detail* on page 40.

Graph 5: Total Real Construction Spending, Year-to-Year Percent Change
(Same as Graph 13 in the Reporting Detail section)

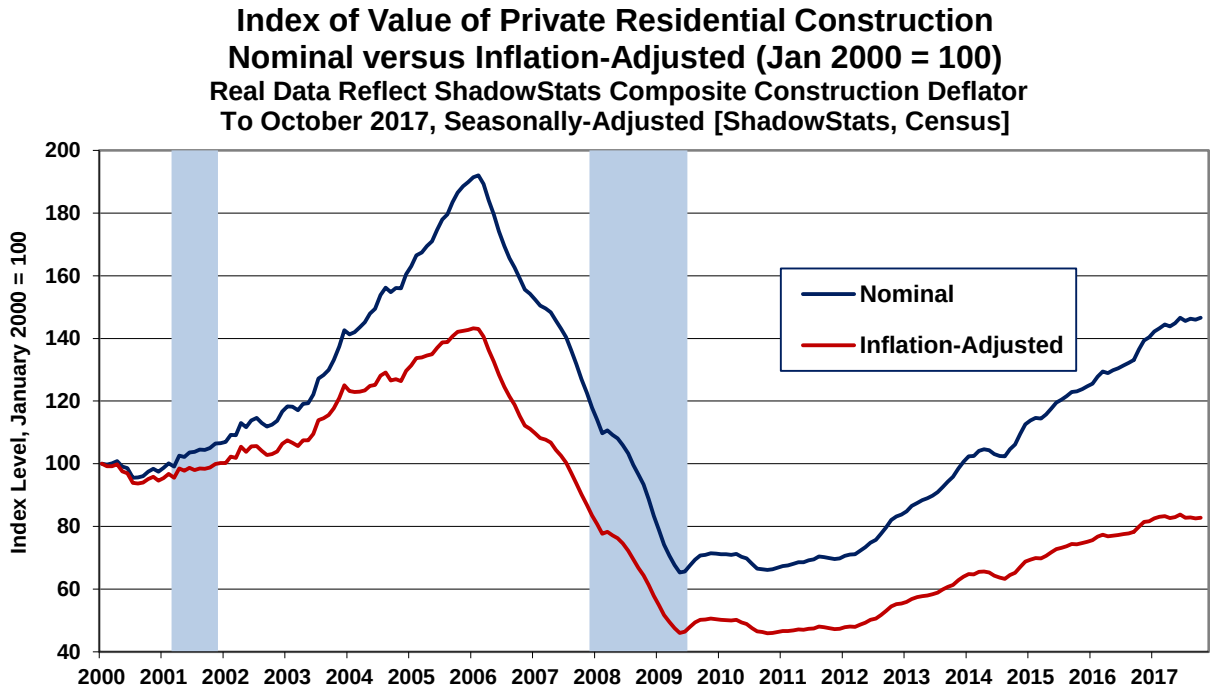


[Graphs 6 to 9 begin on the next page.]

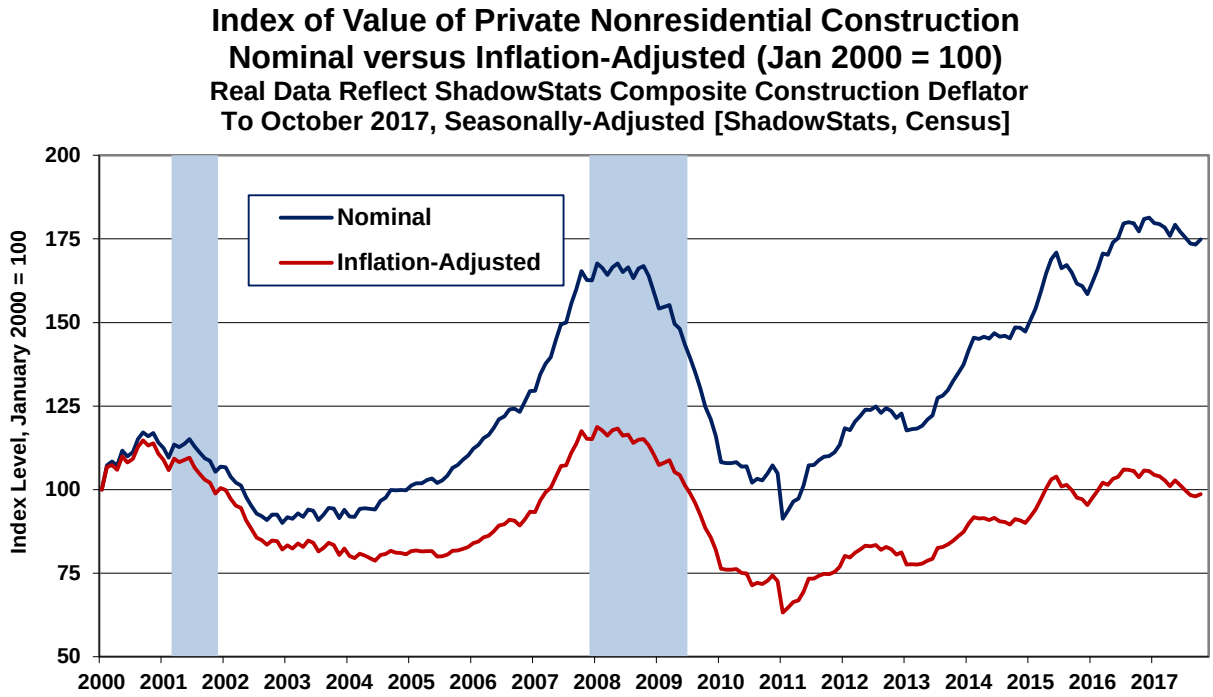
Graph 6: Index, Nominal versus Real Value of Total Construction



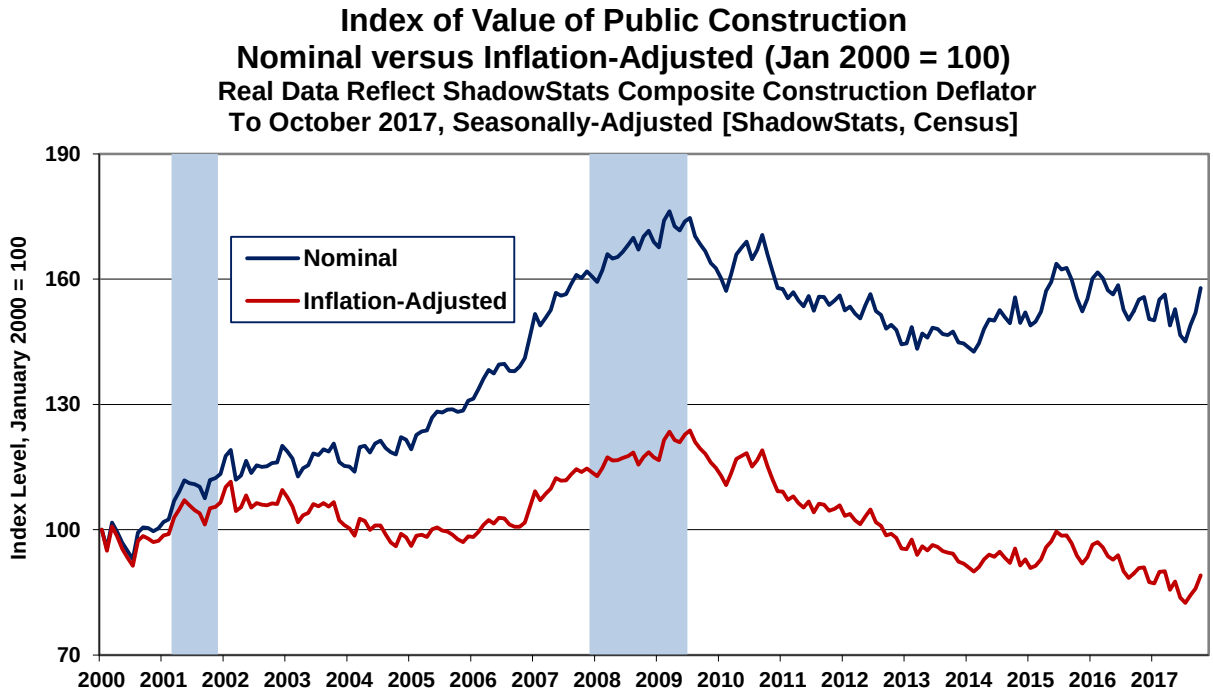
Graph 7: Index, Nominal versus Real Value of Private Residential Construction



Graph 8: Index, Nominal versus Real Value of Private Nonresidential Construction



Graph 9: Index, Nominal versus Real Value of Public Construction



[Extended analysis and graphs follows in the* Reporting Detail*.]

REPORTING DETAIL

EMPLOYMENT AND UNEMPLOYMENT (November 2017)

Headline Household-Survey Unemployment and Employment Details Remain Heavily Warped, While Gimmicked Seasonal Boosts to the Payroll Data Still Showed an Intensified Recession Signal. Discussed with the employment and unemployment details of recent months (see *Commentary No. 915* and *Commentary No. 919-B*), hurricane disruptions heavily impacted labor-related data for September and October. While the Payroll Employment Survey appears to have returned to its normal patterns and gimmicks in headlining monthly payroll-employment activity, the Household Survey, which details employment and unemployment, has yet to unwind from its heavily-distorted and hurricane-disrupted September and October surveys.

The Household Survey data most likely will undergo major, corrective revisions with its pending January 5th annual benchmark revisions, which will recast the monthly data on a one-time, consistent, month-to-month basis for the five years to December 2017. The culprit in this recent, unconscionably bad-quality Household Survey reporting, relative to the Payroll Survey detail, is the handling of concurrent seasonal-adjust factors, as detailed in the *Supplemental Labor-Detail Background* section *(I.) Headline Distortions from Shifting Concurrent Seasonal-Adjustment Factors* (see page 30). The Bureau of Labor Statistics (BLS) uses concurrent seasonal adjustments in reporting its monthly labor details, recasting the historical seasonal factors each month based upon the current headline month's detail.

The problem remains that while the BLS recalculates the historical detail each month, it does not report those monthly revisions to the historical data. In the case of the Household Survey, today's November 2017 adjusted detail was based on November reporting, but the published October detail was reported based only based on its original reporting, not as revised with the November-based seasonals. Simply put, the published "seasonally adjusted" October and Number numbers are not comparable month-to-month. That becomes tremendously distorting when month-to-month employment changes, for example exceed a million people, as they did in the hurricane circumstances. Yet those numbers are never revised the in next month, except for the once-per-year annual December benchmarking.

The difference with the Payroll Employment Survey is that the payrolls also are warped by using concurrent seasonal adjustments, by not reporting the revised history each month, but the Payroll Survey does report the prior two months of history on a consistent basis, so that limited monthly revisions have a chance to revise distortions from extraordinarily-disruptive data, outside the normal course of events.

Payrolls Continued to Signal Deepening Economic Woes. In the context of other, regular reporting distortions discussed in *Special Commentary No. 885* as well as in the *Supplemental Labor-Detail Background*, incorporated here by reference, broad labor circumstances generally have weakened sharply. Allowing for the hurricane-related disruptions to the payroll data, and revisions to same, headline annual payroll growth in November 2017 continued to signal a new recession. Meaningful comment on the

household survey is not possible, at present, given the points just raised as to the non-comparability of the month-to-month data.

The headline monthly payroll jobs gain of 228,000 in November 2017, likely was flat-to-minus in reality (see *Supplemental Labor-Detail*...). In the context of the *ShadowStats-Alternate Unemployment Rate Measure* discussion (also in the *Supplemental Labor-Detail*...), the headline 4.1% November 2017 U.3 unemployment rate was much closer to 21.7%, when viewed from the context of common experience and subject to pending benchmark revisions to the underlying detail on January 5th. Extended assessment of headline labor reporting distortions, again, is found in *No. 885*.

Household Survey: Counting All Discouraged Workers, November 2017 Unemployment Notched Higher to 21.7%. The headline detail on the employment/unemployment news continued nonsensically positive, again, heavily distorted by hurricane impacts in both September 2017 and October 2017. That said, the seasonally-adjusted, U.3 unemployment rate rose to 4.12% in November 2017, versus 4.07% in October, 4.22% in September and a pre-hurricane 4.44% in August. In the usual contradictory, not comparable and otherwise meaningless month-to-month detail, the number of unemployed rose by 90,000 in November, while the number employed rose by 57,000 in November 2017. Once corrected in the benchmarking, the ultimate, unfolding trend here of will not be the happy, booming economy, which appears to be accepted by the markets and reflected in recent Consumer Confidence and Consumer Sentiment surveying, discussed in the *Consumer Liquidity Watch*.

Considering a gain of 48,000 persons working part-time for economic reasons in November, and a decline of 54,000 (-54,000) in those marginally attached to the labor force, on top of the headline U.3 unemployment rate, the broader U.6 rate rose to 7.96% in November 2016 from 7.91% in October 2017, versus 8.29% in September and 8.59% in pre-hurricane August.

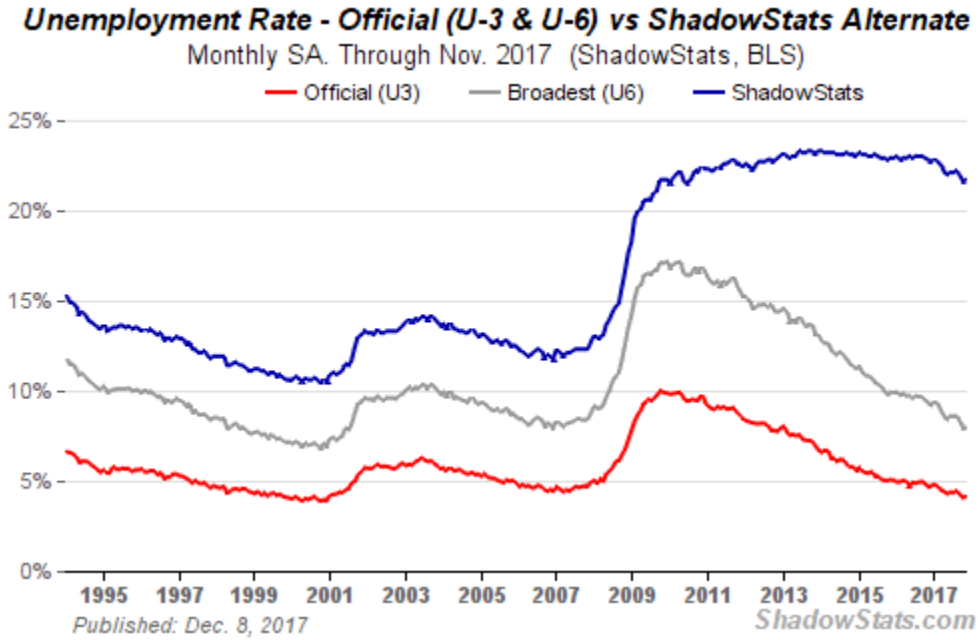
Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced long-term discouraged workers—a broad measure of unemployment more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for November 2017 was 21.7% versus 21.6% in October, 21.9% in September and 22.2% in pre-hurricane August. The ShadowStats estimate generally shows the toll of long-term unemployed leaving the headline labor force, effectively becoming long-term discouraged or displaced workers, although its level is heavily dependent on the underlying level of U.6 unemployment, on top of which the ShadowStats measure is constructed (see full description of the series in the *Supplemental Labor-Detail Background*, page 30).

Unemployment Circumstances Remain Heavily Distorted. *Graphs 10* to *14* reflect various aspects of the Household Survey detail, which generates the unemployment rate. Moving beyond some of the specific, underlying, wild data gyrations of recent months detailed in *Commentary No. 915* and *Commentary No. 919-B*, the headline unemployment rate U.3 at 4.12% in November 2017 followed 4.07% in October—the lowest level since July 2000—versus 4.22% in September 2017. The broader U.6 rose to 7.96% in November 2017, versus 7.91% in October and 8.29% in September, and the ShadowStats-Alternate measure, built upon U-6, rose to 21.7% in November 2017, versus 21.6% in October and 21.9% September. Those rates are nonsense, but nonetheless are plotted in *Graph 10* [*Graph 1*] in the *Executive Summary*].

The inverted-scale plot of the ShadowStats Alternate Unemployment Rate measure is shown in *Graph 11*, as usual, for comparison with the plots in *Graphs 12* and *13* of the Civilian Employment-to-Population

Ratio and the Labor-Force Participation rate, where both those measures took large hits in October but held flat in November. The higher those ratios, the healthier are the employment conditions in the economy. Nonetheless, both measures dropped sharply in October, running counter to what should have been very positive news, with the headline October unemployment rate at a 17-year low. Again, these simply are nonsense numbers.

Graph 10: Comparative Unemployment Rates U.3, U.6 and ShadowStats
(Same as Graph 1 in the Executive Summary)



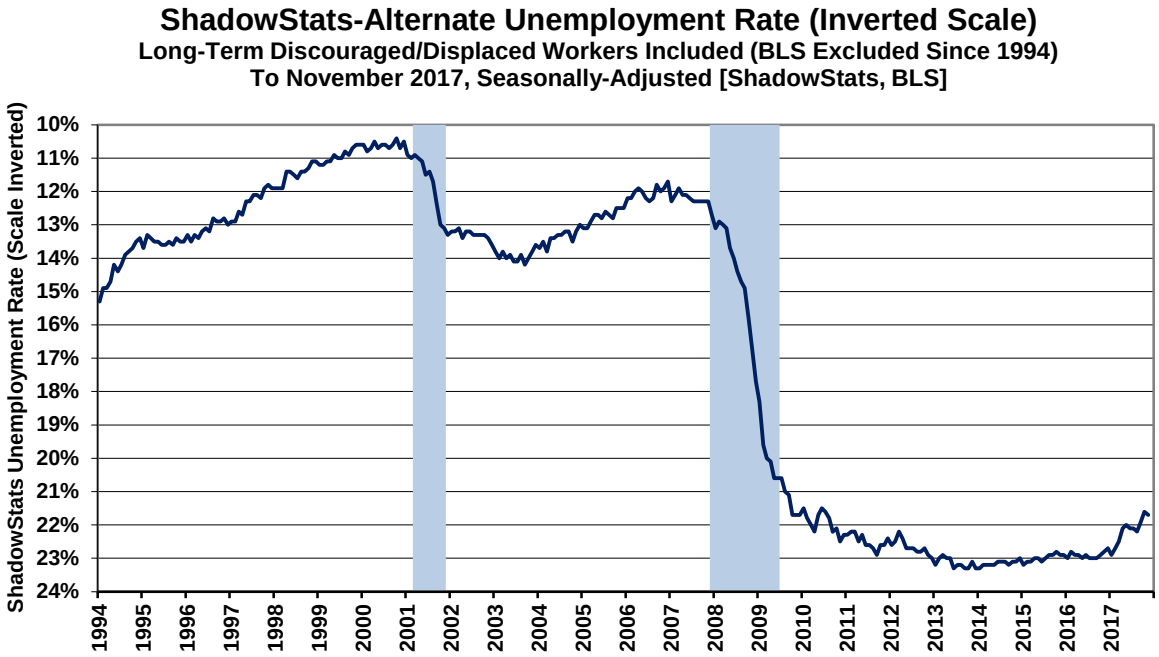
Reflected in *Graph 10*, the headline unemployment rate U.3 rose to 4.12% (unchanged at 4.1% at the first decimal point) in November 2017, from 4.07% (4.1%) in October 2017 versus 4.22% (4.2%) in September. U.6 (U.3 plus those employed part-time for economic reasons, and those marginally attached to the labor force, including discouraged workers) rose to 7.96% (8.0%) in November, versus 7.91% (7.9%) in October and 8.29% (8.3%) in September, and the ShadowStats-Alternate measure (U.6 plus all estimated long-term discouraged and displaced workers), notched higher to 21.7%, from 21.6% in October and versus 21.9% in September.

Dysfunctional, Seasonally-Adjusted Headline Detail from the Household Survey. With the headline U.3 unemployment holding at its lowest level since January 2000, systemic imbalances and instabilities still are reflected in the labor-force participation rate (labor force/population) and the employment-to-population ratio (headline employment/population), which also are still just off historical lows, in the context of just having held about even in November, having taken monthly hits in October (inconsistent with "good" headline labor news of the month), following artificial spikes in September. Still, with the headline unemployment rate so low, those ratios should be approaching historic highs, not holding near historic lows, as seen in *Graphs 12* and *13*.

Graphs 11 to *13* reflect longer-term unemployment and discouraged-worker conditions. *Graph 11* is of the ShadowStats unemployment measure, with an inverted scale. The higher the unemployment rate, the

weaker will be the economy, so the inverted plot tends to move visually in tandem with plots of most economic statistics, where a lower number means a weaker economy.

Graph 11: Inverted-Scale ShadowStats Alternate Unemployment Measure

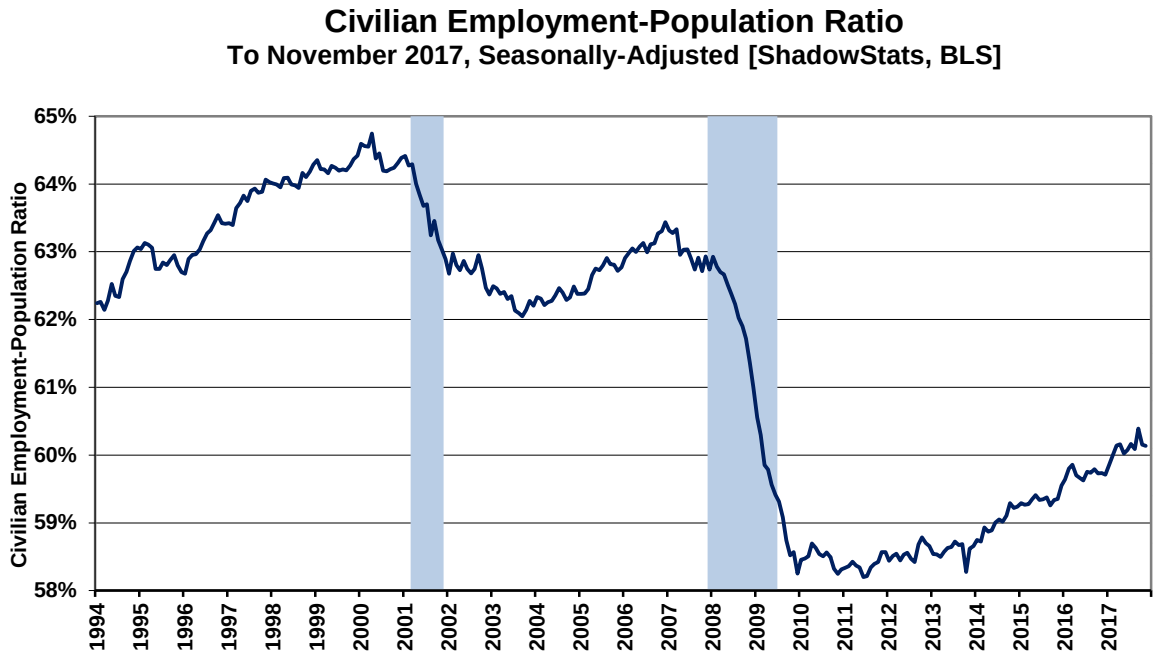


The inverted-scale of the ShadowStats unemployment measure also tends to move with the employment-to-population ratio, which had turned slightly weaker in second-half 2016, had been in an uptrend in 2017, along with monthly jumps and month-to-month inconsistencies in headline employment and the recently rejiggered population numbers (see *Commentary No. 864*). With booming September employment, that ratio notched higher to 60.4% in September 2017, versus 60.1% in August 2017, while the collapsing employment number in October took that back to 60.2% (60.16%). With relatively stagnant employment in November, the ratio notched lower at the first decimal point to 60.1% (60.14%), due to rounding, but was little changed in reality. Nonetheless, that ratio remains somewhat off its post-1994 record low, the historic low and bottom subsequent to the 2007 economic collapse (only the period following the series redefinition in 1994 reflects consistent reporting), as shown in *Graph 12*.

