

COMMENTARY NUMBER 864

Labor Detail and Revisions, Construction Spending and Consumer Liquidity

February 8, 2017

**Fourth-Quarter and Annual 2016 Real Merchandise-Trade Deficits
Were Worst in 10 Years, with Implied Negative GDP Revisions**

**Downside Payroll Benchmark Revisions to First-Half 2016 were
Accompanied by an Offsetting Growth Accelerator Added to Second-Half 2016**

**Upside Annual Bias Factors Were Boosted to Roughly 993,000 Jobs from 841,000,
Despite Indicated Overstatement of 2016 Payroll Growth**

**Current Employment Gains Exaggerated by Highly Questionable Revisions and
Revamped Seasonal-Adjustment Modeling (Still Not Comparable Month-to-Month)**

**Annual Growth Rates in January Payrolls and Full-Time Employment Still at
Multi-Year Lows; Payroll Growth Weakest Since Exiting the Recession**

**January 2017 Unemployment Rates Rose: U.3 Rose to 4.8% from 4.7%,
U.6 Rose to 9.4% from 9.2%, ShadowStats-Alternate Rate Rose to 22.9% from 22.7%**

**Real Construction Spending Remained in Stagnant Non-Recovery,
Still 23% (-23%) Shy of Its Pre-Recession High**

December Real Median Household Income Took a Statistically-Significant Hit

**January 2017 M3 Annual Growth at 3.6%, in Context of a
Major Fed Benchmarking Reducing M3 and M2 Annual Growth Rates,
Reflecting an Intensifying Flight to Cash into M1**

PLEASE NOTE: The next regular Commentary, scheduled for tomorrow, Thursday, February 9th, will cover February 7th detail of the December 2016 Trade Deficit. The deficit improved month-to-month in context of prior-period revisions but deteriorated to the worst quarterly and annual levels in ten years.

NOTE TO SUBSCRIBERS: I apologize for the delayed publication of this Commentary covering the January 2017 Labor Conditions (including annual revisions), December Construction Spending, and the latest Consumer Liquidity and the Money Supply detail, and in the backed up coverage of the December Trade deficit. The research and writing here are mine alone, and unusual circumstances, such as annual benchmark revisions, can throw off sometimes overly-optimistic plans for scheduled Commentaries, particularly when there are unexpected publication issues, which also happened.

As a heads up, next week's schedule is an unusual one, with January Retail Sales, Industrial Production and the CPI (including real Retail Sales and Earnings) all released by their respective Bureaus or Board on February 15th. Given the volume of the new information released, the related Commentary will be published the next day, February 16th, which also is the release date for Housing Starts. So, with the PPI being released on the 14th, a series not generally covered by itself, one massive Commentary on February 16th is planned for coverage of the January PPI, CPI (and related series), Retail Sales, Industrial Production and Housing Starts. Thank you for your continued support and interest. Please call any time at (707) 763-5786, if you have questions or just would like to talk.

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

Revamped Labor Detail Was Highly Misleading. Despite January 2017 help-wanted advertising holding in year-to-year contraction for the twelfth straight month¹—a solid leading indicator of unfolding recession—headline January employment conditions were boosted artificially by highly questionable revisions and guesstimations out of the Bureau of Labor Statistics (BLS), including a new system for selecting seasonal-adjustment processes for payrolls. Headline January 2017 payroll employment gained 227,000 jobs, in the context of upside benchmark revisions to prior months, irrespective of the 2016 annual benchmarking survey showing an overstatement of historical growth.

Separately, Household-Survey employment surged in January by a not-believable 457,000, coincident with, but purportedly adjusted for, discontinuities from the annual revisions to population estimates used in calculating those numbers. The greater problem remains the month-to-month non-comparability of those seasonally-adjusted Household Survey data, where seasonal adjustments are recalculated every month, but the consistent, revised historical series is not published. Despite surging headline employment, the U.3 unemployment rate rose to 4.8% from 4.7%, because the unemployment count increased by 127,000, at a proportionately faster pace than the employment count.

