

**COMMENTARY NUMBER 903**

**Labor Conditions, Construction Spending, Trade Deficit, Money Supply M3**

**August 7, 2017**

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**Unemployment Remained Well Shy of Common Experience;  
U.3 at 4.3% in 2017 Is Not the Same as the 4.3% Circumstance in 2001**

**July 2017 Unemployment Rates Effectively Were Unchanged:  
U.3 Eased to 4.35% (4.3497% Rounds to 4.3%) from 4.36% (Rounds to 4.4%),  
U.6 Eased to 8.57% from 8.59%, and the ShadowStats-Alternate Held at 22.1%**

**Annual Payroll Growth Notched Lower to 1.50%, a  
Level Common at the Onset of Recessions**

**Private Jobs Surveying Showed Renewed Collapse in July 2017**

**Headline Annual Growth in Inflation-Adjusted, Real Take-Home Pay,  
Formally Per Capita Real Disposable Income, Revised Sharply Lower**

**Real Annual Growth in June 2017 Construction Spending  
Turned Negative in a Manner Last Seen During the Housing Collapse of 2006**

**Shy of Recovering Its Pre-Recession Peak by 23.1% (-23.1%),  
Real Construction Spending Has Shifted to Down-Trending from Low-Level Stagnation**

**Second-Quarter 2017 Real Merchandise Trade Deficit Widened versus First-Quarter;  
Most-Recent Four Quarters of Real Deficit Were Worst Since 2007**

**Money Supply M3 Annual Growth Rose to 3.2% in July from 3.1% in June**

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*PLEASE NOTE: The next regular Commentary, planned for Friday, August 11th, will cover the July Consumer and Producer Prices Indices (CPI and PPI), along with an updated review on the financial markets, the economy and evolving FOMC circumstances. Given the amount of expanded new material to be covered, the missive could go into the weekend.*

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

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**Today's Opening Comments and Executive Summary (August 7th).** The *Opening Comments* reviews several signals for an unfolding recession, including a downside shift in June real headline construction spending, deepening annual contractions in The Conference Board Help Wanted OnLine<sup>®</sup> (HWOL) for July 2017, and some benchmark-revised detail to real disposable personal income, along with related impact on domestic politics and FOMC policy. The *Executive Summary* (page 8) highlights details and provides background graphs on the headline reporting of July employment and unemployment, June construction spending and the June trade deficit.

The *Reporting Detail* (page 22) provides extended analysis and graphs of the latest labor, construction spending and trade details.

The *Hyperinflation Watch* (page 52) reviews the headline July 2017 annual growth rate estimate for the ShadowStats ongoing M3 money supply measure, along the headline M2 and M1 Federal Reserve measures, along with a quick look at the latest Monetary Base graphics.

The *Consumer Liquidity Watch* (page 55) is unrevised from its prior version.

The *Week, Month and Year Ahead* (page 65) provides links to recent *Commentaries* and previews this week's releases of the July CPI and PPI.

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## OPENING COMMENTS AND EXECUTIVE SUMMARY

**Real World, Negative Economic News Intensified, Despite Heavily-Gimmicked GDP and Labor Numbers: Mounting Political and Policy Issues for the Administration and the FOMC.** With headlines such as the unemployment rate at a sixteen-year low and GDP growth purportedly on the rise, it is understandable that the current Administration takes credit for the good news. The problems with that, however, are twofold. First, most of the better-quality, underlying economic series show that headline economic activity never recovered fully from the collapse into 2009, having yet to reach the status of "Economic Expansion" (see [Commentary No. 876](#)), and they are turning down anew. Headline labor and GDP eventually will come into line with underlying reality. Second, the U.S. economy does not change direction quickly, usually with a time-lag of nine-to-twelve months, often more.

Accordingly, whatever is happening in the current economy largely still reflects circumstances in place during the prior Administration. That will change within the next four-to-six months, in time for the current Administration to receive credit for a new recession that already is in play. Similar circumstances were seen where the 2001 recession came out of the Clinton Administration and was credited to the Bush Administration, where the 2007 recession and economic collapse unfolded during the Bush

Administration and was taken on by the Obama Administration and now, in its residual, re-intensifying form, has been passed on to the Trump Administration.

The President always needs to exude optimism, but rather than taking credit for turning the economy around, prudent caution on what lies ahead and intensified pressure on Congress to generate new economic stimulus might make some sense. Such is irrespective of Congressional reluctance to respond positively to what appears to have been a rather significant cry for economic help from the U.S. electorate in 2016. Political Washington and Congress need to consider that the electorate's cry for help likely will not have abated and will not have been forgotten by the 2018 Congressional elections.

***Real World Economic Activity Remains Well Removed from GDP and Employment/Unemployment Headline Gains.*** How can the latest headline Gross Domestic Product (GDP) and Payroll and Unemployment-Rate data appear to be on the plus-side of expanding economic activity, when the underlying headline numbers for Industrial Production, Construction, Retail Sales and the Trade Deficit broadly continue to appear to be in non-recovery from the economic collapse into 2007, with current activity stagnant or deteriorating anew? Simply put, the GDP heavily is gimmicked to the upside in its headline detail (see prior [Commentary No. 902-B](#)), while headline payroll employment is boosted artificially by significant upside-bias factors, with headline unemployment kept in check by not accounting adequately for “discouraged” workers (see the comments in the later *Executive Summary* and *Reporting Detail* sections). Also for background and perspective, consider [Special Commentary No. 885](#), entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*.

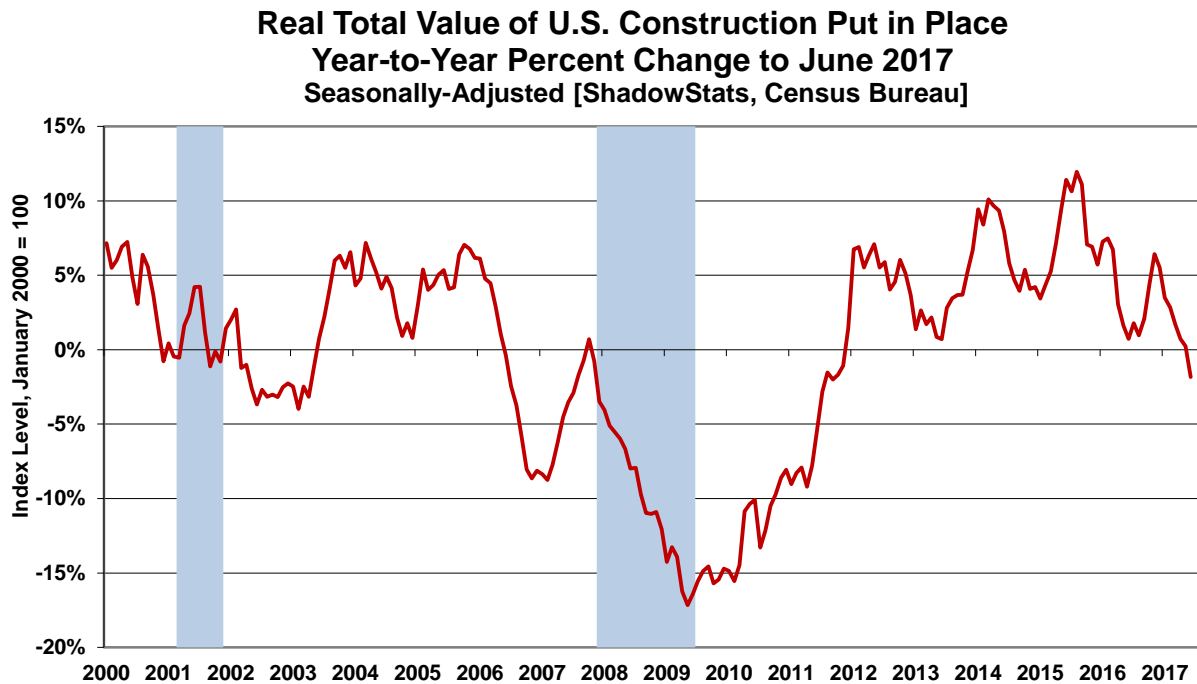
Individuals and businesses—including the banking system—have to operate and survive under real-world economic circumstances. Beyond shifting their circumstances to adjust for underlying economic and liquidity issues, individuals will express their views on underlying economic reality at the voting booth, again, as seen in the 2016 U.S. presidential election. Businesses, small and large, see the real world in their sales and profits, or lack of same, and respond strategically as best they can. Some businesses are in circumstances where they legally are able to enhance their apparent financial performance in order to help placate shareholders, lenders, regulators and/or the equity markets. Separate from a variety of accounting gimmicks, consider share buybacks, for example, which, aside from often reflecting a legitimate financial strategy, have the effect of boosting headline per-share measures such as earnings and revenue.

***Impact on Banking-System Solvency and FOMC Policy.*** Underlying economic reality also directly impacts banking-system solvency, and that “solvency” circumstance was and remains the primary driving force behind the Federal Reserve's Federal Open Market Committee (FOMC) monetary policies from at least the Panic of 2008, to date. Solvency issues not only drove the initial concept and expansion of Quantitative Easing, but also now, in the context of the FOMC heavily touting the purported current economic expansion, using such as an excuse to raise the federal funds rate.

As discussed recently here (see [Commentary No. 899](#)), and as will be reviewed in pending *Special Commentary No. 904*, a renewed downturn in the economy should intensify systemic-solvency anew, driving the FOMC back into expanded Quantitative Easing. That likely would include a halt in the pattern of raising the federal funds rate and a reversal in plans to reduce the scope of the Federal Reserve's balance sheet. The aftershocks of such a circumstance would reflect a massive sell-off in the U.S. dollar—a massive dollar debasement—accompanied by surging U.S. inflation and parallel jumps in the prices of physical gold and silver. Again, all that will be reviewed in the forthcoming missive.

**Real Construction Spending Makes a Clear Turn Towards Deepening/Renewed Recession.** As seen in *Graph 1* (see also *Graph 29* and related discussion the *Reporting Detail*), June 2017 inflation-adjusted real activity turned negative year-to-year, down by 1.8% (-1.8%), turning down for the first time since October 2017 [a year-to-year drop then of 0.7% (-0.7%)], just before the formal onset of the recession in December 2007. Yet, where that October 2007 move followed a minimal upside blip in annual growth into positive territory, the June 2017 drop to the downside was of a magnitude last seen in July 2006, in the midst of the housing collapse. The signal here in this often highly volatile series is of an unfolding downturn in broad economic activity that bears close monitoring in the months ahead.

**Graph 1: Total Real Construction Spending, Year-to-Year Percent Change**  
(Same as Graph 29 in the Reporting Detail)



**Intensifying Signal of Deepening/Renewed Recession Out of Private Surveying.** 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. Recent details of, and related benchmark revisions to, a number of economic indicators have indicated ongoing, non-recovery or renewed downturn in the post-2007 economic collapse period, with “unexpected” headline weakness seen in a variety of major economic series (see [Commentary No. 902-B](#) and [Commentary No. 900](#)).

Beyond various private and public alternative measures to the federal government’s headline employment, unemployment and GDP reporting, discussed in [No. 859 Special Commentary](#), The Conference Board’s Help Wanted OnLine® (HWOL) measure simply is one of the best leading indicators—private or public—of economic activity. The just-published HWOL reading for July took renewed, sharp monthly and annual tumbles. Such generated, once again, an intensified and continuing signal of imminent economic downturn or otherwise deepening non-recovery, as reviewed here.

***The Conference Board Help Wanted OnLine<sup>®</sup> Advertising, July 2017.*** The HWOL concept certainly has proven itself over the last century, in the context of the preceding concept of measuring help-wanted advertising in newspapers. The current on-line series tracked the economic collapse into 2009, coincident 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 recently 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 July 2017 (published August 2nd). 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.

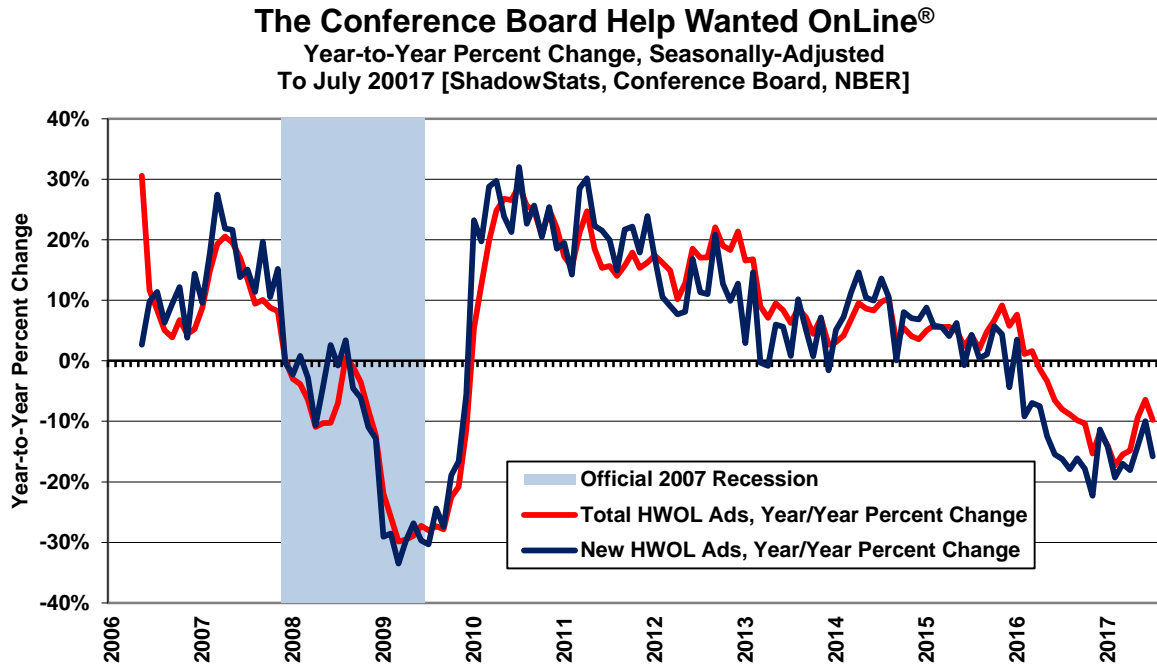
Many thanks to The Conference Board for permission to publish the following graph of year-to-year change in its *Help Wanted OnLine<sup>®</sup>* data. The annual percentage change is plotted for two series: Total Ads (red line) and New Ads (blue line). Where, “Total ads are all unduplicated [online] 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<sup>®</sup>](#).

The tracked seasonally-adjusted monthly measures have declined year-to-year in each of the last sixteen months for the total ads, and in each of the last eighteen months (nineteen of the last twenty months) for the new ads, including July 2017. Although the annual decline had narrowed in the last several months, annual change generally has continued to sink, along with a deepening downturn in July 2017 as seen in *Graph 2*. 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.

With July 2017 “Total Ads” and “New Ads” counts down year-to-year respectively by 9.8% (-9.8%) and 13.8% (-13.8%), the annual contractions have hit depths last seen going into the trough of the business collapse into 2009/2010. Month-to-month changes have been irregular, down in thirteen of the last twenty months for the “Total” and down eleven out of the last twenty months for the “New.” Both series showed month-to-month declines in the seasonally-adjusted July 2017 detail.

While much of this text is repetitive of prior discussions in [Commentary No. 890](#), [No. 852](#) and [No. 820](#), the detail is updated for the latest information. These comments and analysis remain mine alone, not those of The Conference Board.

**Graph 2: The Conference Board Help Wanted OnLine® to July 2017**



**Historical Background.** 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 as a formal recession, when the annual change in the index contracted by 15% (-15%) or more.

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 (again, 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, updated on August 4th of the headline July 2017 detail (covered in today’s *Executive Summary* and *Reporting Detail*), 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 2016 payroll-survey benchmarking. See the discussions in [Special Commentary No. 885](#), [Commentary No. 864](#) and the *Birth-Death/Bias-Factor Adjustment (BDM)* section in the today’s *Reporting Detail*. Separately, the BLS has announced it will publish its preliminary 2017 benchmark-revision numbers for the payroll data on September 6, 2017, subsequent to the headline regular headline reporting of August 2017 payrolls on September 1st.

**Benchmarked Real Annual Disposable Income Growth Slowed in a Manner Consistent with Recession.** In the August 1st, second round of annual benchmark revisions to the National Income Accounts, Personal Income and related real Disposable Personal Income (DPI), effectively take-home pay, net of taxes, were revised at the monthly level back through 2014. Those measures are components of or related to Gross Domestic Income (GDI), which is the theoretically-equal, income-side measure of the U.S. economy, to the consumption-side’s Gross Domestic Product (GDP) measure. ShadowStats plans to review the Income series fully, upon the release of the initial second-quarter estimate of the GDI on August 30th. Nonetheless, the annual benchmarking to the quarterly GDI series was unusually violent, as discussed in prior [Commentary No. 902-B](#) and reflected there in *Graphs 4 to 6*.

**Growth Revised Sharply Lower for Real Per Capita Disposable Income (Take Home Pay).** The nominal and inflation-adjusted real growth rates in these headline numbers broadly are overstated against common experience, heavily bloated by a variety of underlying assumptions and reporting gimmicks. Specific to the real numbers is the understatement of inflation used in calculating the real GDP and the related real DPI (see the GDP background discussion in [Commentary No. 902-B](#)). Accordingly, when the headline detail signals a recession, the likelihood is that underlying economic reality already is in one.

Consider the following sampling of data. Pre-benchmarking, Real Per Capita Disposable Personal Income (DPI)—effectively the average level of inflation-adjusted, individual take-home pay—by rose by a sub-standard, headline 1.92% in calendar year 2016. That detail was weak enough (below 3.0%) to indicate voters would tend to turn against the incumbent party in the 2016 presidential election, which they did. Post-benchmarking, the headline real annual growth in 2016 revised lower to 0.69%, from the previous estimate of 1.92%.

Circumstances have not improved. Pre-benchmarking, year-to-year real growth in first-quarter 2017 was headlined at 1.11%. Post-benchmarking, that revised to 0.20%, with second-quarter 2017 reported showing an initial estimate of 0.51% (full monthly detail has not been published). As now reported, headline real year-to-year growth in Per Capita DPI hit a peak of 4.17% in fourth-quarter 2014 and declined steadily to a trough in fourth-quarter 2016, with an annual contraction then of 0.45% (-0.45%). While there are a number of issues with these series, including variability with shifting tax policies and

payroll-tax deductions, current real growth levels and circumstances are consistent with periods of historical recession, despite the relatively happy, near-term headline GDP and employment reporting.

**EXECUTIVE SUMMARY: Employment and Unemployment—July 2017—Continued Recession Signaled in Annual Payroll Growth; Unemployment Detail Remained Far Shy of Common Experience.** In the continuing context of reporting distortions out of the Bureau of Labor Statistics (BLS), discussed in [Special Commentary No. 885](#), entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play* (incorporated here by reference), underlying reality in labor conditions is much weaker than popularly touted. Despite the stronger-than expected headline gain in July 2017 payrolls, ongoing low levels of year-to-year growth continued to signal pending recession, as reviewed later in the *Reporting Detail*. Separately, major distortions continued in the underlying measurement, definition and reporting of the headline unemployment rate, with the effect that the related numbers remain well removed from common experience, as discussed in this *Executive Summary* and in the context of the *ShadowStats-Alternate Unemployment Rate Measure* discussion on page 37.

Specifically, the headline monthly payroll jobs gain of 209,000 in July 2017 likely was near unchanged, plus-or-minus, in reality, while the headline 4.35% July 2017 unemployment rate remained far short of reflecting common experience. In contrast, the July 2017 ShadowStats-Alternate Unemployment Rate was estimated to have held at 22.1%. Extended assessment of headline distortions in the payroll-employment and household survey reporting, again, is found in [Special Commentary No. 885](#).

**Payroll Survey: Continued Weakening Growth Signaled New Downturn.** In the context of mixed prior-period revisions, continued heavily-distorted bloating, unstable seasonal adjustments and inconsistent benchmarkings, seasonally-adjusted headline July 2017 payrolls showed a stronger-than-expected monthly gain of 209,000 jobs. That followed an upwardly-revised monthly gain of 231,000 in June and a largely offsetting downside to 145,000 in May. The revised monthly gain in May, however, was not reported on a comparable basis with the headline July 2017 and June. Net of prior-month revisions, July 2017 payrolls rose by 211,000, instead of the headline 209,000.

**Collapsing Annual Growth Still at Levels Seen Only Going Into or Coming Out of Recession.** The not-seasonally-adjusted, year-to-year growth in July 2017 nonfarm payrolls declined minimally to 1.50%, versus a 1.53% in June, 1.56% in May 2017 and versus 1.43% in April 2017. That annual growth of 1.43% in April 2017 hit a 68-month low, the weakest since August 2011, and at that time, it was the highest growth seen coming out of the economic collapse into 2009. Before that, the same growth rate was last seen as annual growth slowed going into the 2007 recession, signaling the pending recession.

**Household Survey: Thank Goodness for Unemployment-Reporting Precision of +/- 0.0007%.** One should not get too excited about the headline U.3 unemployment rate dropping to a sixteen-year low of 4.3% in July, from 4.4% in June, although that low rate also was seen in May 2017. At the second decimal point, the decline was from 4.36% to 4.35%, with the 4.35% rounding to 4.3%. Where the unemployment count in these numbers is measured in increments of 1,000, given the next higher incremental level of 4.707 million seasonally-adjusted unemployed in July 2017, instead of the headline 4.706 million, headline unemployment would have rounded to and held at 4.4%, instead of dropping to the renewed 16-year low of 4.3%.



Discussed later in *The Economy Remains Far From Full-Employment* section, July 2017 was not the same circumstance as May 2001, although both months reflected the same level of headline U.3 unemployment at 4.3%. The July 2017 labor conditions reflected a 4.3% headline U.3 unemployment rate in the context of a 62.9% labor-force participation rate, and a 60.2% employment-population ratio. Those latter measures, just off recent historical troughs, were far from being as happy a situation, or as broadly beneficial to the economy and labor force, as the May 2001 circumstance of 4.3% unemployment. May 2001 enjoyed a much healthier participation rate of 66.7% and an employment-population ratio of 63.8%, both ratios just off their recent historical peaks. Separately, consider that the broader U.6 and ShadowStats unemployment measures were much higher in July 2017 than they were in May of 2001 (see *Graphs 3 to 6*).

***Counting All Discouraged Workers, July 2017 Unemployment Held at 22.1%***. The headline detail on the employment/unemployment news was mixed, as commonly is the circumstance, with the seasonally-adjusted, headline U.3 unemployment rate, again easing back to 4.3% in July, from 4.4% in June and versus the prior 16-year low of 4.3% in May. The number of unemployed declined by 1,000 (-1,000) for the month, in context of the number of employed rising by 345,000. That simply could be a continued distortion in shifting summer employment patterns, yet an increase in the count of those employed could be expected to have somewhat of an offsetting impact on the count of the unemployed. Such generally should be balanced out with proper seasonal adjustments. More likely, though, both July and June, headline details just were skewed, not comparable month-to-month, due to the regular non-comparability of seasonally-adjusted detail, because the headline household survey data are not reported consistently, month-to-month.

The BLS simply refuses to publish consistent monthly details. As usual, the seasonally-adjusted, month-to-month numbers reported with the household survey were neither directly comparable nor meaningful, specifically including comparisons of seasonally-adjusted month-to-month the levels of the unemployment rate and the counts of employed and unemployed. The problem remains that while the headline monthly data for July 2017 were calculated using new seasonal-adjustment patterns unique to July 2017, and the new seasonally-adjusted and comparable data for June 2017 and the months before also were re-calculated, the earlier months' details were not published. Instead, the unique seasonal adjustments based on prior June 2017 calculations were left in place for June, unrevised for the July-based seasonals, and the unique seasonal adjustments based on the initial May 2017 calculations were left in place, unrevised for June or July. Standardly, the month-to-month comparisons of the seasonally-adjusted, headline Household Survey data simply are not comparable, as reviewed further in *Headline Distortions from Shifting Concurrent-Seasonal Factors* in the *Reporting Detail*.

Discussed frequently in these *Commentaries* on monthly unemployment conditions, what removes headline-unemployment reporting from common experience and broad, underlying economic reality, simply is definitional. To be counted among the headline unemployed (U.3), an individual has to have looked actively for work within the four weeks prior to the unemployment survey. If the active search for work was in the last year, but not in the last four weeks, the individual is considered a “discouraged worker” by the BLS and not counted in the headline labor force.

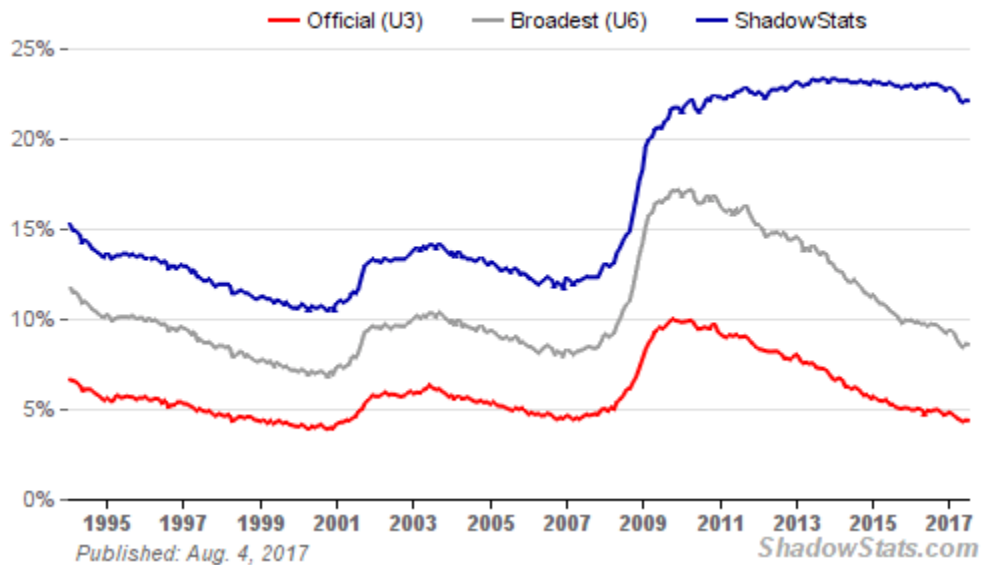
ShadowStats defines that group as “short-term discouraged workers,” as opposed to those who, after one year, no longer are counted by the government. Instead, they enter the realm of “long-term discouraged workers,” those displaced by extraordinary economic conditions, including regional/local business activity affected negatively by trade agreements or by other factors shifting U.S. productive assets

offshore, as defined and estimated by ShadowStats (see the extended comments in the *ShadowStats Alternate Unemployment Measure* in the *Reporting Detail*).

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

**Unemployment Rate - Official (U-3 & U-6) vs ShadowStats Alternate**

Monthly SA. Through July 2017 (ShadowStats, BLS)



*Graph 3* reflects headline July 2017 U.3 unemployment at 4.35% (rounds to 4.3%), versus 4.36% in June, versus 4.29% in May and 4.40% in April; headline July 2017 U.6 unemployment at 8.57%, versus 8.59% in June, 8.41% in May and 8.57% in April; and the headline July 2017 ShadowStats unemployment estimate holding at 22.1%, the same as in June, versus 22.0% in May and 22.1% in April.