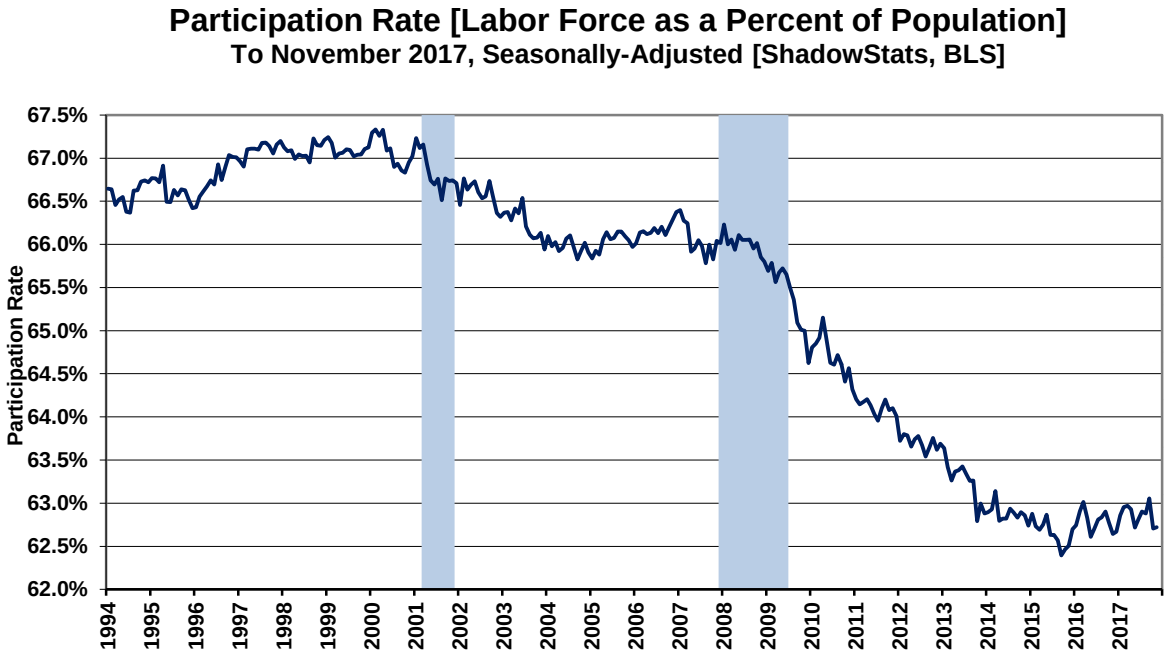
The labor force containing all unemployed (including total discouraged workers) plus the employed, however, tends to be correlated with the population, so the employment-to-population ratio remains something of a surrogate indicator of broad unemployment, and a strong correlation with the ShadowStats unemployment measure.

Shown in *Graph 13*, the November 2017 participation rate (the ratio of the headline labor force to the population) held about even in November 2007 at 62.7% (62.72%)versus to 62.7% (62.71%) in October and down from 63.1% in September.

Graph 12: Civilian Employment-to-Population Ratio



Graph 13: Labor-Force Participation Rate



Graphs 11 through *13* reflect labor data available in consistent detail only back to the 1994 redefinitions of the Household Survey and the related employment and unemployment measures. Before 1994, employment and unemployment data consistent with the June 2017 Household-Survey reporting simply are not available, irrespective of any protestations to the contrary by the BLS.

The Economy Remains Far From Full-Employment. Discussed in the *Fedspeak* portion of the *Fed* section of *No. 859 Special Commentary* (see also the *Opening Comments* of *Commentary No. 870*), certain members of the Federal Reserve Board (see *Commentary No. 827*) have suggested that an unemployment rate near 5.0% (headline U.3 is at 4.1% at the moment) reflected full-employment conditions in the United States. As noted in, and updated from the earlier employment/unemployment *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%). Full employment with unemployment at 5.0%, also minimally should be reflected at a near-term peak in the participation rate, not at a trough. The November 2017 headline unemployment rate of 4.1%, for example was in the context of a 62.7% participation rate. That participation rate, though, was more consistent with a headline unemployment rate (U.3) of 8.9% instead of the headline 4.1%. Where the count of Household Survey employed generally is not gimmicked, that 66% full-employment participation rate—consistent with the latest hyped "full-employment" economy—generally was consistent with a U.3 unemployment 78% above the hyped 5.0% full-employment unemployment rate, and well more than double the current headline U.3 number.[1]

The reason for the heavily distorted current unemployment detail remains that the numbers reflect 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.

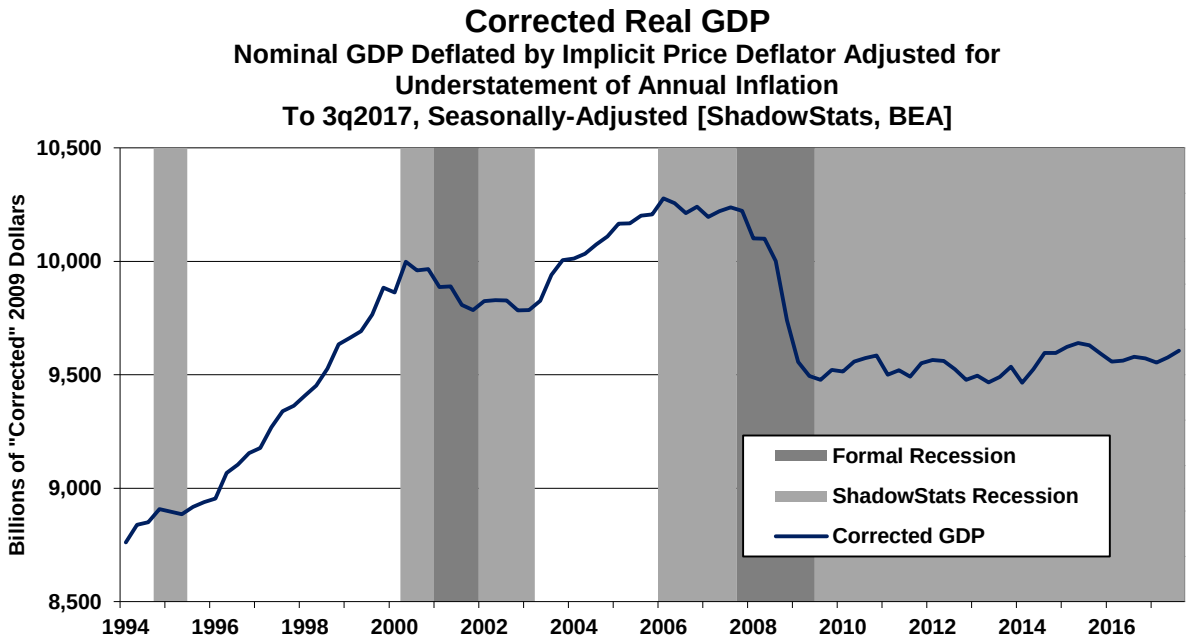
Other Major Indicators Do Not Show a Growing, Expanding—Let Alone Recovered— Economy. Regularly plotted here are various graphs that mirror the patterns of *Graphs 11* to *13* (1994-to-date where available), which do not confirm the purported headline recoveries in the GDP or relative employment. That detail was expanded upon and covered in *No. 859 Special Commentary*; see also *Commentary No. 923*. Some of those series are updated in this section.

Consider *Graph 14*, which shows the ShadowStats version of the GDP, also plotted from 1994 but through the November 29th second estimate of third-quarter 2017, where the GDP plot here has been corrected for the understatement of inflation used in deflating the headline GDP (see *Commentary No. 923* for details).

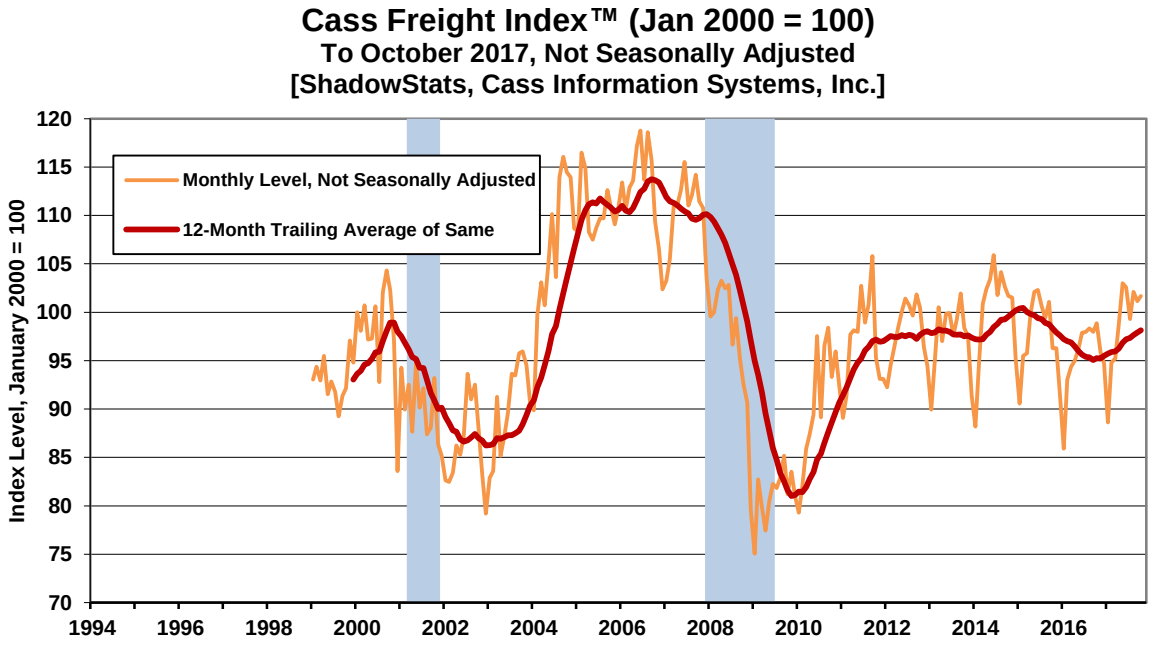
Other graphs range from the Cass Freight Index (*Graph 15*) to Real S&P 500 Revenues adjusted for share buybacks (*Graph 16*), and include the just-released September 2017 U.S. Petroleum Consumption (*Graph 17*), the Consumer Goods sector out of October 2017 Industrial Production (*Graph 18*) and October 2017 Housing Starts (*Graph 19*), with the latter two graphs from *Commentary No. 921.*

[1] Consider with the November 2017 population of 255.949 million, that the implied labor force at a full-employment participation rate of 66.0% would be 0.66 x 255.949 = 168.926. That labor force less current headline employed, 168.926 - 153.918 = 15.008 million implied unemployed / labor force of 168.926 = 8.9% unemployment. The problem with the assumptions underlying these numbers and concept, again, remains that the economy is not at full employment, as claimed.

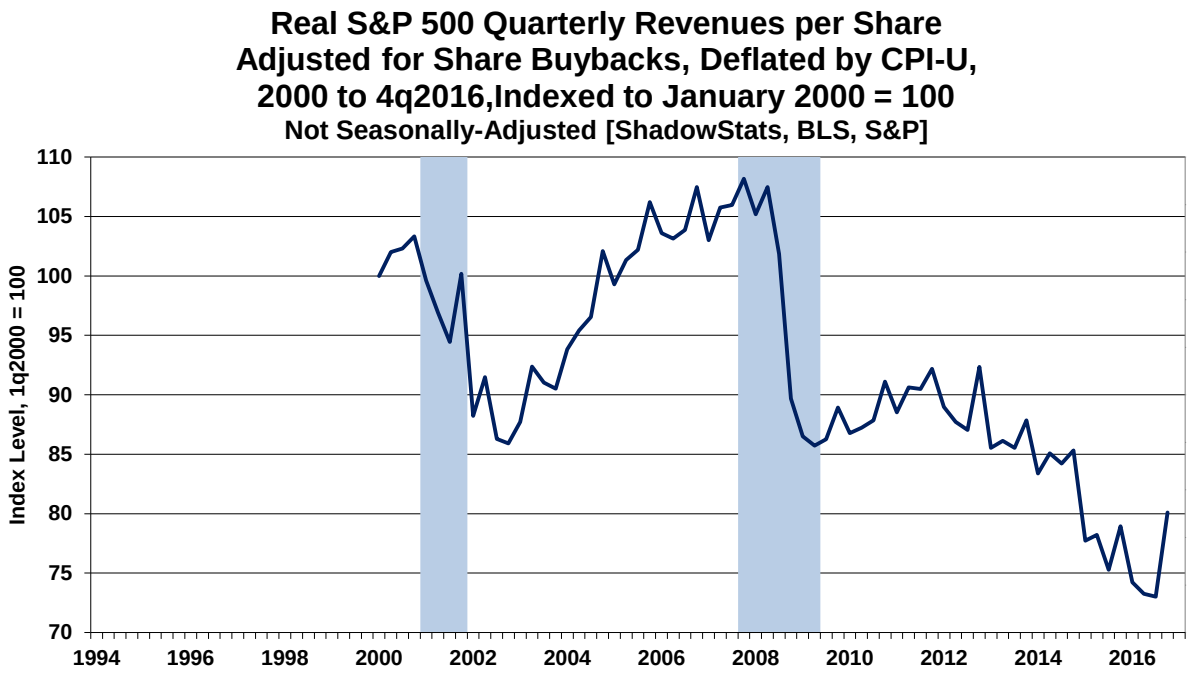
Graph 14: Corrected Real GDP through 3q2017, Second Estimate



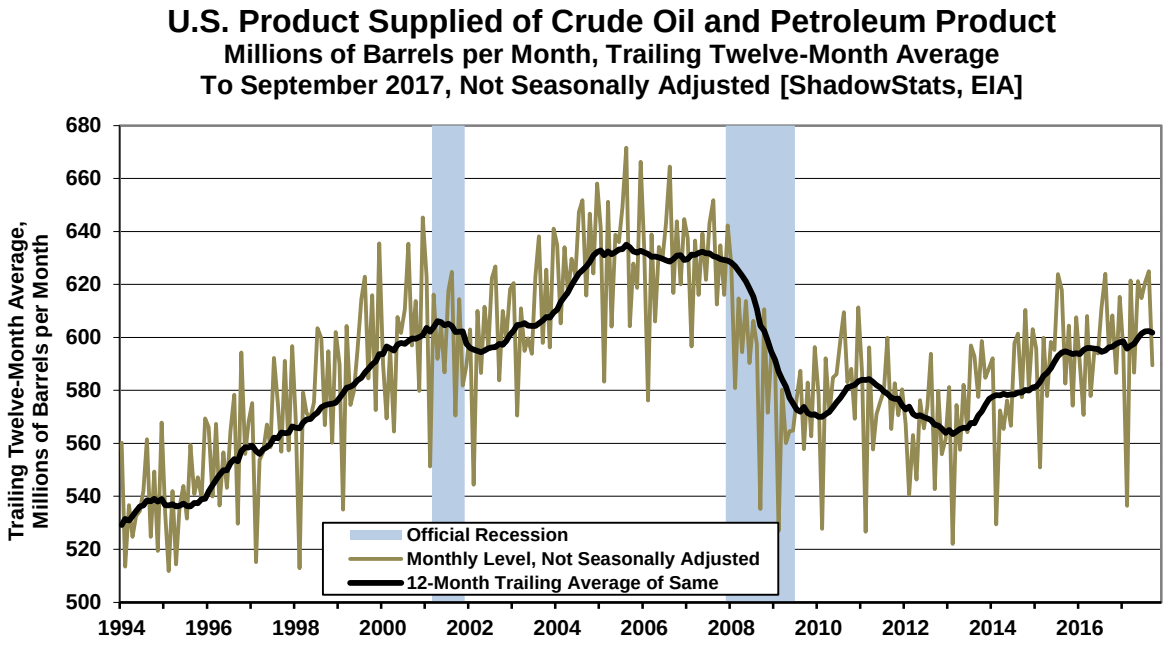
Graph 15: Cass Freight Index for North America (2000 – October 2017), Indexed to January 2000 = 100



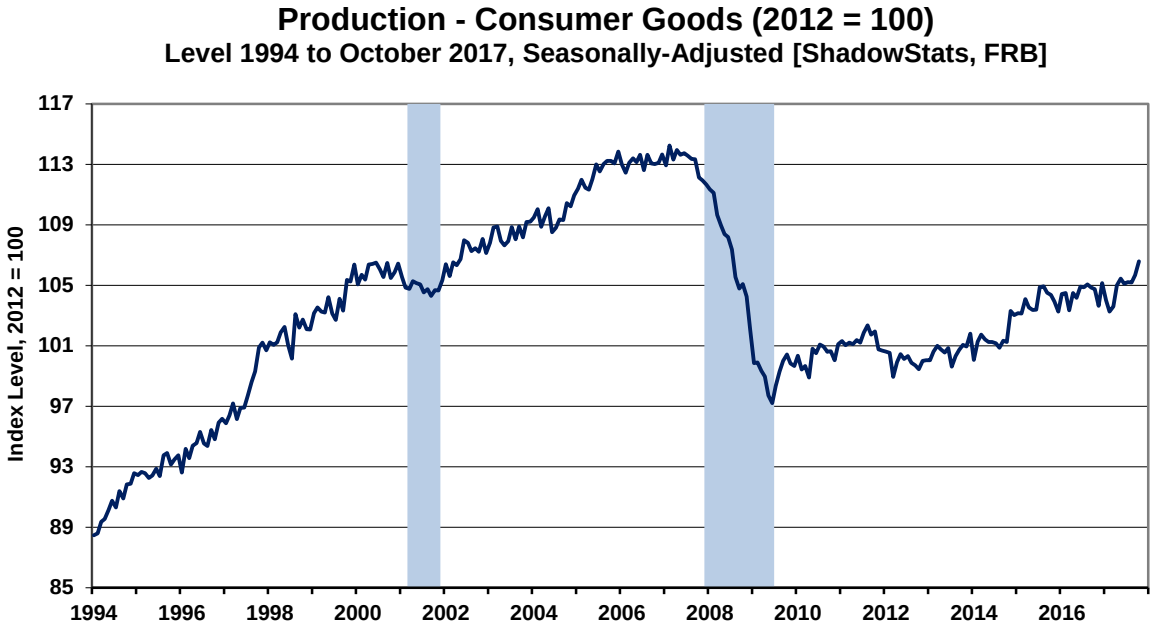
Graph 16: Real S&P 500 Sales Adjusted for Share Buybacks (2000 - 2016), Indexed to January 2000 = 100



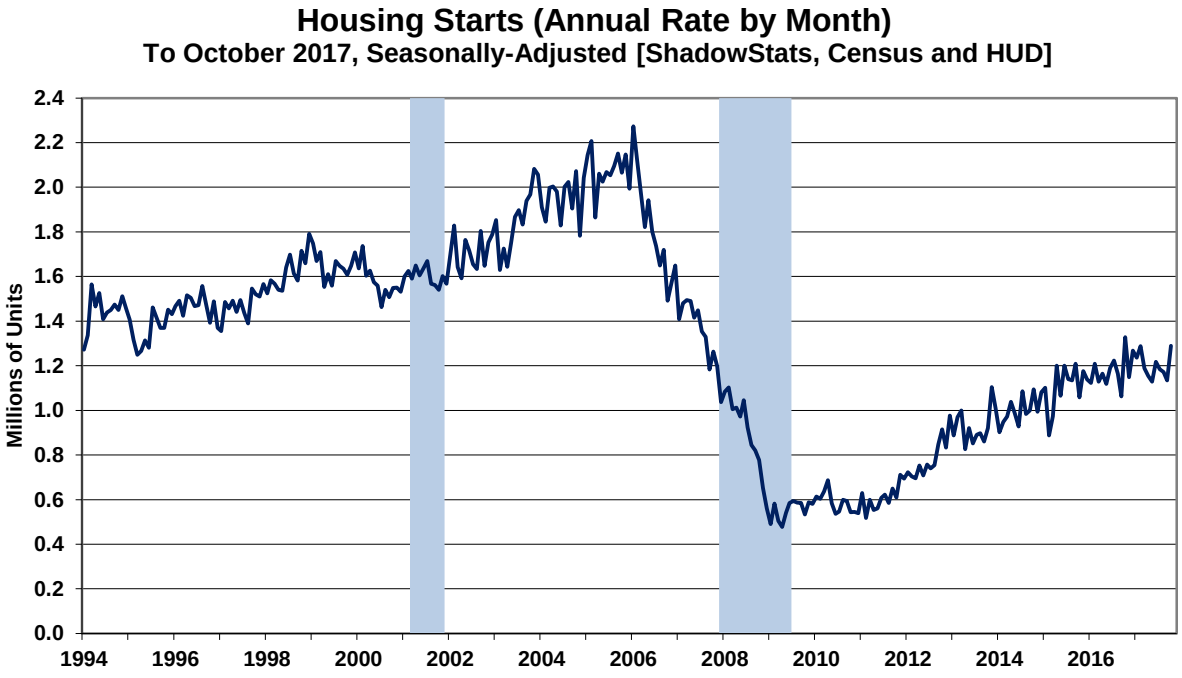
Graph 17: U.S. Petroleum Consumption to September 2017



Graph 18: Industrial Production – Consumer Goods Sector (1994 – October 2017)



Graph 19: Housing Starts, Annual Rate by Month (1994 – October 2017)



Headline Unemployment Rates. Again, in the context of the non-comparability of month-to-month changes in seasonally-adjusted headline unemployment detail, reflected in *Graph 10*, November 2017 U.3 unemployment "held" at 4.1% [4.12% at the second decimal points], versus 4.1% [4.07%] in October,

4.2% [4.22%] in September, 4.4% [4.44%] in August, 4.3% [4.35%] in July, 4.4% [4.36%] in June, 4.3% [4.29%] in May, 4.4% [4.40%] in April, 4.5% [4.50%] in March, 4.7% [4.70%] in February and 4.8% [4.78%] in January.