¹ In the history of the two major economic indicators that go back nearly 100 years, to the post-World War I era, current year-to-year contractions are of a nature never seen outside of what have been declared as formal recessions. Those series are industrial production and the current version of help-wanted advertising (The Conference Board's Help Wanted OnLine[®]), discussed respectively in [Commentary No. 854](#) and in [Commentary No. 820](#) and [Commentary No. 852](#). January 2017 HWOL detail is available from and viewable without charge at [The Conference Board](#).

Indicated U.S. Economic Health Still Massively Overstated. Underlying reality for January 2017 labor conditions remained in the realm of a 22.9% broad unemployment rate, with the actual monthly payroll-employment change likely flat-to-minus, despite more-upbeat headline indications out of the BLS. Specifically, the government showed headline U.3 unemployment notching higher to 4.8%, with a benchmarked and re-adjusted headline monthly jobs gain of 227,000.

Reporting quality of January headline employment and unemployment data suffered from the regular monthly distortions, exacerbated this month by an annual benchmark revision and changes to seasonal-adjustment methodologies for payroll employment, and from annual population re-estimation for the unemployment series, which went through seasonal-adjustment revisions last month. Most reporting gimmicks continue to evolve out of the fine-tuning of longer-range political manipulation. Such includes changes to methodology with the upside bias-factors created post-1983 recession for payroll counts. That became the current birth-death modeling, with the upside biases created for enhancing the payroll-employment count, an area that was further bloated in the current annual revisions (see the *Birth-Death/Bias-Factor Adjustment [BDM]* in the *Reporting Detail* section).

Consider, too, the politically-orchestrated methodology changes, such as redefining “discouraged workers” out of longer-term unemployment accounting, in coordination with the NAFTA agreement (see the *ShadowStats-Alternate Unemployment Rate Measure* discussion in the *Reporting Detail* Section).

As designed, intended and implemented over decades, the regularly-gimmicked headline employment and unemployment numbers and annual revisions meaningfully have overstated labor-market health in the January jobs and unemployment reporting. Separately, the headline monthly reporting details for the both the payroll and unemployment series broadly are not consistent month-to-month. Concurrent seasonal-factor-adjustment are used to revise the prior five years of seasonal adjustments each and every month, for both series, but the consistent, revised historical data are not published each month (see *Headline Distortions from Shifting Concurrent-Seasonal Factors* in the *Reporting Detail*).

Household Population Revisions. The BLS (in conjunction with the Census Bureau) publishes revised estimates of the U.S. Civilian Noninstitutional Population each January, where those estimates are used in converting the results of the Census Bureau’s monthly Current Population Survey (see the *Note on Reporting-Quality Issues and Systemic-Reporting Biases* in the *Week, Month and Year Ahead*) into hard-number estimates of the Household Survey, based on the survey’s percentages against the guesstimated monthly population levels.

Each January, the re-estimated population numbers throw off relative month-to-month reporting. For example, the level of seasonally-adjusted headline employment in January 2017 was lower versus headline December 2016 reporting by 30,000 (-30,000) but the BLS indicates that employment really gained an incredible (as in unbelievable) 457,000 when viewed on the basis of consistent reporting. In like manner, the number of unemployed purportedly really increased by 127,000 on a consistent basis, instead of the published increase of 106,000. Driving these numbers, the published decline in the population of 660,000 (-660,000) really was a gain of 171,000, per the BLS (see Table C of on page 4 of the [BLS Press Release](#)).

Due to the downgrading of the population estimates, comparative monthly levels of the-not-seasonally-adjusted data levels (not rates, which are ratios) are understated and can be re-estimated at a January 2017 level consistent with December 2016 by multiplying the headline January number by 1.003271. The

rates, such as the unemployment rate, participation rate, etc., should be unaffected as they are ratios of proportionately-biased data levels. The numbers published in this *Commentary* are reported or noted as to “consistent” level, while graphs reflect the headline detail being used by the BLS going forward.