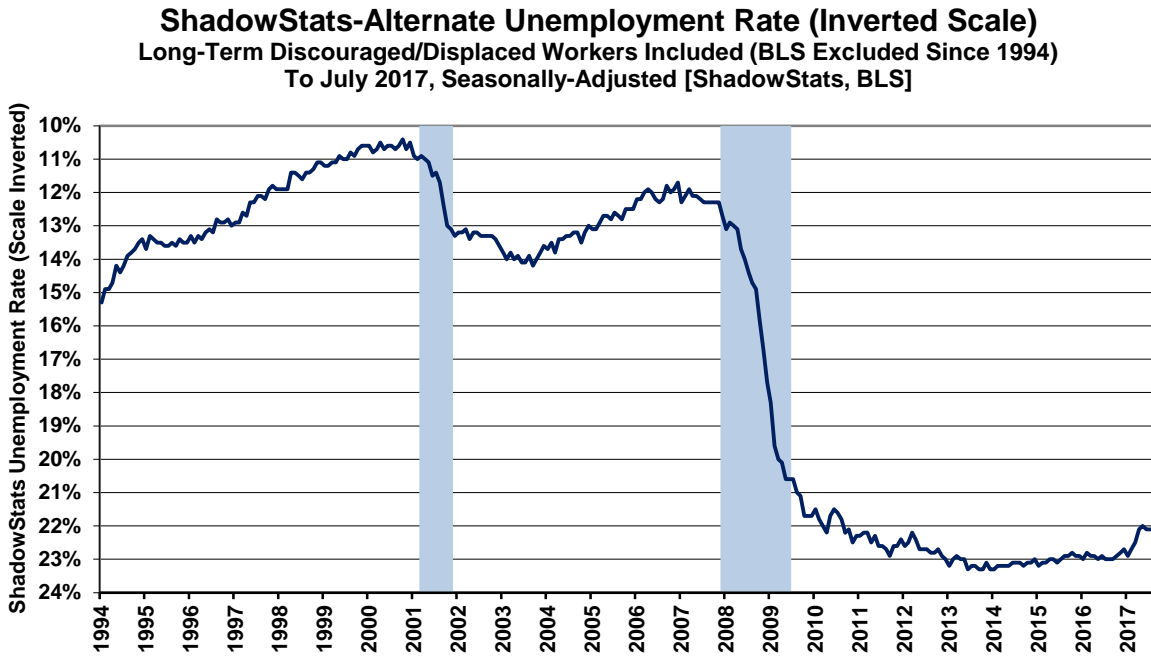
***Dysfunctional, Seasonally-Adjusted Headline Detail from the Household Survey.*** With the headline U.3 unemployment rate closing in again on historic low levels, systemic imbalances and instabilities are reflected in the labor-force participation rate (labor force/population) and the employment-to-population ratio (headline employment/population), which also are just off historical lows. Yet, in a purportedly healthy, growing economy, those ratios should be approaching historical highs, not near historic lows (see *Graphs 5 and 6*). Discussed in the following section *Economy Remains Far From Full-Employment*, the current low level of the participation rate is broadly consistent with a headline U.3 unemployment rate of about 9.0%, more than double July's headline rate of 4.3%.

*Graphs 4 to 6* reflect longer-term unemployment and discouraged-worker conditions. *Graph 4* 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.

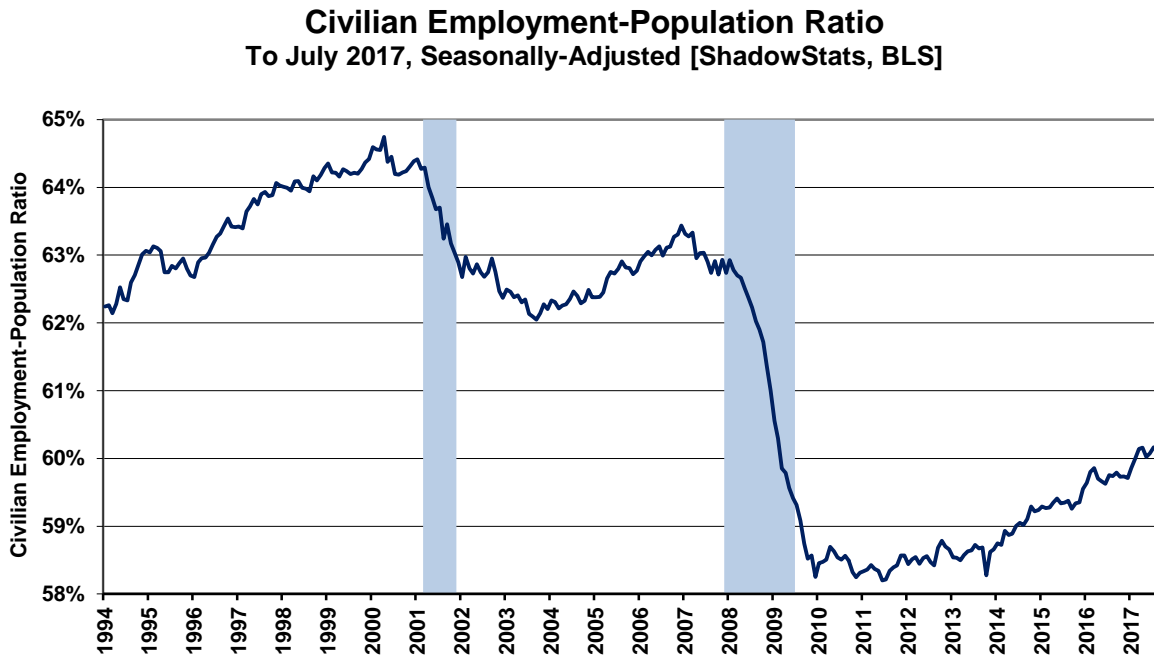
The inverted-scale of the ShadowStats unemployment measure also tends to move with the employment-to-population ratio, which had turned slightly weaker in second-half 2016, but recently had been in an uptrend in 2017, along with monthly jumps and month-to-month inconsistencies in headline employment and the recently rejiggered population numbers (see [Commentary No. 864](#)). That ratio notched higher in July 2017 to 60.2, versus 60.1 in June, 60.0 in May and 60.2 in April. 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 5*.

**Graph 4: Inverted-Scale ShadowStats Alternate Unemployment Measure**



**Graph 5: Civilian Employment-to-Population Ratio**



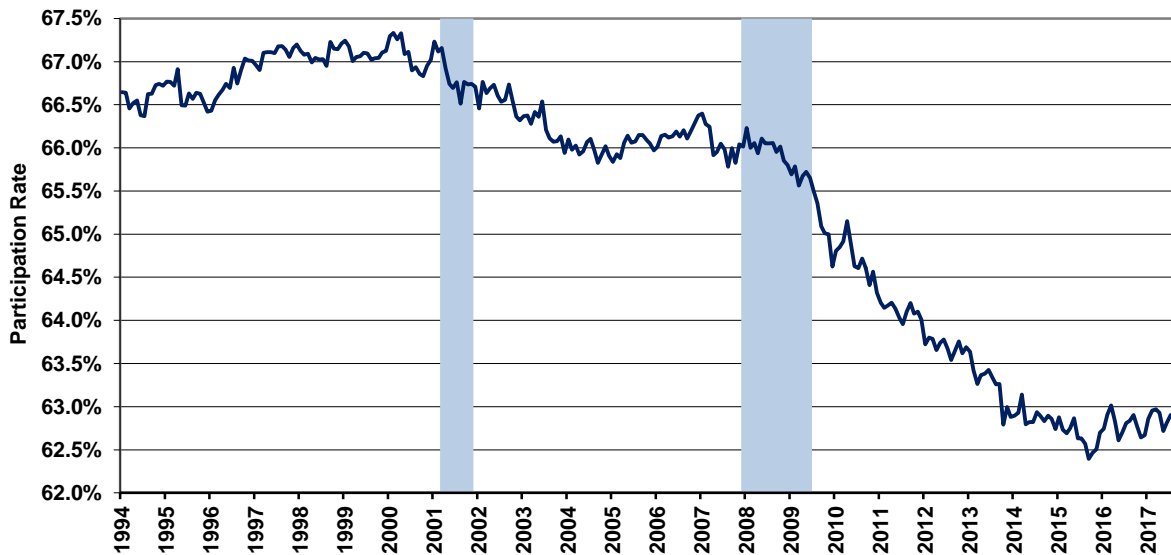
The labor force containing all unemployed (including total discouraged workers) plus the employed, however, tends to be correlated with the population, so the employment-to-population ratio remains something of a surrogate indicator of broad unemployment, and it has a strong correlation with the ShadowStats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

Shown in *Graph 6*, the July 2017 participation rate (the ratio of the headline labor force to the population) also notched higher to 62.9%, 62.8% in June, 62.7% in May and 62.9% in April, having been fluctuating shy of the 63% mark for the last year. Both the Employment-to-Population Ratio and the Participation Rate appear to have suffered near-term spikes and volatility from the population redefinitions in January 2016, but fell off again in the second half of 2016, only to spike again in the environment of the January 2017 population redefinitions, again falling off thereafter.

The Participation-Rate—one measure that publicly had been followed closely and touted frequently by Fed Chair Janet Yellen before the recent tightening actions by the Fed—remains off the historic low hit in September 2015 (again, pre-1994 estimates are not consistent with current reporting). The labor force used in the Participation-Rate calculation is the headline employment plus U.3 unemployment. As with *Graph 5* of employment-to-population ratio, its holding near a post-1994 low in current reporting indicates problems with long-term discouraged workers. Their swollen ranks generally have continued to depress the headline (U.3) labor force, and the plotted ratios.

**Graph 6: Labor-Force Participation Rate**

**Participation Rate [Labor Force as a Percent of Population]  
To July 2017, Seasonally-Adjusted [ShadowStats, BLS]**



*Graphs 3* through *6* 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 4.3% at the moment) reflects 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 July 2017 headline unemployment rate of 4.3%, for example was in the context of a 62.9% participation rate. That participation rate, though, was more consistent with a headline unemployment rate (U.3) of 9.0% instead of the headline 4.3%. 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 80% above the hyped 5.0% full-employment unemployment rate, and more than double the current headline U.3 number.<sup>1</sup>

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, 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 4 to 6* (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. 902-B](#). Some of those series are updated in this section.

Consider *Graph 7*, which shows the ShadowStats version of the GDP, also plotted from 1994 but through the July 28th initial estimate of second-quarter 2017 and accompanying benchmark revisions, where the GDP plot here has been corrected for the understatement of inflation used in deflating the headline GDP series (further detail and a description of the approach and related links, again are found in prior [Commentary No. 902-B](#)).

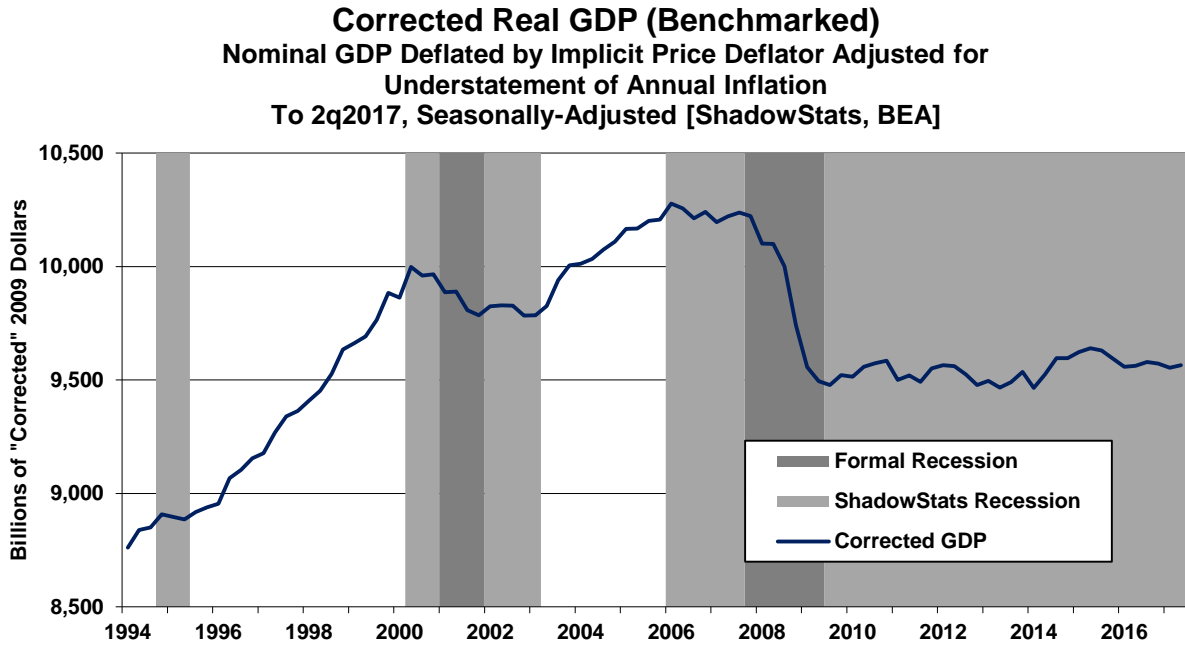
Other graphs (again, see [No. 859](#)) range from the CASS Freight Index (*Graph 8*) to Real S&P 500 Revenues adjusted for share buybacks (*Graph 9*), and include U.S. Petroleum Consumption (*Graph 10*), the Consumer Goods sector out of June 2017 Industrial Production (*Graph 11*) and June 2017 Housing Starts (*Graph 12*), respectively out of [Commentary No. 899](#) and [Commentary No. 900](#). A similar pattern is seen in real Construction Spending (see *Graph 28* in today’s *Reporting Detail*).

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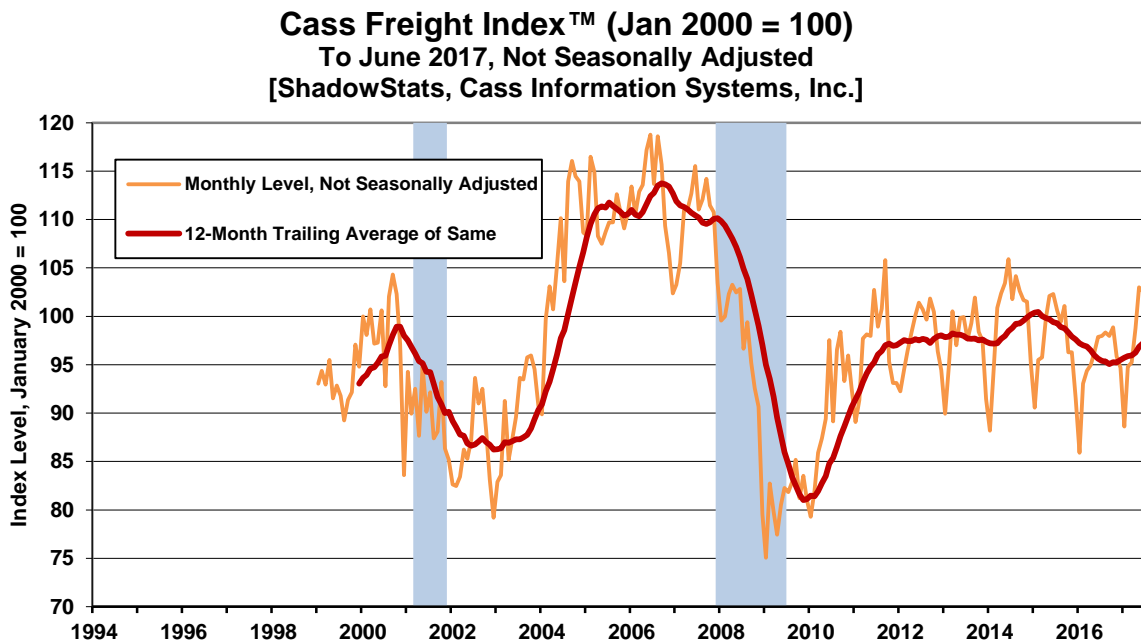
<sup>1</sup> Consider with the July 2017 population of 255.151 million, that the implied labor force at a full-employment participation rate of 66.0% would be  $0.66 \times 255.151 = 168.400$ . That labor force less current headline employed,  $168.400 - 153.168 = 15.232$  million implied unemployed / labor force of  $168.400 = 9.0\%$  unemployment. The problem with the assumptions underlying these numbers and concept, again, remains that the economy is not at full employment, as has been claimed.



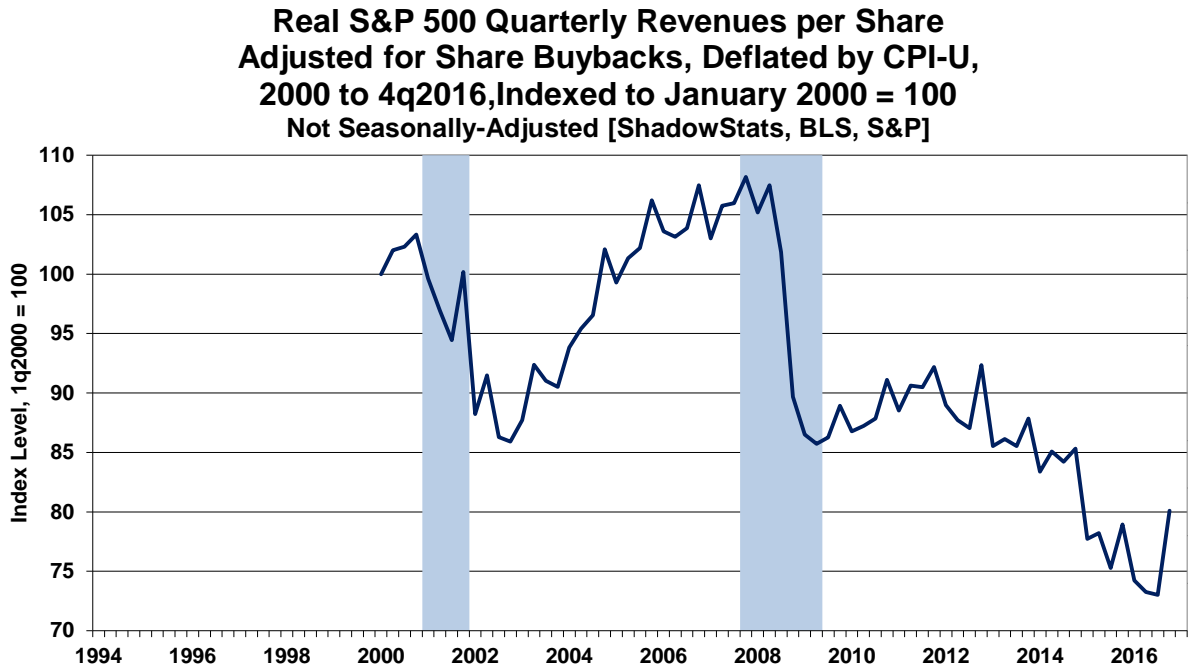
**Graph 7: Corrected Real GDP through 2q2017, First Estimate**



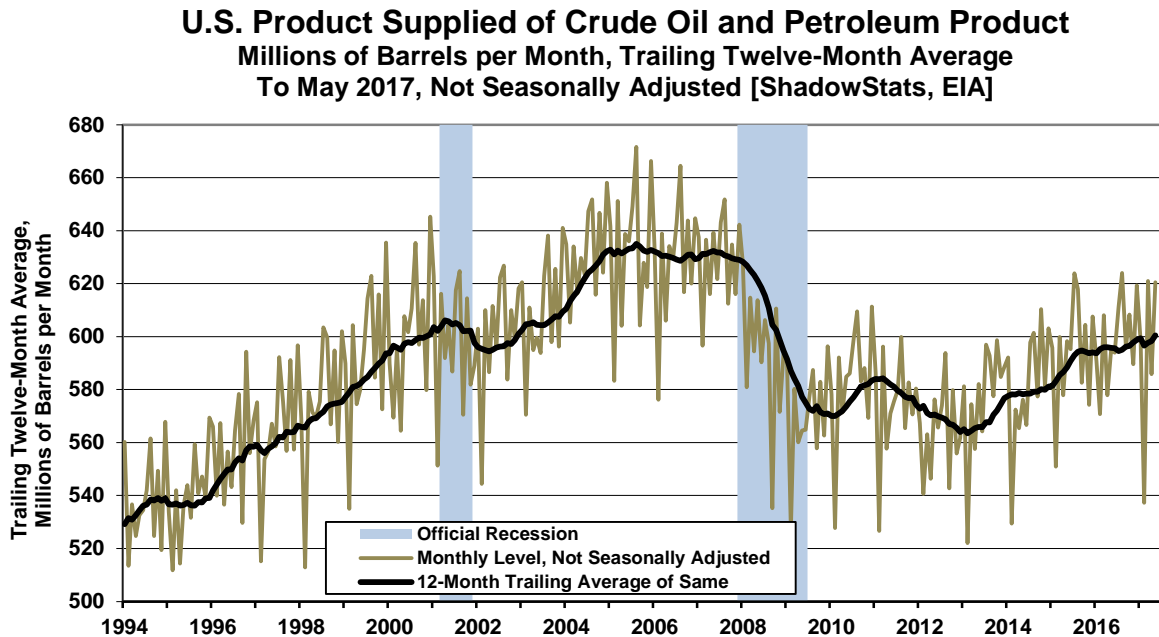
**Graph 8: CASS Freight Index for North America (2000 – June 2017), Indexed to January 2000 = 100**



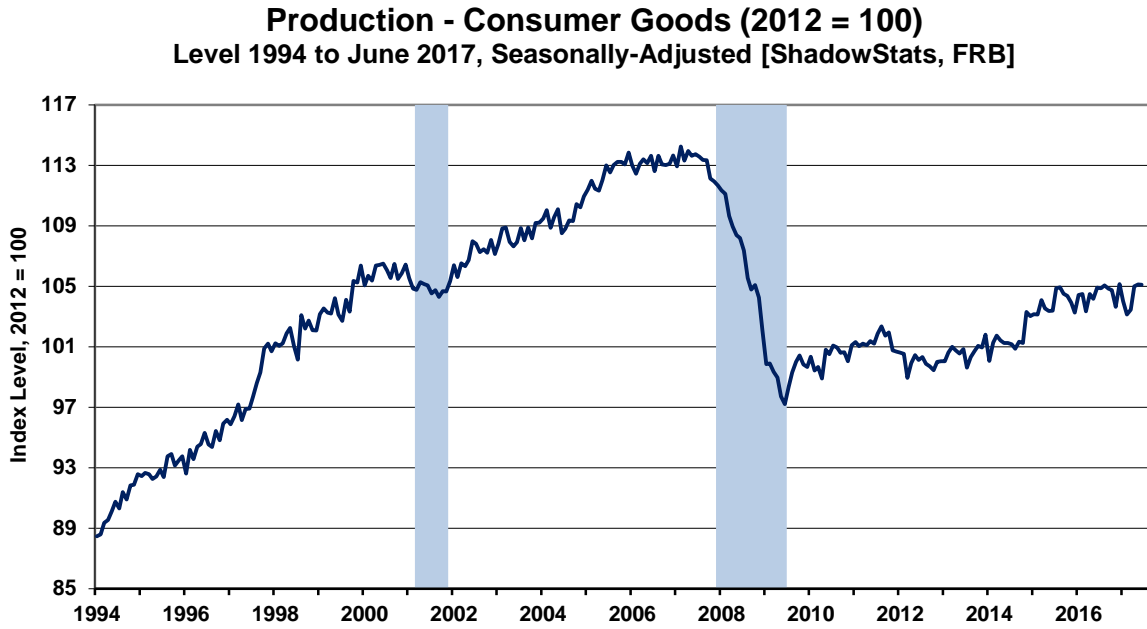
**Graph 9: Real S&P 500 Sales Adjusted for Share Buybacks (2000 - 2016), Indexed to January 2000 = 100**



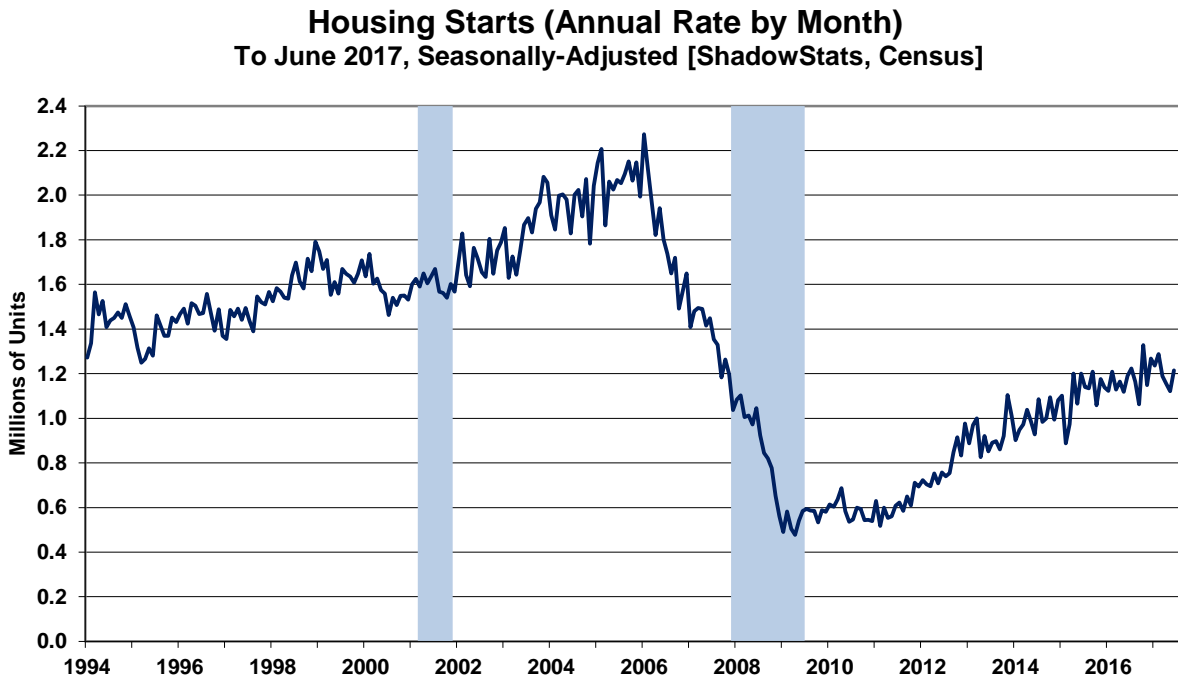
**Graph 10: U.S. Petroleum Consumption to May 2017**



**Graph 11: Industrial Production – Consumer Goods Sector (1994 – June 2017)**



**Graph 12: Housing Starts, Annual Rate by Month (1994 – June 2017)**



**Headline Unemployment Rates.** Again, in the context of the non-comparability of month-to-month changes in seasonally-adjusted unemployment detail, the July 2017 unemployment rate (U.3) eased to 4.35% (rounds to 4.3%) from 4.36% in June, versus 4.29% in May, 4.40% in April, 4.50% in March, 4.70% in February and 4.78% in January. On an unadjusted basis, unemployment rates are not revised and, in theory, are consistent in post-1994 methodology. The unadjusted unemployment rate U.3 rose to 4.60% in July 2017 versus 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 a basically flat, seasonally-adjusted July 2017 U.3 unemployment rate, an unadjusted increase in the count of marginally-attached workers of 47,000 and a decline of 44,000 (-44,000) in the adjusted number of people working part-time for economic reasons, the adjusted July 2017 U.6 unemployment rate was 8.57%, versus 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 8.86% in July 2017, versus 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.