Formally, the month-to-month increase of 0.05% in the November 2017 U.3 was shy of being statistically-significant (+/- 0.23% at the at the 95% confidence interval). Such consideration broadly is nonsense, however, given that the monthly numbers are reported on an inconsistent basis and are not even comparable with each other, except once per year, in December, which disappears with the ensuing January reporting (again, see the following *Supplemental Labor-Detail Background*).

On an unadjusted basis, unemployment rates are not revised and, in theory, are consistent in post-1994 methodology. The unadjusted unemployment rate U.3 inched higher to 3.92% in November 2017, versus 3.89% in October, 4.07% in September, 4.53% in August, versus 4.60% in July, 4.49% in June, 4.11% in May 2017, 4.11% in April, 4.56% in March, 4.95% (rounds to 4.9%) in February and 5.14% in January.

Unemployment rate U.6 is the broadest unemployment rate published by the BLS. It 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 upside pressure on the seasonally-adjusted November 2017 U.3 unemployment rate, an unadjusted decline of 54,000 (-54,000) in the count of marginally-attached workers (including discouraged workers) and an increase of 48,000 in the adjusted number of people working part-time for economic reasons, the adjusted November 2017 U.6 unemployment rate was 7.96%, versus 7.91% in October, 8.29% in September, 8.59% in August, 8.57% in July, 8.59% in June, 8.41% in May, 8.57% in April, 8.87% in March, 9.24% in February and 9.43% in January. The unadjusted U.6 unemployment rate was 7.61% in October 2017, versus 8.29% in September, 8.64% in August, 8.86% in July, 8.59% in June, 8.10% in May, 8.15% (rounds to 8.1%) in April, 8.94% in March, 9.54% in February and 10.08% in January.

Where the adjusted U.6 rose by the same 0.05% at the second decimal point as the U.3 rate in November 2017, the one-decimal point U.6 unemployment rate rose to 8.0%, from 7.9%, while U.3 was unchanged at 4.1%, with headline change differentials purely a matter of rounding.

Marginally-Attached and Displaced Workers. New discouraged and otherwise marginally-attached workers always are moving into U.6 unemployment accounting from U.3, while those who have been discouraged or otherwise marginally-attached for one year, continuously, are dropped from the U.6 measure. As a result, the U.6 measure has been easing along with U.3, for a while, but those being pushed out of U.6 still are counted in the ShadowStats-Alternate Unemployment Estimate, which has remained relatively stable, despite recent monthly declines.

The monthly count of short-term discouraged workers in November 2017 (never seasonally-adjusted) declined by 55,000 (-55,000) to 489,000, from 524,000 in October, which had gained 123,000 versus 421,000 in September, which had declined by 27,000 (-27,000) versus August, which had declined by 88,000 (-88,000) versus July, which had gained 22,000 versus a 159,000 gain in June, having declined by 100,000 (-100,000) in May, 5,000 (-5,000) in April, 62,000 (-62,000) in March, and 10,000 (-10,000) in February [the headline monthly change in January 2017 was meaningless, in the context of annual population revisions]. Total marginally-attached declined to 1,535,000 in October 2017 down by 34,000

(-34,000) versus August, which had declined by 81,000 (-81,000), where it had increased by 47,000 in July, 107,000 in June, having declined by 59,000 (-59,000) in May, 61,000 (-61,000) in April, 128,000 (-128,000) in March and 9,000 (-9,000) in February.

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.

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. 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 November 2017 was 21.7%, versus 21.6% in October 2017, 21.9% in September, 22.2% in August, 22.1% in July, 22.1% in June, 22.0% in May, 22.1% in April, 22.5% in March and 22.7% in February. The ShadowStats estimate generally shows the toll of long-term unemployed leaving the headline labor force—effectively becoming long-term discouraged or displaced workers—as discussed in the *Supplemental Labor-Detail Background*, page 30.

Payroll Survey: November Gain Was On Top of Upside Revisions to Seasonally-Adjusted October and September Payroll Levels, Yet, Those Months Were Revised Lower Unadjusted. Reflected in *Graphs 20* and *21*, the headline payroll employment gain in November 2007 was 228,000, versus revised monthly gains of 244,000 [previously 261,000] in October and 38,000 [previously 18,000, initially a decline of 33,000 (-33,000)] in September. Recent monthly changes reflected heavy hurricane distortions to the September data, and recovery from same in the subsequent detail.

Also unusual here is that while the seasonally-adjusted levels of October and September revised higher in the current detail, seasonal factor distortions were in play, where the unadjusted numbers revised lower. Net of the adjustment gimmicks, November payrolls would have gained about 195,000 jobs instead of 228,000, which still was bloated with other distortions.

Separately, September detail was not stated on a consistent basis with the October and November headline details (see the *Supplemental Labor-Detail Background*, page 30 for discussion on various reporting distortions and gimmicks. September's initial contraction and subsequent revised low-level gains, again, reflected hurricane suppressed payroll employment.

The headline November payroll gain of 228,000 formally was statistically-significant +/- 135,000 (a confidence interval more appropriately in the range +/- 300,000) at the 95% confidence interval (all confidence intervals used are at the 95% level).

Annual percentage growth in payroll employment, however, softened further in September and October 2017, with a minimally stronger November 2017 still at a level seen only coming out of, or going into recessions. The not-seasonally-adjusted, year-to-year growth in November 2017 nonfarm payrolls was 1.44%, versus downwardly revised annual gains of 1.37% [previously 1.40%] in October 2017, and 1.29% [previously 1.30%] in September 2017. Ignoring the hurricane-warped data for September and October, the 1.44% headline annual gain in November 2017 (with the exception of 1.43% annual growth in April 2017) was at a 75-month low, the lowest level of annual growth since the economy was last coming out of a recession in August 2011.

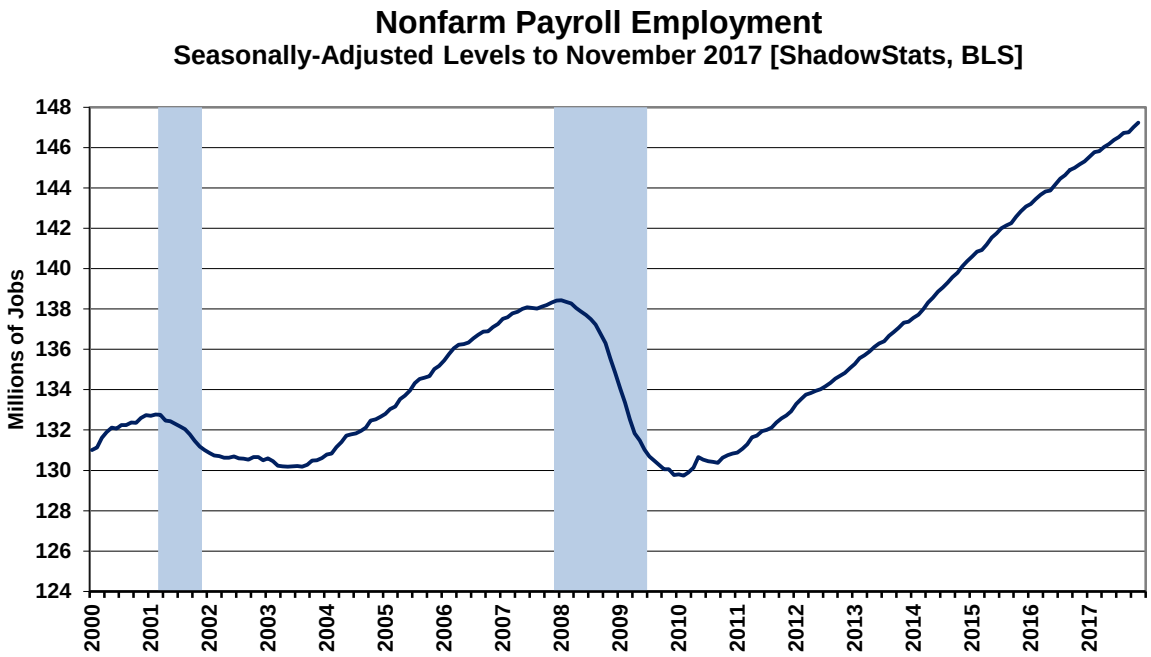
Accordingly, contrary to claims by economists at the San Francisco Fed, far from being healthy or normal, such low-level annual growth rates are seen either coming out of recession, or going into recession, but never seen consistently in the regular variability of ongoing, normal economic activity, as discussed in *Commentary No. 843*. The November 2017 annual growth likely is at a threshold on the downside, headed into recession.

Graphs 20 to *23* 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 1945. 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.

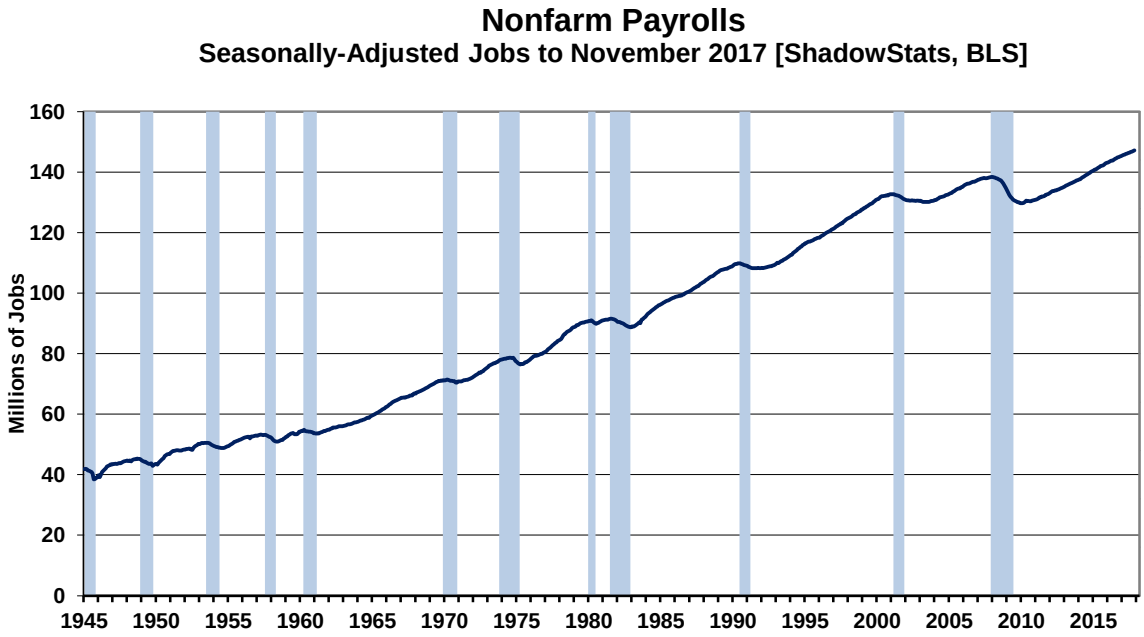
[Graphs 20 to 23 begin on the next page.]

Graph 20: Nonfarm Payroll Employment 2000 to Date

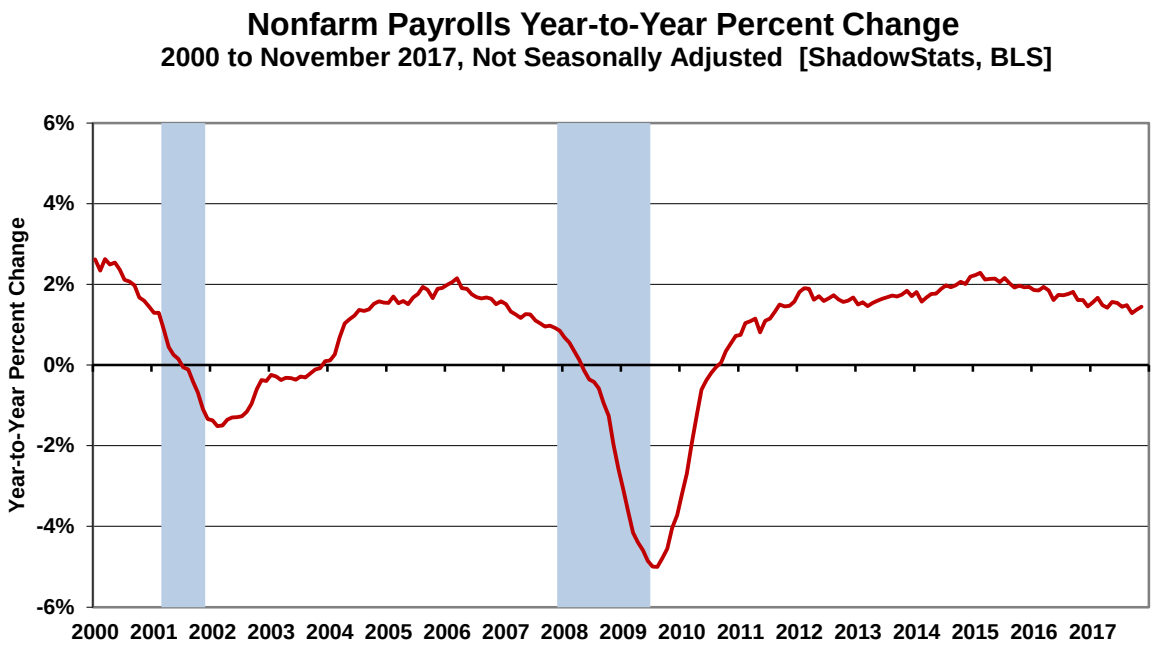
(Same as Graph 2 in the Executive Summary)



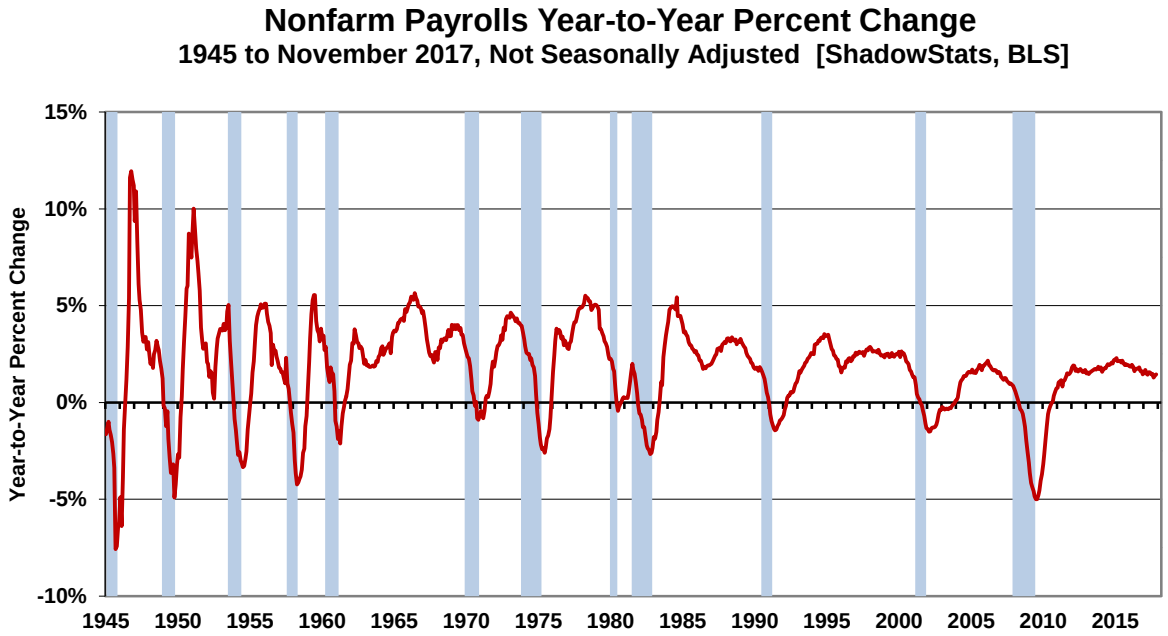
Graph 21: Nonfarm Payroll Employment 1945 to Date



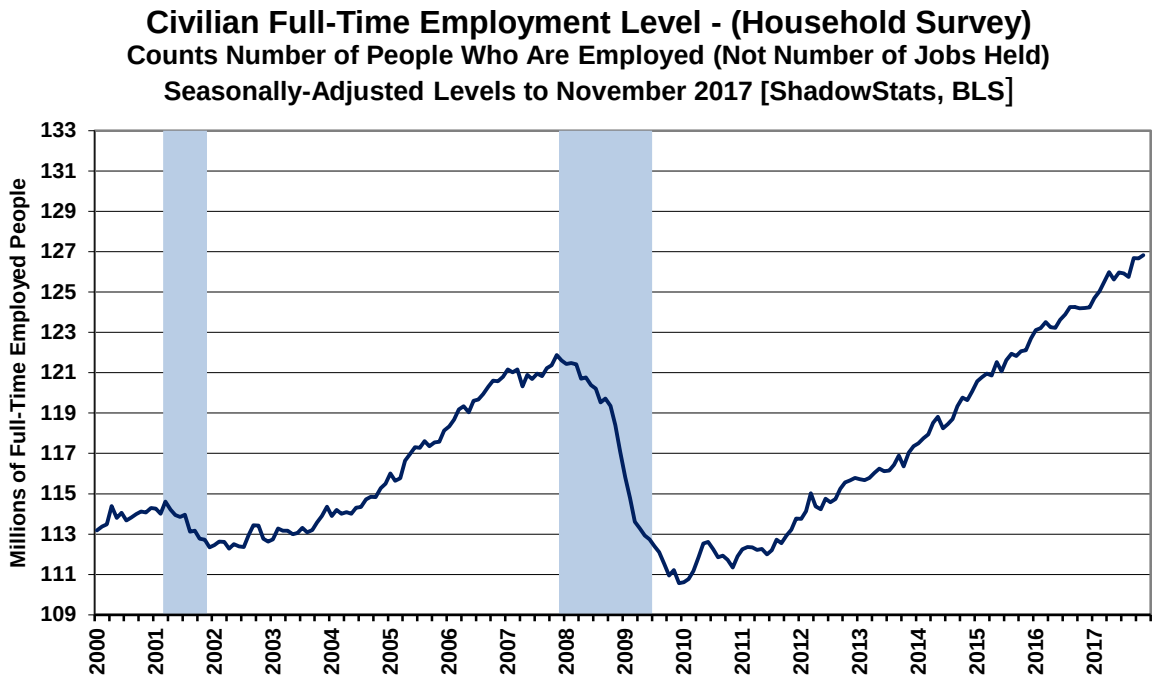
Graph 22: Payroll Employment, Year-to-Year Percent Change, 2000 to Date
(Same as Graph 3 in the Executive Summary)



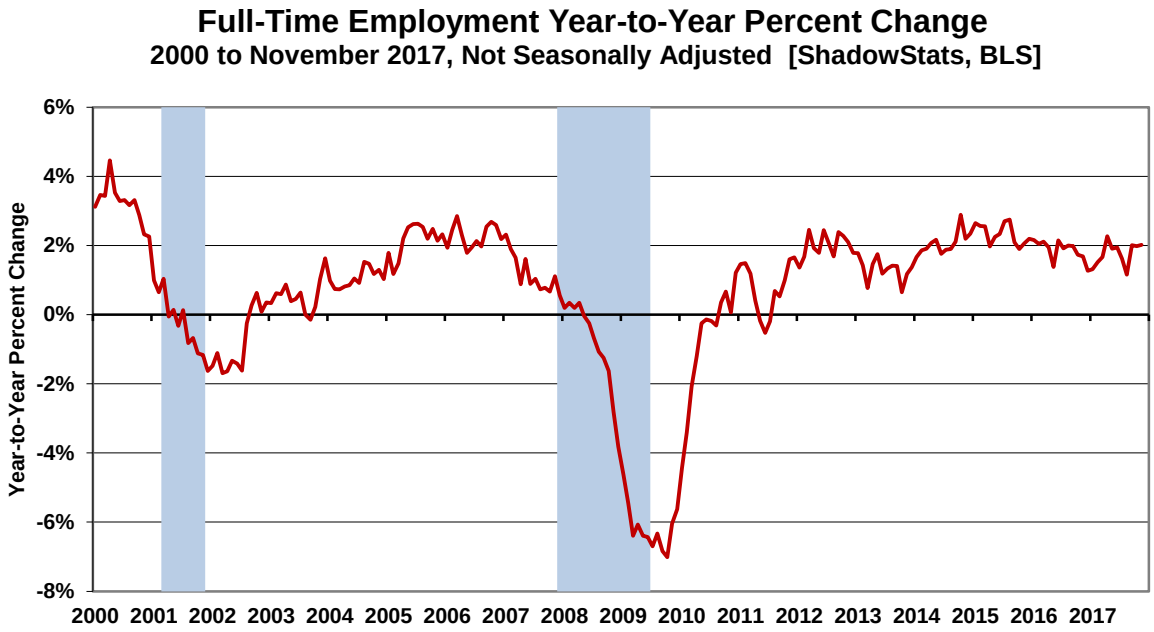
Graph 23: Payroll Employment, Year-to-Year Percent Change, 1945 to Date



Graph 24: Full-Time Employment (Household Survey) to Date (2000 to Date)



Graph 25: Full-Time Employment (Household), Year-to-Year Percent Change, 2000 to Date



Unlike the Payroll Survey, which counts "employed" people with more than one job (such as part-time jobs) for each job counted, the Household Survey counts employed individuals only once, irrespective of the number of jobs held.

Where, out of the payroll survey, headline payroll employment rose by month-to-month by 228,000 in November, out of the household survey, full-time employment rose by 160,000, with multiple job holders (already counted as employed individuals) increasing by 135,000. Among other differences, the payroll survey is nonfarm, where agricultural employment is covered in the household survey.

Heavily hurricane-distorted in recent headline Household Survey reporting, full-time employment gained 160,000 in the month of November 2017, having declined by 23,000 (-23,000) in October 2017, having gained a remarkable, heavily-hurricane-warped 935,000 jobs in September 2017, and having lost 166,000 (-166,000) jobs in August. These numbers all are subject to benchmark revisions on January 5th. Year-to-year change rose to 2.10% in November 2017 from 1.99%, in October 2017, versus 2.11% in September 2017 from 1.16% in August 2017. Those details are plotted in *Graphs 24* and *25*, with scales consistent with *Graphs 20* and *21* of nonfarm payrolls, for comparison purposes.