Seasonally-adjusted data are very similarly affected and corrected, although none of the seasonally-adjusted data are otherwise comparable with prior months, as discussed earlier in terms of the lack of month-to-month consistent reporting used along with concurrent seasonal factor adjustment process.

Payroll Benchmark Revisions. Repeating patterns of recent years, what had been indicated initially as a downside annual benchmark revision to the Payroll Employment Survey was turned ultimately to the upside, with an increase in upside biases to annual payroll gains (from an aggregate 841,000 to 993,000), where a decrease otherwise was indicated per the benchmarking. Discussed in the *Birth-Death/Bias-Factor Adjustment (BDM)* in the *Reporting Detail* section, however, that annual add-factor of 993,000 jobs remains well shy of the regular overstatement of payroll employment. Due to birth-death modeling issues, the total annual overstatement runs in excess of 2.4 million (200,000 per month) as estimated by *ShadowStats*. The recent history of annual benchmarking also is discussed in the *Birth/Death ...* section.

The effect here, even allowing for more-frequent BLS assessment of the monthly accuracy of its payroll data, was to reverse a process of downside benchmarking that should have played out at least to year-end 2016. Instead, the monthly payroll growth was recast with an effective jobs-growth accelerator, post-March 2016, in conjunction with a recasting of seasonal adjustments, reflected in *Graph 1*. As a result, the just-revised, headline payroll level for December 2016 of 145,327 actually revised higher by 24,000 jobs from its pre-benchmarking headline reporting.

The initial estimate (summary number) for the 2016 benchmark was for a downside revision in total, not-seasonally-adjusted 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 were massaged and recast to an aggregate downside revision of 81,000 (-81,000), instead of the purported 150,000 (-150,000) found in the surveying. That change then was imputed for adjustments back to April 2015, and should have been carried forward to December 2016, but such did not happen. The new, seasonally-adjusted detail incorporated increased flexibility for the BLS to select the most-desirable seasonal-adjustment processes, which can boost the monthly, adjusted detail. Noted in the *Headline Distortions from Shifting Concurrent-Seasonal Factors* in the *Reporting Detail* section, however, historically consistent month-to-month, seasonally-adjusted data never are published in the headline detail by the BLS.

Payroll Benchmarking Graphs. Included benchmark revisions (April 2015 to December 2016) to the unadjusted data, as well as a revamping of the seasonal adjustment factors are shown in *Graph 1* back to January 2014. Some small, unspecified revisions to both the adjusted and unadjusted data precede 2012. The revisions shown in the graph on a seasonally-adjusted basis include the unadjusted raw benchmarking for April 2015 forward. The net of revisions attributed to seasonal-adjustment factors is the difference between the orange and brown lines, April 2015 and after, or as shown just with the indicated level of the orange lines, before April 2015. The pattern of seasonal adjustment revisions shown in 2014 generally repeats back in time, with a declining magnitude each year to 2012.