**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 July 2017 held at 22.1%, versus 22.1% in June, 22.0% in May, 22.1% in April, 22.5% in March, 22.7% in February and 22.9% in January.

**Construction Spending—June 2017—Real Monthly and Annual Growth Weakened Sharply, Signaling New Recession; Still Shy by 23.1% (-23.1%) of Recovering Pre-Recession Peak.** In the context of last month's annual Construction Spending benchmarking (see [Commentary No. 897](#)) and recent GDP benchmarking that affected the CCD Deflator to Construction Spending (see discussion the *Reporting Detail*), the June 2017 level of activity in this highly volatile series continued in contraction, in the context of downside revisions to both May and April. Discussed in the *Opening Comments*, June activity turned negative year-to-year in a manner not seen since the housing collapse of 2006.

Separately, real second-quarter 2017 now shows the steepest quarterly, annualized contraction in real construction spending since the trough of the formal recession, with the current six-month trend moving from broadly flat to downtrending. Separately, headline real June 2017 activity stands at 23.1% (-23.1%) below its pre-recession high, previously down by 20.7% (-20.7%) in initial May 2017 reporting.

Inflation adjustment here reflects the ShadowStats Composite Construction Deflator (CCD), as discussed in [Commentary No. 829](#) and as detailed in the *Construction Inflation* section of the *Reporting Detail*. Accompanying *Graphs 13 to 16* plot the levels of the aggregate Construction Spending series and major its major subcomponents, in both nominal (before inflation adjustment) and real (after inflation adjustment) terms.

**Headline Reporting for June 2017.** In the context of annual benchmark revisions back through 2014, as reviewed in the *Opening Comments* of last month's [Commentary No. 897](#), the headline, total value of construction put in place in the United States for June 2017 was \$1,205.8 billion on a seasonally-adjusted but not-inflation-adjusted, annual-rate basis.

That estimate was down month-to-month by a statistically-insignificant 1.3% (-1.3%), versus a downwardly-revised \$1,221.6 in May, which gained 0.3% versus downwardly-revised April 2017 spending of \$1,217.7, which in turn was down by 1.8% (-1.8%) from unrevised \$1,239.6 billion spending March 2017. Adjusted for revised CCD inflation, total real spending declined by 1.5% (-1.5%) month-to-month in June 2017, following a gain of 0.1% in May and an April decline of 2.0% (-2.0%).

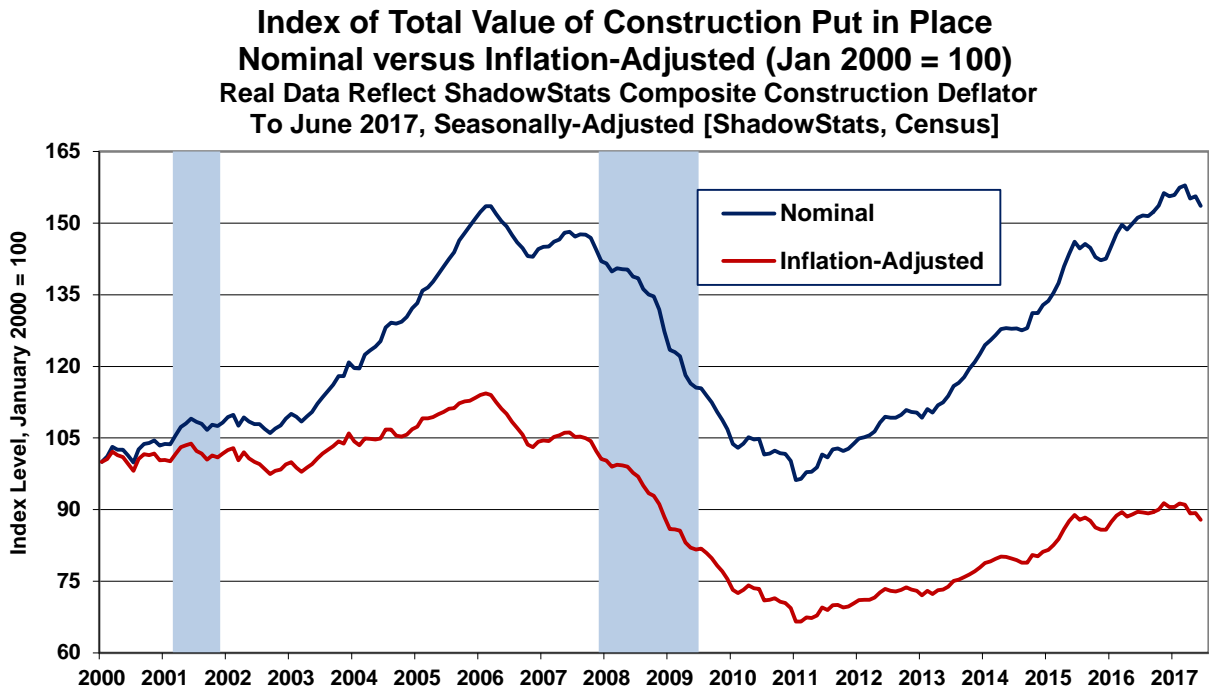
On a year-to-year annual-growth basis, June 2017 nominal construction spending rose by a statistically-insignificant 1.6%, following revised annual gains of 3.8% in April 2017 and 4.4% in March 2017. Net of CCD inflation, the annual growth in total real construction declined by 1.8% (-1.8%) in June 2017, gained 0.2% in May 2017 and 0.7% in April 2017.

See the *Reporting Detail* for the full analysis, including expanded graphs.

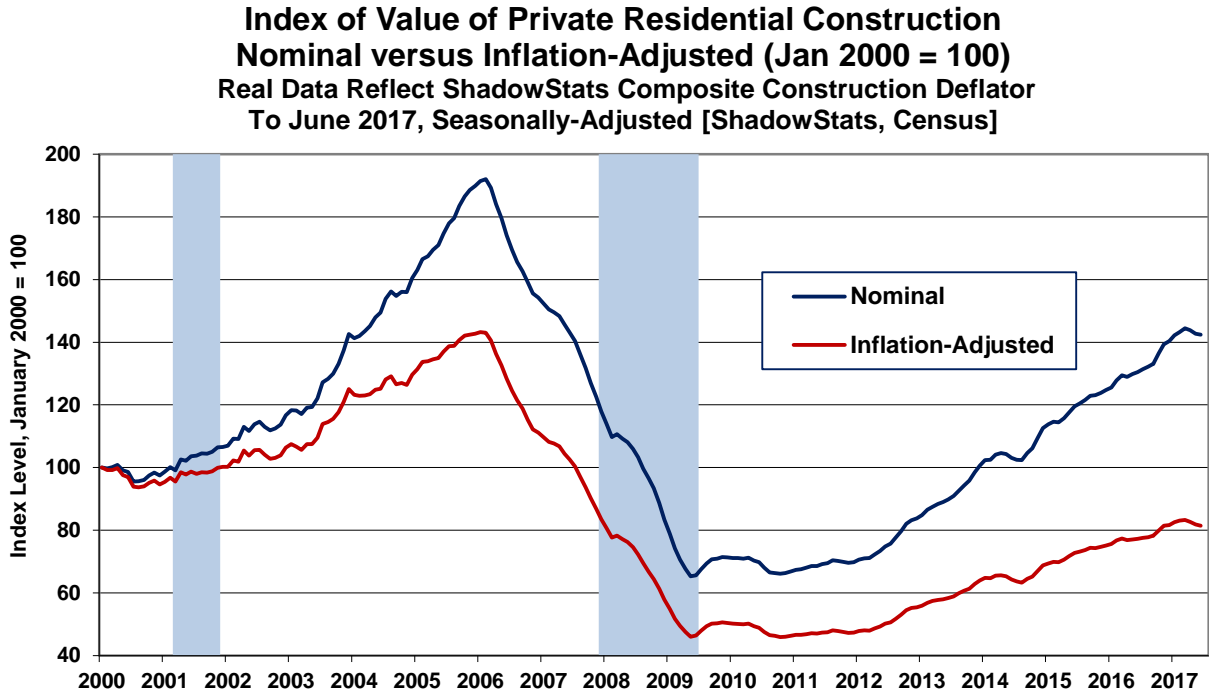
[Graphs 13 to 16 begin on the next page.]



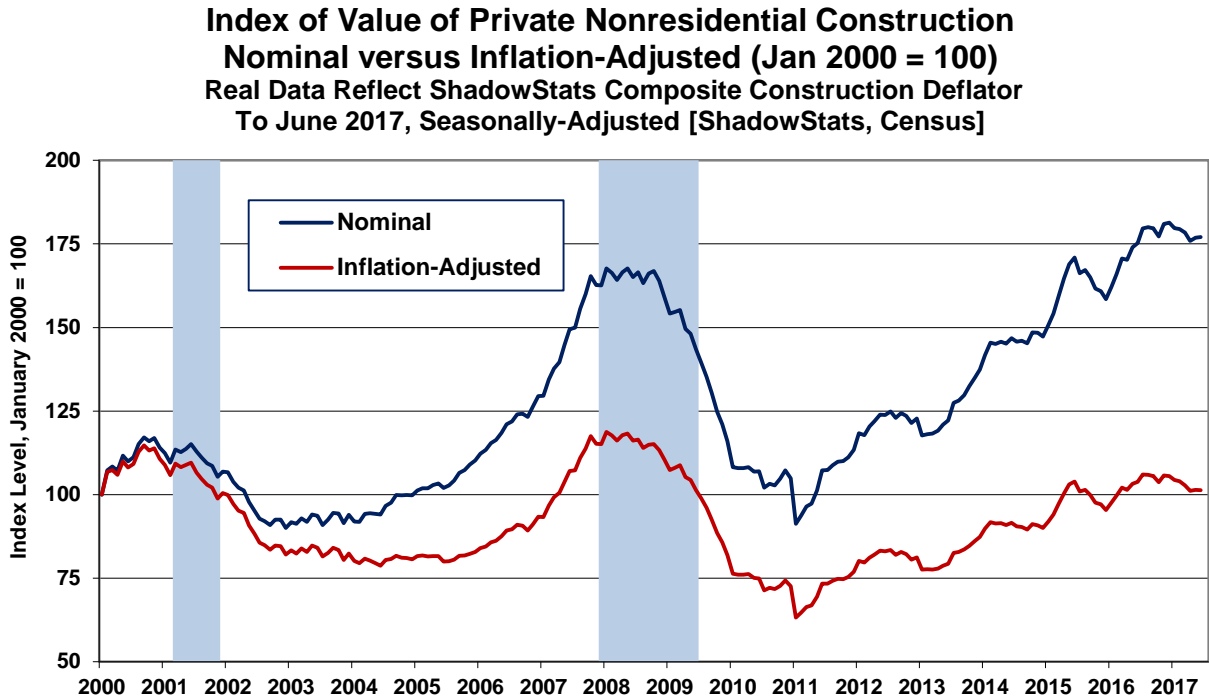
**Graph 13: Index, Nominal versus Real Value of Total Construction**



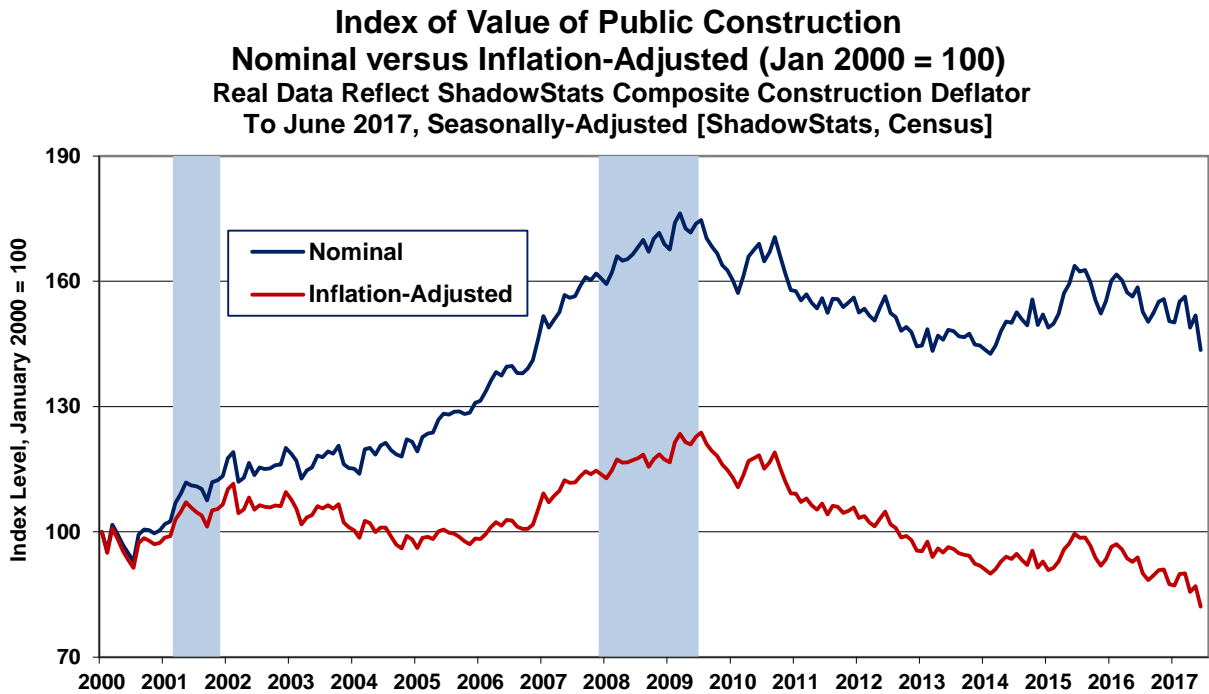
**Graph 14: Index, Nominal versus Real Value of Private Residential Construction**



**Graph 15: Index, Nominal versus Real Value of Private Nonresidential Construction**



**Graph 16: Index, Nominal versus Real Value of Public Construction**

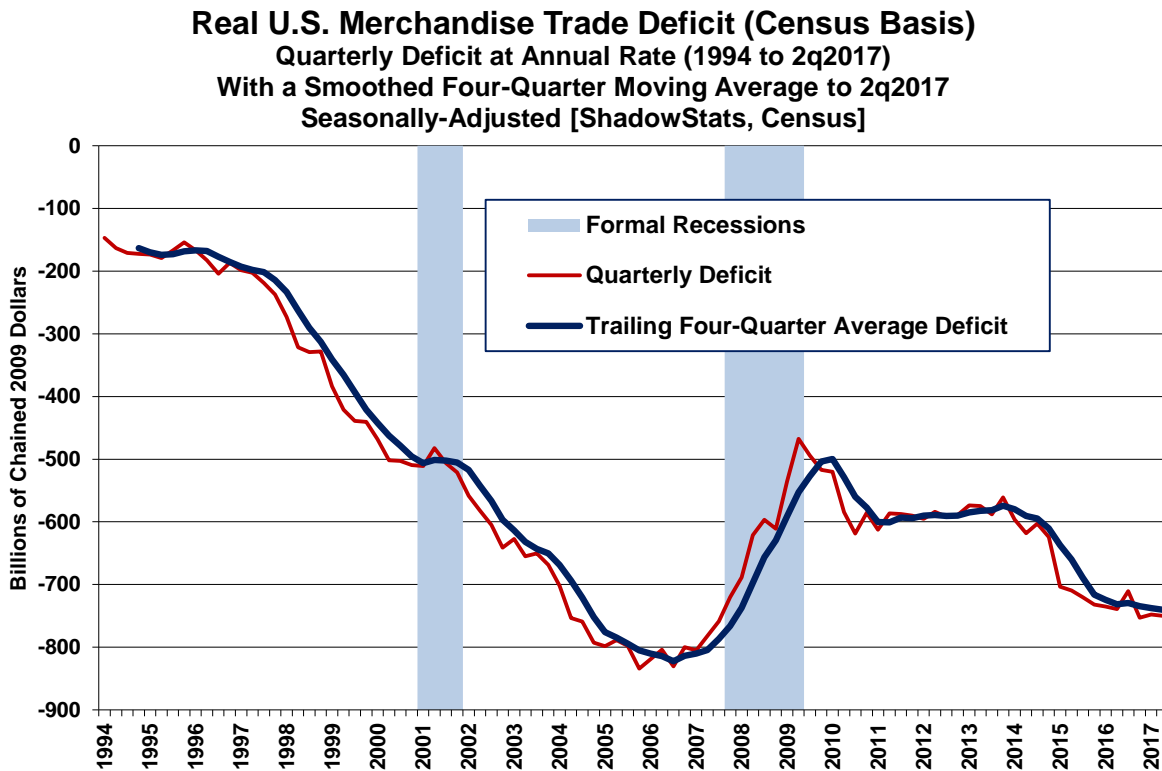


**U.S. Trade Deficit—June 2017—Real Second-Quarter Merchandise Deficit Deepened Versus First-Quarter; Latest Four Quarters of Real Deficit Were Worst Since 2007.** The headline real merchandise trade deficit, widened minimally versus first-quarter activity. In the context of mixed positive revisions to previously-published January to May 2017 monthly detail, the second-quarter 2017 real merchandise trade deficit was not the worst showing in ten years, instead fourth-quarter 2016 retained that title (see accompanying *Graph 17* in *Graph 39* in the *Reporting Detail*). Nonetheless, as can be seen in *Graph 17*, the four-quarter moving average of the real merchandise trade deficit was the worst trade shortfall since 2007 and still broadly an ongoing negative contributor to headline real GDP growth.

**Nominal June 2017 Trade Deficit.** The nominal (not adjusted for inflation), seasonally-adjusted monthly trade deficit in goods and services for June 2017 narrowed on a balance-of-payments basis by \$2.749 billion, to \$43.642 billion, versus a revised deficit of \$46.391 billion in May. The improvement in the monthly deficit reflected an increase of \$2.353 in monthly exports, helped by a minimal decline in imports by \$0.396 (-\$0.396) billion. The headline June 2017 deficit narrowed minimally by \$0.193 billion versus the year-ago \$43.835 billion trade shortfall for June 2016.

See the *Reporting Detail* for more-comprehensive background.

**Graph 17: Quarterly and Trailing Four-Quarter Average Real Merchandise Trade Deficit (1994-2017)**



*[The Reporting Detail contains extended analysis and graphs.]*

## REPORTING DETAIL

### EMPLOYMENT AND UNEMPLOYMENT (July 2017)

**Annual Payroll Growth Is Signaling Recession; Headline Unemployment Detail Remains Far Shy of Common Experience.** Discussed in the *Opening Comments and Executive Summary*, and in the continuing context of the reporting distortions discussed in [Special Commentary No. 885](#), entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*, labor conditions are much weaker than popularly touted. Despite the stronger-than-expected headline gain in July 2017 payrolls, ongoing low levels of year-to-year growth have continued to signal pending recession, as reviewed, again in this *Reporting Detail*. Separately, major distortions continued in the underlying measurement, definition and reporting of headline unemployment, with the effect that the headline details remain well removed from common experience, again as detailed in the *Executive Comments* in the context of the *ShadowStats-Alternate Unemployment Rate Measure* discussion later in this section.

Specifically, the headline monthly payroll jobs gain of 209,000 in July 2017 likely was near unchanged, plus-or-minus, when viewed realistically, while the headline 4.3% July 2017 unemployment rate remained far short of reflecting common experience. In contrast, the July 2017 ShadowStats-Alternate Unemployment Rate was estimated to have held at 22.1%. Extended assessment of headline reporting distortions in the payroll-employment and household surveys is found in [Special Commentary No. 885](#).

**PAYROLL SURVEY DETAIL.** The Bureau of Labor Statistics (BLS) published the July 2017 headline payroll-employment on August 4th. In the context of mixed prior-period revisions, and in the continuing context of heavily-distorted bloating, unstable seasonal adjustments, and inconsistent benchmarking, the seasonally-adjusted, headline July 2017 payrolls formally showed a statistically-significant gain of 209,000 +/- 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).

That followed an upwardly-revised monthly gain of 231,000 [previously 222,000] in June and a downwardly-revised gain of 145,000 [previously 152,000, initially 138,000] in May. The revised monthly gain in May, however, was not reported on a basis comparable with the headline July 2017 and June 2017 details, as discussed in the *Headline Distortions from Shifting Concurrent-Seasonal Factors*.

Net of prior-month revisions, June 2017 payrolls rose by 211,000, instead of the headline 209,000.

**Collapsing Annual Growth Still at Levels Seen Only Going Into or Coming Out of Recession.** The not-seasonally-adjusted, year-to-year growth in July 2017 nonfarm payrolls declined minimally to 1.50%, versus an upwardly-revised 1.53% [previously 1.52%] in June 2017 and a downwardly-revised 1.56% [previously 1.57%, initially 1.54%] in May 2017.

The annual growth of 1.43% in April 2017 hit a 68-month low, the weakest growth since August 2011, and at that time, the highest growth seen coming out of the economic collapse into 2009. As of August 2011, that same growth rate was last seen as annual growth slowed going into the 2007 recession. Minor fluctuations around the April 2017 annual growth are not meaningful.

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](#). April 2017 annual growth hit that threshold on the downside, headed into recession, and subsequent minimal upticks in annual growth have not altered the broad picture.

**Confidence Intervals.** Where the current employment levels have been spiked by misleading and inconsistently-reported concurrent-seasonal-factor adjustments, the reporting issues suggest that a 95% confidence interval around the modeling of the monthly headline payroll gain should be well in excess of +/- 200,000, instead of the official +/- 135,000. Even if the data were reported on a comparable month-to-month basis, other reporting issues would prevent the indicated headline magnitudes of change from being significant. Encompassing Birth-Death Model biases, the confidence interval more appropriately should be in excess of +/- 300,000.

**Construction-Payrolls Rose Minimally in July, Amidst Downside Revisions to May and June, Activity Still Was Down 10.7% (-10.7%) from Pre-Recession Peak.** Construction employment in July 2017 rose by 6,000 jobs to 6.889 million following a revised monthly gain of 15,000 [previously 16,000] in June to 6.893 [previously 6.896] million. Net of prior-period revisions, the headline July monthly gain would have been 3,000 instead of the headline 6,000.

In theory, construction payroll levels should move closely with the inflation-adjusted aggregate construction spending series and the Housing Starts series (the latter measured in units rather than dollars). July details are plotted in *Graph 32* in the following *Construction Spending* section. The recent general pattern of activity has softened and flattened out, and still is shy of recovering its pre-recession high. That broadly is consistent with continuing weakness seen in real construction spending and other construction measures.

Headline month-to-month construction employment rose by 0.9% in July 2017, 0.22% in June 2017 and 0.10% in May. Unadjusted year-to-year growth slowed to 2.67% in July 2017, versus 2.96% in June 2017 and 2.82% in May 2017.

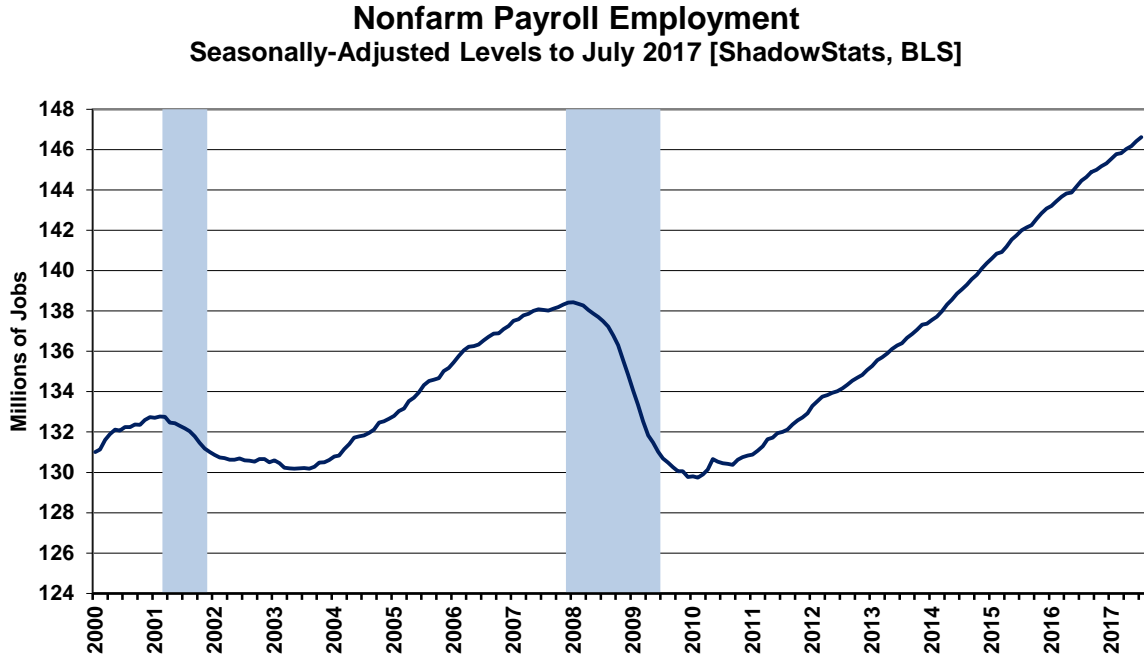
Headline construction-payroll numbers remain heavily biased to the upside (officially bloated by 7,600 jobs per month, unofficially at an order of magnitude of 21,000 jobs per month). Despite downside revisions to recent activity, the headline July 2017 level of construction jobs was the highest seen since October 2008, but it remained down from the April 2006 pre-recession series peak by 10.69% (-10.69%).