Construction Payrolls Still Down 10.0% from Recovering Pre-Recession Peak. Construction payrolls gained 24,000 jobs or 0.35% in November 2017, to 6.995 million employed, versus an upwardly revised 6.931 [previously 6.930] million in October and 6.921 [previously 6.919, initially 6.911] million in September. As with the headline nonfarm payrolls, the unadjusted data were revised lower, suggestive of the seasonal-factor games discussed in the following *Supplemental Labor-Detail Background (I.).* Annual change was an unadjusted gain of 2.78% in November 2017, versus downwardly-revised unadjusted gains of 2.53% [previously 2.59%] in October 2017 and 2.58% [previously 2.61%] in September 2017.

That said, in parallel with various construction measures, headline November 2017 construction employment remained down by 9.97% (-9.97%) from recovering its pre-recession high. The plot of Construction Payrolls *(Graph 32*) is found on page 45, associated with the October 2017 Construction Spending detail discussion.

[The Supplemental Labor-Detail Background Begins on the Next Page.]

SUPPLEMENTAL LABOR-DETAIL BACKGROUND

The following material provides background on issues with headline monthly reporting of 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 is not revised each month from its prior version, except for updated monthly numbers through the latest headline detail (currently November 2017), which also are referenced separately in the related standard employment and unemployment text in the *Executive Summary* and *Reporting Detail*. Note: Annual benchmark revisions are scheduled for the Household Survey on January 5, 2018, and the Payroll Survey on February 2, 2018.

(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)

(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 a concurrent-seasonal-adjustment process to adjust both the payroll and unemployment data for the latest seasonal patterns. As new headline data are seasonally-adjusted for each series, the re-adjustment process also revises the monthly history of each series. 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. The problem remains that the historically-comparable revised data are not published along with the new headline detail.

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 consistent basis for the payroll survey, even when accompanying headline benchmark revisions. The household survey is published only once per year on a consistent basis, in December, but the numbers become inconsistent, once again, with the ensuing January reporting. Headline month-to-month inconsistencies in the 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."

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. 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.

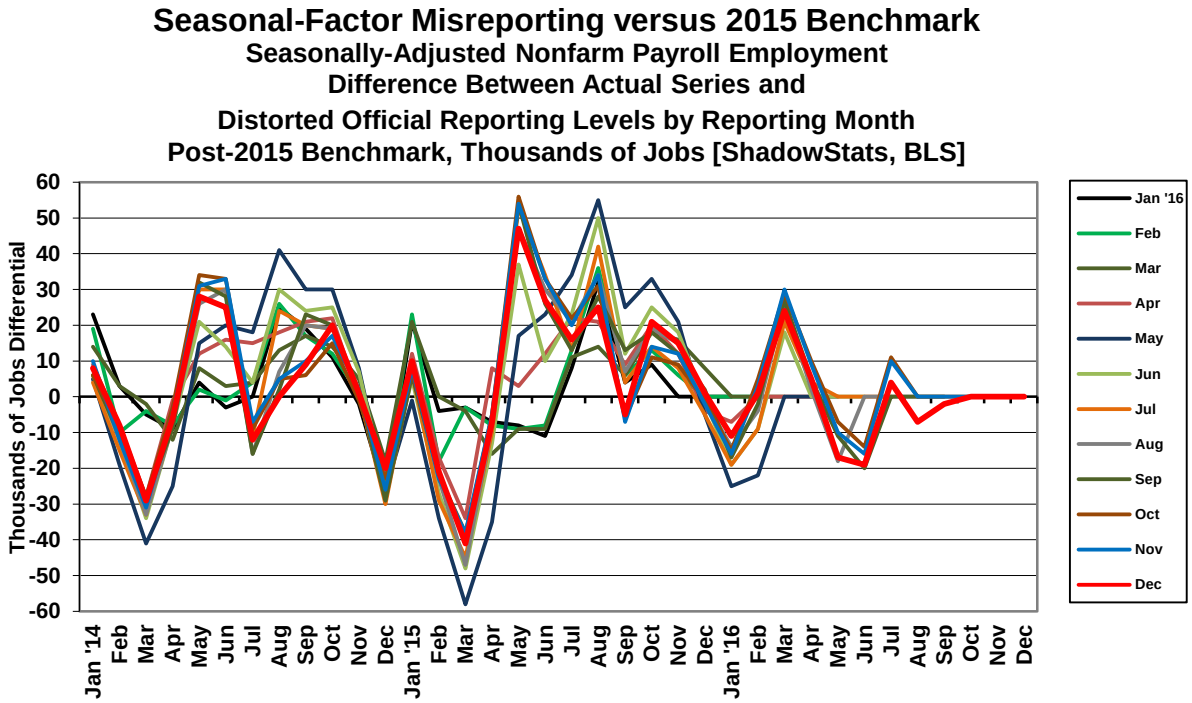
Consider *Graphs SLD-1* and *SLD-2*, where data are available from the BLS to calculate the month-to-month seasonal-adjustment variability in the Payroll Survey. Similar detail is not available for the Household Survey, yet the monthly instability likely is of similar magnitude. Shown here as an example 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.

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 revision (see the comments with *Graphs SLD-1* and *SLD-2*).

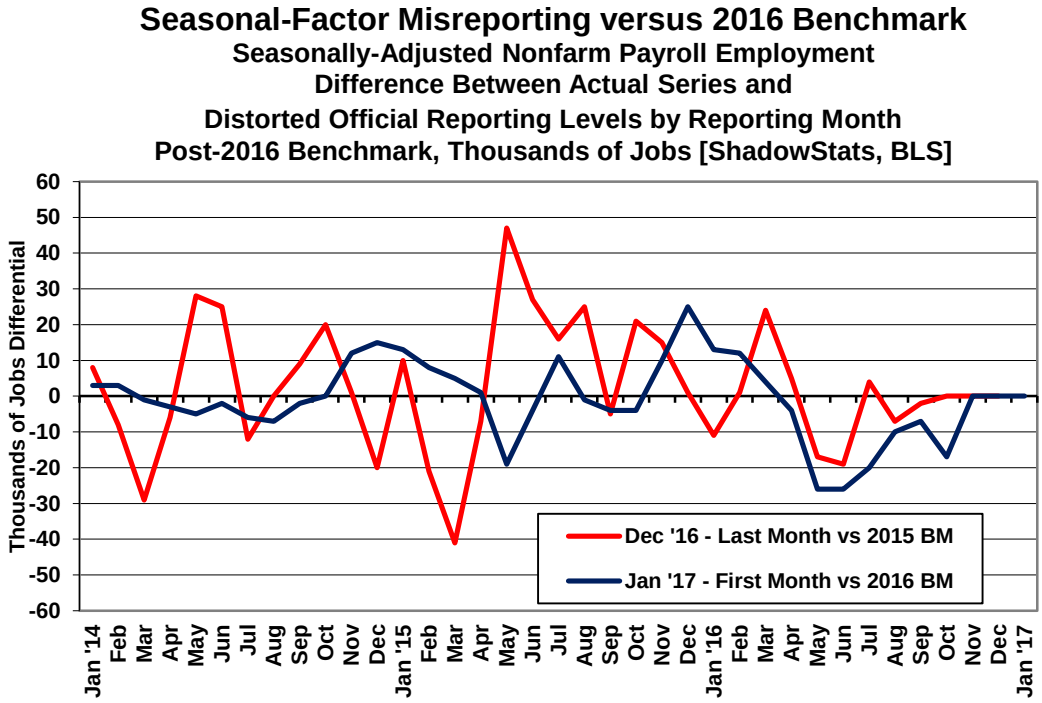
Where the BLS does provide modeling detail for the Payroll Survey, allowing for third-party calculations, no such accommodation has been made for the Household Survey. ShadowStats affiliate ExpliStats has done such third-party calculations for the payroll series, and the resulting detail of the differences 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 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.

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



As seen in the detail, the differences go both ways and often are much larger. Such was the case for 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.

(II.) Payroll-Employment Monthly Bias Factors (Birth-Death Modeling: BDM). Despite 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 and 2017 excepted), with the initial 2017 benchmark revisions to the upside by 95,000, as announced September 6th. Discussed in the *Opening Comments* of *Commentary No. 908-B*, formal prior-period revisions will be detailed in the February 2, 2018 release of the headline January 2018 payroll employment.

As a separate matter, though, when formalized, downside revisions 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, again, as discussed in the *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.

November 2017 Add-Factor Bias. The not-seasonally-adjusted add-factor upside bias was a revised contraction of 5,000 (-5,000) in November 2017, versus an upside bias of 216,000 in October 207, a downside bias of 49,000 (-49,000) in September 2017 and an upside 103,000 in August 2017 and against a positive add-factor of 2,000 in November 2016 reporting. The revamped, aggregate upside annual bias for the trailing twelve months through November 2017 is estimated from current headline bias reporting at 902,000 up by 61,000 or 7.3% from 841,000 in the December 2016 pre-benchmarking level, and up 121,000 or 15.5% from 781,000 in December 2015, the year before. That is a monthly average of 75,167, in November 2017 (versus 70,083 pre-2016 benchmarking) 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.

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 2016 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 result in overstated official estimates of general economic growth. Along with these 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 75,167 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). 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 just-implemented North American Free Trade Agreement (NAFTA). At the time, I (John Williams) had close ties with an old-line consumer 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 an unadjusted 4.877 million in November 2017, versus 4.938 million in October 2017, 5.415 million in September 2017, 5.852 million in August 2017, 5.713 million in July 2017. Seasonally-adjusted the aggregate November 2017 number was 5.238 million, versus 5.185 million in October, 5.628 million in September, 5.844 million in August 2017, 5.420 million in July 2017. While some contend that that number includes all those otherwise-uncounted discouraged workers, such is extremely shy of underlying reality due to the changed survey methodology.

The ShadowStats 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, 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." 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 11* to *13*). Other measures, such as the ShadowStats-Alternate GDP Estimate, S&P 500 Real Revenues, the Cass Freight Index, U.S. Petroleum Consumption, etc. are highlighted in subsequent *Graphs 14* to *19* there and in the *Economy* section of *No. 859 Special Commentary*.

Headline November 2017 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 November 2017 was 21.7%, versus 21.6% in October, 21.9% in September, 22.2% in August, 22.1% in July, 22.1% in June, 22.0% in May, 22.1% in April, 22.5% in March 2017, 22.7% in February, and 22.9% in January. Built upon the headline U.3 and U.6 estimates, the November 2017 ShadowStats reading was down by 160 basis points or 1.6% (-1.6%) from the 23.3% series high last seen in December 2013.

In contrast, the November 2017 headline U.3 unemployment rate of 4.1% was down by 590 basis points or by 5.9% (-5.9%) from its peak of 10.0% in October 2009. The broader U.6 unemployment measure of 8.0% in November 2017, was down by 920 basis points or 9.2% (-9.2%) from its peak of 17.2% April 2010.

A subscriber raised the question 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*), there indeed is a noticeable divergence in the ShadowStats series versus U.6 and U.3, with the BLS headline U.3 unemployment measures broadly heading lower recently against a down-trending U.6 and a higher-level, relatively stagnant, but also down-trending ShadowStats number, which also bounced up a notch in November along with the headline U.6 rate.

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 22% 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%.

U.S. TRADE DEFICIT (October 2017)

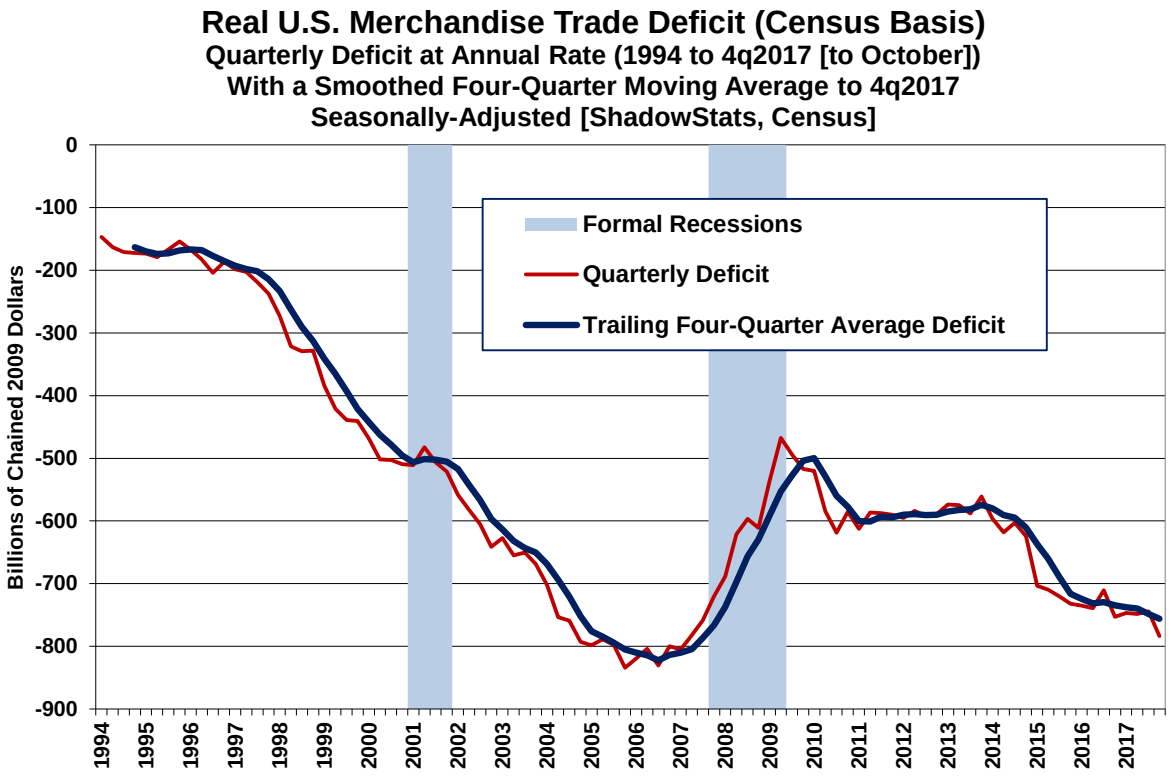
Sharp Monthly Deterioration Suggests Worst Quarterly Real Merchandise Trade Shortfall Since First-Quarter 2007. Before adjustment for inflation, the nominal October 2017 balance-of-payments trade deficit, reflecting trade in both goods and services, deteriorated sharply month-to-month and year-to-year. Such was on top of net-negative revisions to the series (increased deficit from reduced services surpluses and effectively unrevised goods balances) for the six months ended September 2017. Implications here are for negative trade-deficit impact on real growth in fourth-quarter 2017 GDP, and for negative GDP benchmark (July 2018) revisions to earlier quarters in 2017.

Given the headline October 2017 detail, and deteriorations in the revised balance of payments deficit for the six-months ended September 2017, the trade deficit remains still a broadly-negative contributor to headline real GDP growth, with fourth-quarter 2017 GDP an increasingly good bet to take a hit from deteriorating trade conditions.

Quarterly Real Deficits Rival Pre-Recession Levels. Detailed in the *Real Trade Deficit* section, adjusted for inflation, the fourth-quarter 2017 early trend in the real merchandise trade deficit is for the worst showing since first-quarter 2007 (see *Graph 4* in the *Executive Summary*).

Shown in accompanying *Graph 26*, previously, the fourth-quarter 2016 real merchandise trade deficit had been the worst shortfall since third-quarter 2007, with subsequent first-, second- and third-quarter 2017 deficits only minimally narrowed. As a result, the four-quarter soothed, moving average of the annual real merchandise trade deficit, through third-quarter 2017, remained the worst since fourth-quarter 2007, with that pattern continuing and intensifying, based on the early fourth-quarter 2017 detail.

Graph 26: Four-Quarter Smoothed, Real Quarterly Merchandise Trade Deficit (1994-2017)



Nominal October 2017 Trade Deficit: Services Surplus Revised Lower by 7% (-7%) in Six Months to September, Revised Balance of Payments Deficit Increased (Deteriorated) in Parallel by 3.3%. In the context of no obvious net impact from hurricanes, the Bureau of Economic Analysis (BEA) and the Census Bureau (Census) reported Tuesday, December 5th, that the nominal (not adjusted for inflation), seasonally-adjusted monthly trade deficit in goods and services for October 2017 widened on a balance-of-payments basis by $3.841 billion, or by 8.6%, to $48.731 billion, versus a revised $44.890 [previously $43.495] billion in September 2017. The widening in the monthly deficit reflected a negligible decline of $0.021 billion in monthly exports, more than offset by an increase of $3.822 billion in imports. The headline October 2017 deficit widened by $5.662 billion, or by 13.1%, versus the year-ago $43.069 billion trade shortfall for October 2016.

The widening in the goods-related deficit on a Census Basis by $4.078 billion was reasonably close to the "advance" estimate of a $4.185 billion published November 28th, while the goods component of the October Balance-of-Payments Basis deficit widened by $3.834 billion.

Factors affecting the changes to the October balance were widespread, encompassing a variety of fields of export and import. On the export side, increasing oil exports largely offset declining exports of soybeans and commercial aircraft, while on the import side, gains were seen in oil and in consumer and other goods.

Energy-Related Petroleum Products. October 2017 imported oil prices rose by 4.7% to $47.26 per barrel versus $45.16 in September 2017, and rose by 18.1% versus $40.03 per barrel in October 2016.

Separately, not-seasonally-adjusted physical oil-import volume in October 2017 averaged 7.570 million barrels per day, up from 7.017 million in September 2017, and up from down from 7.247 million in October 2016.

Revisions to the Services Sector Surplus. The six months ended September 2017 were revised in terms of the balance of payments for both the goods and services sectors. While the deficits in the goods sector saw minimal monthly revisions, which averaged 0.0% at the first decimal point, the monthly surpluses on the services side revised lower by 7.0% (-7.0%), on average, with the effect of boosting the size of the average monthly aggregate deficit by 3.3% during the same period.

Hurricane Impact. The BEA and Census indicated they had no way of estimating the impact of the Atlantic hurricanes on the reported trade activity, and net trade-flow disruptions (exports versus imports) are not obvious in the headline data. Noted in last month's *Commentary No. 919-A*, "damages from Hurricane Harvey likely had some negative near-term impact on aggregate trade-flow activity in August, although not in much that would affect the aggregate trade balance, and little in the way of obvious impact was seen in the September detail, either. In general, where the aggregate dollar value of the net U.S. trade flow is negative, trade-flow disruption tends to understate the trade deficit, a circumstance that tends to be a positive contributor to headline GDP activity."

Ongoing Cautions and Alerts on Data Quality. Monthly trade data can be influenced by irregular shipping patterns, affected by factors ranging from labor disruptions to unusual weather conditions, such just discussed with recent hurricanes.

Separately, potentially heavy distortions in headline data continue from distorted and unstable seasonal adjustments. Similar issues affect other economic releases, such as labor conditions and retail sales, where the headline number reflects seasonally-adjusted month-to-month change. Discussed frequently (see *2014 Hyperinflation Report—Great Economic Tumble* for example), the extraordinary length and depth of the current business downturn and related, ongoing disruptions have distorted regular patterns of seasonality.

Real October 2017 Merchandise Trade Deficit. Discussed here and reflected in *Graph 4* of the *Executive Summary* and in *Graph 26*, earlier in this section, seasonally-adjusted and in real terms, net of oil-price swings and other inflation (2009 chain-weighted dollars, as used in GDP deflation), that October 2017 merchandise trade deficit (no services) widened to $65.320 billion, versus a revised September deficit of $62.177 [previously $62.205] billion, and an unrevised August deficit of $62.166. The October 2017 real shortfall of $65.320 billion also widened versus the deficit of $61.166 billion in October 2016.

Last year, the annualized deficit was $735.3 billion for first-quarter 2016, $739.4 billion for second-quarter 2016, $710.4 billion for third-quarter 2016 and $753.1 billion for fourth-quarter 2016. The fourth-quarter 2016 deficit was the worst quarterly showing since third-quarter 2007. The annual real merchandise trade deficit widened for the year of 2016 to $747.2 billion, versus $716.4 billion in 2015. The 2016 annual trade shortfall was the worst since 2008.

The first-quarter 2017 deficit narrowed minimally to $747.1 billion, with the second-quarter 2017 deficit widening minimally to $748.3 billion, with the headline detail for the third-quarter 2017 deficit now at a revised annualized deficit of $744.4 [previously $744.5] billion.

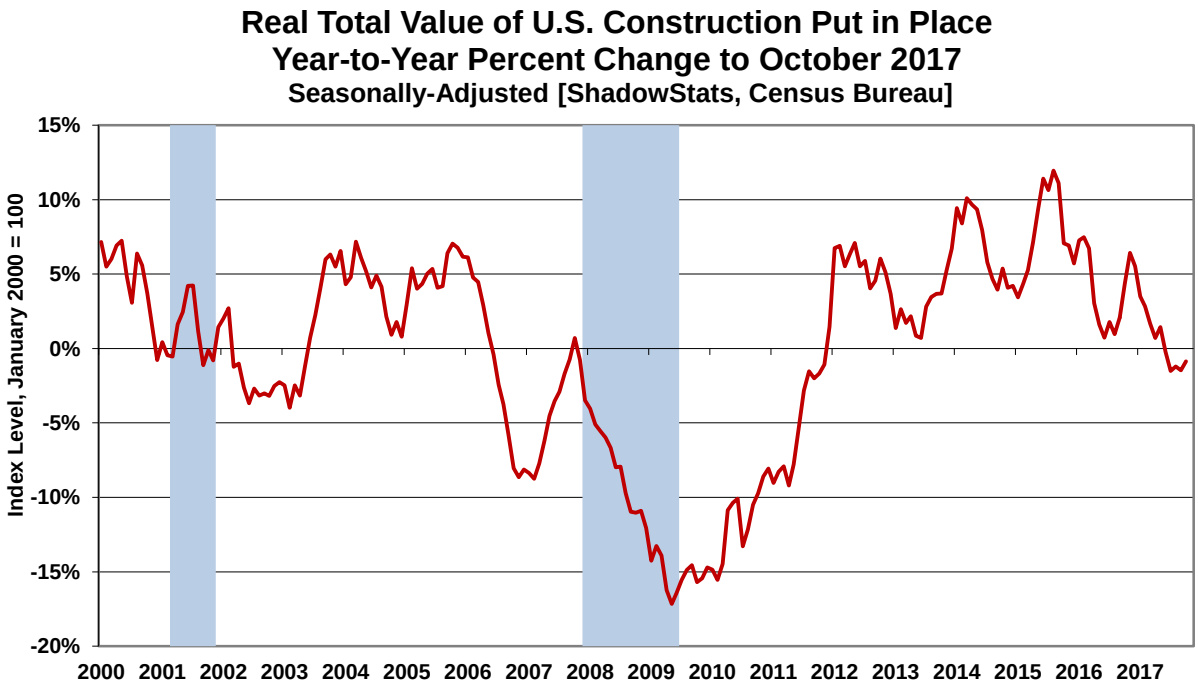
Based solely on the October 2017 detail, fourth-quarter 2017 is on early track for an annualized deficit of $783.8 billion, which would be the worst showing since first-quart 2017 (see *Graph 4*). Discussed in the opening details of this *Trade Deficit* section, previously the fourth-quarter 2016 deficit had been the worst quarterly showing since 2007, and, as indicated in *Graph 26*, the four-quarter moving annual average deficit through third-quarter 2017 was the deepest shortfall seen since 2007.