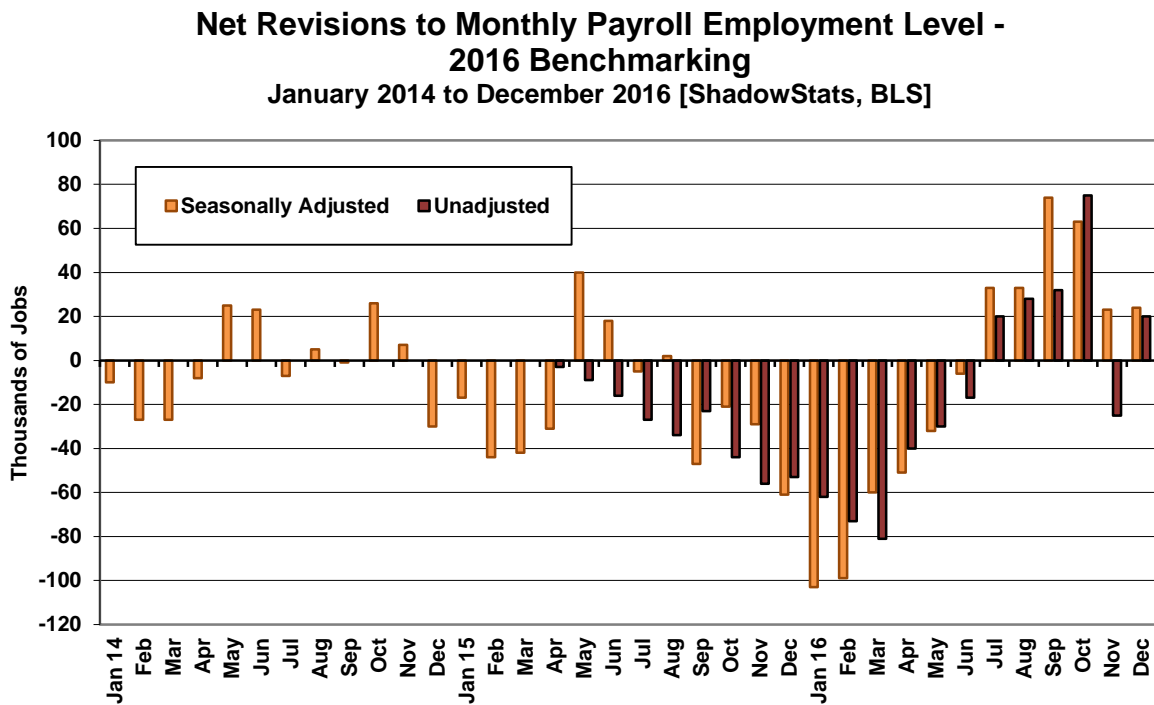
Indicated in *Graph 1*, much of the extreme revision reflected sharp changes in seasonal-adjustment. Discussed in *Headline Distortions from Shifting Concurrent-Seasonal Factors* in the *Reporting Detail* section, the headline, seasonally-adjusted monthly payroll data never are published on a consistent month-

to-month basis, except for the current headline month (January 2017) and the prior month (December 2016). While the second-month prior is consistent in terms of level, it is not in terms of month-to-month change (see *Graphs 37* and *Graphs 38*).

SPECIAL REQUEST TO SUBSCRIBERS: *ShadowStats would appreciate feedback [at (707) 763-5786 or johnwilliams@shadowstats.com] as to the value you find in, and interest you have in the corrected, consistent payroll numbers provided in the Headline Distortions from Shifting Concurrent-Seasonal Factors section in the Reporting Detail. Specifically, would you like to see that detail continued in future Commentaries. Those numbers are costly for us to produce, yet significant additional information also can be pulled from the underlying monthly analysis, once completed.*

Under consideration is a supplemental subscription service, which would provide consistent month-to-month payroll reporting also by industry (customized to subscriber needs and interest), based on internal BLS data not otherwise published. The monthly discrepancies between the headline seasonally-adjusted data and consistent monthly numbers often are small. Yet, occasionally they vary by an aggregate of 100,000 jobs or so, meaningfully distorting the monthly detail, both in aggregate and by subsidiary industries. Thank you in advance for your thinking.