**Historical Payroll Levels.** Payroll employment (Payroll Survey) is a coincident indicator of economic activity, and irrespective of all the reporting issues with the series, payroll employment formally regained its pre-recession high in 2014, despite the GDP purportedly having done the same somewhat shy of three years earlier, back in 2011 (see quarterly detail [Commentary No. 876](#)). Reflected in the next two graphs, headline payroll employment moved to above its pre-recession high in May 2014, as of the 2015 and 2016 benchmarkings. Previously that had been April 2014, as of the 2014 benchmarking. Payroll

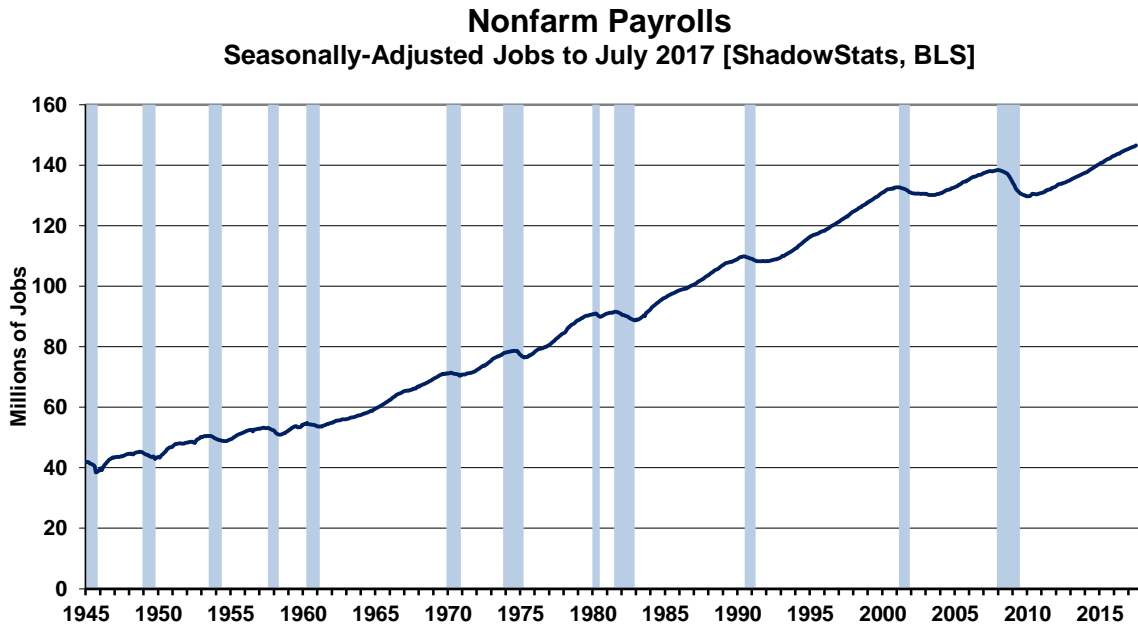


employment generally has continued to rise since. July 2017, headline payroll employment was 8.19-million jobs above its pre-recession peak.

**Graph 18: Nonfarm Payroll Employment 2000 to Date**



**Graph 19: Nonfarm Payroll Employment 1945 to Date**



*Graphs 18 and 19* show the headline payroll series, 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.

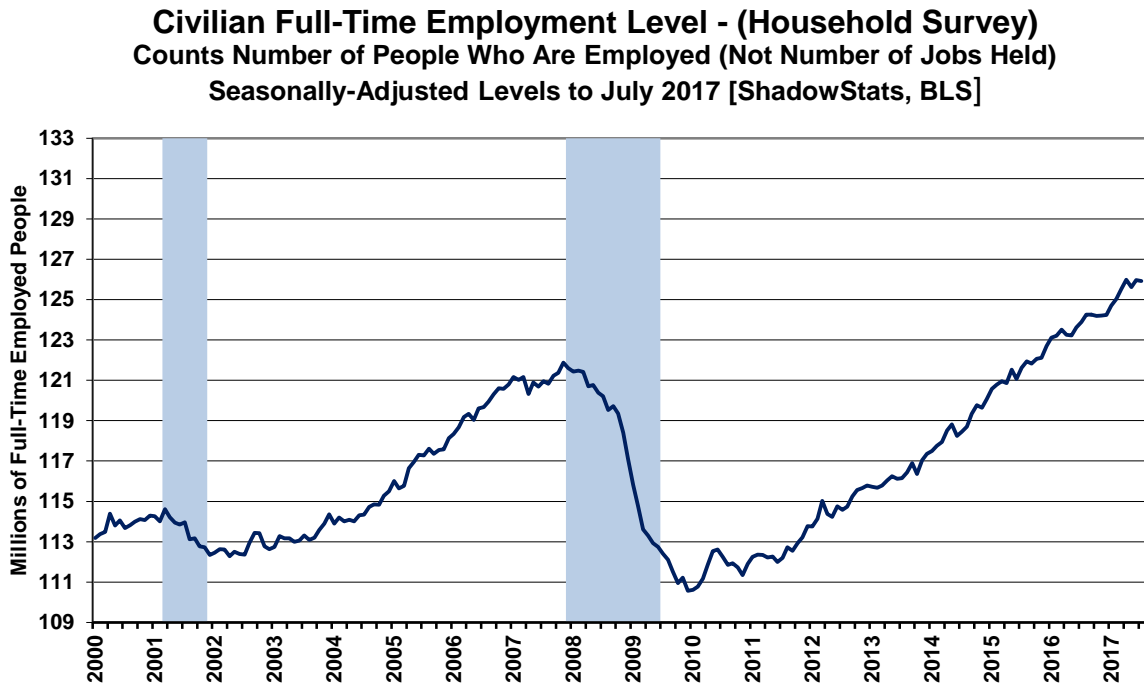
Beyond excessive upside add-factor biases built into the monthly calculations (see the *Birth-Death Model* section), the problem remains that payroll employment counts the number of jobs, not the number of people who are employed. Much of the payroll “jobs” growth has been in multiple part-time jobs—many taken on for economic reasons—where full-time employment was desired but could not be found.

In July 2017 payroll jobs, which count each part-time job as an employed individual, gained an aggregate 209,000 jobs in the month.

The Household Survey, which counts employed individuals only once, showed a gain of 345,000 in total employed [from the summary numbers for the month]. Such was in the context of a headline decline of 54,000 (-54,000) in full-time employed, versus a gain of 393,000 in part-time employed, suggesting a gain of 339,000 in the total employed [from the detailed subsidiary tables, unusually close to balancing for the month]; still those series never add up.

Separately, the number of employed holding multiple jobs declined by 50,000 (-50,000), directly offsetting the 50,000 gain of the month before, suggestive of a portion of the new payroll jobs count in July was indicative of a declining number of multiple-jobs holders. The Household Survey and Payroll Survey detail broadly are not comparable, ranging from defined coverage, to data gathering techniques and related manipulation of the end results, such as upside-bias factors add into the Payroll Survey.

**Graph 20: Full-Time Employment (Household Survey) to Date (2000 to Date)**  
(Plotted with Scale Proportional to Graph 18)



Detailed in the regular monthly BLS press release covering employment/unemployment BLS (second page of the *Technical Note*, subheading *Differences in Employment Estimates*):

The household survey has no duplication of individuals, because individuals are counted only once, even if they hold more than one job. In the establishment survey, employees working at more than one job and thus appearing on more than one payroll are counted separately for each appearance.

***Full-Time Employment versus Part-Time Payroll Jobs.*** Shown in preceding *Graph 20* (using a roughly-proportionate scale to *Graph 18*), the level of full-time employment (Household Survey) recovered its pre-recession high in August 2015 (see quarterly detail in [Commentary No. 876](#)). Headline July 2017 full-time employment declined by 54,000 (-54,000), flattening out, backing off its recent, unbelievable upside trend in monthly gains, having gained month-to-month by 355,000 in June, declined month-to-month by 367,000 (-367,000) in May, and having had monthly gains of 480,000 in April, 476,000 in March, 326,000 in February and 457,000 [an implied nonsensical 865,000 if the population revisions were to be believed] gain January 2017, having gained 35,000 in December 2016, 23,000 in November, and having declined by 63,000 (-63,000) in October and by 3,000, (-3000) in September.

Nonetheless, as shown in following *Graphs 21* and *22*, full-time employment had shown a sudden a pick-up in growth relative to payroll employment. Putting aside comparability and data-quality issues, those patterns otherwise had been suggestive, at least temporarily of shift from multiple part-time jobs to full-time employment.

Headline full-time employment detail now stands at 4.05-million above the pre-recession high for the series. That gain is due in particular to irregularly-volatile monthly gains in the seasonally-adjusted data of the last year or so, and with particularly strong growth in five of the first six months of 2017. Again, month-to-month seasonally-adjusted details simply are not comparable.

Still that 4.05-million gain compares with the headline payroll-employment level that is 8.19-million above its pre-recession high, regained some 37-months ago. Again, the payroll count is of jobs, not people, where much of that payroll “jobs” growth has been in part-time, and in multiple part-time jobs, many still taken on for economic reasons, where full-time employment was desired but could not be found.

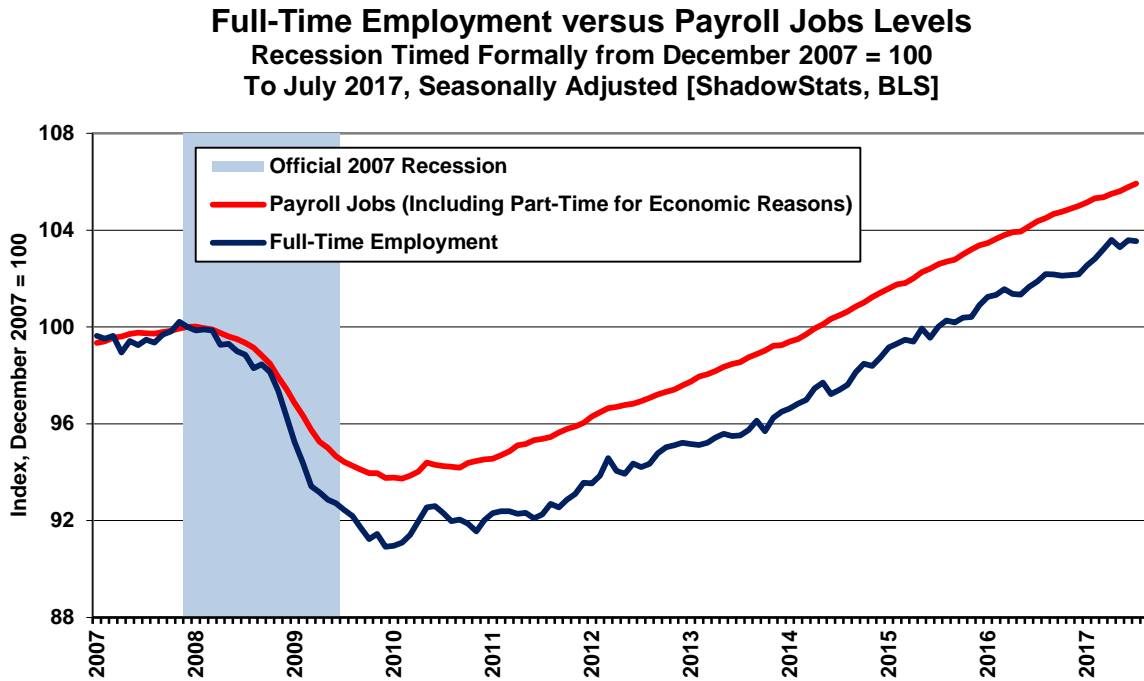
As a separate consideration and an indication of the level of nonsensical GDP reporting, where employment traditionally is a coincident indicator of broad economic activity, again the GDP purportedly recovered its pre-recession high some five years ago, more than two years before similar payroll activity, and more than four years before the likely temporary, lesser recovery in full-time employment. *Graphs 21* and *22* plot comparisons of activity in full-time employment versus payroll jobs, post-economic collapse. Full-time employment was hit hardest, with headline employment “recovery” coming largely from individuals having to settle for part-time work (again, see quarterly detail [Commentary No. 876](#)).

Headline month-to-month volatility in the full-time employment reporting usually is more a function of the instabilities from the non-comparability of the headline, seasonally-adjusted monthly data (see the discussion in the *Headline Distortions from Shifting Concurrent Seasonal Factors* section).

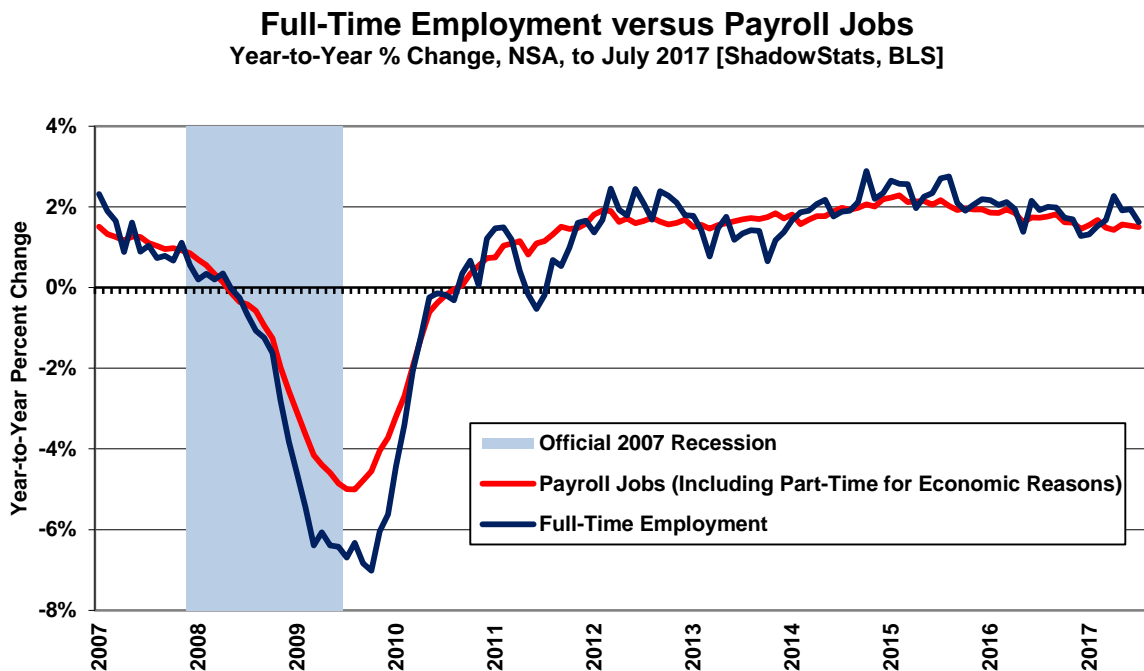
The graphs of full-time employment exclude the count of those employed with only part-time jobs, one or more. Total employment, including those employed with part-time work, has recovered its pre-recession high, but it is not close to the payroll reporting and has been irregular in pattern. Once more, the

Household-Survey numbers count the number of people who have at least one job. The Payroll Survey simply counts the number of jobs (see [Commentary No. 686](#) for further detail).

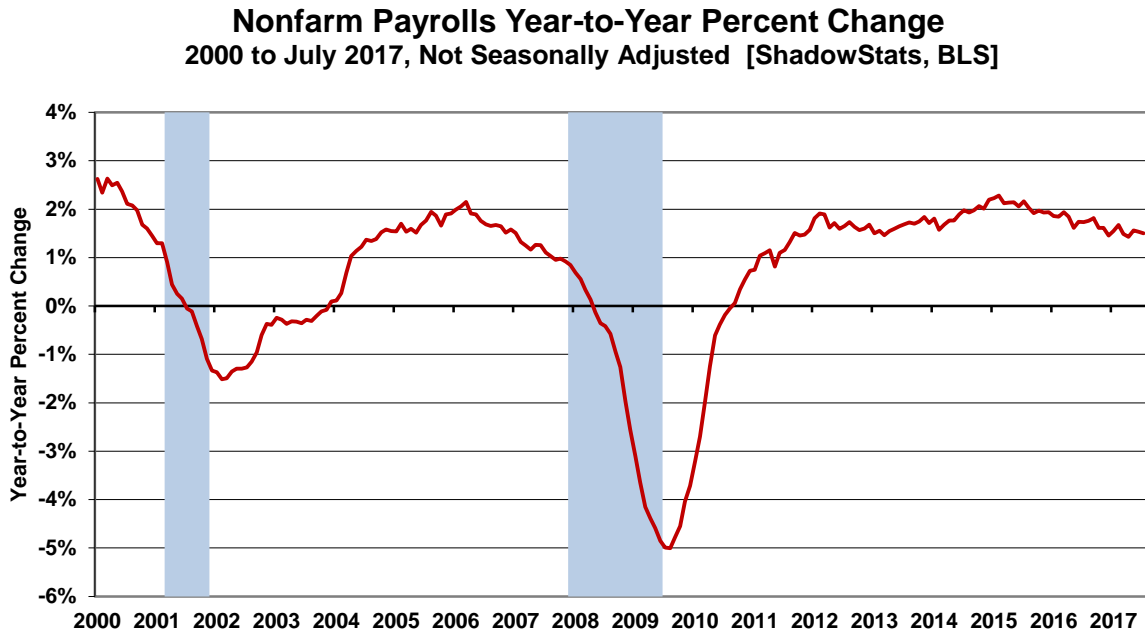
**Graph 21: Full-Time Employment (Household Survey) versus Jobs Count (Payroll Survey)**



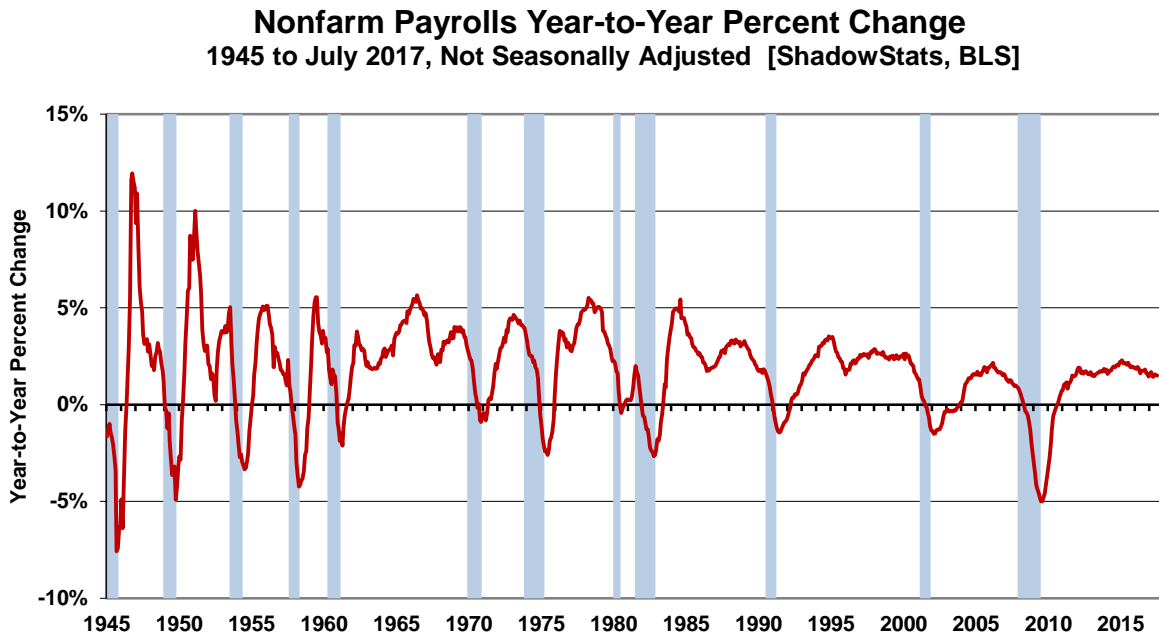
**Graph 22: Full-Time Employment (Household Survey) versus Jobs Count (Payroll Survey), Year-to-Year**



**Graph 23: Payroll Employment, Year-to-Year Percent Change, 2000 to Date**



**Graph 24: Payroll Employment, Year-to-Year Percent Change, 1945 to Date**



**Annual Percent Changes in Headline Payroll Employment.** Not-seasonally-adjusted, year-to-year change in payroll employment is untouched by the concurrent-seasonal-adjustment issues, so the monthly

comparisons of year-to-year change at least are reported on a consistent basis, although they are, in theory, the basis for the core annual benchmarking of payroll employment.

Year-to-year growth in unadjusted payrolls hit a post-recession peak of 2.29% in February 2015, reflected in the headline details of *Graphs 23* and *24*. Such remains the strongest annual growth since June 2000 (another recession), but subsequent annual growth has slowed sharply. Year-to-year nonfarm payroll growth in January and February 2017 notched higher respectively to 1.55% and 1.66%, then dropped back to 1.49% in March 2017 and to a 68-month low of 1.43% in April 2017. Annual growth notched minimally higher to 1.56% in May 2017, backed off to a revised 1.53% in June 2017 and eased to 1.50% in July 2017. The level of annual growth in April 2017 was last hit on the downside going into the 2007 recession, and on the upside, coming out of the recession, as discussed earlier, again see recent discussions of “healthy” annual payroll growth in [Commentary No. 843](#) and the FOMC discussion in [Commentary No. 870](#).

With bottom-bouncing patterns of recent years, current headline annual growth has recovered from the post-World War II record benchmarked decline of 5.01% (-5.01%) seen in August 2009, as shown in the accompanying graphs. That decline remains the most severe annual contraction since the production shutdown at the end of World War II [a trough of a 7.59% (-7.59%) annual contraction in September 1945]. Disallowing the post-war shutdown as a normal business cycle, the August 2009 annual decline was the worst since the Great Depression.

***Headline Distortions from Shifting Concurrent-Seasonal Factors.*** [PLEASE NOTE: This section has not been revised from prior reporting.] There remain serious and deliberate flaws with the government’s seasonally-adjusted, monthly reporting of both employment and unemployment. 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, again, even with the headline benchmark revision. 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, 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, though, again, with the ensuing headline January reporting, and with each monthly estimate thereafter.

Consider *Graphs 25* and *26*, 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 month-to-month instability likely is of similar magnitude. At least 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 are consistent only for January and December. With the Household Survey, except for December, the seasonally-adjusted monthly detail is not comparable with any other month, so seasonally-adjusted, month-to-month comparisons have no meaning in the Household Survey, even for the headline month.

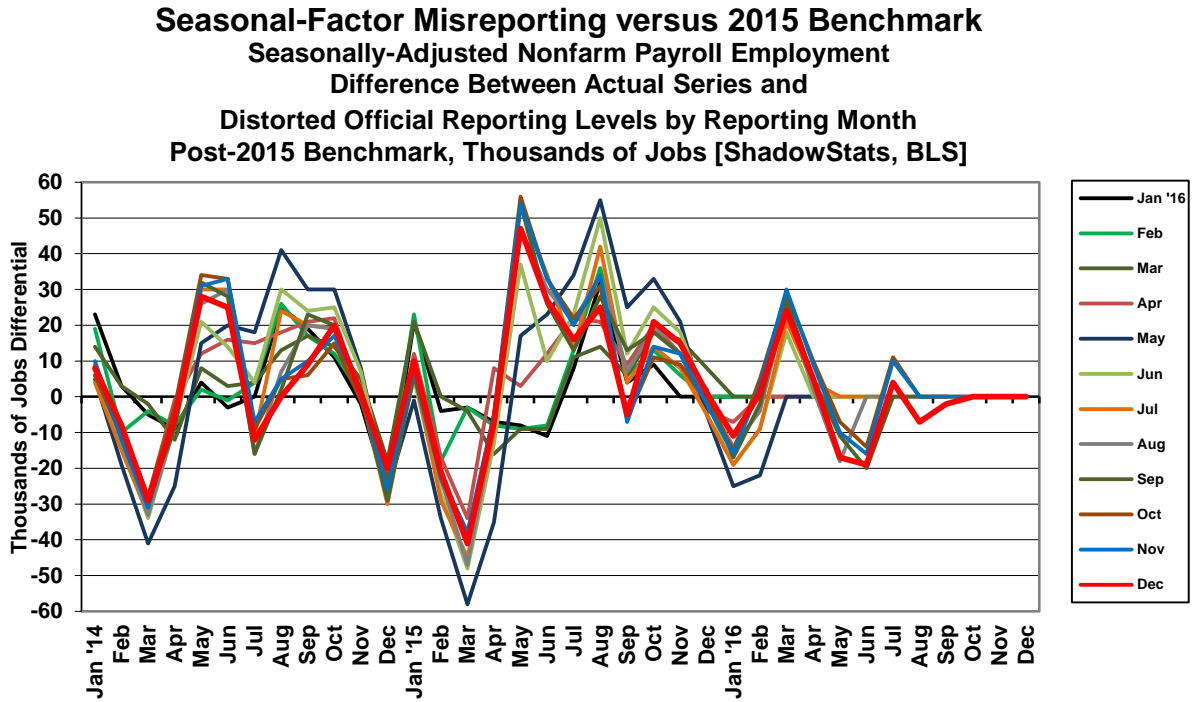
Payroll or Establishment Survey. In the case of the published Payroll Survey data (payroll-employment change and related detail), again, the current monthly changes in the seasonally-adjusted headline data are comparable only with the prior month’s month-to-month reporting, not before. Due to the BLS modeling process, the historical data never are published on a consistent basis, even with publication of the annual benchmark revision (see the comments on *Graphs 25* and *26*).

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. Again, 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 25*, 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 initial benchmarking. *Graph 25* shows how far the system strayed from the initial 2016 benchmarking, in its formal benchmark reporting of January 2017.

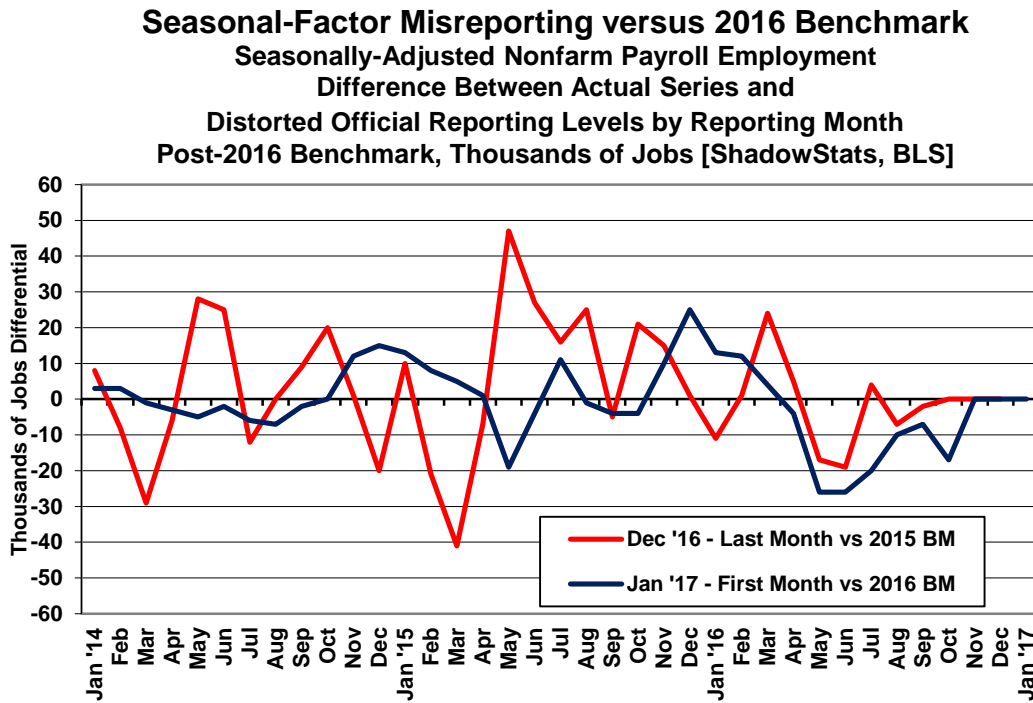
Where the red line reflected seasonal-factor straying through December 2016 from the 2015 benchmarking, the blue line indicates the straying in January 2017 versus the initial 2016 benchmarking. The January 2017 detail suggested a reversal of seasonal factors, consistent with the benchmarking detail 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.

[Graphs 25 and 26 follow on the next page]

**Graph 25: Concurrent-Seasonal-Factor Irregularities – December 2016 Detail versus 2015 Benchmarking**



**Graph 26: Concurrent-Seasonal-Factor Irregularities – January '17 Detail versus 2016 Benchmarking**



As seen in the recent 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](mailto:johnwilliams@shadowstats.com) or at (707) 763-5786.