Irrespective of occasional, quarterly aberrations and increasingly irregular, headline month-to-month activity, headline deficits broadly should continue to deteriorate sharply in the months and quarters ahead, revising and intensifying the ongoing and commonly-negative impact on headline GDP.

CONSTRUCTION SPENDING IN THE UNITED STATES (October 2017)

Amidst Respectively Minor and Large Upside Revisions to Private and Public Spending, Third-Quarter 2017 Real Construction Activity Held Negative Year-to-Year and Quarter-to-Quarter. With what could encompass some minimal, positive impact from the hurricanes, inflation-adjusted U.S. construction spending rose in October 2017, against upside revisions to September and August activity. Annual and quarterly contractions remained indicative of the onset of a new recession, with the early fourth-quarter activity trending positive quarter-to-quarter, but trending negative year-to-year. The third-quarter patterns were seen last during the housing collapse of 2006, leading into the formal 2007 recession. The signals here remain for an intensifying downturn.

Graph 27: Total Real Construction Spending, Year-to-Year Percent Change
(Same as Graph 5 in the Executive Summary)



With total nominal annual growth in construction increasing to 2.9% in October 2017, from a revised 2.4% [previously 2.0%] in September 2017, down at a year-to-year real pace—net of inflation—of 0.9%

(-0.9%) in October 2017, versus a revised annual real decline of 1.5% (-1.5%) [previously 1.9% (-1.9%)] in September 2017, the pattern of downturn in real annual growth continued, and though less severe than reported previously, again, last was seen going into the housing collapse in 2006 and the 2007 recession.

Where declining real annual activity should remain the general trend, recovery and rebuilding efforts from hurricane damages may offer some possible short-lived moderation to the otherwise negative activity. Despite the negative trends in place, discussed in *Commentary No. 912*, construction spending could see activity from rebuilding and reconstruction engendered by the massive destruction wrought by both Hurricanes Harvey and Irma. The Census Bureau previously had offered some background as to what its reporting will and will not cover: *Construction Spending - Hurricane Impact*.

In normal times, the Construction Spending series remains highly volatile, subject to unstable and extraordinarily-large monthly revisions. Aggregate revisions were to the upside for August and September 2017 activity, along with the publication of the initial October 2017 detail. Revised boosts were seen particularly in public construction spending, with small aggregate upside revisions to private construction spending, as well. On top of those revisions, nominal October 2017 monthly activity increased by 1.4%, which was dominated by a jump of 3.9% in public construction spending versus a gain of 0.6% in private spending.

What had been an intensifying downside shift in trend in the inflation-adjusted real series continued, moderated some by the headline October detail and revisions, but real year-to-year change continued in an annual contraction of a scope last seen during the housing collapse of 2006 (see *Graph 27*, and *Graph 5* in the *Executive Summary*). Real second-quarter and third-quarter 2017 activity showed revised annualized contractions, respectively of an unrevised 5.8% (-5.8%) and a revised 5.1% (-5.1%) [previously down by 7.4% (-7.4%)], with the early fourth-quarter 2017 trend, based solely on the regularly-volatile reporting of the single month of October was for an annualized gain of 3.7%. That said, the headline real October 2017 monthly reading stood at 22.0% (-22.0%) below its pre-recession peak, in contrast to November 2017 Construction employment down by 10.0% (-10.0%) from recovering its pre-recession high. The broad housing and related construction sector remain severely constrained by ongoing consumer liquidity issues, discussed in regularly in the *Consumer Liquidity Watch*.

October 2017 Construction Spending. In the context October's monthly gain in nominal aggregate construction spending, dominated by the public sector, the upside revisions to September and August activity also were dominated by public spending. Nonetheless, aggregate activity, net of inflation remained in decline on an annual basis.

The headline, seasonally-adjusted nominal October 2017 Value of Construction Put in Place in the United States rose to $1,241,5 billion, from an upwardly revised $1,224.6 [previously $1,219.5] billion in September 2017, an upwardly revise $1,220.9 [previously $1,216.0, initially $1,218.3] billion in August 2017 and an unrevised $1,215.4 billion in July 2017.

In the context of the upside revision to August and September activity, nominal construction spending rose month-to-month in October 2017 by a statistically insignificant 1.4% +/- 1.8% (all confidence intervals are at the 95% level), versus an revised gain of 0.3% in September and a revised gain of 0.5% [previously 0.1%, initially a gain of 0.5%] in August and an unrevised decline of 0.9% (-0.9%) July, and an revised decline of 0.8% (-0.8%) in July. Net of the Composite Construction Deflator inflation (see the

next section), those were real changes of a 1.2% gain in October 2017, 0.1% in September, an "unchanged" 0.0% in August, and a decline of 1.4% (-1.4%) in July.

Headline annual nominal growth rose by a statistically-significant 2.9% +/- 2.1% in October 2017, versus revised annual gains of 2.4% [previously 2.0%] in September 2017, 2.7% [previously 2.3%, initially 2.5%] in August 2017 and an unrevised 2.1% for July 2017. Net of inflation, October 2017 was down year-to-year by 0.9% (-0.9%), with September 2017 down by 1.5% (-1.5%), August 2017 down by 1.2% (-1.2%) and July 2017 down 1.5% (-1.5%). The preceding headline details are reflected in *Graphs 28* to *31* and in *Graph 6* in the *Executive Summary*.

The statistically-insignificant, nominal monthly gain of 1.4% in aggregate October 2017 spending, versus the unrevised monthly gain of 0.3% in aggregate September 2017 spending, included a headline monthly gain of 3.9% in October public spending, which followed a monthly revised gain of 2.0% in September. Private construction spending gained by 0.6%, having declined by a revised 0.1% (-0.1%) in September. Within total private construction spending, the residential-construction sector activity rose by 0.4% in October, having declined by a revised 0.2% (-0.2%) in September 2017, while the nonresidential sector gained by 0.9% in October, having declined by a revised 0.2% (-0.2%) in September.

The preceding headline details are reflected in *Graphs 30* and *31* and in *Graphs 6* to *19* in the *Executive Summary*, including net of inflation.

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.

CCD year-to-year inflation was 4.03% for October 2017, 3.79% for September 2017 versus 3.94% for August 2017. Month-to-month inflation was 0.45% for October 2017, 0.20% for September 2017 and 0.20% for August 2017.

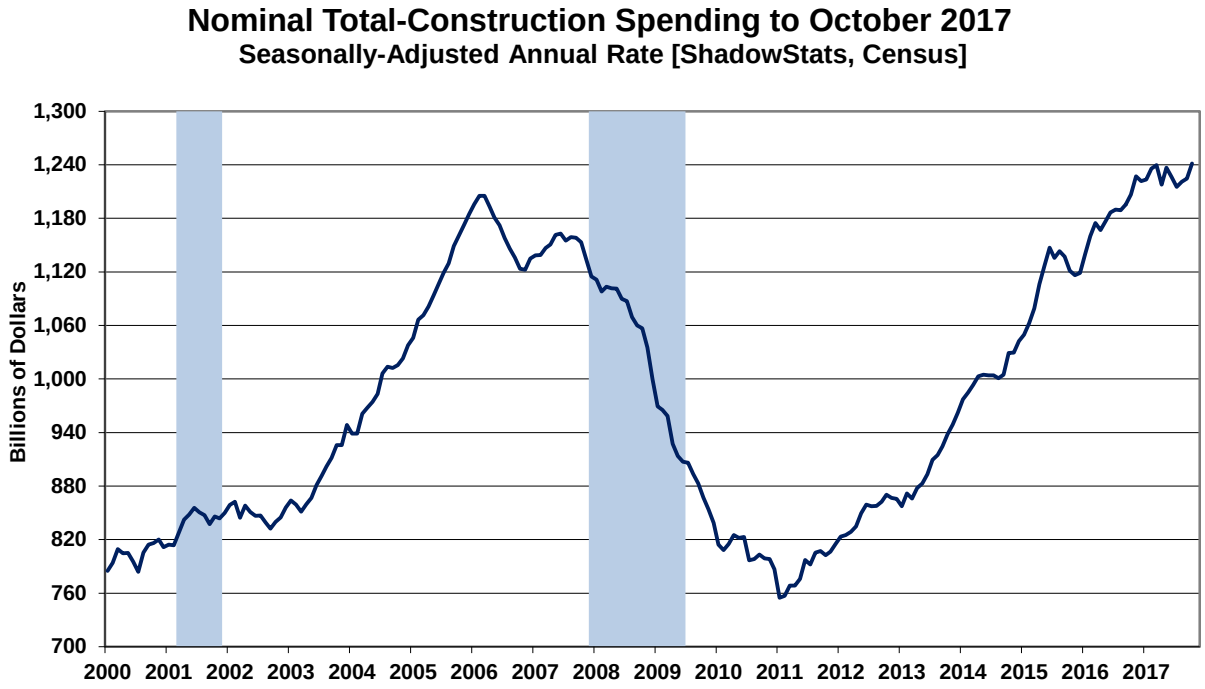
Second-Quarter and Third-Quarter 2017 Real U.S. Construction Spending Contracted Sharply Quarter-to-Quarter. In the context of upside revisions to August and September 2017 activity and the initial October 2017 reporting, net of inflation, second-quarter 2017 growth contracted at an unrevised annualized real pace of 5.8% (-5.8%), versus first-quarter 2017. Annualized real first-quarter 2017 growth had slowed to 1.4% from 5.4% in fourth-quarter 2016.

Reflecting the second full reporting for third-quarter 2017, real growth contracted at an annualized quarterly pace of a revised 5.1% (-5.1%) [previously 7.4% (-7.4%)].

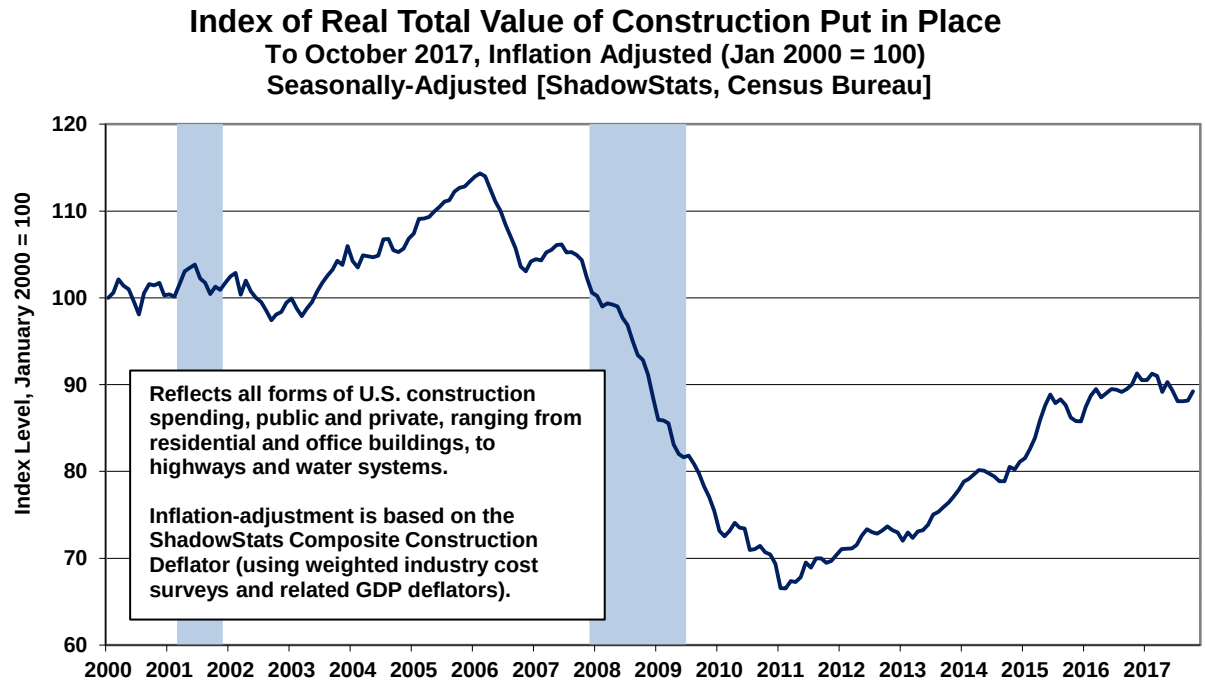
Based solely on the headline October 2017 detail, fourth-quarter 2017 is on early track for an annualized quarterly gain of 3.7%.

In terms of real year-to-year change, first-quarter 2017 growth of 2.7% slowed to 0.6% in second-quarter 2017 reporting and turned negative, down year-to-year by a 1.1% (-1.1%) in third-quarter 2017, with an early trend for a fourth-quarter 2017 year-to-year contraction of 1.5% (-1.5%).

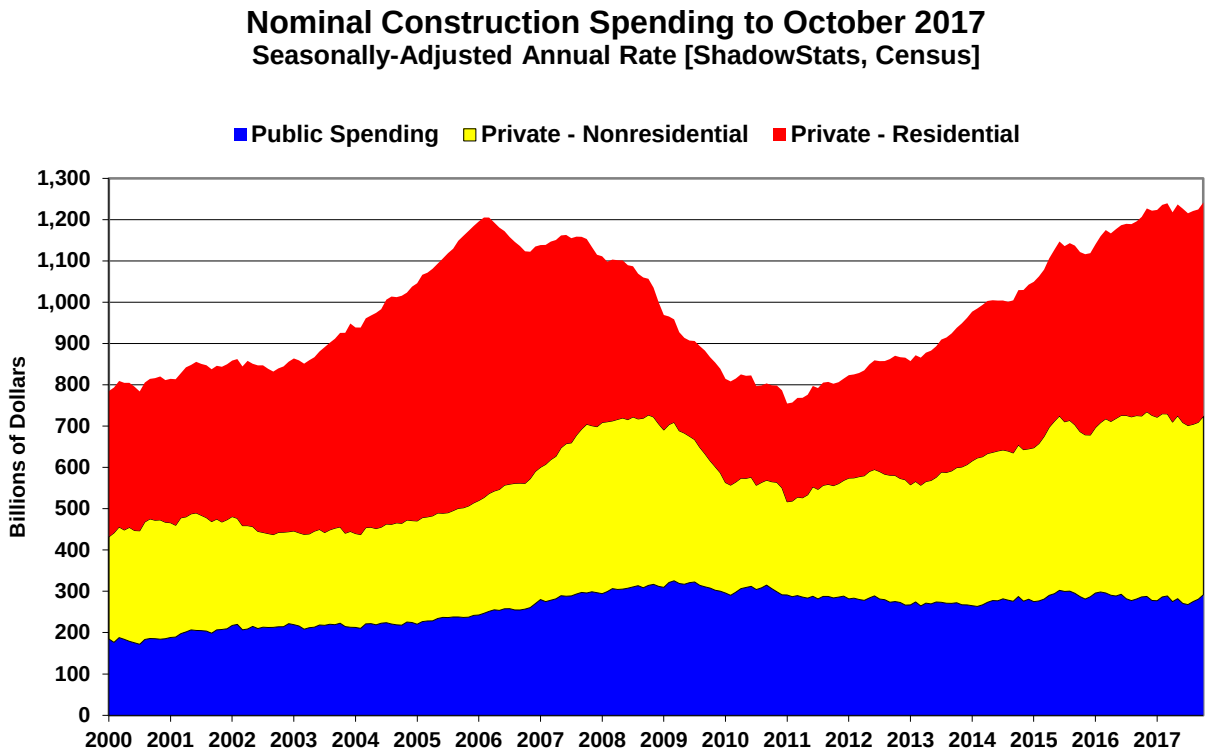
Graph 28: Total Nominal Construction Spending



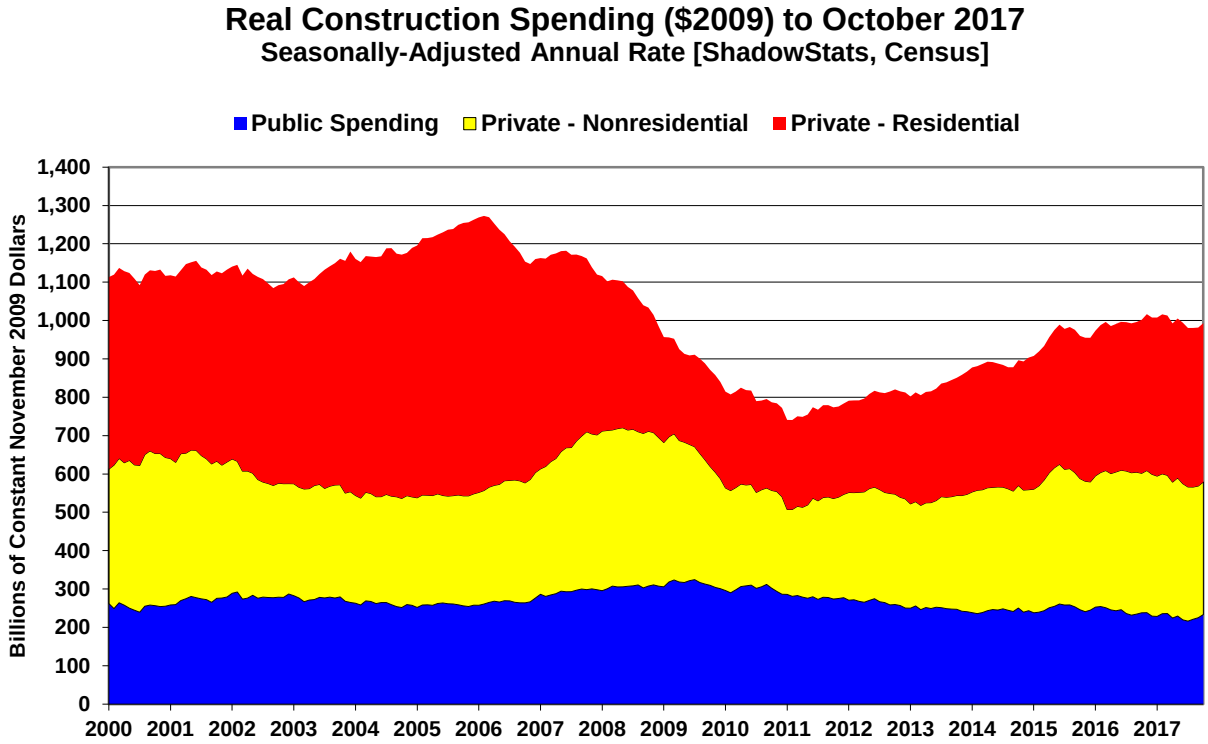
Graph 29: Index of Total Real Construction Spending



Graph 30: Aggregate Nominal Construction Spending by Major Category to Date

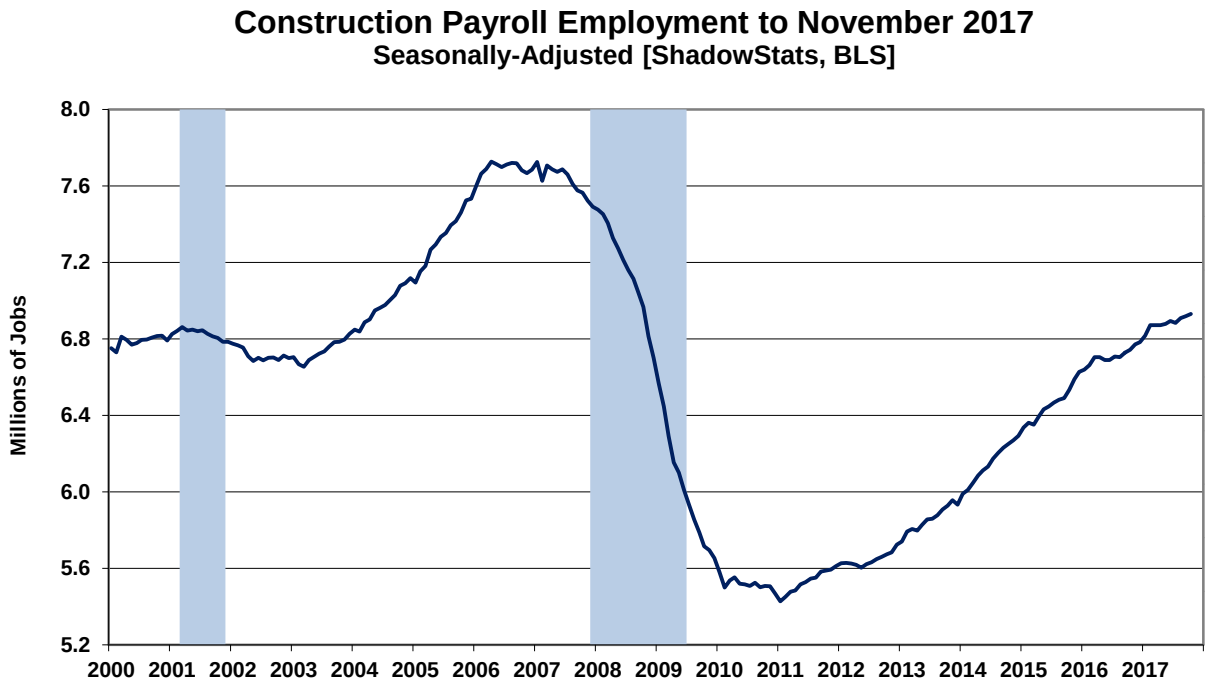


Graph 31: Aggregate Real Construction Spending by Major Category (Billions of November 2009 Dollars)



November Construction Payrolls Rose by 0.3% Month-to-Month, Bloated by Bad Seasonals, Still Down by 10.0% (-10.0%) from Its Pre-Recession Peak. Discussed in the Payroll Employment Section (page 29), November 2017 construction payrolls gained 24,000 jobs or 0.35%, to 6.955 million employed, following revised gains of 10,000 and 13,000 jobs in October and September. Annual growth was at an unadjusted 2.78%, yet the adjusted November 2018 construction payroll employment level remained down by 9.97% (-9.97%) from the pre-recession high for the series.

Graph 32: Construction Employment (Payroll Survey), Year-to-Year Percent Change, 2000 to Date



Construction Spending and Related Graphs. *Graphs 6* to *9* in the *Executive Summary* show comparative nominal and real construction activity for the aggregate series as well as for private residential- and nonresidential-construction and public-construction. Seen after adjustment for inflation, the real aggregate series generally have remained in low-level stagnation, now effectively flat to turning down, from mid-2015 into third-quarter 2017. Areas of recent relative strength in the major subcomponents generally have flattened out and have begun to turn down anew, after inflation adjustment.