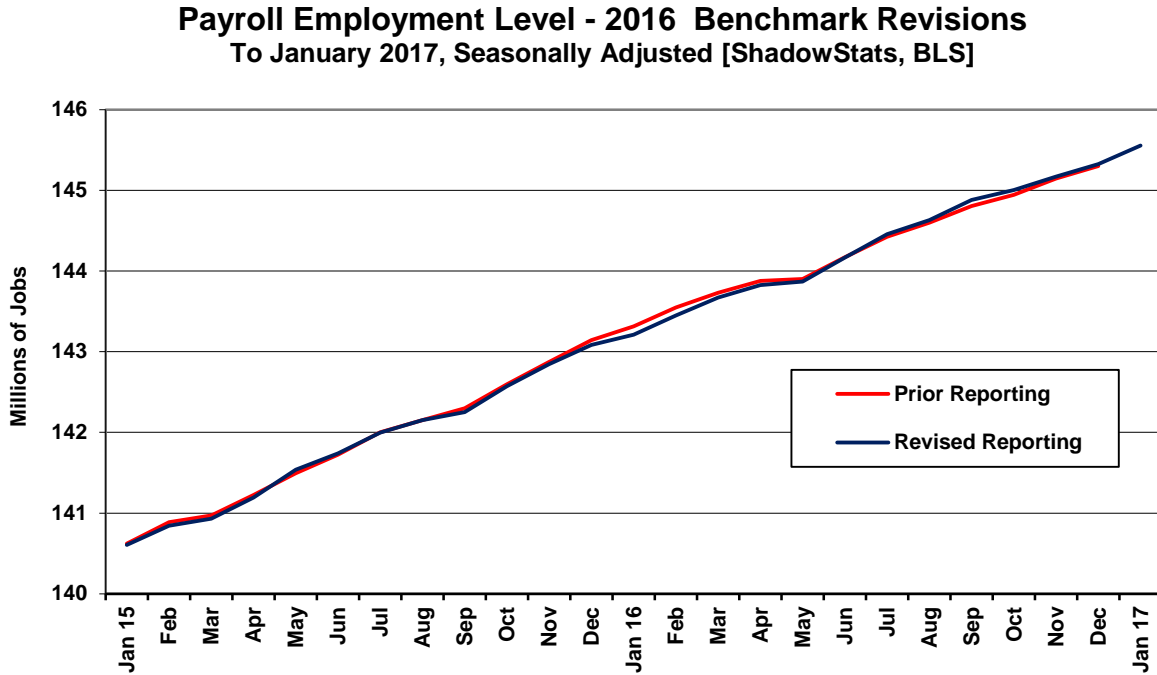
Graph 1: Payroll Employment Level, 2016 Benchmark Revision



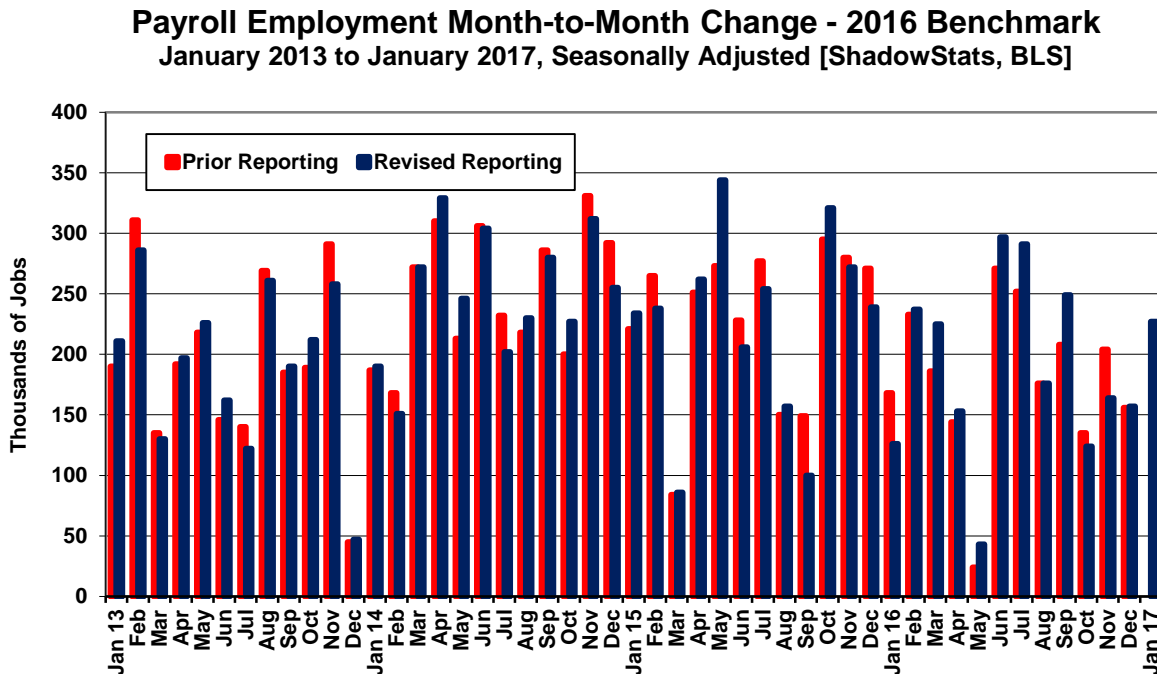
Graphs 2 to 4 respectively plot the headline payroll benchmarking revisions in terms of level of employment, month-to-month change in payroll level and year-to-year percent change in payroll level.