***Birth-Death/Bias-Factor Adjustment (BDM)***. Despite the ongoing, general overstatement of monthly payroll employment, 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 and 2012 excepted), although increasingly the downside revisions, when formalized are more than offset by upside revisions to the monthly bias factors, going forward, as was the case in 2016 (see [Commentary No. 864](#)).

Separately, the BLS announced on August 4th that it will publish its preliminary March 2017-based benchmark-revision numbers for the payroll data on September 6, 2017, subsequent to the headline regular headline reporting of August 2017 payrolls on September 1st. The initial detail will be covered in *Commentary No. 911* of that date.

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 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.

July 2017 Add-Factor Bias. The not-seasonally-adjusted add-factor bias was a revised 158,000 in July 2017, following a positive 102,000 add factor in June 2017 and a positive add-factor of 154,000 in July 2016 reporting. The revamped, aggregate upside annual bias for the trailing twelve months through July 2017 is estimated from current headline bias reporting at 936,000 up by 95,000 or 11.1% from 841,000 in the December 2016 pre-benchmarking level and up 155,000 or 19.8% from 781,000 in December 2015, the year before. That is a monthly average of 78,000, in July 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.

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 78,000 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).

**HOUSEHOLD SURVEY DETAIL.** Discussed in the December 2016 labor-conditions reporting (see [Commentary No. 860](#)), the headline details in the counts of the employed and unemployed, from the seasonally-adjusted, month-to-month Household-Survey detail, usually are nonsense, particularly egregious examples of the BLS misreporting practices, in its use of concurrent seasonal factors (detailed in the *Headline Distortions from Shifting Concurrent-Seasonal Factors*). Only in the December 2016 reporting were most of the headline Household Survey details last historically consistent, but only for that one month. With the January 2017 and subsequent headline detail, all the monthly inconsistencies first returned and subsequently have been increasingly scrambled. Separately, the regular annual break in January detail, based on the introduction of new population controls left many of the headline numbers—January versus December—in a circumstance where they never are fully consistent or compatible (see [Commentary No. 864](#)).

Another issue, detailed in [Commentary No. 669](#), and with links (Crudele) in the *Note on Reporting-Quality Issues and Systemic-Reporting Biases* in the *Week Ahead* section, significant issues as to falsification of the data gathered in the monthly Current Population Survey (CPS), conducted by the Census Bureau, have been raised in the press and investigated by the House Committee on Oversight and Government Reform and the U.S. Congress Joint Economic Committee. That investigation still is unfolding. The CPS is the source of the Household Survey used by the BLS in estimating monthly unemployment, employment, etc. Accordingly, the statistical significance of the headline reporting detail here remains open to serious question.

**Headline Unemployment Rates.** Again, in the context of the non-comparability of month-to-month changes in seasonally-adjusted unemployment detail, the July 2017 unemployment rate (U.3) declined to 4.3% [4.35% at the second decimal point] from 4.4% [4.36%] versus 4.3% [4.29%] in May, versus 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 decline of 0.01% in the July 2017 U.3 was far shy of being statistically-significant (+/- 0.23% at the at the 95% confidence interval). Such consideration 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.

On an unadjusted basis, unemployment rates are not revised and, in theory, are consistent in post-1994 methodology. The unadjusted unemployment rate U.3 rose to 4.60% in July 2017 versus 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 a basically flat, seasonally-adjusted July 2017 U.3 unemployment rate, an unadjusted increase in the count of marginally-attached workers of 47,000 and a decline of 44,000 (-44,000) in the adjusted number of people working part-time for economic reasons, the adjusted July 2017 U.6 unemployment rate was 8.57%, versus 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 8.86% in July 2017, versus 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.



On top of an increase in the seasonally-adjusted June 2017 U.3 unemployment rate, an unadjusted increase in the count of marginally-attached workers of 107,000 and an increase also of 107,000 in the adjusted number of people working part-time for economic reasons, the adjusted June 2017 U.6 unemployment rate rose to 8.59%, versus 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 8.86% in June 2017, versus 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.

***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 July 2017 (never seasonally-adjusted) rose by 22,000 to 536,000, having risen by 159,000 to 514,000 in June, having declined by 100,000 (-100,000) to 355,000 in May, having declined in April by 5,000 to 455,000, having declined by 62,000 (-62,000) to 460,000 in March, having dropped by 10,000 (-10,000) to 522,000 in February, with total marginally-attached workers having increased by 47,000 to 1,629,000, having risen by 107,000 to 1,582,000 in June 2017, having declined by 59,000 (-59,000) in May, by 61,000 (-61,000) in April, by 128,000 (-128,000) in March and by 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 workers—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 July 2017 was 22.1%, versus 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 detail in the following section.

**SHADOWSTATS-ALTERNATE UNEMPLOYMENT RATE MEASURE.** 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 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 5.713 million in July 2017, versus 5.725 million in June 2017. Seasonally-adjusted the aggregate July 2017 number was 5.420 million, versus 5.431 million in May June 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 U.6 estimate as an underlying monthly base, I have not found a way of accounting fully 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 *Executive Summary*, 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 4 to 6*). 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 7 to 12* there and in the *ECONOMY* section of [No. 859 Special Commentary](#).

**Headline July 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 July 2017 was 22.1%, versus 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 estimate, the July 2017 ShadowStats reading was down by 120 basis points or 1.2% (-1.2%) from the 23.3% series high last seen in December 2013.

In contrast, the July 2017 headline U.3 unemployment rate of 4.3% was down by 570 basis points or by 5.7% (-5.7%) from its peak of 10.0% in October 2009. The broader U.6 unemployment measure of 8.6% in July 2017, was down by 860 basis points or 8.6% (-8.6%) from its peak of 17.2% April 2010.

A subscriber recently raised the question as to why the ShadowStats Alternate Unemployment Estimate had been holding around 23%. 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 3* in the *Executive Summary*), there indeed is a noticeable divergence in the ShadowStats series versus U.6 and U.3, with the BLS headline U.3 unemployment measures generally headed lower against a down-trending U.6 and a higher-level, relatively stagnant, but minimally down-trending ShadowStats number.

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](http://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%.

## CONSTRUCTION SPENDING IN THE UNITED STATES (June 2017)

### **Amidst Continuing Downside Revisions, Downturns and Downtrends, Real Construction Spending Was 23.1% (-23.1%) Shy of Recovering Its Pre-Recession Peak and Signaling Renewed Recession.**

The construction spending series remains highly volatile, subject to unstable and extraordinarily-large monthly revisions, compounded once per year with annual benchmarking, seen with last month's May headline detail, as discussed in [Commentary No. 897](#). Downside revisions continued in headline June 2017 reporting, with real year-to-year change now showing an annual contraction of a scope last seen during the housing collapse of 2006, as discussed in the *Opening Comments* (see *Graph 1* of the *Opening Comments* and accompanying *Graph 29* here).

Separately, real second-quarter 2017 now shows the steepest quarterly, annualized contraction since the trough of the formal recession, with the current six-month trend moving from uptrending to downtrending. Separately, headline real June 2017 now stands at 23.1% (-23.1%) below its pre-recession high, that shortfall had been 20.7% (-20.7%) in initial May 2017 reporting.

**Ongoing Consumer Liquidity Issues Constrain Residential Construction Spending.** Discussed in *Consumer Liquidity Watch* and fully reviewed in [No. 859 Special Commentary](#), the extreme liquidity bind besetting consumers continues to constrain personal-consumption expenditures and related residential real-estate activity, including construction. 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 U.S. consumer remains unable to support regularly-positive growth in broad economic activity.

Where the private housing sector never recovered from the business collapse of 2006 into 2009, there remains no chance of a near-term, sustainable turnaround in the dominant residential-construction category of construction spending, without a fundamental upturn in consumer and banking-liquidity conditions.

**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.

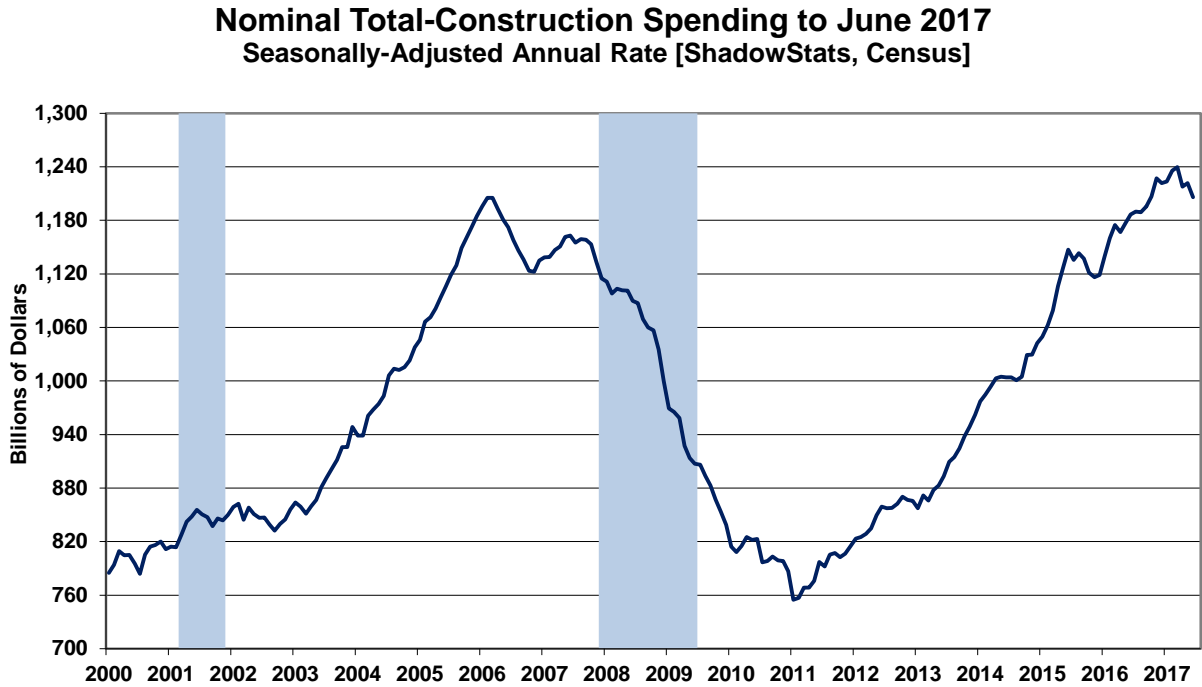
Accordingly, ShadowStats constructed the CCD specifically for deflating construction spending. The CCD is a composite of pricing series, weighted by broad industry segment as compiled in the headline construction spending, with consistent historical tabulation back to before 2000. The combined indices reflect price deflators out of National Income (GDP) reporting, with quarterly numbers there interpolated into a smoothed monthly series, in conjunction with privately surveyed monthly cost indicators. The related GDP deflators just underwent a benchmark revision back to 2014, with CCD revising in tandem, reflecting minimally-higher inflation in the current period.

There is no perfect inflation measure, public or private, for deflating construction. For the historical series in the accompanying plots, as shown in *Graphs 13 to 16* in the *Executive Summary*, and in the accompanying *Graphs 28 and 34* in this section, the inflation-adjusted numbers are deflated by the CCD.

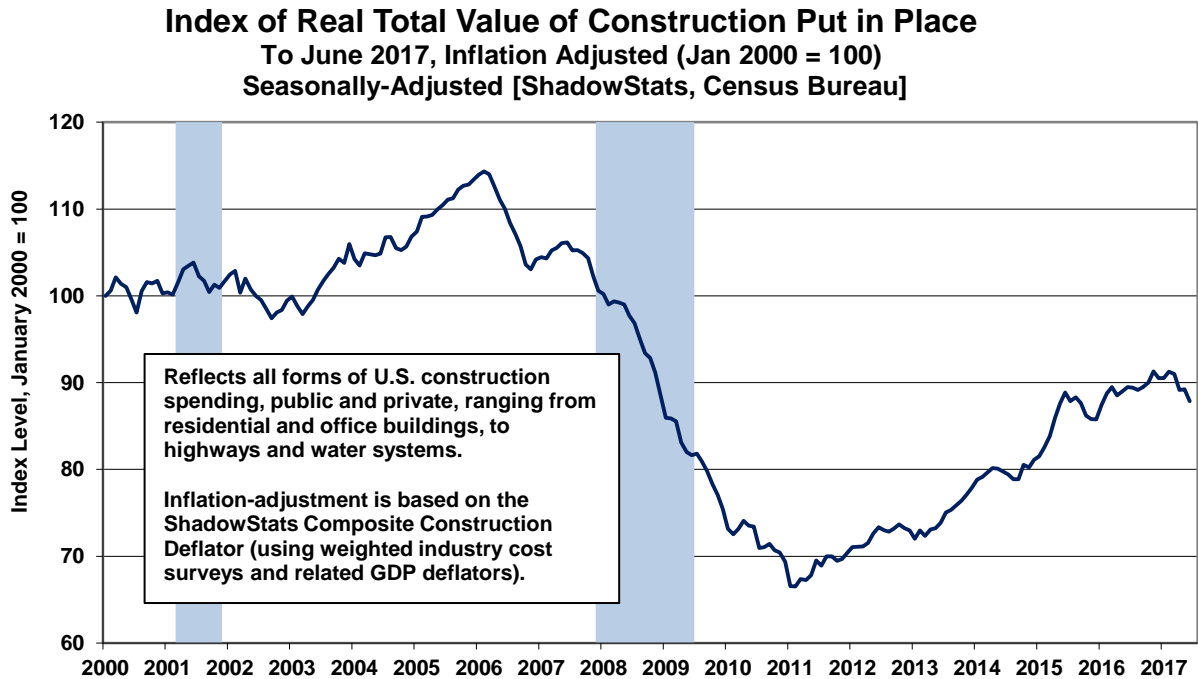
Seasonally-adjusted June 2017 CCD month-to-month inflation rose by 0.24%, having gained 0.26% [previously 0.19%] in May and 0.25% [previously 0.18%] in April. In terms of year-to-year inflation, the June 2017 CCD gained 3.53%, versus 3.54% [previously 3.34%] in May 2017 and 3.61% [previously 3.48%] in April 2017.

[Graphs 27 to 29 begin on the next page]

**Graph 27: Total Nominal Construction Spending**

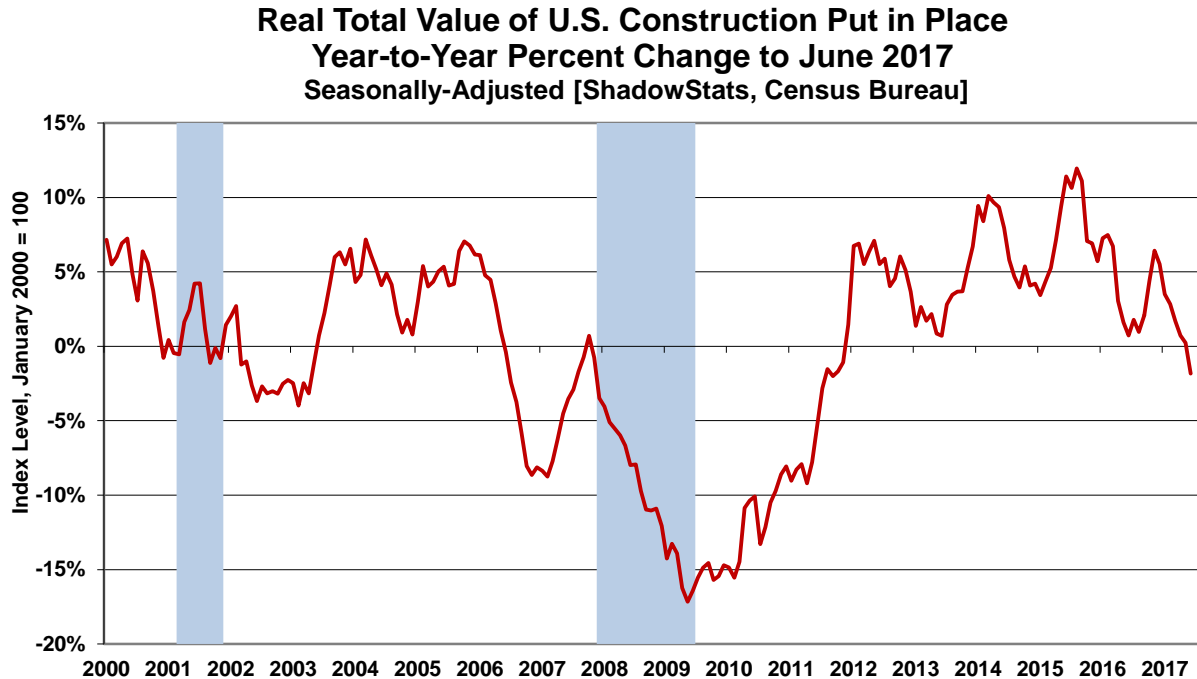


**Graph 28: Index of Total Real Construction Spending**





**Graph 29: Total Real Construction Spending, Year-to-Year Percent Change**  
(Same as Graph 1 in the Opening Comments)



**Headline Reporting for June 2017.** In the context of annual benchmark revisions back through 2014, as reviewed in the *Opening Comments* of last month's [Commentary No. 897](#), the Census Bureau reported August 1st that the headline, total value of construction put in place in the United States for June 2017 was \$1,205.8 billion on a seasonally-adjusted but not-inflation-adjusted, annual-rate basis.

That estimate was down month-to-month by a statistically-insignificant 1.3% (-1.3%) +/- 1.8% (all confidence intervals are at the 95% level), versus a downwardly-revised \$1,221.6 [previously \$1,230.1 billion] in May 2017. Net of prior-period revisions, the June 2017 monthly change would have been a statistically-significant monthly decline of 2.0% (-2.0%).

In turn, the revised May activity gained 0.3% versus downwardly-revised April 2017 spending of \$1,217.7 [previously \$1,230.4 billion], which in turn was down by 1.8% (-1.8%) from the unrevised \$1,239.6 billion spending March 2017.

Adjusted for revised CCD inflation (see the prior *CCD* section), total real spending in June 2017 declined month-to-month by 1.5% (-1.5%), following a May gain of 0.1% and an April decline of 2.0% (-2.0%).

On a year-to-year annual-growth basis, June 2017 nominal construction spending rose by a statistically-insignificant 1.6% +/- 2.1%, following revised annual gains of 3.8% [previously 5.5%] in April 2017 and 4.4% [previously 5.5%] in March 2017. Net of construction costs indicated by the CCD, the annual growth in total real construction declined by 1.8% (-1.8%) in June 2017, gained 0.2% [previously 1.1%] in May 2017, and 0.7% [previously 1.9%] in April 2017 (see *Graph 1* and related discussions in the *Opening Comments*, and accompanying *Graph 29*).

The statistically-insignificant, nominal monthly decline of 1.3% (-1.3%) in aggregate June 2017 spending, versus a monthly gain of 0.3% in May 2017 spending, included a headline monthly drop of 5.4% (-5.4%) in June 2017 public spending, which followed a monthly gain of 1.9% in May 2017. Private construction spending was down month-month to month by 0.1% (-0.1%) in both June 2017 and May 2017. Within total private construction spending, the residential-construction sector activity declined by 0.2% (-0.2%) in June 2017 and by 0.8% (-0.8%) in May 2017, while the nonresidential sector showed a monthly gain of 0.1% in June 2017 and 0.6% in May 2017.

***Second-Quarter 2017, Real U.S. Construction Spending Contracted Sharply Quarter-to-Quarter, Worst Since the 2007-Recession Trough.*** In the context of sharp downside reporting and revisions in April, May and June 2017, and net of inflation revisions post-2014, annualized second-quarter 2017 growth contracted at an annualized pace of 9.2% [-9.2%], versus first-quarter 2017 where growth slowed to 1.5% [previously 1.9%]. That was against a revised 5.4% [previously 5.7%] gain in fourth-quarter 2016.

*Graphs 13 to 16 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 through second-quarter 2017. Areas of recent relative strength in the major subcomponents generally have flattened out or 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 27* of this *Reporting Detail*, with the real, inflation-adjusted activity plotted in *Graph 28*, while *Graphs 33* and *34* show the relative patterns of nominal and real activity aggregated by sector.

***Construction and Related Graphs.*** Earlier *Graphs 27* and *28*, and later *Graphs 33* and *34* reflect total construction spending through June 2017, both in the headline nominal dollar terms, and in real terms, after inflation adjustment. *Graph 28* is on an index basis, with January 2000 = 100.0, where *Graph 29* 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 holding now at low levels, as indicated in *Graph 29*.

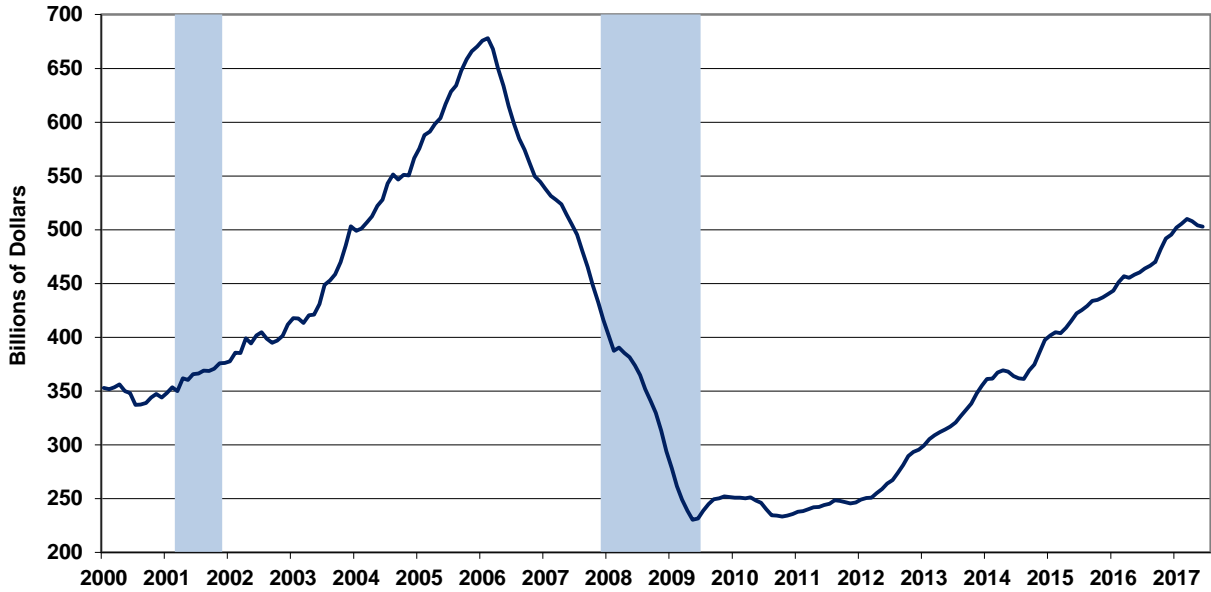
The pattern of non-recovered, inflation-adjusted activity here—net of the CCD inflation estimates—does not confirm the economic recovery indicated by the headline GDP (see prior [Commentary No. 902-B](#) and the *Economy* section of [No. 859 Special Commentary](#)). To the contrary, broad construction reporting, both before (nominal) and after (real) inflation adjustment, generally still shows low-level activity, where aggregate activity never recovered pre-recession highs and, again, has flattened-out and is turning-down anew.

***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 30* and *31*.

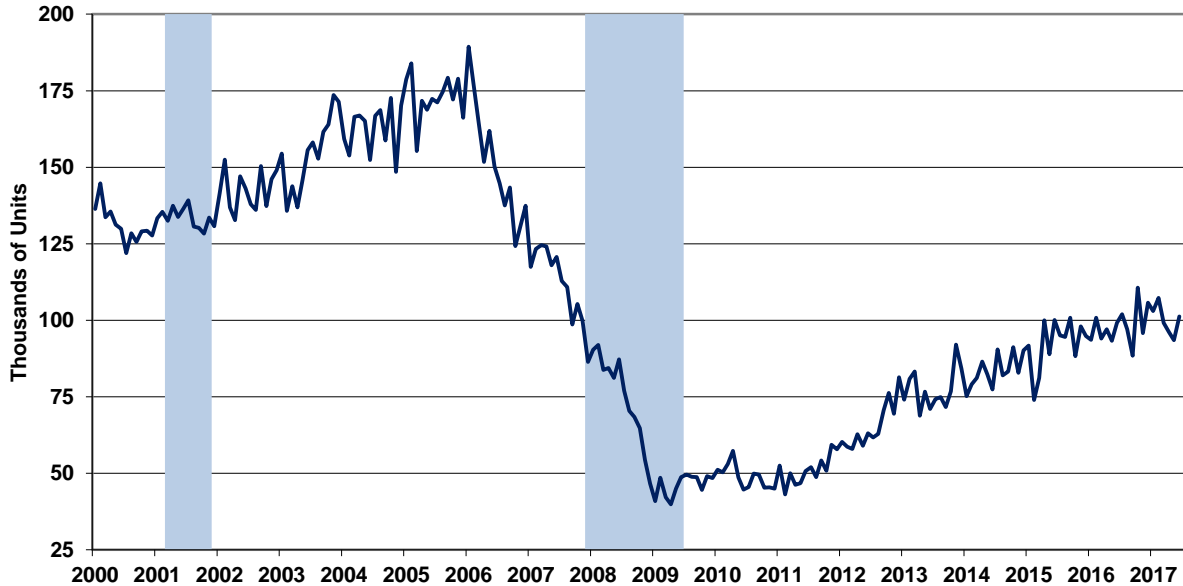
**Graph 30: Nominal Private Residential Construction Spending to Date**

**Nominal Private Residential Construction to June 2017**  
 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



**Graph 31: Combined Single- and Multiple-Unit Housing Starts to Date**

**Aggregate Housing Starts (Monthly Rate)**  
 Single- and Multiple-Unit Starts  
 To June 2017, Seasonally-Adjusted [ShadowStats, Census]

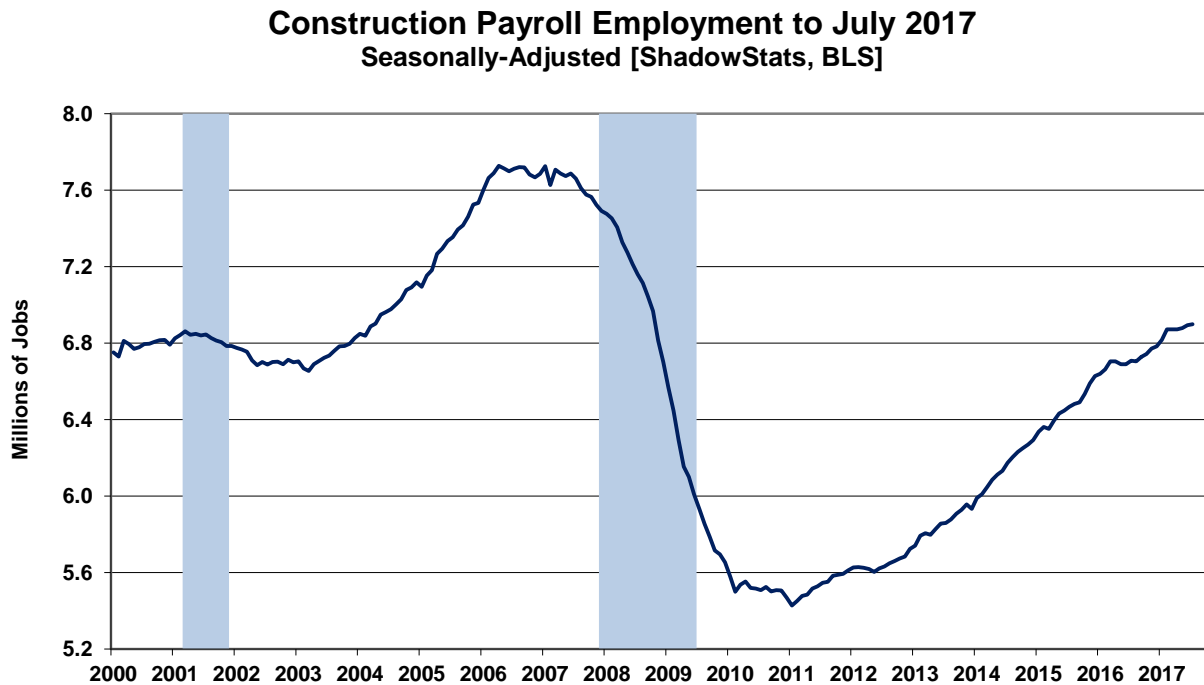


**Construction-Payrolls Rose Minimally in July, Amidst Downside Revisions to May and June, Activity Still Down 10.7% (-10.7%) from Pre-Recession Peak.** Discussed earlier in the *Employment Section*, construction employment in July rose by 6,000 jobs to 6.889 million jobs following a revised monthly gain of 15,000 [previously 16,000] in June to 6.893 [previously 6.896] million. Net of prior-period revisions, the headline July monthly gain would have been 3,000 instead of the headline 6,000.