The general pattern of real activity had been one of low-level, up-trending stagnation but, again, now has turned generally flat-to-minus. The aggregate nominal detail, before inflation adjustment, is shown in *Graph 28* of this *Reporting Detail*, with the real, inflation-adjusted activity plotted in *Graph 29*, while *Graphs 30* and *31* show the relative patterns of nominal and real activity aggregated by sector.

Construction and Related Graphs of Physical Activity. Again, *Graphs 28* and *29*, and *Graphs 30* and *31* reflect total construction spending through October 2017, both in the headline nominal dollar terms, and in real terms, after inflation adjustment. *Graph 29* is on an index basis, with January 2000 = 100.0, where *Graph 27* reflects the same detail in terms of annual change. Adjusted for the CCD, real aggregate construction spending showed the economy slowing in 2006, plunging into 2011, then turning minimally

higher in an environment of low-level stagnation, trending lower from late-2013 into mid-2014, then with some boost into early-2015. Activity declined in fourth-quarter 2015, with a rebound in 2016, sinking anew into 2017, with annual growth having turned negative, again as indicated in *Graph 27*. The pattern of non-recovered, inflation-adjusted construction spending turning down anew has continued to move contrary to the purported economic recovery and expansion indicated by headline GDP reporting (see prior *Commentary No. 923*).

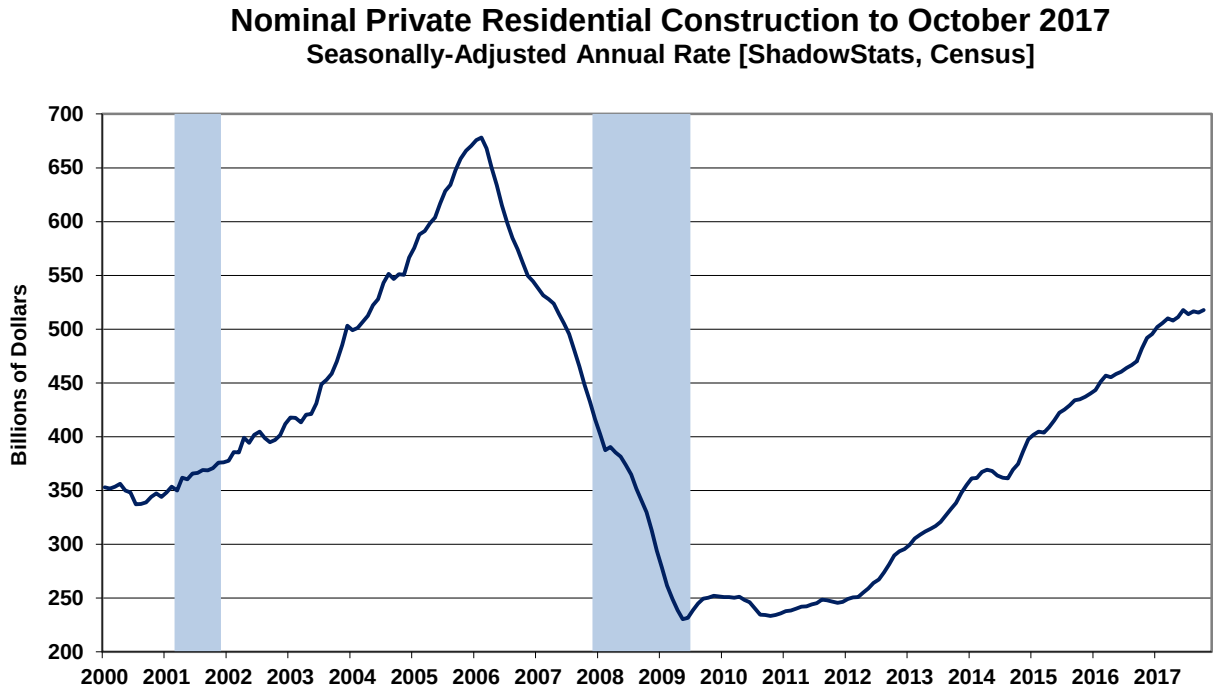
The Data and Graphs Here Reflect Monthly Levels, Not Smoothed, Moving Averages. Unlike the housing-starts and home-sales series—where ShadowStats smooths the irregular and continually-revised monthly data with accompanying plots of smoothed, six-month moving averages—the construction spending series is shown here only on a monthly basis, as published. While the spending series is extremely volatile in its monthly revisions, it tends to remain reasonably smooth in the residual month-to-month change.

Note the comparative monthly volatilities in the non-smoothed *Graphs 33* and *34*, which cover private residential construction spending, along with housing starts (combined single- and multiple-unit starts) for October 2017 (see *Commentary No. 921*). Keep in mind that the construction spending series is in nominal terms, while housing starts reflect unit volume, which should be parallel with the inflation-adjusted series shown in *Graph 7* in the *Executive Summary* section and *Graph 29* here.

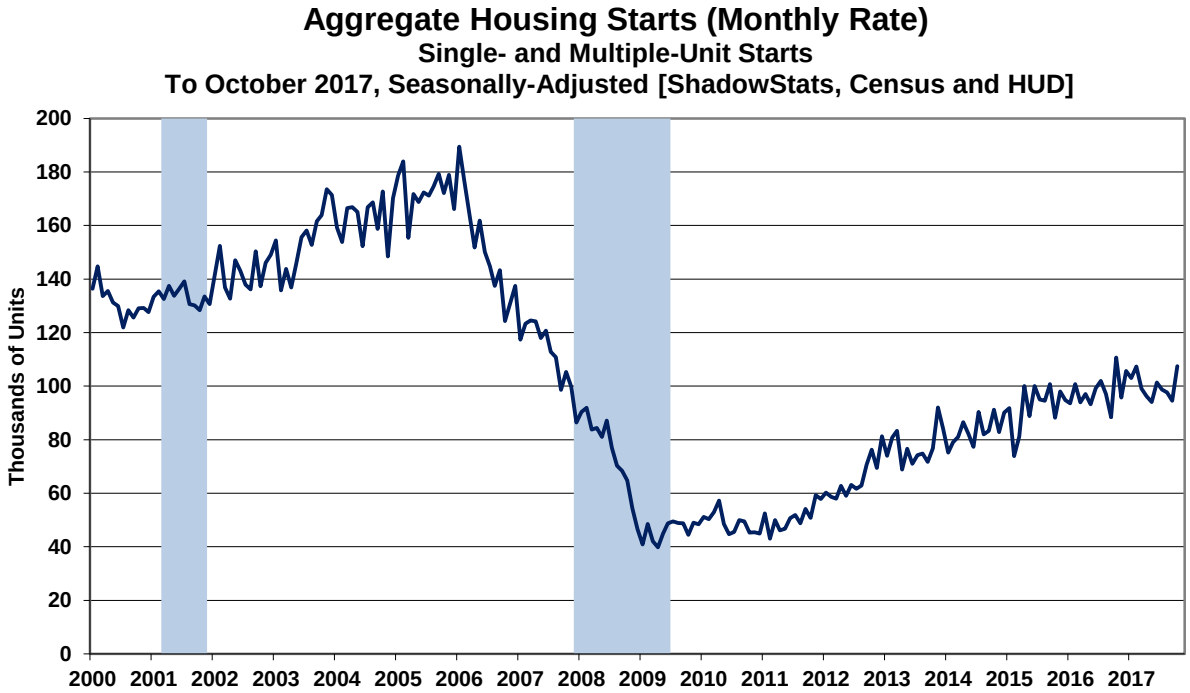
The final two graphs (*Graphs 35* and *36*) show the patterns of the monthly level of activity in nominal private nonresidential-construction spending and in public-construction spending. Private Non-Residential Construction spending surged beyond its pre-recession nominal peak in 2016, hitting a new high in December 2016 and broadly backing off same since. Public Construction spending, which is 98% nonresidential, had continued in a broad downtrend into 2014, with intermittent bouts of fluttering stagnation and then some upturn in 2015. In 2016 and into 2017, the nominal series still appeared to have fluttered into and out of a low-level top, now generally moving lower, increasingly shy of its pre-recession peak. Viewed net of inflation, in *Graphs 8* and *9* in the *Executive Summary* and in accompanying *Graph 30*, both series still appear stalled shy of their pre-recession peaks.

[Graphs 33 to 36 begin on the next page.]

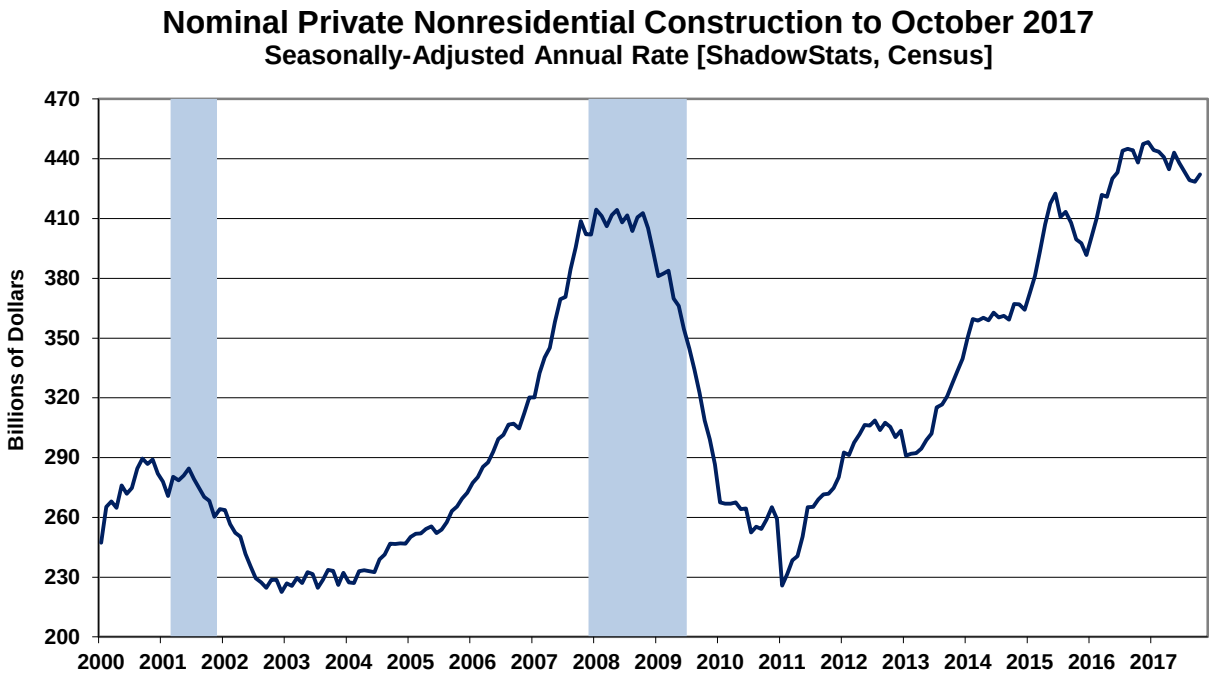
Graph 33: Nominal Private Residential Construction Spending to Date



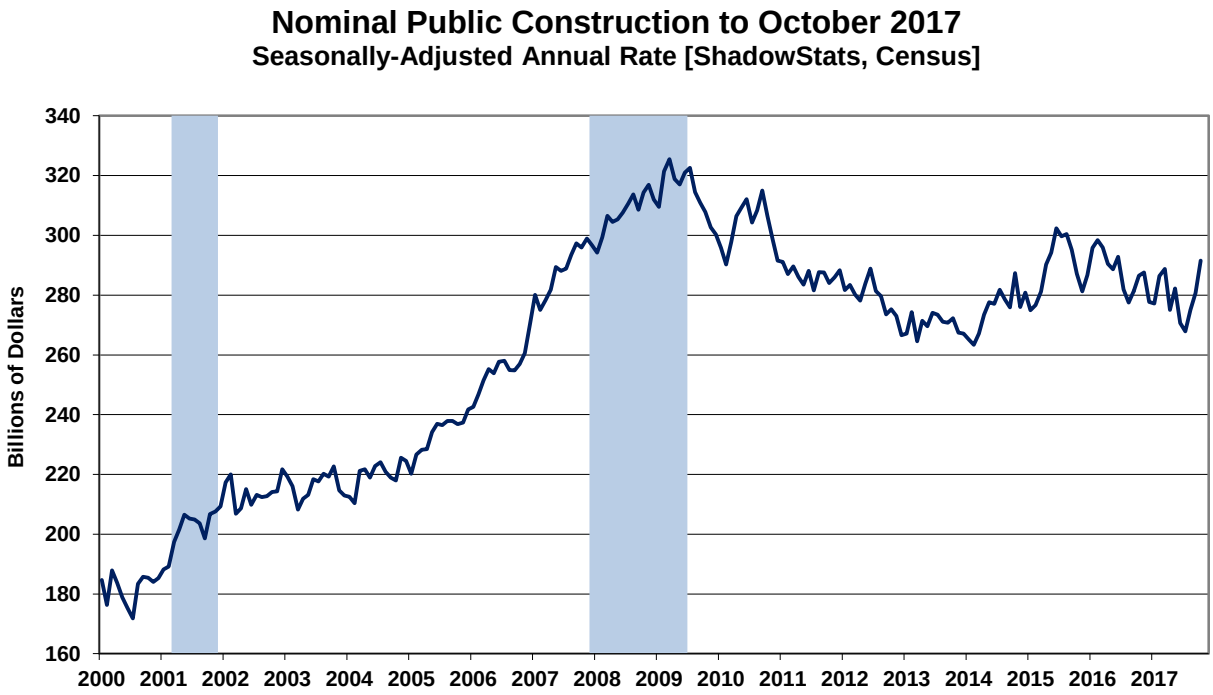
Graph 34: Combined Single- and Multiple-Unit Housing Starts to Date



Graph 35: Nominal Private Nonresidential Construction Spending to Date



Graph 36: Nominal Public Construction Spending to Date



[The* Hyperinflation Watch *begins on the next page.]

HYPERINFLATION WATCH

MONETARY CONDITIONS

Annual Growth in November 20127 M3 Eased Back to 4.6% from 4.8% in October as Monetary Base Annual Growth Jumped to a Four-Year High. The Federal Open Market Committee (FOMC) of the Board of Governors of the Federal Reserve System will complete its regularly-scheduled December 2017 meeting and announce any policy changes on Wednesday, December 13th. The result of that meeting will be reviewed, at least briefly, in *Commentary No. 925*, of that date. Markets expectations broadly are for a rate hike. In the context of no negative shocks out of today's (December 8th) headliine reporting of labor detail reporting, those market expectations likely will be met.

Nonetheless, negative economic shocks lie ahead, with retail sales and industrial production likely to show some negative catch up following recent hurricane distortions, and particularly with a likely labor-data shock on January 5th, when an annual benchmark revision realigns heavily distorted Household Survey numbers to show a much weaker employment/unemployment circumstance. As market sentiment increasingly shifts towards a weaker economy, pressure and expectations should mount on the FOMC to pull back from further tightening. That likely will come into play as an early consideration for the new Fed Chairman, presumably Jerome Powell, who is President Trump's nominee for the position.

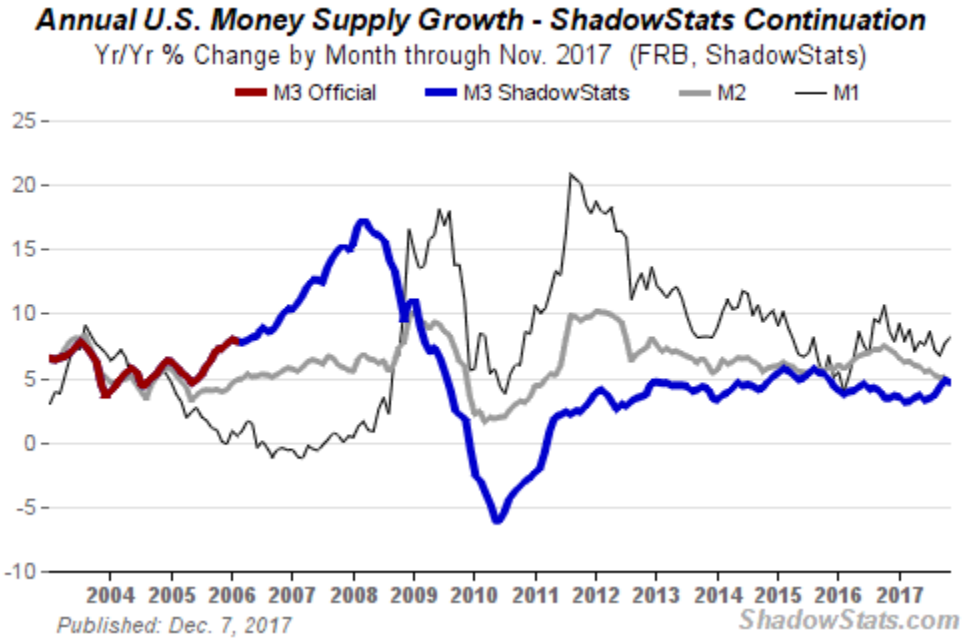
With the primary concern for the U.S. central bank continuing to be the maintenance of solvency and liquidity in a still-troubled banking system, intensifying economic difficulties remain likely to cause the FOMC to back off its formal, current pattern of promised rate hikes and balance-sheet liquidation, to revert again towards expanded quantitative easing, as openly allowed for in current FOMC policy.

Annual Growth in November 2017 Money Supply M3 eased to 4.6% from 4.8% in October, with Monetary Base Annual Growth up by a 8.1%, a Four-Year High. Based on three-plus weeks of reporting, and in the context of continued softening growth in the narrower M2 measure, the estimate of nominal annual growth for the ShadowStats Ongoing M3 Money Supply in November 2017 declined to 4.6%, from an unrevised 4.8% in October 2017, which had been the highest level of year-to-year monthly growth seen since November 2015. The monthly slowing of the annual growth rate was the first in five months. Those M3 growth rates were against unrevised annual gains of 4.3% in September 2017, 3.6% in August 2017 and continual further notching of annual growth lower back in time, until 3.1% in February 2017, which then had been the weakest year-to-year change since July 2012.

Separately, nominal year-to-year growth for M2 eased to 4.2% in November, versus an unrevised 5.0% in October 2017, 5.1% in September 2017, 5.3% in August 2017, 5.6% in July 2017, 5.6% in June 2017 and 5.9% in May 2017, with annual nominal growth in November 2017 M1 at 8.2%, versus a revised 7.8% [previously estimated at 8.2%] in October 2017, an unrevised 6.8% in September 2017, 7.2% in August 2017, 8.7% in July 2017, 7.6% in June 2017 and 7.9% in May 2017.

For those living in the headline money-supply world comprised of just the Fed's M1 and M2, money growth still has been relatively stronger for both M1 and M2, than for M3, although that difference has continued to narrow recently, with M3 growth picking up versus slowing annual M1 and M2 growth. The relative weakness in annual M3 growth, versus M2 and M1 (M2 includes M1; M3 includes M2) still has reflected a shift over time in funds from accounts included just in M3, such as large time deposits and institutional money funds, into accounts in M2 and M1. The recent relative gains in annual M3 growth have reflected a returning flow of cash from M1 and M2 back into M3 accounts, again, such as large-time deposits and institutional money funds. The latest estimates of level and annual changes for November 2017 M3, M2 and M1, and for earlier periods, are detailed in the Alternate Data tab of www.ShadowStats.com. See the *Money Supply Special Report* for full definitions of those measures.

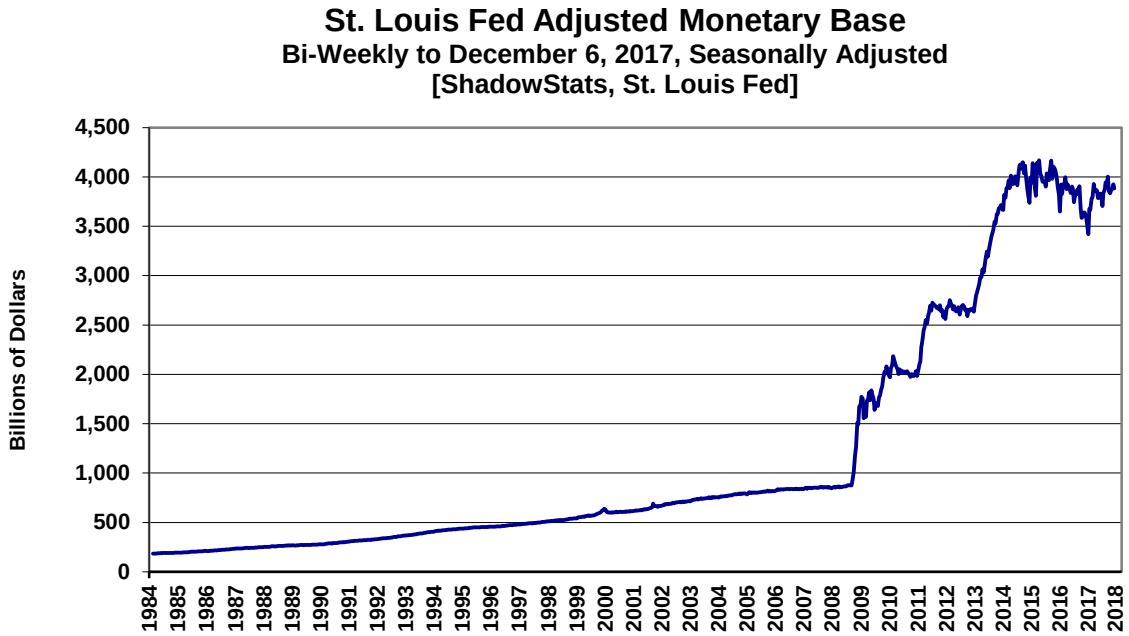
Graph HW-1: Comparative Money Supply M1, M2 and M3 Yr-to-Yr Changes through November 2017



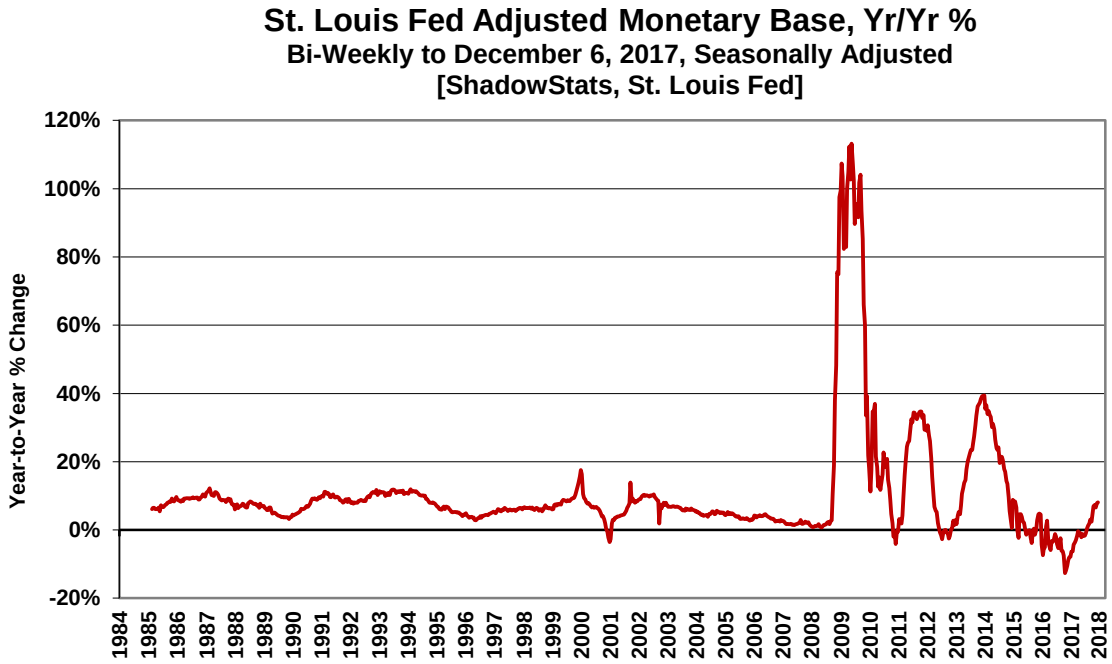
As M3 Has Jumped in Recent Months, So Too Has the Monetary Base. In the wake of near-term volatility surrounding recent rate hikes by the FOMC, and the related market efforts by New York Fed to establish or maintain stable trading-range activity for the targeted federal funds rate, the level of the monetary base had been reasonably stable, with annual percentage change fluctuating around zero. Yet, recently the pace of annual growth has turned higher, rapidly moving to consecutive, multi-year highs. Aside from short-term gyrations around the timing of change in the targeted federal funds rate, circumstances generally should remain relatively stable, until the Fed begins to sell its excess Treasuries and Mortgage-Backed Securities heavily, as part of its planned "balance sheet normalization," or otherwise to embark upon expanded quantitative easing, amidst increasing liquidity stresses in the banking system from deteriorating economic conditions.