[Graphs 2 to 4 begin on the following page.]

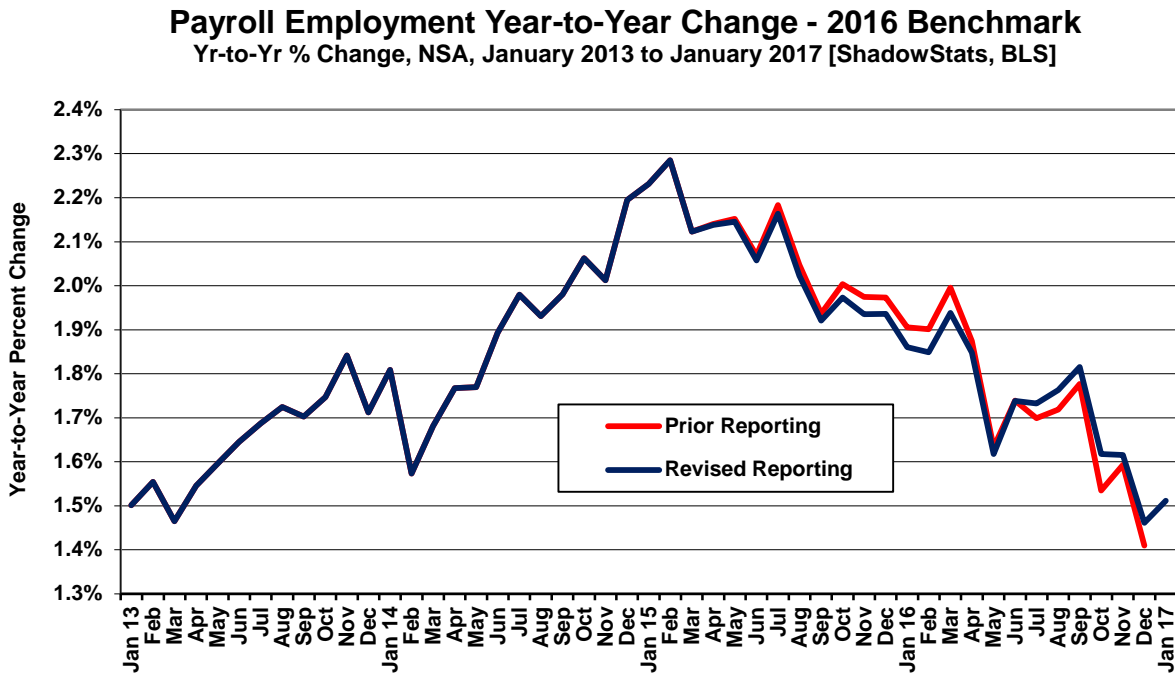
Graph 2: Payroll Employment Level, 2016 Benchmark Revision



Graph 3: Payroll Employment Month-to-Month Change in Jobs Count, 2016 Benchmark Revision



Graph 4: Payroll Employment Monthly Year-to-Year Percent Change, 2016 Benchmark Revision



Today’s Commentary (February 8th). These *Opening Comments and Executive Summary* cover summary detail of January 2017 labor conditions, in the context of the annual benchmark revisions to the payroll survey and the annual revision to “population controls,” the population assumptions used in setting the underlying base for household or unemployment headline details. Also covered are December 2016 U.S. construction spending and a regular update of consumer liquidity conditions.

The *Hyperinflation Watch* updates monetary conditions with the headline estimate of year-to-year growth for the January 2017 ShadowStats Ongoing M3 Estimate.