In theory, construction payroll levels should move closely with the inflation-adjusted aggregate construction spending series and the Housing Starts series (the latter measured in units rather than dollars). The recent general pattern in construction employment has flattened, still well shy of recovering its pre-recession peak, and still broadly consistent with continuing weakness seen in real Construction Spending and other construction measures. While the headline July 2017 level of construction jobs was the highest seen since October 2008, it still remained down from its April 2006 pre-recession series peak by 10.69% (-10.69%).

Where construction payrolls generally had flattened out, such generally has been broadly consistent with patterns of stagnating non-recovery seen in various residential real estate sales and construction activity measures, and with faltering growth patterns seen here in headline real construction spending.

**Graph 32: Construction Payroll Employment to Date**



**Graphs of Construction Activity.** *Graph 33* shows total nominal construction spending, broken out by the contributions from total-public (blue), private-nonresidential (yellow) and private-residential (red) spending. *Graph 34* shows the same breakout as in *Graph 33*, but the detail is in real, inflation-adjusted terms, reflected in constant November 2009 dollars (base month for the PPI), deflated by the *ShadowStats Composite Construction Deflator (CCD)*, as discussed in the earlier *Construction Inflation* section.

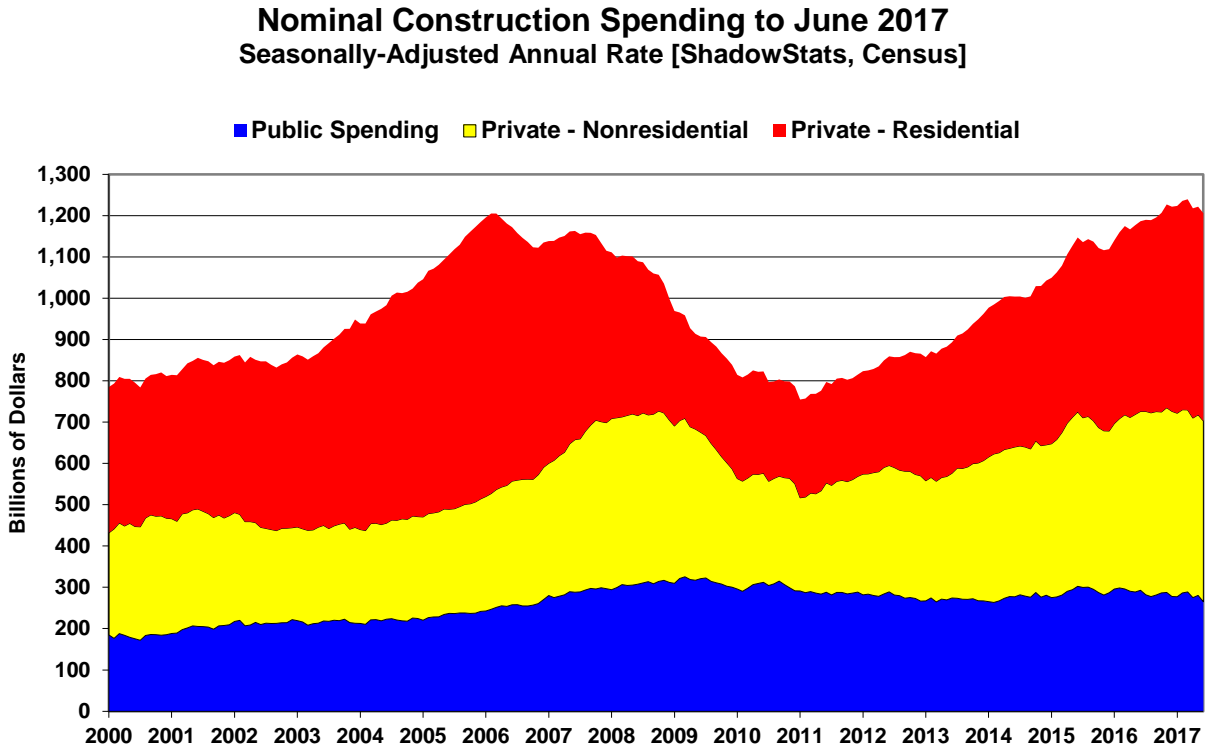
*Graphs 35 and 36* cover private residential construction spending, along with housing starts (combined single- and multiple-unit starts) for June 2017 (see [Commentary No. 900](#)). Keep in mind that the construction spending series is in nominal terms, while housing starts reflect unit volume, which should be parallel with the inflation-adjusted series shown in *Graph 14* of the *Opening Comments* section, *Graph 34* and presumably with the headline construction-payroll data in *Graph 32*.

The final two graphs (*Graphs 37 and 38*) 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.

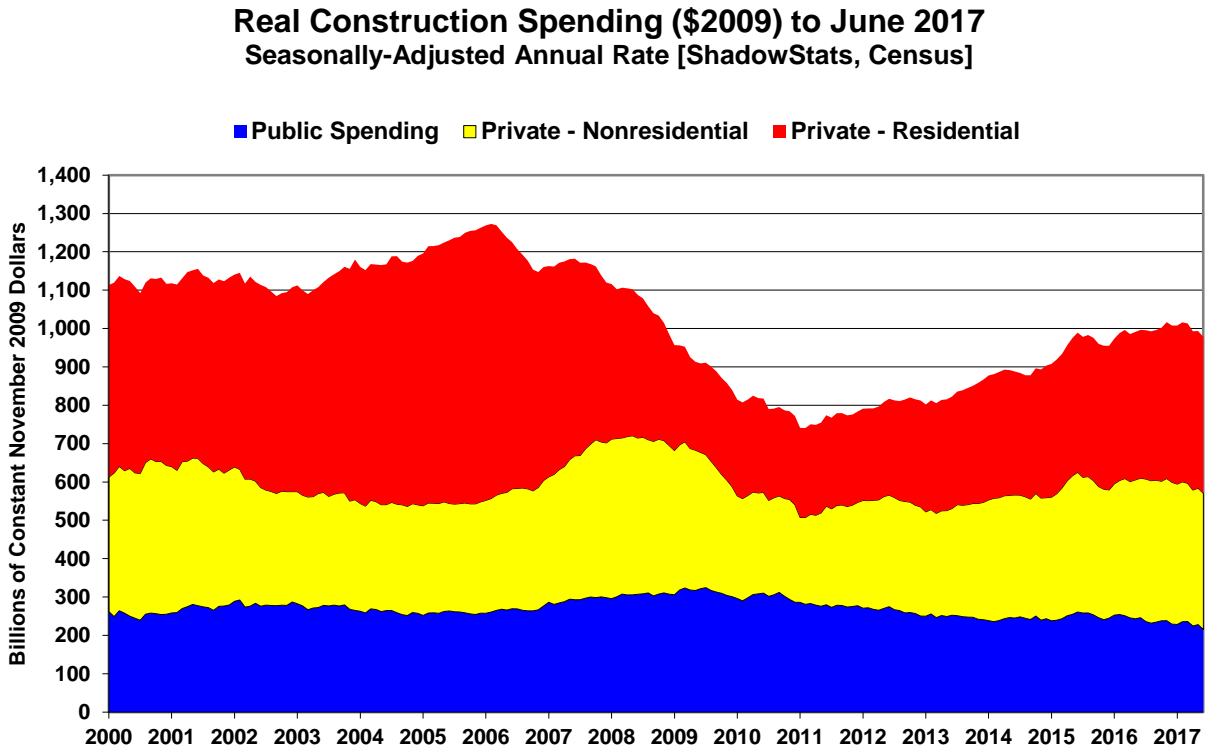
Public Construction spending, which is 98% nonresidential, had continued in a broad downtrend into 2014, with intermittent bouts of fluttering stagnation and then some upturn in 2015. In 2016 and into 2017, the nominal series still appeared to have fluttered into and out of a low-level top, now generally moving lower, increasingly shy of its pre-recession peak. Viewed net of inflation, in *Graphs 15, 16 and 34*, both series still appear stalled shy of their pre-recession peaks.

[Graphs 33 to 38 begin on the following page]

**Graph 33: Aggregate Nominal Construction Spending by Major Category to Date**



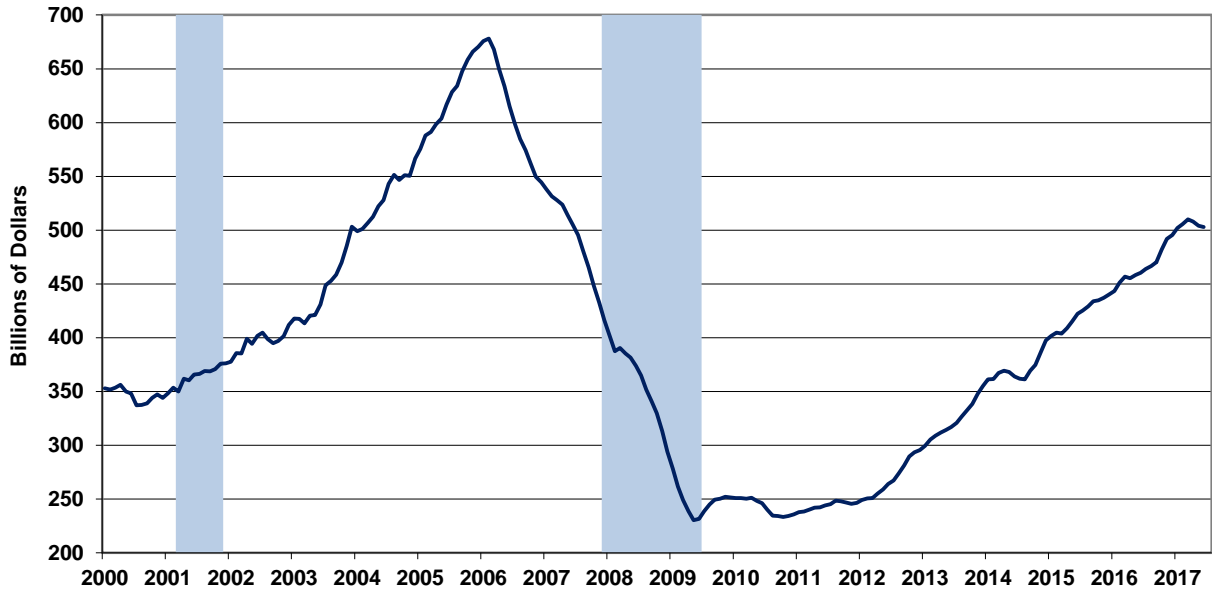
**Graph 34: Aggregate Real Construction Spending by Major Category (Billions of November 2009 Dollars)**





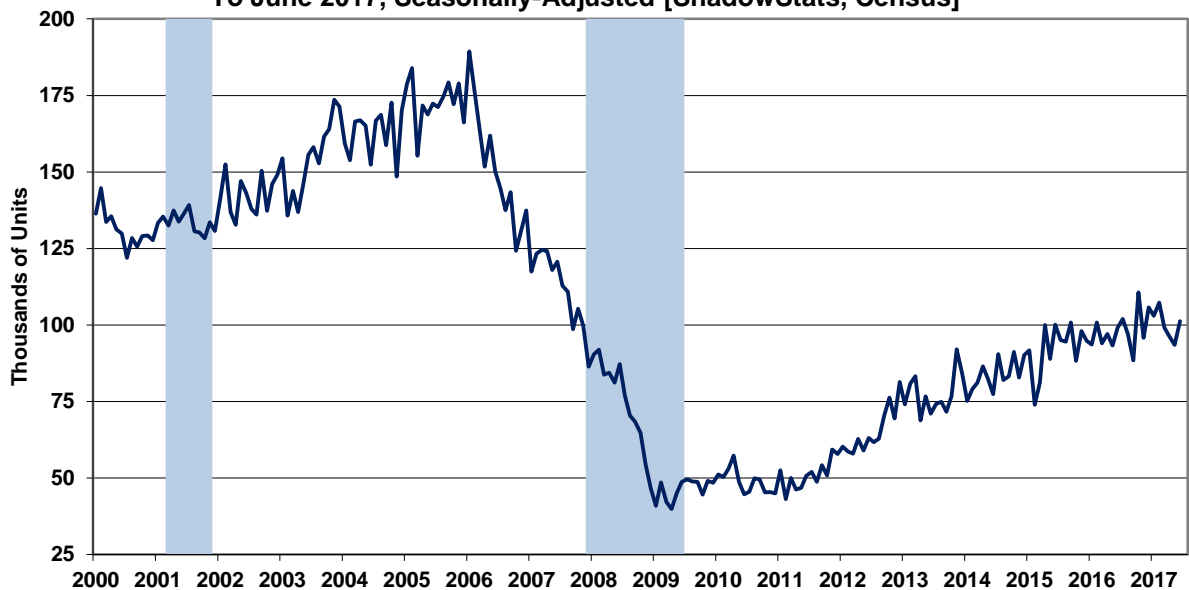
**Graph 35: Nominal Private Residential Construction Spending to Date**

**Nominal Private Residential Construction to June 2017**  
Seasonally-Adjusted Annual Rate [ShadowStats, Census]

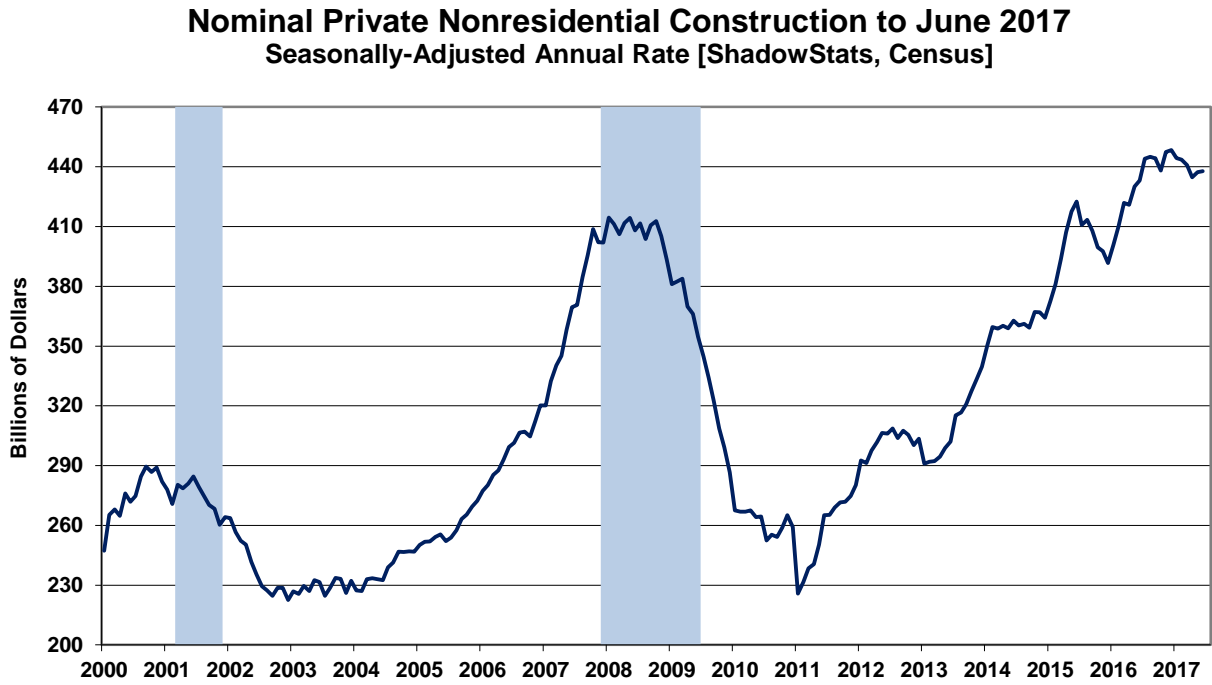


**Graph 36: Combined Single- and Multiple-Unit Housing Starts to Date**

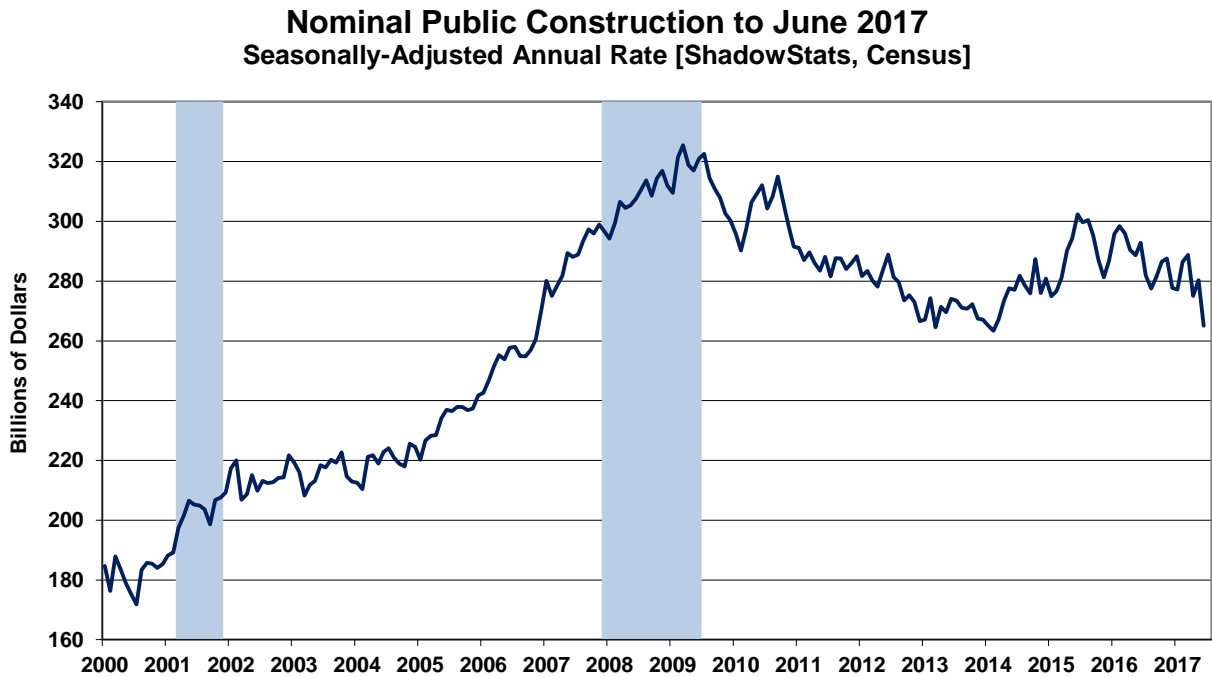
**Aggregate Housing Starts (Monthly Rate)**  
Single- and Multiple-Unit Starts  
To June 2017, Seasonally-Adjusted [ShadowStats, Census]



**Graph 37: Nominal Private Nonresidential Construction Spending to Date**



**Graph 38: Nominal Public Construction Spending to Date**



## U.S. TRADE DEFICIT (June 2017)

**Real Second-Quarter Merchandise Trade Deficit Deepened Versus First-Quarter; Latest Four Quarters of Real Deficit Were Worst Since 2007.** Despite the indication in headline real second-quarter GDP reporting of a small narrowing in the second-quarter aggregate real trade deficit, the headline second-quarter real merchandise trade deficit widened minimally (see [Commentary No. 902-B](#)). Usually those two measures move in the same direction with minimal variation in the balancing numbers of the heavily-gimmicked services trade area included in the GDP.

In the context of heavily-negative June 2nd annual benchmark revisions to the trade deficit ([Commentary No. 890](#)) and of mixed revisions to previously-published January to May 2017 monthly detail, the second-quarter real merchandise trade deficit was not the worst showing in ten years; fourth-quarter 2016 was (see *Graph 17* in the *Opening Comments* and accompanying *Graph 39*). As can be seen in the earlier *Graph 17*, the four-quarter moving average of the annual real merchandise trade deficit, though, was the worst trade shortfall since 2007, still a broadly-negative contributor to headline real GDP growth.

**Nominal June 2017 Trade Deficit.** The Bureau of Economic Analysis (BEA) and the Census Bureau reported August 4th, that the nominal (not adjusted for inflation), seasonally-adjusted monthly trade deficit in goods and services for June 2017 narrowed on a balance-of-payments basis by \$2.749 billion, to \$43.642 billion, versus a revised deficit of \$46.391 [previously \$46.507] billion in May. The improvement in the monthly deficit reflected an increase of \$2.353 in monthly exports, helped by a minimal decline in imports by \$0.396 (-\$0.396) billion. The headline June 2017 deficit narrowed minimally by \$0.193 billion, versus the year-ago \$43.835 billion trade shortfall for June 2016.

Factors affecting the changes to the June trade balance were increasing exports of capital goods and foods, versus declining imports of oil and cellphones with some offset from increased autos. Again, changes in energy-sector activity were tied to declining imports.

**Energy-Related Petroleum Products.** June 2017 imported oil prices declined by 0.8% (-0.8%) to \$44.68 per barrel, versus \$45.03 in May 2017, but up by 13.5% versus \$39.38 per barrel in June 2016. Separately, not-seasonally-adjusted physical oil-import volume in June 2017 averaged 8.292 million barrels per day, down from 8.548 million in May 2017 but up from 8.159 million in June 2016.

**Ongoing Cautions and Alerts on Data Quality.** 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. Separately, the monthly trade data can be influenced by irregular shipping patterns, affected by factors ranging from labor disruptions to unusual weather conditions.

**Real June 2017 Trade Deficit.** Discussed here and reflected in *Graph 17* in the *Executive Summary*, as well as in accompanying *Graph 39*, seasonally-adjusted and in real terms, net of oil-price swings and other inflation (2009 chain-weighted dollars, as used in GDP deflation), the June 2017 merchandise trade deficit (no services) narrowed to \$61.023 billion, versus a revised \$62.803 [previously \$62.836] in May 2017 and narrowed against \$64.879 billion in June 2016. The January 2017 to May 2017 monthly real

deficits all were revised, with the first-quarter deficit 2017 deepening versus a narrowed shortfall-trend in second-quarter 2017 activity.

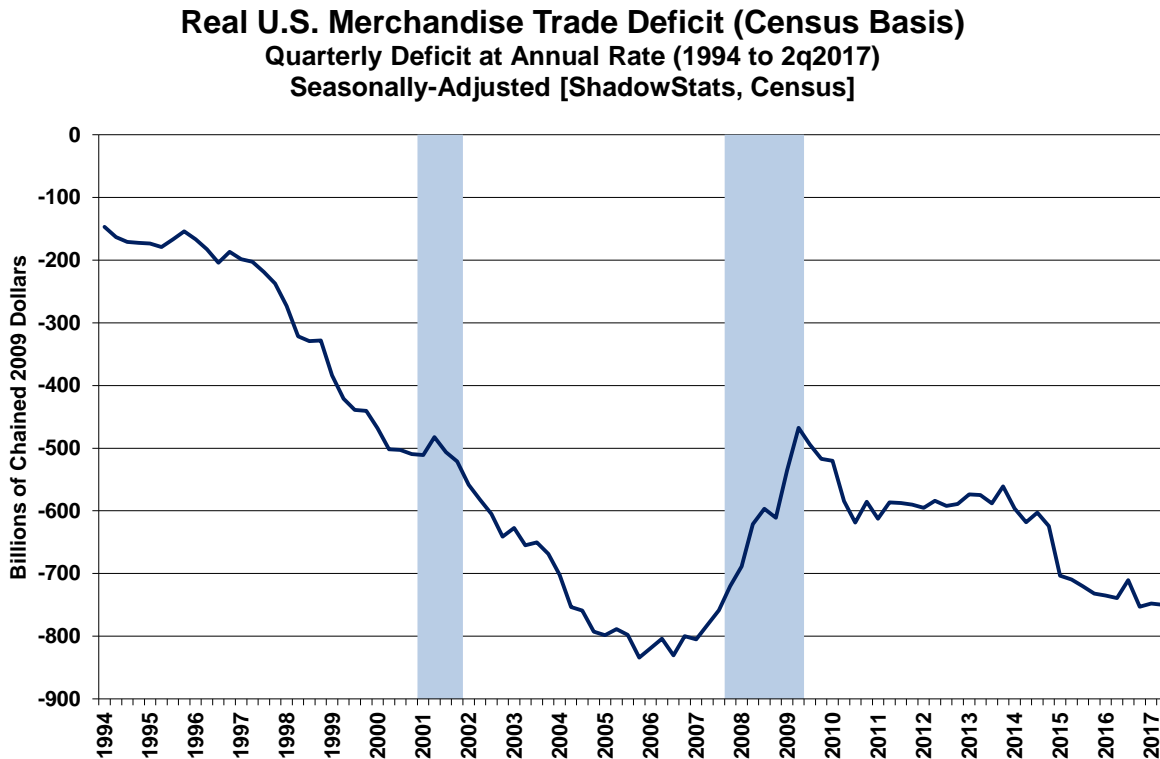
Last year, the annualized deficit was \$735.3 billion for first-quarter 2016, \$739.4 billion for second-quarter 2016, \$710.4 billion for third-quarter 2016 and \$753.1 billion for fourth-quarter 2016. The fourth-quarter 2016 deficit was the worst quarterly showing since third-quarter 2007.

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 a revised annual rate of \$746.1 [previously \$746.4] billion, with the initial second-quarter 2017 deficit widening minimally to \$750.0 billion. Where the fourth-quarter 2016 deficit remained the worst showing since 2007, as shown in *Graph 17* of the *Opening Comments*, the four-quarter moving annual average deficit through second-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.