Based on the latest Saint Louis Fed estimate, annual growth in the Monetary Base stood at its highest level since January 2015, for the two weeks ended December 6, 2017, with annual change up by 8.1%, although the Monetary Base itself had backed off its near-term high level of September 13th. Accompanying *Graphs HW-2* and *HW-3*, reflect that detail.

Graph HW-2: Saint Louis Fed Monetary Base, Billions of Dollars (1984 to December 6, 2017)



Graph HW-3: Year-to-Year Percent Change, Saint Louis Fed Monetary Base (1985 to December 6, 2017)



The level of the Monetary Base remains well within the bounds of activity seen in the last several years. That said, prior to the Quantitative Easing, changing the level of the Monetary Base had been the primary tool of the Federal Reserve Board's Federal Open Market Committee (FOMC) for targeting growth in the money supply. If the recent upside movement in annual growth for M3 and the Monetary Base continue, questions as to a potential covert shift in FOMC policy (towards easing) increasingly should arise.

CONSUMER LIQUIDITY WATCH

CONSUMER LIQUIDITY CONDITIONS: INCOME, CREDIT AND RELATIVE OPTIMISM.
[Updated Opening Text, Early-December 2017 Consumer Sentiment and October Consumer Credit.]

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

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

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

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

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

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

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

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

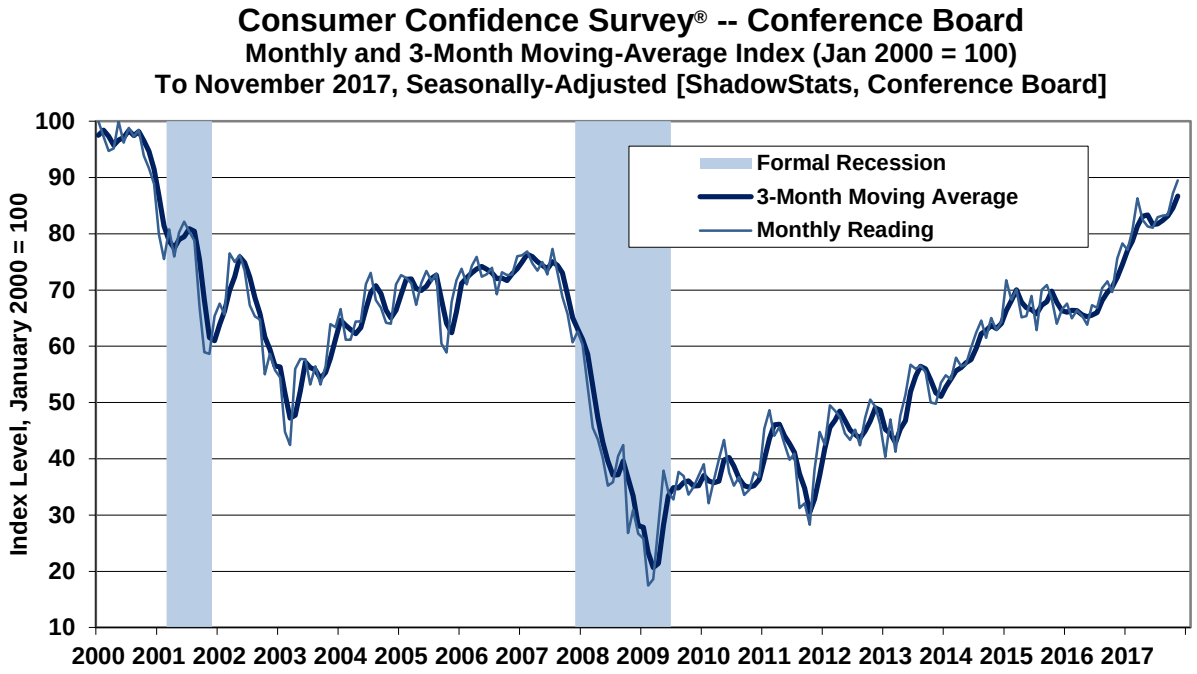
Consumer Optimism: November Consumer Confidence and Early-December Sentiment Continue Mixed in Direction; Confidence Is at Highest Level Since It Collapsed into the 2001 Recession but Sentiment Is Pulling Back. This detail reflects the November 2017 readings of The Conference Board's Consumer-Confidence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

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

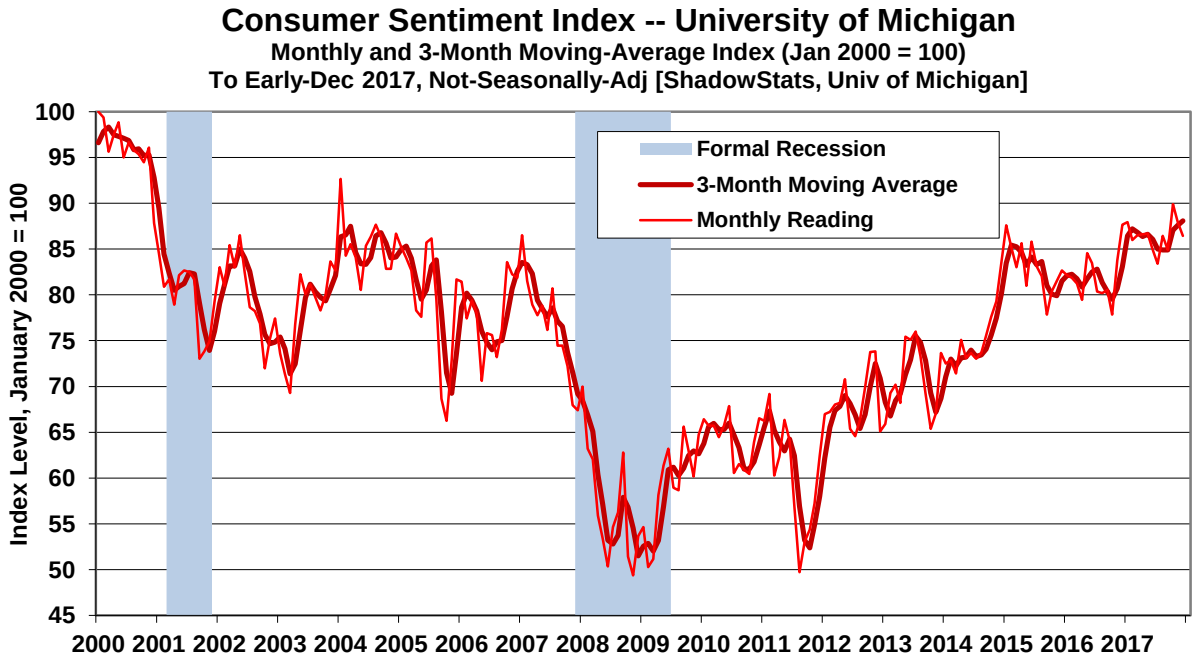
For both the Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index® (*Graph CLW-1*), and the University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph CLW-2*), the three-month moving averages also are above pre-2007 recession highs,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

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

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



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



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

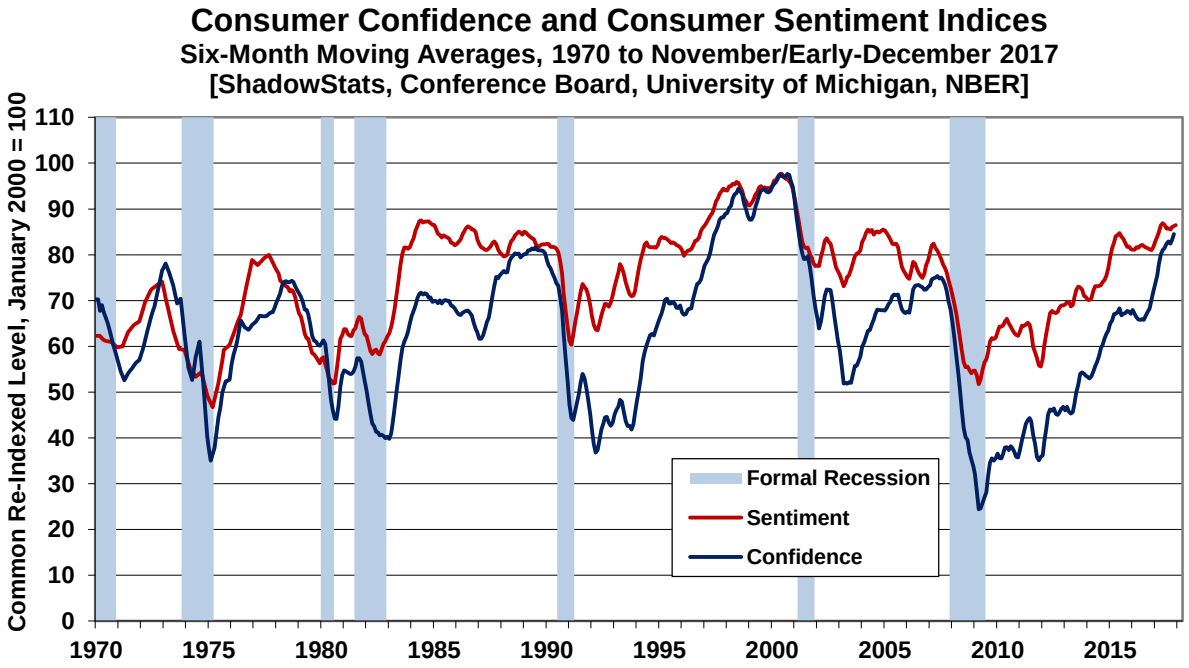
particularly on unemployment (not payroll employment), retail sales and industrial production. Headline financial and economic reporting in the next month or two should turn increasingly-negative and unstable.

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

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

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

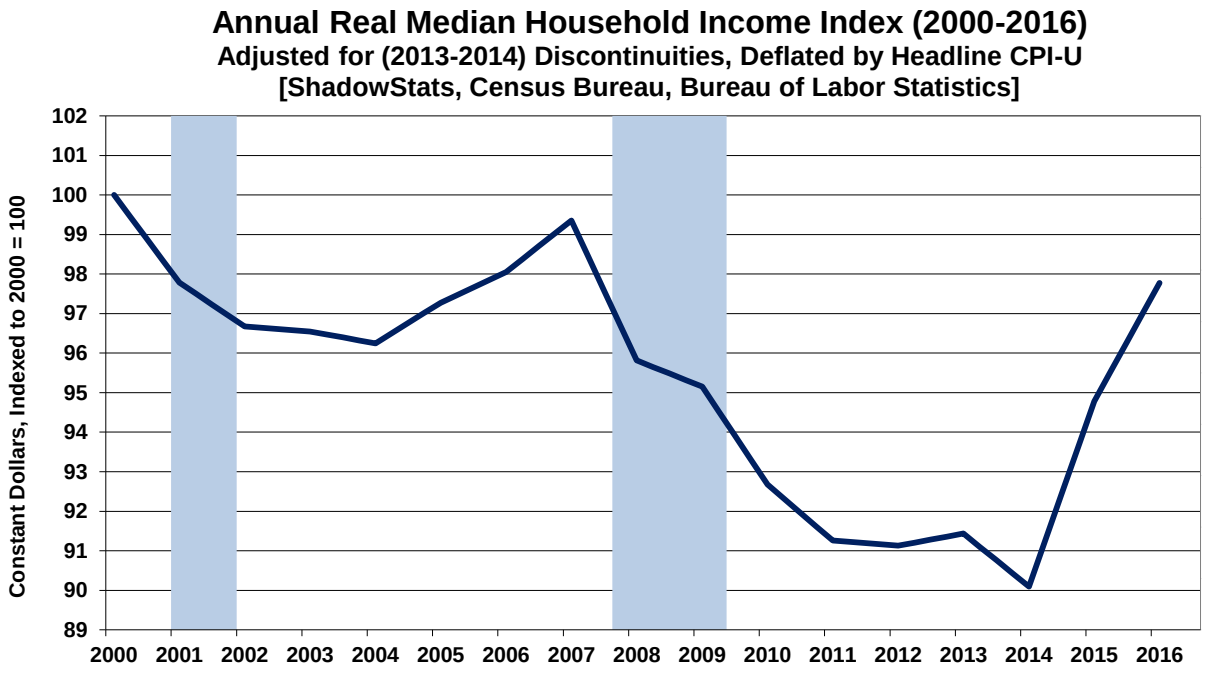
Graph CLW-3: Comparative Confidence and Sentiment (6-Month Moving Averages, 1970 to 2017)



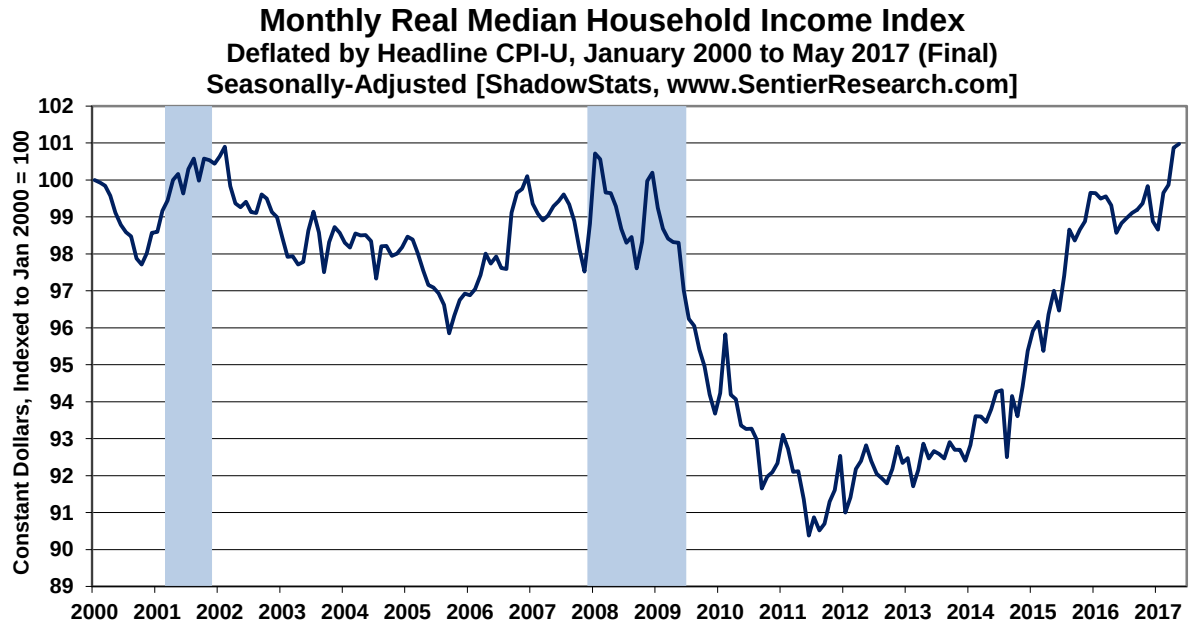
2016 Annual Real Median Household Income Still Was Below Its 2007 Pre-Recession High, Below Activity in the Late-1990s, About Even with the Mid-1970s. The measure of real monthly median household income, which has been provided by www.SentierResearch.com, generally can be considered

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

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



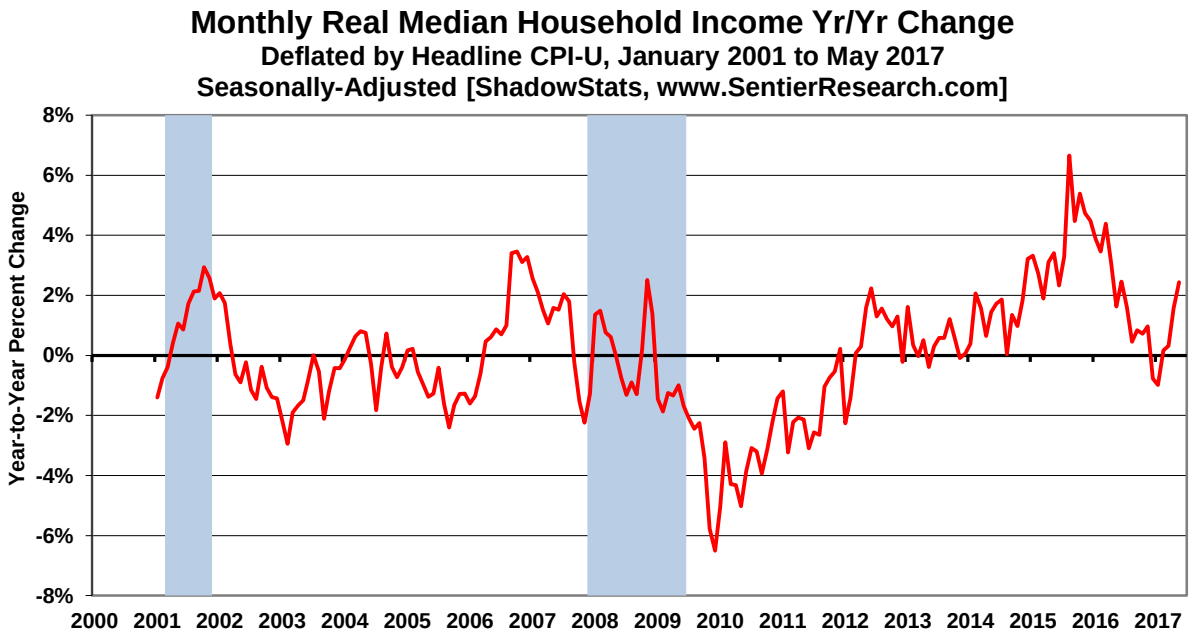
Graph CLW-5: Monthly Real Median Household Income (2000 to May 2017) Index, January 2000 = 100



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

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

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



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

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

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

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

***Special Note*:** Accompanying the release of the May 2017 data by Sentier Research was this Notice of Final Report:

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

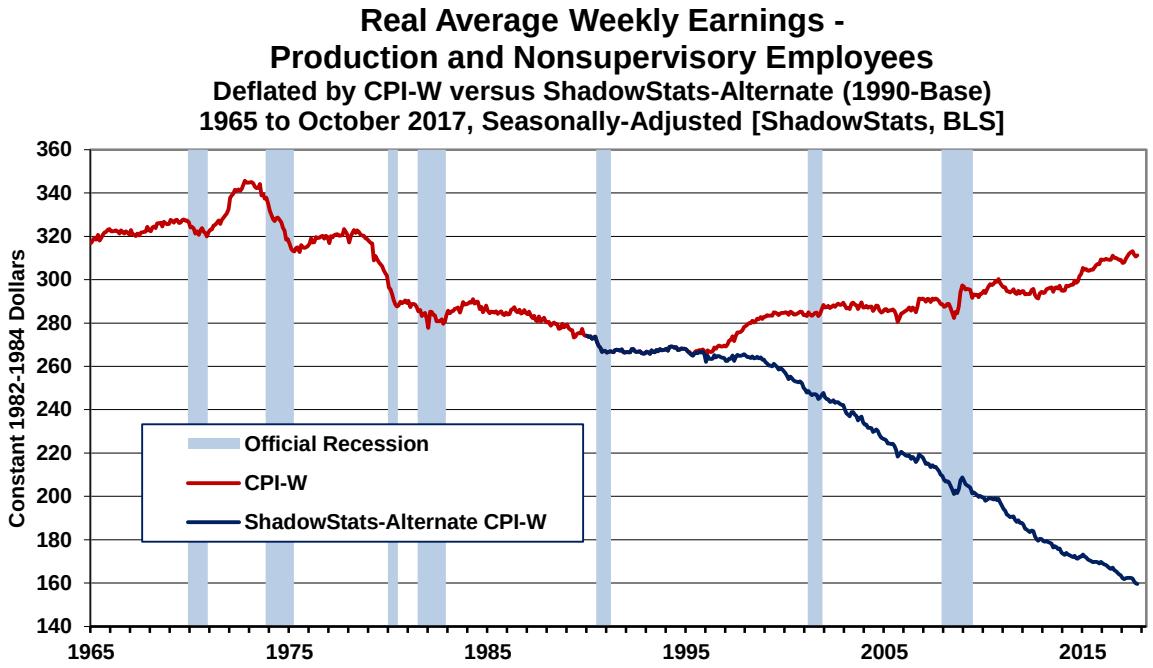
ShadowStats hopes a circumstance will unfold that enables continued reporting of this extraordinarily valuable and timely indicator of consumer liquidity. Gordon Green and John Coder, the authors of the monthly report, both are former senior officials at the U.S. Census Bureau and have a unique understanding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

Real Average Weekly Earnings—October 2007—Month-to-Month Real Earnings Notched Higher, Third-Quarter Still Showing Flat/Minimal Contraction, Early Fourth-Quarter Trend Negative. For the production and nonsupervisory employees category—the only series for which there is a meaningful history (see the full discussion on in the *Reporting Detail* of *Commentary No. 920*), the regularly-volatile, real average weekly earnings rose month-to-month in October 2017 with a small quarterly contraction already in place for in third-quarter 2017 activity, and a deepening quarterly contraction unfolding in the early-trend for fourth-quarter 2017.