The *Week, Month and Year Ahead* section of tomorrow’s *Commentary No. 865* will preview next week’s reporting of the January 2017 PPI, CPI, nominal and real Retail Sales, Industrial Production and New Residential Construction (Housing Starts).

Executive Summary: Employment and Unemployment—January 2017—Underlying Recession Continued in Play versus Nonsense Labor Data. What otherwise often are just highly questionable monthly labor data was pushed heavily into the realm of nonsensical and relatively worthless headline detail in the context of the annual revisions discussed in the *Opening Comments*.

Payroll Employment Survey: Bloated Payroll Levels, Historically-Troubled Annual Payroll Growth.

[Please note that all January 2017 payroll survey results are in the context of the 2016 annual payroll-survey benchmark revisions as discussed in the *Opening Comments*.]

In the context of increased, heavily-distorted bloating, unstable seasonal adjustments, and inconsistent benchmarking, the seasonally-adjusted, headline payroll gain for January 2017 was 227,000. That followed an upwardly benchmarked 157,000 gain in December 2016 and a downwardly-revised gain of 164,000 jobs gain in November 2016. Net of prior-period revisions, January 2016 payrolls rose by 251,000, instead of the headline 227,000. So much for what purportedly was to be a downside revision to prior history.

The benchmarked, not-seasonally-adjusted, year-to-year growth in January 2017 nonfarm payrolls of 1.51% notched higher from a benchmark-revised 1.46% in December 2016, but it was down from a revised 1.62% in November 2016. The December 2016 annual growth was the lowest level of growth in 62 months, since October 2011, when payrolls first were recovering from the economic collapse. The uptick in January 2017 annual growth to 1.51% remained at a level rarely seen, except going into or coming out of recessions.

Household Survey: Counting All Discouraged Workers, January 2017 Unemployment Rose to 22.9%.

[Please note that all January 2017 household survey results (the unemployment and related surveying) are in the context of a downside adjustment in the annual re-estimation of the January 2017 level of the civilian noninstitutional population, which is used by the Bureau of Labor Statistics (BLS) as the base for estimating the proportionately-determined hard numbers in the monthly unemployment estimations. Discussed in the *Opening Comments*, ratios such as the various unemployment rates are not affected, in theory. Month-to-month seasonally-adjusted and unadjusted changes in level, such as the number of unemployed, however, are affected, and those numbers are reported in this *Commentary* as estimated to be consistent on December 2016-to-January 2017 per the BLS, or per ShadowStats if not otherwise specified by the BLS. Headline levels in the BLS monthly seasonally-adjusted or unadjusted data shown in the February BLS press release are not comparable month-to-month, December-to-January.]

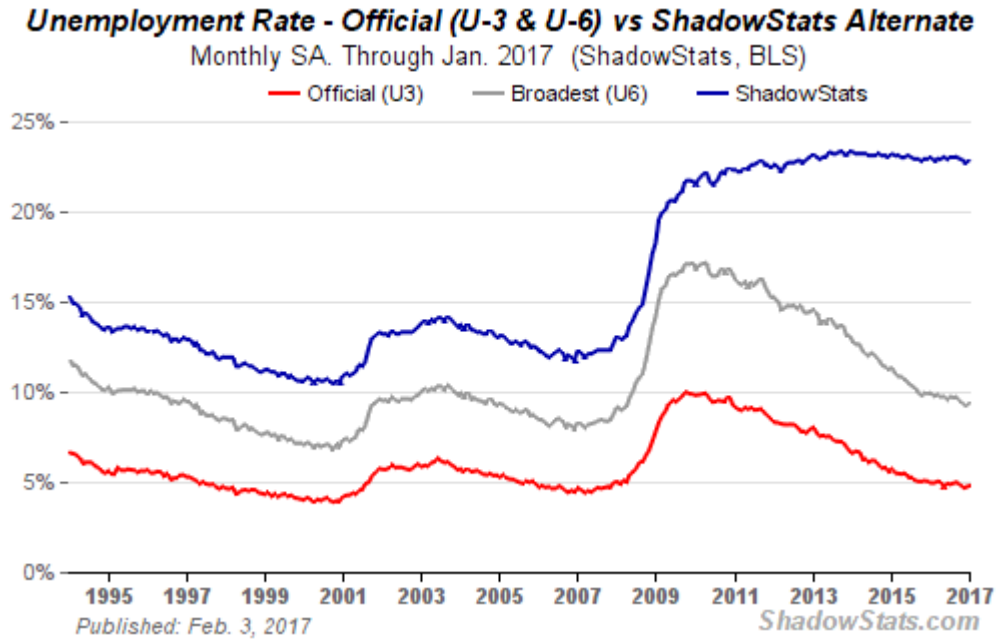
Discussed frequently in these *Commentaries* on monthly unemployment conditions, what removes headline-unemployment reporting from common experience and broad, underlying economic reality, simply is definitional. To be counted among the headline unemployed (U.3), an individual has to have looked actively 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 counted by ShadowStats (see the extended comments in the *ShadowStats Alternate Unemployment Measure* in the *Reporting Detail*).