**Graph 39: Real Quarterly Merchandise Trade Deficit (1994-2017)**

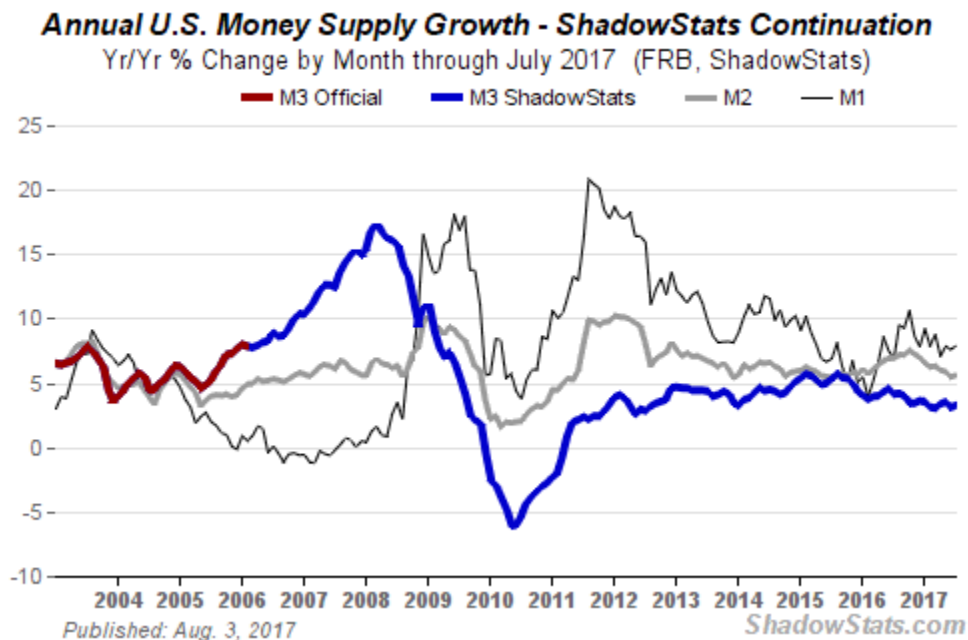


## HYPERINFLATION WATCH

### MONETARY CONDITIONS

**July 2017 Annual Growth Rate in M3 Notched Higher to 3.2% from 3.1%.** Based on three-plus weeks of reporting, and in the context of continuing regular benchmark revisions and softening growth in both the narrower M2 and M1, the estimate of nominal annual growth for the ShadowStats Ongoing M3 Money Supply in July 2017 rose to 3.2% from an unrevised 3.1% in June 2017, versus 3.5% in May 2017, versus a 3.4% in April 2017 and 3.0% in March 2017. The revised March showing still was the weakest year-to-year change since July 2012. Separately, nominal year-to-year growth for M2 rose to 5.6% in July versus 5.5% in June 2017 and 5.9% in May 2017, with annual nominal growth in July 2017 M1 rising to 7.9%, versus 7.7% in June 2017 and 7.9% in May 2017.

**Graph HW-1: Comparative Money Supply M1, M2 and M3 Yr-to-Yr Changes through July 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 begun to narrow. 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 latest estimates of level and annual changes for July 2017 M3, M2 and M1, and for earlier periods, are detailed in the [Alternate Data](#) tab of [www.ShadowStats.com](http://www.ShadowStats.com). See the [Money Supply Special Report](#) for full definitions of those measures.

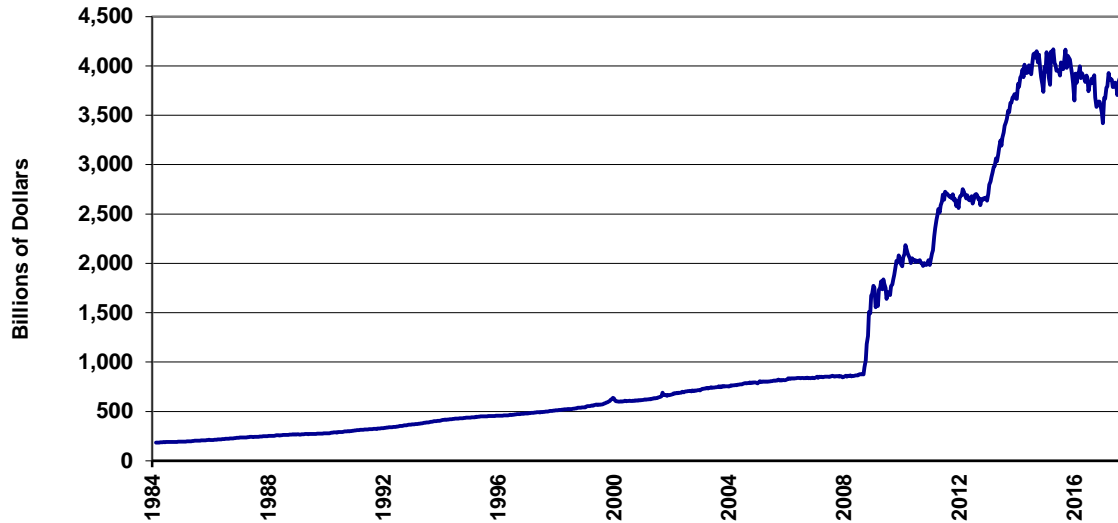
***Second-Quarter Velocity of Money Declined Minimally for M2 and M3, More Sharply for M1.*** As separately detailed and graphed in prior [Commentary No. 902-B](#), in the context of initial headline reporting for Second-Quarter 2017 GDP and annual revisions to both the nominal GDP and nominal Money Supply measures, the Velocity of Money (GDP/money supply) slowed for all three money supply measures M1, M2 and M3. For the first time in two quarters, quarterly M3 growth rose more rapidly than the GDP pace, where it had gained in the prior two quarters only for the broadest money measure M3. As a result growth rates in the narrower M1 and M2 measures (M3 encompasses M2, M2 encompasses M1), all were at faster paces, above that of the nominal GDP, with resulting slowing Velocity.

**Monetary Base Has Been Reasonably Stable/Minimally Uptrending.** 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 stable trading-range activity for upwardly revised target rates for federal funds, the level of the monetary base has been reasonably stable, with annual percentage change fluctuating around zero, although now minimally to the plus-side. Aside from short-term gyrations around a change in the targeted federal funds rate, circumstances generally should stay as they are until the Fed moves meaningfully either to sell its excess Treasuries and Mortgage-Backed Securities as part of a planned, eventual “balance sheet normalization,” or to embark upon expanded quantitative easing, amidst increasing liquidity stresses in the banking system from deteriorating economic conditions. Those issues will be reviewed in some detail in the next *Commentary No. 904*.

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

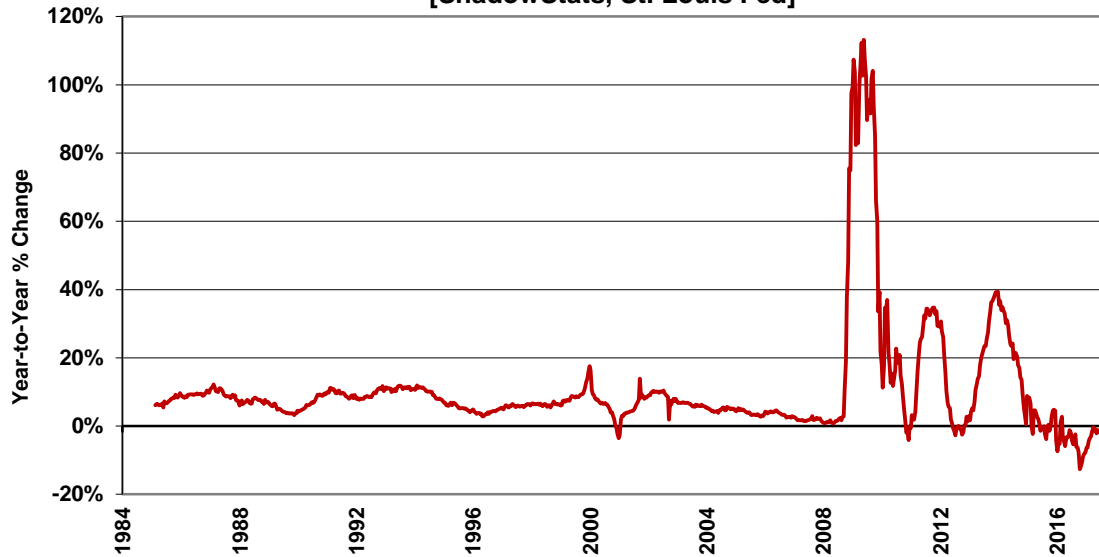
**Graph HW-2: Saint Louis Fed Monetary Base, Billions of Dollars (1984-August 2017)**

**St. Louis Fed Adjusted Monetary Base**  
Bi-Weekly to August 2, 2017, Seasonally Adjusted  
[ShadowStats, St. Louis Fed]



**Graph HW-2: Year-to-Year Percent Change, Saint Louis Fed Monetary Base (1985-August 2017)**

**St. Louis Fed Adjusted Monetary Base, Yr/Yr %**  
Bi-Weekly to August 2, 2017, Seasonally Adjusted  
[ShadowStats, St. Louis Fed]



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



## CONSUMER LIQUIDITY WATCH

### CONSUMER LIQUIDITY CONDITIONS: INCOME, CREDIT AND RELATIVE OPTIMISM.

*[The Consumer Liquidity Watch has not been revised from the version in prior-[Commentary No. 902-B.](#)]*

**Liquidity Stresses Mounted Amidst Faltering Optimism.** The U.S. consumer faces continuing financial stress, increasingly reflected in the renewed softening of headline economic activity, including Real Retail Sales, Home Sales and Construction Series and series that ultimately reflect in affected series such as Industrial Production, among others, with related, negative impact on the broad economy.

***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. Not surprisingly, consumer optimism has begun to falter anew.

Including the various consumer income stresses discussed in [Special Commentary No. 888](#), the broad underlying consumer liquidity fundamentals simply have not supported, and still do not support a turnaround in general economic activity 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 73.0% of the headline real, first-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 recently in [Commentary No. 896](#).

***Consumer Optimism: July Consumer Confidence and Sentiment Measures Mixed.*** This detail incorporates the full-month reporting of July 2017 for the University of Michigan’s Consumer Sentiment Index (Sentiment), updated July 28th, as well as the previously reported July 2017 reading of The Conference Board’s Consumer-Confidence Index<sup>®</sup> (Confidence). Reflected in *Graphs CL-1* and *CL-2*, both Confidence and Sentiment rose in September 2016 and plunged in October, likely reflecting concerns as to the direction of the presidential race. Post-election, both measures rallied sharply, reflecting a surge in consumer optimism into early 2017. Both series appeared to have topped and pulled back in June, but the July Confidence number just rebounded anew, albeit on top of a downwardly-revised reading for June, while the full-July Sentiment number continued to pull back, although it was revised minimally higher versus the advance-July estimate. Nonetheless, both the Confidence and Sentiment levels remained off their respective post-election, euphoric peaks of March 2017 (Confidence) and January 2017 (Sentiment).

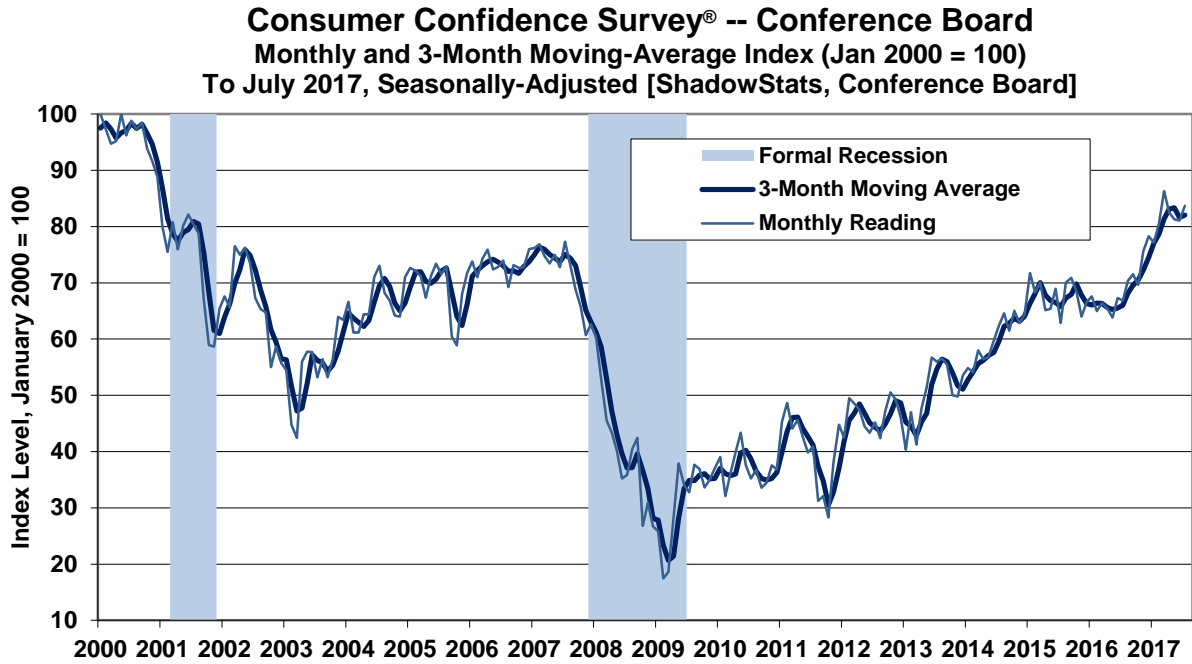
The Conference Board’s seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index<sup>®</sup> (*Graph CL-1*), and the University of Michigan’s not-seasonally-adjusted Consumer-Sentiment Index (*Graph CL-2*), again, both soared post-election, into early 2017, with Confidence booming into and topping in March and with sentiment booming into and topping in January 2017. The three-month moving averages in both series broke to pre-recession highs, with the Confidence hitting levels not seen since before the 2001 recession. The moving averages also have begun to falter, although still at high levels.

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

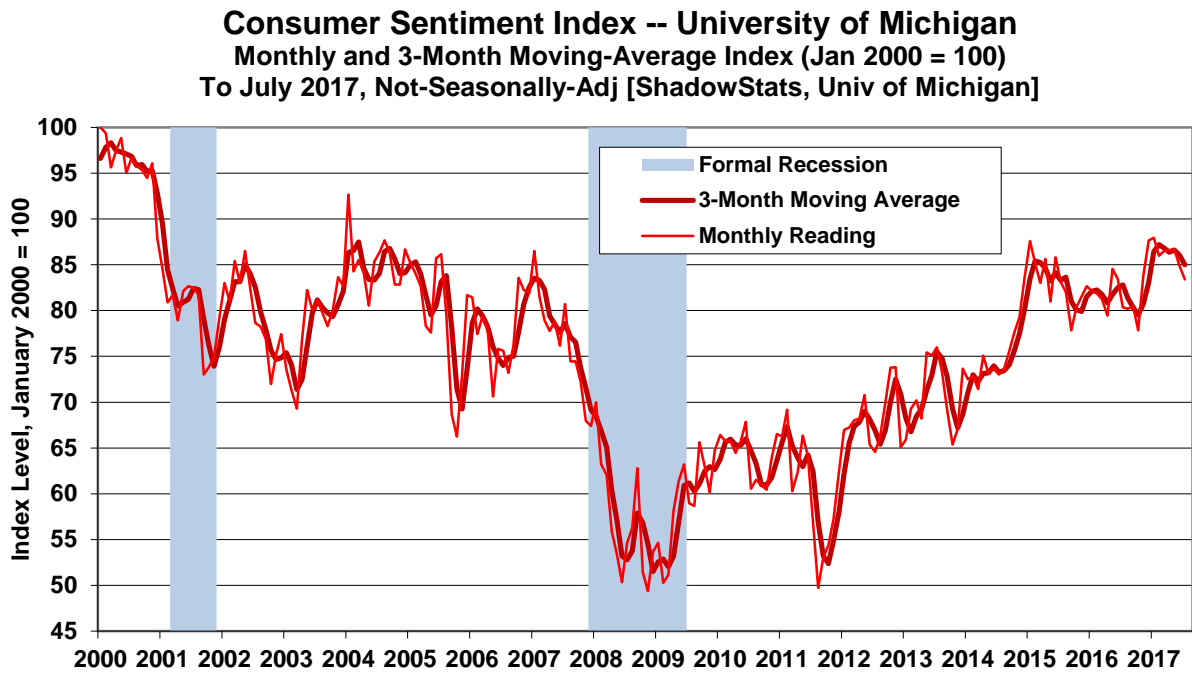
The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in [Commentary No. 764](#)), and often are highly volatile month-to-month, as a result. With what should become increasingly-negative, unstable and uncertain headline financial and economic reporting in the months ahead—beyond the early change-in-government euphoria—continued, successive negative hits to both the confidence and sentiment readings remain increasingly likely in the near future.

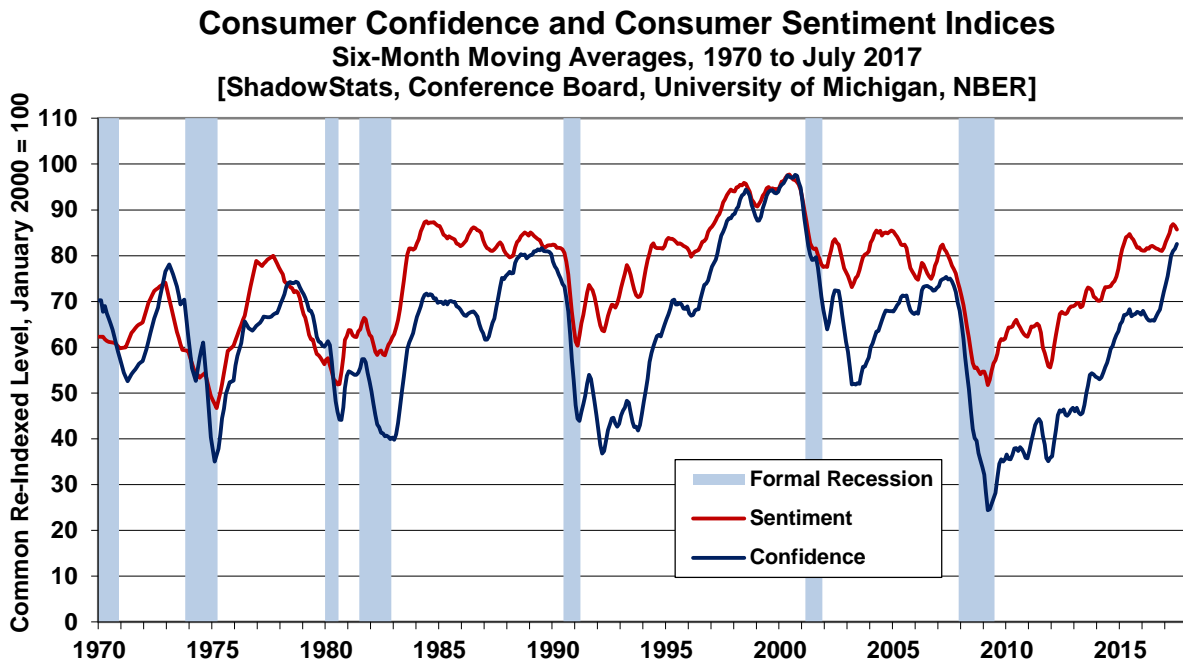
Smoothed for irregular, short-term volatility, the two series still generally had held at levels seen typically in recessions, until the post-2016 election circumstance. Suggested in *Graph CL-3*—plotted for the last 47 years—the latest readings of Confidence and Sentiment recently have recovered levels 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. 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. Beyond having happy feelings about the future, consumers still need actual income, cash-in-hand or credit in order to increase their spending.

**Graph CL-1: Consumer Confidence (2000 to 2017)**



**Graph CL-2: Consumer Sentiment (2000 to 2017)**



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

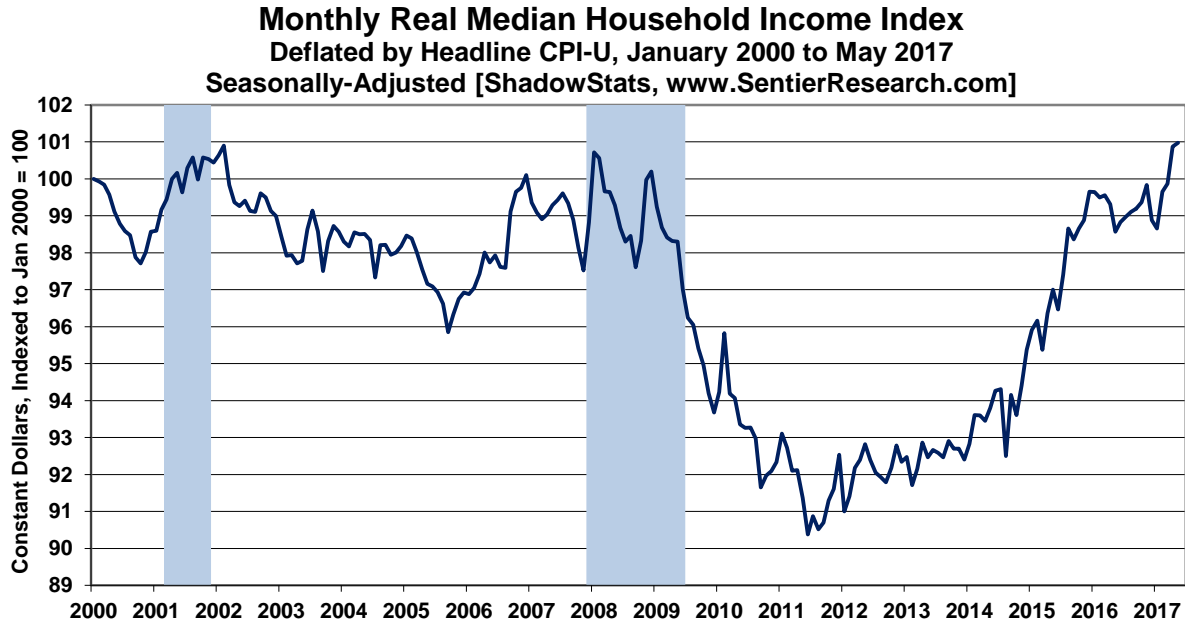
**Consumer Income: May 2017 Real Median Household Income Was Statistically Unchanged, Despite a Boost from Falling Gasoline Prices.** Previously discussed in [General Commentary No. 894](#), and in the contexts of continued, faltering gains in post-election consumer optimism, and inflation-adjusted activity 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%), as reported by [www.SentierResearch.com](http://www.SentierResearch.com). That followed a statistically-significant monthly gain of 1.00% in April 2017. As shown in *Graph CL-4*, such enabled May 2017 real monthly median household income to hold a level regained last month and otherwise last seen fifteen years ago, in February 2002. Year-to-year real median household income rose to 2.44% in May 2017, the highest level since last June, following an annual gain of 1.57% in April 2017 (see *Graph CL-5*).

Where real 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 should resume turning down anew, as headline pace of monthly consumer inflation picks up anew, perhaps as early as the July CPI.

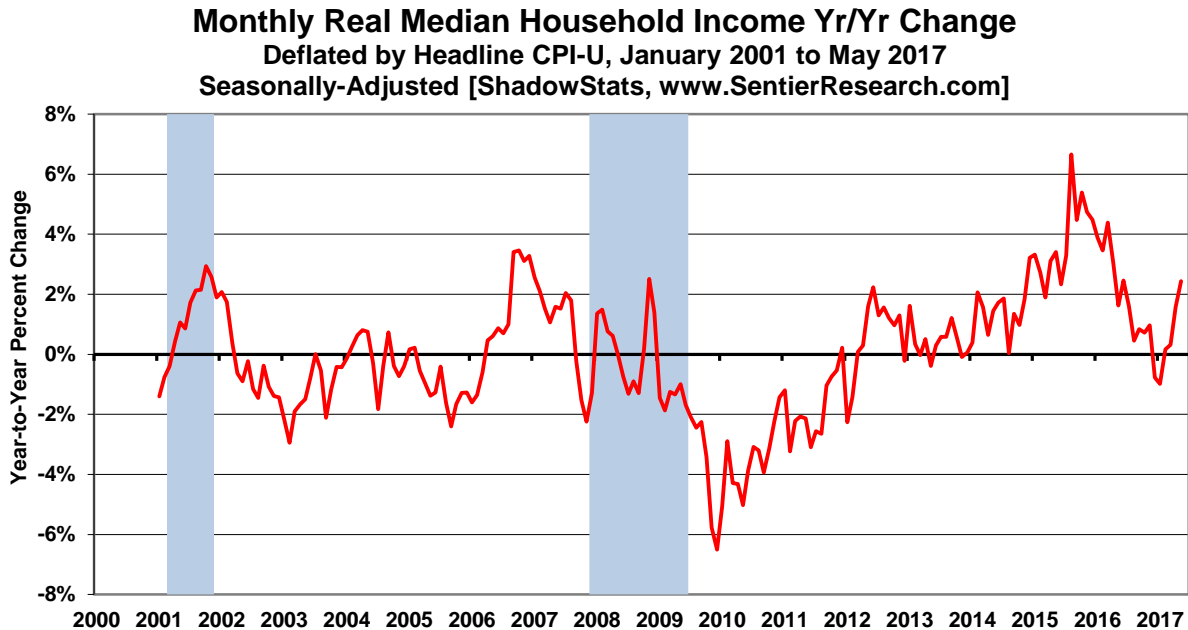
Nonetheless, the recent “rebound” in the series still has left consumers financially strapped. Where lower gasoline prices had provided some minimal liquidity relief to the consumer, indications are that any effective extra cash largely has been used to help pay down unsustainable debt or other obligations, 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.

**Graph CL-4: Monthly Real Median Household Income (2000 to 2017) Index, January 2000 = 100**



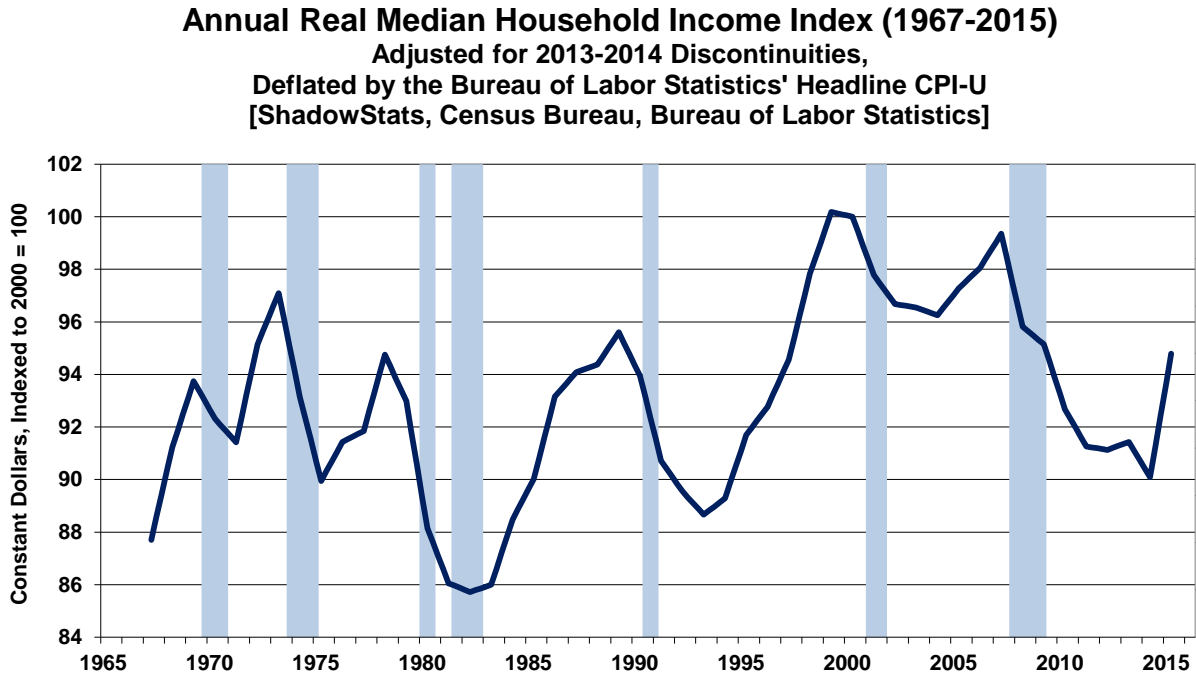
**Graph CL-5: Monthly Real Median Household Income (2000 to 2017) Year-to-Year Change**



This measure of real monthly median household income generally can be considered as a monthly version of the annual detail shown in *Graph CL-6*, which was updated ten months ago for 2015 detail (see the full analysis of the 2015 annual household income reporting in [Commentary No. 833](#), including an analysis of annual detail on income variance or “inequality”). The relative jump seen in the headline annual 2015

median income, despite formal adjustment for discontinuities in the recent annual reporting, was due largely to series redefinitions, not due to a sudden change in consumer liquidity, other than as tied to the collapse in gasoline prices and a related spike in the inflation-adjusted numbers. The level of real annual median household income for 2015, not only was below that seen at the purported trough of the economic collapse into 2009, but also it was below levels seen in the early-1970s and the late 1980s.