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

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

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

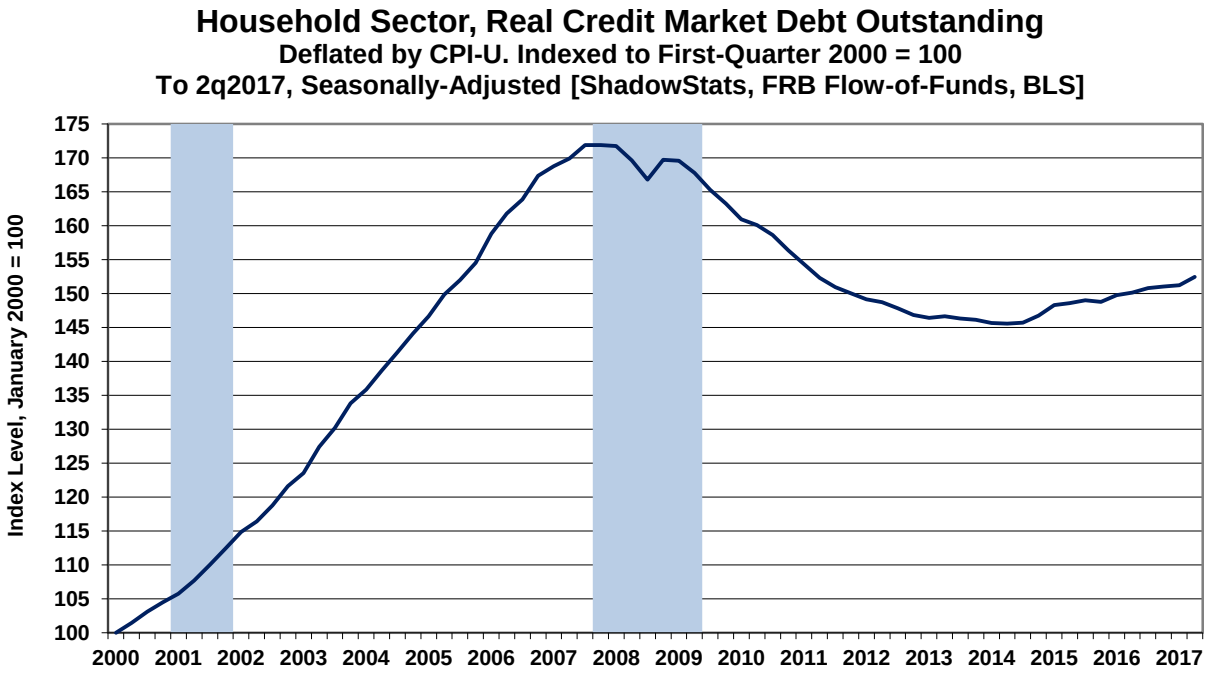


Consumer Credit: Lack of Meaningful Real Consumer Credit Growth Remains an Economic Constraint. The final four graphs on consumer conditions address consumer borrowing. Where debt expansion can help make up for a shortfall in income growth, adequate expansion of consumer debt, which would help fuel growth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

Consider *Graph CLW-8* of *Household Sector, Real Credit Market Debt Outstanding*. The level of real household debt declined in the period following the Panic of 2008, reflecting loan defaults and reduced banking lending, and it has not recovered fully, based on the Federal Reserve's flow-of-funds accounting through second-quarter 2017, released on September 21st. Household Sector, Real Credit Market Debt Outstanding in second-quarter 2017 still was down by 11.3% (-11.3%) from its pre-recession peak of third-quarter 2007. That was against an initial first-quarter 2017 decline of 11.5% (-11.5%), recently revised to 11.3% (-11.3%). The visual uptick in the latest point in *Graph CLW-8* resulted from a lowered estimate of first-quarter activity (consumer credit revised lower by more than the upside revision mortgages), with the headline second-quarter inflation-adjusted level of activity boosted by a relatively-rare, annualized quarterly contraction in the seasonally-adjusted second-quarter CPI-U.

The series includes mortgages, automobile and student loans, credit cards, secured and unsecured loans, etc., all deflated by the headline quarterly CPI-U. The level of real debt outstanding has remained stagnant for several years, reflecting, among other issues, lack of normal lending by the banking system into the regular flow of commerce. The slight upturn seen in the series through 2015 and into 2016 was due primarily to gasoline-price-driven, negative CPI inflation, which continued to impact the system through second-quarter 2016. Current activity also has reflected continued relative strength from student loans, as shown in the *Graphs CLW-9* to *CLW-11*.

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

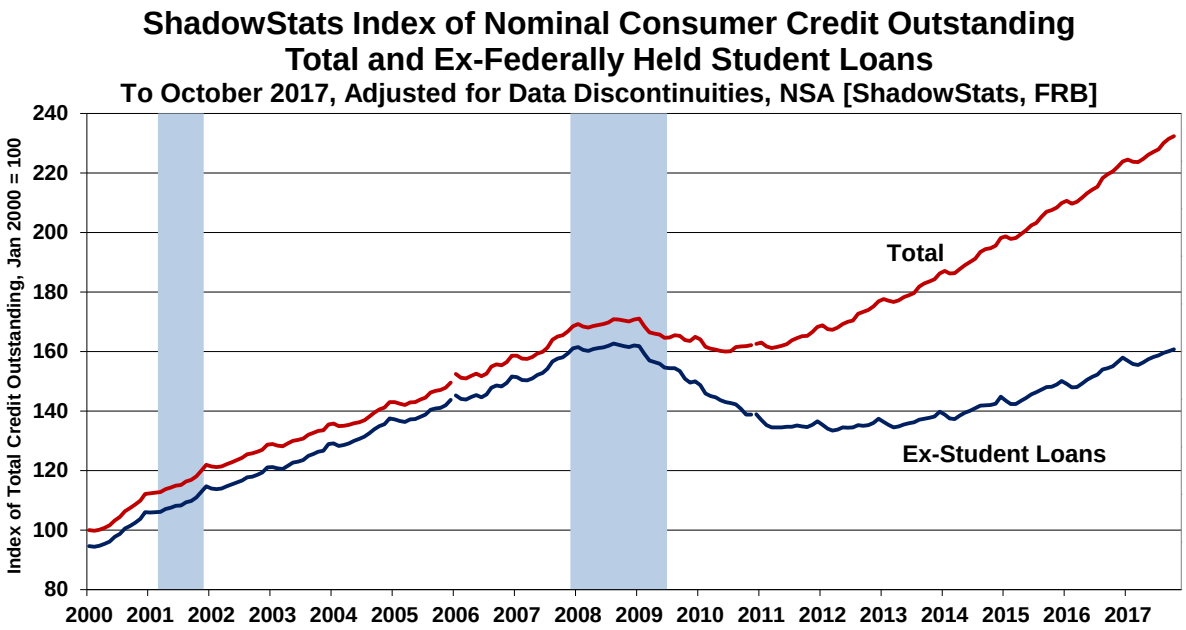


The ShadowStats analysis usually focuses on the particular current weakness in monthly levels of consumer credit, net of what has been rapidly expanding government-sponsored student loans. Where detail on that series is only available not-seasonally-adjusted, the following graphs are so plotted.

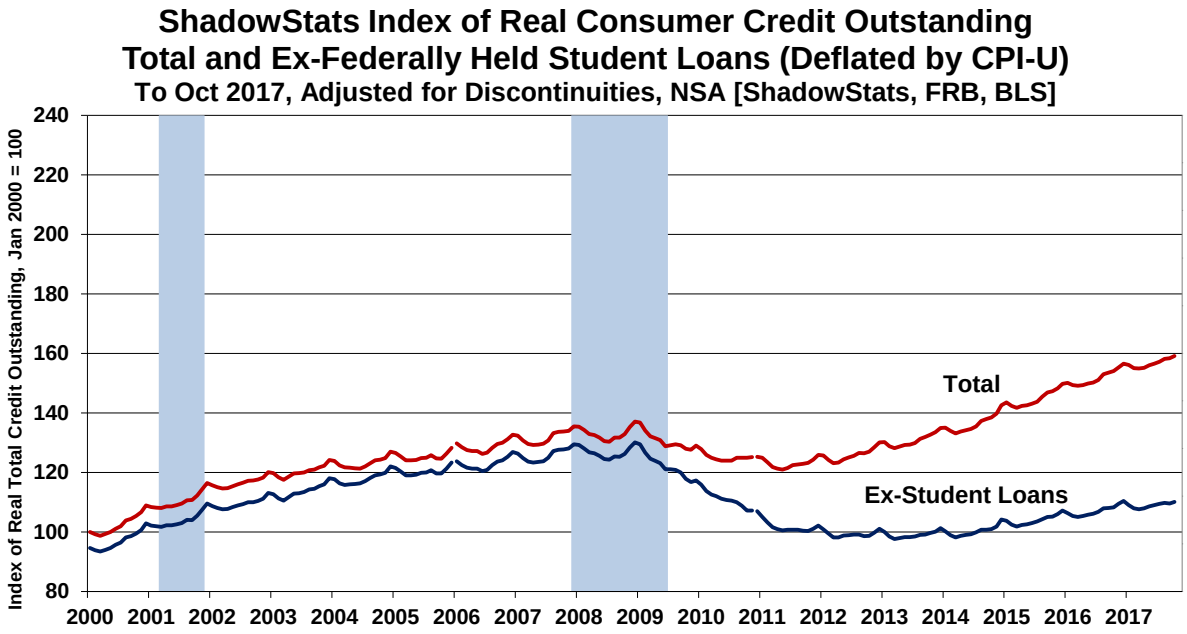
Shown through the October 2017 (released December 7th), *Graph CLW-9* of monthly Consumer Credit Outstanding is a subcomponent of *Graph CLW-8* on real Household Sector debt. Where *Graph CLW-9* reflects the nominal reporting, real or inflation-adjusted activity for monthly Consumer Credit Outstanding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

Post-2008 Panic, growth in outstanding consumer credit has continued to be dominated by growth in federally-held student loans, not in bank loans to consumers that otherwise would fuel broad consumption or housing growth. Although in slow uptrend, the nominal level of Consumer Credit Outstanding (ex-student loans) has not recovered since the onset of the recession. These disaggregated data are available and plotted only on a not-seasonally-adjusted basis, with the pattern of monthly levels during one year reflecting some regular, unadjusted seasonal dips or jumps.

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



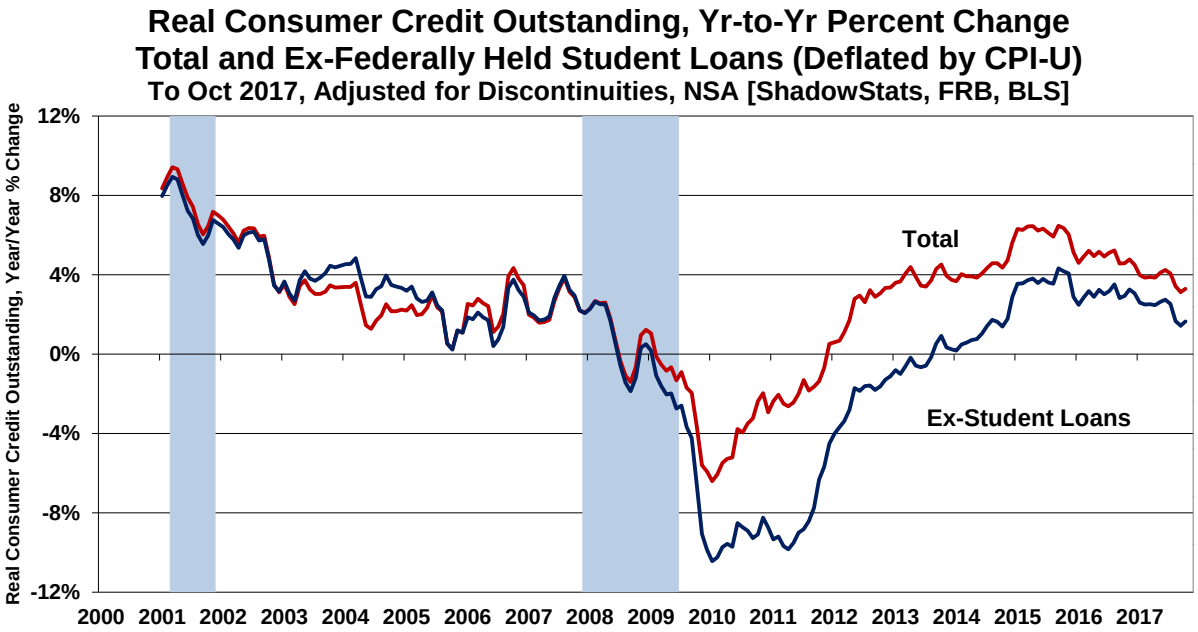
Graph CLW-10: Real Consumer Credit Outstanding (2000 to 2017)



Adjusted for inflation, the lack of recovery in the ex-student loan area is more obvious. Although the recent monthly upside move in the not-seasonally-adjusted consumer credit reflected a seasonal pattern, the pace of year-to-year growth has continued to slow sharply, suggesting some tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in October 2017 was down from its December 2007 pre-recession peak by 15.0% (-15.0%) [that previously

had been down by 12.3% (-12.3%) in June 2017, before a recent downside revision to the last five years of activity]. Year-to-year real growth shown in *Graph CLW-11* tends to resolve most of the monthly distortions in the not-seasonally-adjusted data.

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



WEEK, MONTH AND YEAR AHEAD

Financial-Market Instabilities and Turmoil Are Increasingly Likely in the Near Future; Along with Continued Deterioration of Domestic and Global Political Circumstances. Irrespective of the minimally revised headline Household Survey detail, which still is distorted heavily by hurricane disruptions, and subject to corrective benchmark revisions next month (see the *Opening Comments*), headline economic detail increasingly should shock the markets and the U.S. dollar on the downside, as the disruptions work out of the headline reporting detail in the next month or two. Such will be more fully discussed in the *Hyperinflation Watch* of the planned December 13th *Commentary No. 925*, which not only will review the FOMC meeting of that date and likely other Federal Reserve action or inaction in the near-term future, but also assess increasingly manic activity see in markets ranging from Bitcoin to the U.S. stock market (see also today's *Hyperinflation Watch*).

In the unfolding circumstances, the U.S. dollar and financial markets remain at extraordinarily-high risk of panicked declines, increasingly likely in the very near term. Negative economic surprises will mount rapidly in catch-up reporting in late-fourth-quarter detail, versus third-quarter hurricane disruptions, with an intensifying in the next several weeks and months that should be highly disruptive to the markets, to market sentiment and to public confidence in the economy.

Holding physical gold and silver remain the ultimate hedges—stores of wealth—for preserving the purchasing power of one's U.S. dollar assets, in the context of liquidity and portability, as discussed in the November 15th *Hyperinflation Watch* of *Commentary No. 920*, which speaks for itself. Brief references to other recent *Hyperinflation Watch* and *Special Comments* follow.

Following this note, other than for the *Pending Releases* paragraphs and updated links, language changes in this section from the prior *Commentary No. 923* are minimal. Please call (707) 763-5786, if you would like to discuss current circumstances, or otherwise. *Best wishes – John Williams*

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

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

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

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

Broad economic activity never recovered fully from its crash into 2009, and it has started to turn down anew. As explored previously in the *Hyperinflation Watches* of *Commentary No. 899* and *General Commentary No. 894*, and further to the *Opening Comments* and *Hyperinflation Watch* of *Commentary No. 892*, headline economic reporting during June, July and early August of 2017, had shown a marked downturn versus consensus forecasts. While these circumstances usually signal an unfolding, major downshift in underlying economic reality, at present, they also forewarn of a potential shift in FOMC activity. Where such an event remains well removed from consensus expectations, at this time, in terms of Fed policy, that would mean a cessation of incremental rate hikes and a shift back towards expanded quantitative easing.

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

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

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

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

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

Discussed in *No. 859 Special Commentary*, the Trump Administration continues to face extraordinarily difficult times, but still has a chance to turn the tide on factors savaging the U.S. economy and on highly negative prospects for long-range U.S. Treasury solvency and stability. Any forthcoming economic stimulus faces a nine-month to one-year lead-time, once in play, before it meaningfully affects the broad economy. Increasing and continuing delays from political discord continue to push targeted programs back in time. Needed at the same time are a credible plan for bringing the U.S. long-term budget deficit (sovereign solvency issues) under control and action to bring the Federal Reserve under control and/or to reorganize the banking system. These actions broadly are necessary to restore domestic-economic and financial-system tranquility (see *No. 859*), but they cannot happen without the meaningful participation

and cooperation of Congress. The financial crisis at hand likely will intensify well before the 2018 Congressional Election will have any chance to stabilize the political outlook for economic policy.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Note on Reporting-Quality Issues and Systemic-Reporting Biases. In the context of historical background provided in *Special Commentary No. 885*: *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*, significant reporting-quality problems remain with most major economic series. Beyond the pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended both to understate inflation and to overstate economic activity meaningfully—as generally viewed in the common experience of Main Street, U.S.A.—ongoing, near-term headline reporting issues often reflect systemic distortions of monthly seasonal adjustments.

Data instabilities—induced partially by the still-evolving economic turmoil of the last eleven years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn provide particularly unstable headline economic results, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). While historical seasonal-factor adjustments are revised every month, based on the latest, headline monthly data, the consistent, revamped historical data are not released or reported at the same time. That issue is discussed and explored in the labor-numbers related *Supplemental Commentary No. 784-A* and *Commentary No. 695*.

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

Combined with ongoing allegations in the last several years of Census Bureau falsification of data in its monthly Current Population Survey (the source for the BLS Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular - economic series (see *Commentary No. 669*). Investigative-financial/business reporter John Crudele of the *New York Post* has written extensively on such reporting irregularities: *Crudele Investigation*, *Crudele on Census Bureau Fraud* and *John Crudele on Retail Sales*.

PENDING ECONOMIC RELEASES: Producer Price Index—PPI (November 2017) The Bureau of Labor Statistics (BLS) will release the November 2017 PPI on Tuesday, December 12th, with detail covered in *Commentary No. 925* of Wednesday, December 13th. Odds favor strongly-positive wholesale

inflation on the goods side of the reporting, reflecting a combination of rising wholesale oil and gasoline prices in November, in the context of a strong, seasonal-factor boost at this time of year.

The dominant services-sector "inflation," however, often provides some counter-move to the hard-inflation estimate on the goods side. Such comes particularly from counterintuitive "deflation" or "inflation," reflecting falling or rising "margins," in turn reflecting rising or falling costs. Guesstimation in that services sector remains highly problematic, as discussed in *Inflation that Is More Theoretical than Real World?* in *Commentary No. 920*, where, again, the services component could offset some of the strength in the headline goods inflation.

Per the Department of Energy (DOE), unadjusted crude oil prices and wholesale gasoline prices increased in November 2017. Based on the two most-widely-followed oil contracts, monthly-average oil prices rose by 9.1% (Brent) and 9.8% (WTI). That was accompanied by increases in unadjusted, monthly-average wholesale gasoline prices of 6.7% (NY Harbor) and 6.4% (Gulf Coast). Where PPI seasonal adjustments for energy costs are strongly positive in November, positive petroleum-related unadjusted monthly price changes, again, should boost headline changes in the month-to-month adjusted Final Demand Goods component of the PPI, perhaps by 0.5% or so.

Consumer Price Index—CPI (November 2017). The Bureau of Labor Statistics (BLS) will release the November 2017 CPI on Wednesday, December 13th, which will be covered in *Commentary No. 925* of that date. The headline November CPI-U likely will be on the plus side, perhaps 0.3%, plus-or-minus, in the context of a month-to-month gain in unadjusted gasoline prices, boosted by strongly positive seasonal adjustments. Headline, unadjusted year-to-year annual inflation for November 2017 should rise to 2.2% or 2.3% from the 2.0% seen in October 2017 reporting.

Positive Monthly Inflation Impact from Rising Gasoline Prices Exacerbated by Positive Seasonal Adjustments. After jumping by a hurricane-induced, unadjusted 10.7% in September 2017, average monthly gasoline prices retreated by 5.1% (-5.1%) in October 2017 and then rebounded by 2.2% in November per the DOE. Where BLS seasonal adjustments to gasoline prices in November are strongly to the upside, the implied, adjusted-gasoline price change suggests a positive contribution to adjusted monthly CPI-U inflation of 0.19%. Likely boosted also by higher food and "core" (net of food and energy) inflation, the headline CPI-U reading could come in around 0.3% or 0.4% in November 2017.

***Annual Inflation Rate*.** Noted in *Commentary No. 920*, year-to-year CPI-U inflation would increase or decrease in November 2017 reporting, dependent on the seasonally-adjusted month-to-month change, versus the adjusted, headline gain of 0.21% in November 2016 CPI-U. The adjusted change is used here, since that is how consensus expectations are expressed. To approximate the annual unadjusted inflation rate for November 2017, the difference in November's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the unadjusted October 2017 annual inflation rate of 2.04%. Given an early guess of a 0.3% to 0.4% seasonally-adjusted monthly gain in November CPI-U, that would leave the annual CPI-U inflation rate for November 2017 at about 2.2%, plus-or-minus.

Retail Sales—Nominal and Real (November 2017). The Census Bureau will release its "advance" estimate of November 2017 nominal (not-adjusted-for-inflation) Retail Sales on Thursday, December

14th. Detail on both the nominal and real (adjusted-for-inflation) Retail Sales will be discussed in *Commentary No. 926* of December 15th. With some pullback from hurricane-bloated activity in September and October 2017—particularly with some easing of replacement demand for storm-ravaged motor vehicles—headline aggregate nominal retail sales activity should be flat-to-minus, with real month-to-month activity in contraction, net of inflation. Odds favor reporting coming in on the downside of consensus expectations for this first of the two key Holiday Season months in 2017.

Beyond lingering hurricane disruptions, per the *Consumer Liquidity Watch*, without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for an income shortfall, the liquidity-strapped U.S. consumer remains unable to sustain growth in regular, broad economic activity, including personal-consumption expenditures and retail sales, real or otherwise. Those liquidity circumstances likely have been exacerbated, temporarily, by hurricane disruptions.

Index of Industrial Production (November 2017). The Federal Reserve Board will publish its estimate of November 2017 Industrial Production on Friday, December 15th, with coverage in *Commentary No. 926* of that date. Where recent monthly activity was boosted by recovery from hurricane disruptions to petroleum production and spiked by factors such as production of replacement automobiles for storm-destroyed vehicles, fundamental trends still are to the downside and should recover dominance of the system in the month and months ahead. Accordingly, November production has a good shot of a fall-back catch-up in production, with continuing non-recovery in the manufacturing sector. Nonetheless, consensus expectations likely will be on the upside for November production, and likely will be disappointed by the headline results.