**Graph CL-6: Annual Real Median U.S. Household Income (1967 to 2015)**



**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.

**Differences in the Monthly versus Annual Median Household Income.** The general pattern of relative historical weakness also has been seen in the headline reporting of the annual Census Bureau numbers,



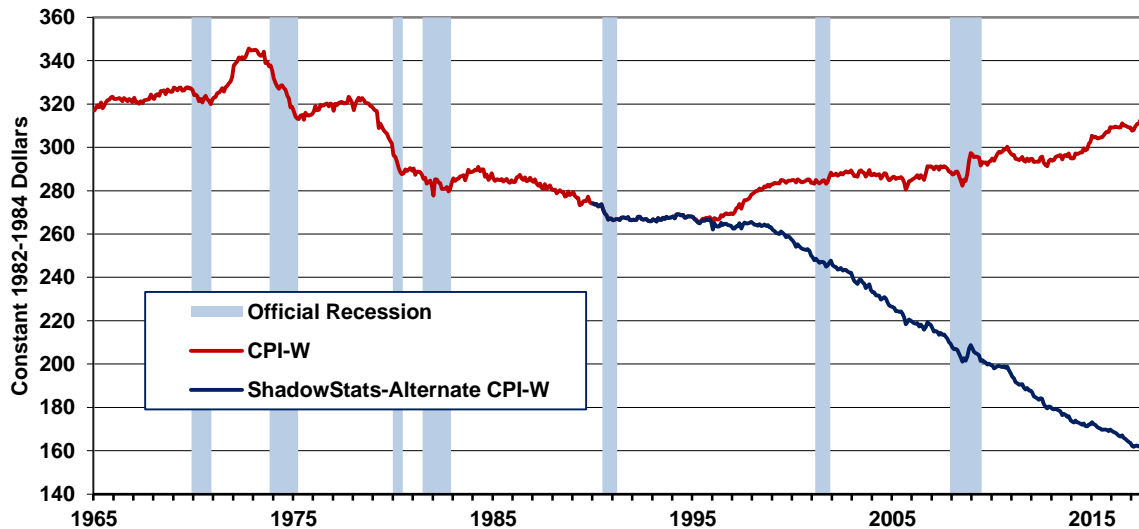
again, shown in preceding *Graph CL-6*, with 2014 real annual median household income having hit a ten-year low, and, again, with the historically-consistent 2015 annual number still holding below that seen when the collapsing economy hit its purported trough in 2009. The Sentier numbers had suggested a small increase in 2014 versus 2013 levels. Still, the monthly and annual series remain broadly consistent, although based on separate questions within the monthly Consumer Population Series (CPS), as conducted by the Census Bureau.

Where Sentier has 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.

**Real Average Weekly Earnings—June 2017—Month-to-Month Real Earnings Spiked by Declining Inflation.** For the production and nonsupervisory employees category—the only series for which there is a meaningful history (see the full discussion in the *CPI* section of the *Reporting Detail* in [Commentary No. 899](#)), spiked monthly by lower inflation in the context of headline, seasonally-adjusted declines in gasoline prices, the regularly-volatile real average weekly earnings were up by 0.53% in June 2017 (as reported by the Bureau of Labor Statistics on July 14th. That was against an unrevised gain of 0.04% in May 2017 and a revised monthly gain of 0.39% in April 2017. Year-to-year, the adjusted June 2017 real change rose to 1.10%, versus revised annual gains of 0.59% in May 2017 and 0.49% in April 2017.

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

**Real Average Weekly Earnings (Benchmark Revised)  
Production and Nonsupervisory Employees  
Deflated by CPI-W versus ShadowStats-Alternate (1990-Base)  
1965 to June 2017, Seasonally-Adjusted [ShadowStats, BLS]**



Initial reporting of second-quarter 2017 activity reflected an annualized real quarterly gain of 4.01%, following an unrevised first-quarter 2017 contraction of 1.13% (-1.13%), a fourth-quarter 2016 contraction of 1.36% (-1.36%), third-quarter 2016 growth of 1.48%, a second-quarter 2016 contraction of 0.11% (-0.11%) and first-quarter 2016 annualized growth of 1.81%.

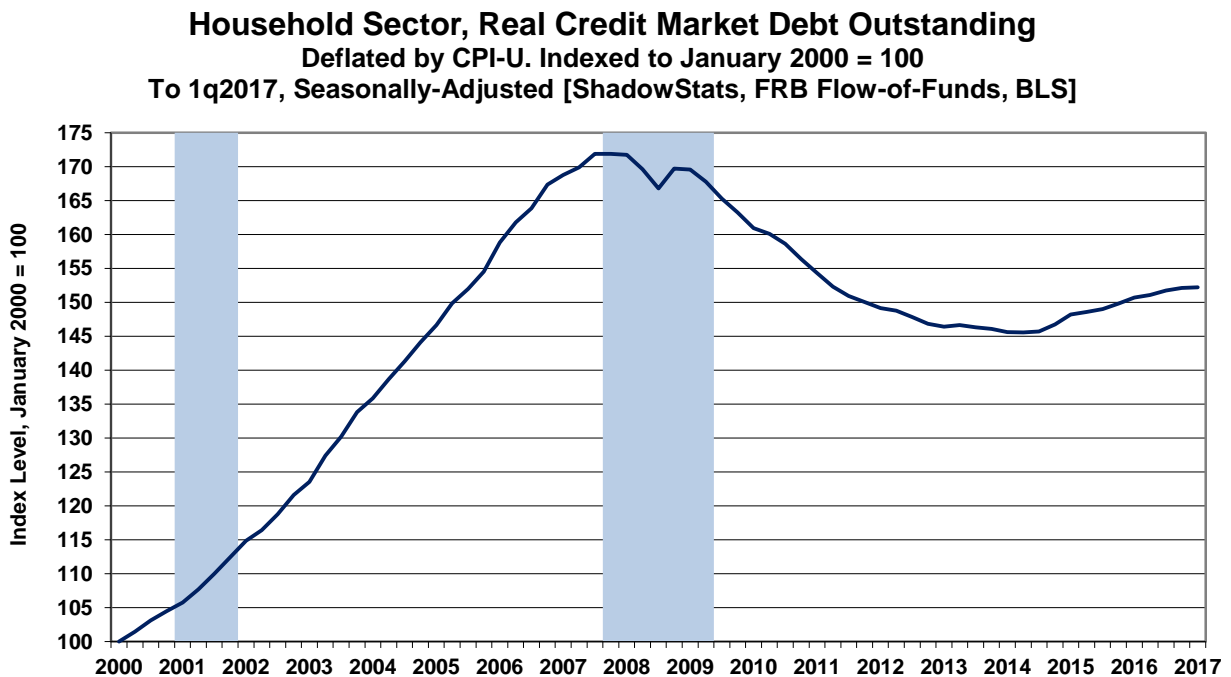


Year-to-year change in second-quarter 2017 real earnings rose by 0.73%, following an unrevised annual contraction of 0.29% (-0.29%) in first-quarter 2017, the first annual or year-to-year quarterly contraction since fourth-quarter 2012, when the real GDP effectively was unchanged quarter-to-quarter. The signal there highlighted financial stresses on the consumer and major downside risk to headline real GDP reporting.

*Graph CL-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.

**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.

**Graph CL-8: Household Sector, Real Credit Market Debt Outstanding (2000 through First-Quarter 2017)**



Consider *Graph CL-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 first-quarter 2017. Household Sector, Real Credit Market Debt Outstanding in first-quarter of

2017 still was down by 11.5% (-11.5%) from its pre-recession peak of third-quarter 2007, the same as in fourth-quarter 2016.

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 CL-9 to 11*.

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.

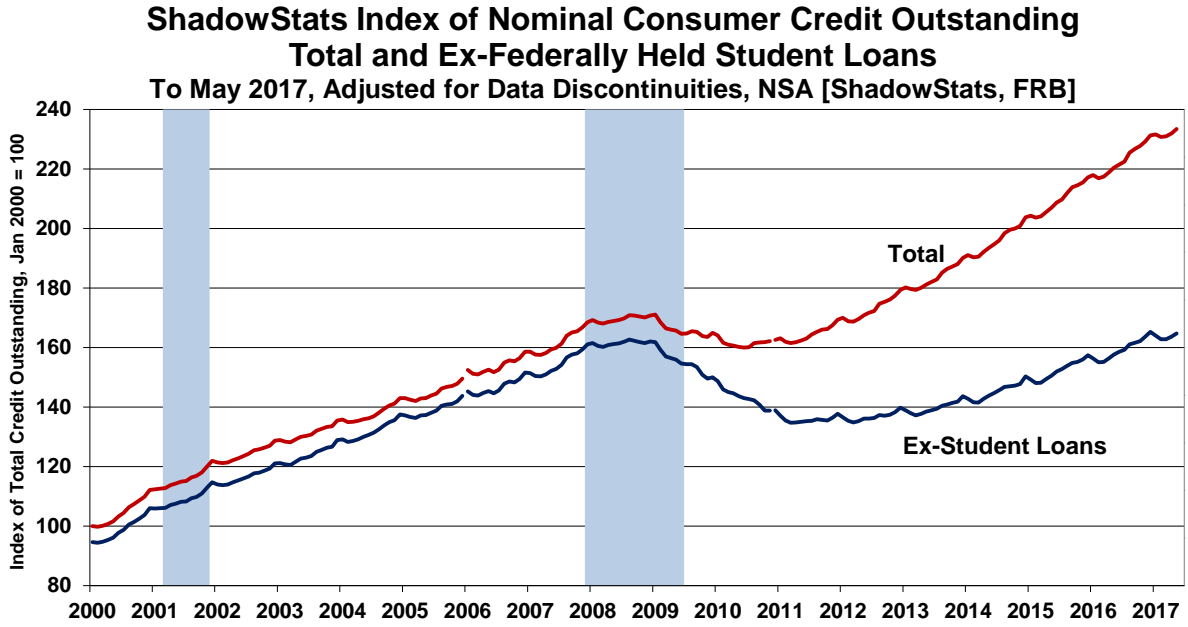
Shown through the latest reporting (May 2017), *Graph CL-9* of monthly Consumer Credit Outstanding is a subcomponent of *Graph CL-8* on real Household Sector debt. Where *Graph CL-9* reflects the nominal reporting, not adjusted for inflation, inflation-adjusted real activity for monthly Consumer Credit Outstanding is shown in terms of both level (*Graph CL-10*) and year-to-year change (*Graph CL-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.

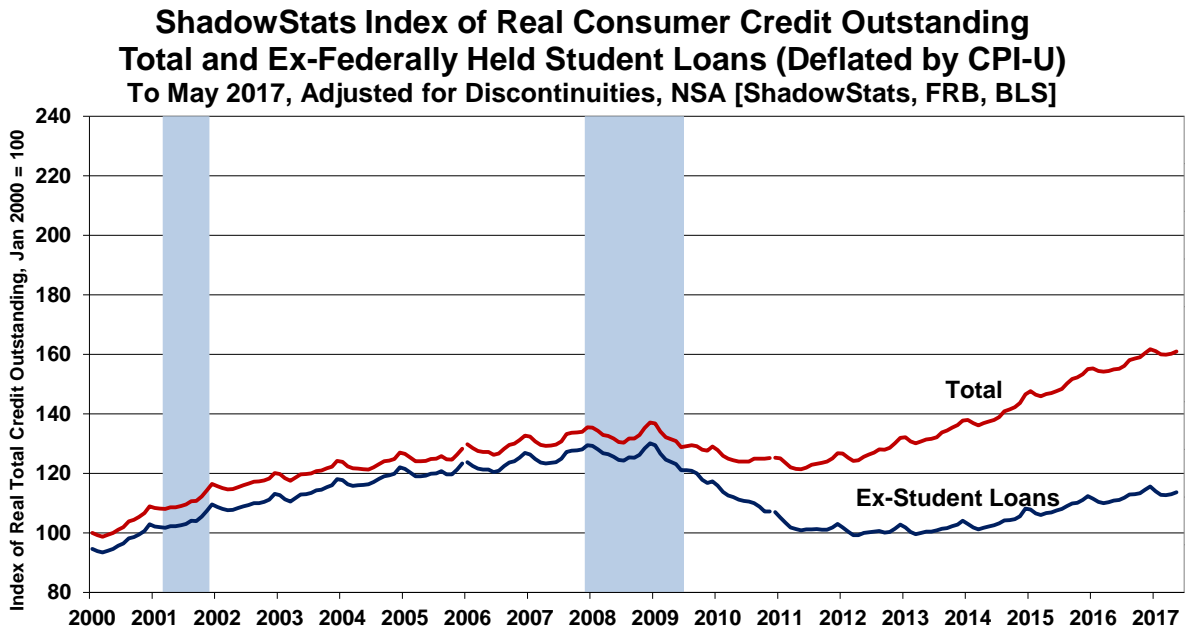
Adjusted for inflation, the lack of recovery in the ex-student loan area is more obvious. Although the recent monthly dips in the not-seasonally-adjusted consumer credit reflect a seasonal pattern, the pace of year-to-year growth continues to slow, suggesting some tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in May 2017 was down from its December 2007 pre-recession peak by 15.5% (-15.5%). Year-to-year growth in *Graph CL-11* tends to resolve most of the monthly distortions in the not-seasonally-adjusted data.

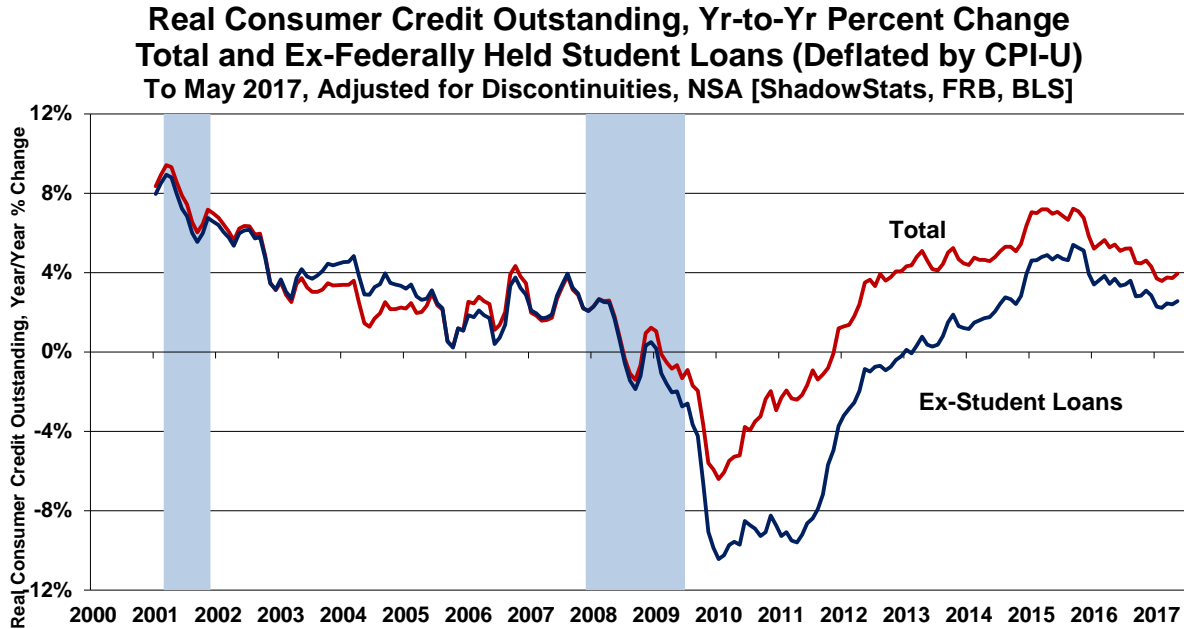
[Graphs CL-9 to CL-11 begin on the next page.]

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



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



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

### WEEK, MONTH AND YEAR AHEAD

**Continued Softening in Underlying Economic Reporting Should Compromise Fed Policies, Pummel the Dollar, Boost the Price of Gold and Foster Other Financial-Market Tumult, Irrespective of Gimmicked GDP and Labor Numbers.** Despite the relatively positive GDP benchmark revisions and initial second-quarter 2017 headline activity for the GDP, and stronger-than expected labor-market data, underlying reality remains a weakening, seriously-impaired U.S. economy, as discussed in today's *Opening Comments*. With that circumstance threatening a shift in FOMC policy, combined with the mounting political discord discussed in the *Opening Comments* of [Commentary No. 901](#) (see also [Special Commentary No. 888](#)), odds continue to mount of financial-market turmoil in the near future, particularly as likely triggered by a market-related, heavy sell-off in the U.S. Dollar. This circumstance will be reviewed and updated in *Special Commentary No. 904*, currently planned for August 11th. The balance of the text has been updated somewhat from prior regular [Commentary No. 902-B](#), along with the *Pending Releases* section.

Irrespective of the GDP benchmarking discussed in [Commentary No. 902-B](#) and the heavily-gimmicked July labor numbers discussed today, broad economic activity is has never fully recovered 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, has shown a marked downturn versus consensus forecasts. While these circumstances usually signal an unfolding, major downshift in underlying economic reality, in the current circumstance they also forewarns 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.

Separately, recent 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, broadly have confirmed that historical activity in recent years has been overstated and/or that it is turning down anew, particularly in 2015, with the availability of better-quality historical detail. Again, that is despite recent near-term improvement in some headline 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 13.5%.

Discussed in [No. 859 Special Commentary](#), the Trump Administration continues to face extraordinarily difficult times, but 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 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 break well before the 2018 Congressional Election will have a chance to stabilize the outlook for economic policy objectives.

[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 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 the long-standing hyperinflation and economic outlooks published in [2014 Hyperinflation Report—The End Game Begins – First Installment Revised](#) (April 2014) and [2014 Hyperinflation Report—Great Economic Tumble – Second Installment](#) (April 2014). The two *Hyperinflation* installments remain the primary background material for the hyperinflation circumstance. Other references on underlying economic



reality are the [Public Commentary on Inflation Measurement](#) and the [Public Commentary on Unemployment Measurement](#).

**Recent Commentaries (Covering Headline Details and/or Special Features).** [*Please Note: Complete ShadowStats archives are found at [www.ShadowStats.com](http://www.ShadowStats.com) (left-hand column of home page).*]

[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.

[Advance Commentary No. 902-A](#) (July 28, 2017) provided an initial assessment and highlights of the first-estimate of Second-Quarter 2017, along with the accompanying annual benchmark revisions, more-fully reviewed in today’s *Commentary No. 902-A*.

[Commentary No. 901](#) (July 27, 2017) discussed possible financial-market impact on continuing political discord in Washington, and reviewed the June 2017 Cass Freight Index, New Orders for Durable Goods and New- and Existing Home Sales.

[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. 899](#) (July 17, 2017) covered headline June 2017 Retail Sales, Industrial Production, the Consumer Price Index (CPI) and the Producer Price Index (PPI), along with a review of current circumstances affecting the markets, U.S. dollar, gold and silver and the FOMC.

[Commentary No. 898](#) (July 7, 2017) covered the headline employment and unemployment detail for June 2017, along with the initial estimate of annual growth in the ShadowStats Ongoing M3 for June.

[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<sup>®</sup> Advertising and the May Cass Freight Index<sup>™</sup>.

[Commentary No. 896](#) (June 29, 2017) reviewed the third estimate of first-quarter 2017 GDP.

[Commentary No. 895](#) (June 26, 2017) covered May 2017 New Orders for Durable Goods.

[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. 893](#) (June 16, 2017) assessed May 2017 New Residential Construction (Housing Starts) and updated *Consumer Liquidity Conditions*.

[Commentary No. 892](#) (June 15, 2017) reviewed May 2017 Industrial Production and assessed current circumstances and likely pending shifts in FOMC policy, in the context of rapidly-deteriorating, headline economic data.

[Commentary No. 891](#) (June 14, 2017) covered the May 2017 CPI and PPI, along with real and nominal retail sales, along with a quick comment on the FOMC rate hike.

[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<sup>®</sup> Advertising and April 2017 estimates of the Cass Freight Index<sup>™</sup>, and the monthly trade deficit and construction spending.

[Commentary No. 889](#) (May 26, 2017) reviewed the second-estimate, first-revision to first-quarter 2017 GDP, and the April 2017 estimates of New Orders for Durable Goods and New- and Existing Home Sales and Sentier Research's April Real Median Household income.

[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.

[Commentary No. 886](#) (May 16, 2017) reviewed the headline details of the April 2017 CPI and PPI detail, along with headline reporting of nominal and real Retail Sales, real Average Weekly Earnings and regular monthly review of U.S. dollar conditions and prospects.

[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. 884](#) (May 4, 2017) reviewed the March 2017 details for the U.S. Trade Deficit and Construction Spending and the Conference Boards' reporting of April 2017 Help Wanted OnLine.

[Commentary No. 883](#) (April 29, 2017) covered the headline detail for the "advance" or first-estimate of first-quarter GDP, along with an update to *Consumer Liquidity Conditions*.

[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. 881](#) (April 19, 2017) reviewed the prior March 2017 Industrial Production, Housing Starts and the Cass Freight Index<sup>™</sup>, along with an economic update in advance of the initial first-quarter 2017 GDP estimate.

[Commentary No. 880](#) (April 15, 2017) detailed the prior March 2017 headline reporting the of both Real and Nominal Retail Sales, Real Earnings, the CPI, the PPI and updated Consumer Liquidity, where mounting stresses on consumer income and credit are signaling major economic issues ahead.

[Commentary No. 879](#) (April 7, 2017) covered March 2007 Employment and Unemployment, Help-Wanted Advertising and an update on monetary policy and Money Supply M3 (the ShadowStats Ongoing Measure).

[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™.

[Commentary No. 873](#) (March 16, 2017) discussed prospects for future tightening and/or a return to quantitative easing by the FOMC, along with the prior review of the February 2017 Residential Construction reporting.

[Commentary No. 872](#) (March 15, 2017) offered some initial comment on the FOMC rate hike, in conjunction with the review of last month's February 2017 Retail Sales (real and nominal), Real Earnings and the CPI and PPI.

[Commentary No. 871](#) (March 10, 2017) covered reporting of February Labor Conditions, updated Consumer Liquidity and the ShadowStats Ongoing M3 Measure for February 2017, and a revised FOMC outlook.

[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. The GAAP-detail will be reviewed in a *Special Commentary*.

[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: Consumer Price Index—CPI (July 2017).** The Bureau of Labor Statistics (BLS) will release the July 2017 CPI on Friday, August 11th, which will be covered in *Special Commentary No. 904* of that date. The headline July CPI-U likely will rally month-to-month, up by perhaps 0.3% plus-or-minus, in the context of a small month-to-month decline in gasoline prices more than offset by the revision to positive seasonal-adjustment factors in the second half of the year. Headline, unadjusted year-to-year annual inflation for July 2017 could strengthen to 1.9%, plus-or-minus, versus the 1.6% seen in June 2017 reporting.

***Upside Monthly Inflation Impact from Minimally-Lower Gasoline Prices Boosted by a Shift to Positive Seasonal Adjustments.*** Average retail gasoline prices declined in July 2017 by 0.19% (-0.19%) for the month on a not-seasonally-adjusted basis, per the Department of Energy. Where BLS seasonal adjustments to gasoline prices in July turn meaningfully positive, that should lead to seasonally-adjusted energy numbers offering a net positive contribution of roughly 0.1% to the headline monthly change in the CPI-U.

Likely boosted as well by higher food and “core” (net of food and energy) inflation, the headline monthly CPI-U reading should show its strongest since a 0.6% headline gain in January 2017, as well as reversing a downtrend in the unadjusted year-to-year CPI-U since its near-term peak of February 2017.

***Annual Inflation Rate.*** As noted in [Commentary No. 899](#), year-to-year, CPI-U inflation would increase or decrease in July 2017 reporting, dependent on the seasonally-adjusted month-to-month change, versus the adjusted, headline gain of 0.02% in July 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 July 2017, the difference in July’s headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the June 2017 annual inflation rate of 1.63%. Given a seasonally-adjusted estimate of a 0.3% gain in the monthly July 2017 CPI-U, that would leave the annual CPI-U inflation rate for July bouncing back to about 1.9%, plus-or-minus, depending on rounding.

**Producer Price Index—PPI (July 2017).** The Bureau of Labor Statistics (BLS) will release the July 2017 PPI on Thursday, August 10th, with detail covered in *Special Commentary No. 904* of August 11th. Odds favor positive wholesale inflation, at least on the goods side of the reporting, perhaps up by 0.2%, plus-or-minus, due to minimally-negative, seasonal-factor adjustments providing only negligible offset to a strong rally in the unadjusted wholesale monthly-prices of petroleum-related products.

The dominant services sector, however, often provides some counter-move to the hard-inflation estimate on the goods side. Such comes from counterintuitive “deflation” or “inflation,” reflecting falling or rising “margins,” in turn inversely reflecting rising or falling costs. Guesstimation in that services sector remains highly problematic, as discussed in *Inflation that Is More Theoretical than Real World?* of [Commentary No. 899](#), where, again, the services component could offset some of the strength in the headline goods inflation.

Unadjusted oil prices rose sharply in July 2017, as did wholesale gasoline prices. Based on the two most-widely-followed oil contracts, monthly-average oil prices rallied by 3.2% and 4.6%. That was accompanied by an 8.6% surge in unadjusted, monthly-average wholesale gasoline prices (all prices per Department of Energy). Where PPI seasonal adjustments for energy costs in July are minimally negative, a petroleum-related monthly price gain should lead a month-to-month gain in the adjusted Final Demand Goods component of the PPI.

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