Graph 5 reflects headline January 2017 U.3 unemployment increasing to 4.78% from 4.72% in December 2016 and 4.65% in November 2016; headline January 2017 U.6 unemployment rose to 9.43%, from to 9.18% in December 2016 and 9.29% in November 2016; and the headline January 2017 ShadowStats unemployment estimate increasing to 22.9% from 22.7% in December 2016 and 22.8% in November.

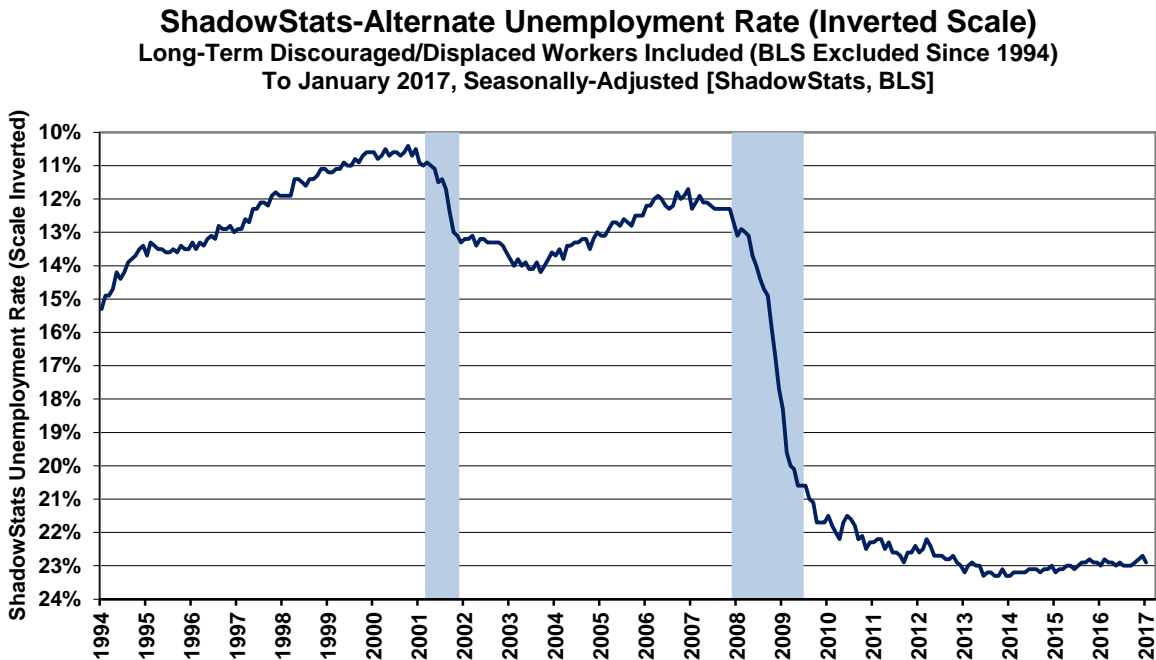
[Graph 5 follows on the next page.]

Graph 5: Comparative Unemployment Rates U.3, U.6 and ShadowStats



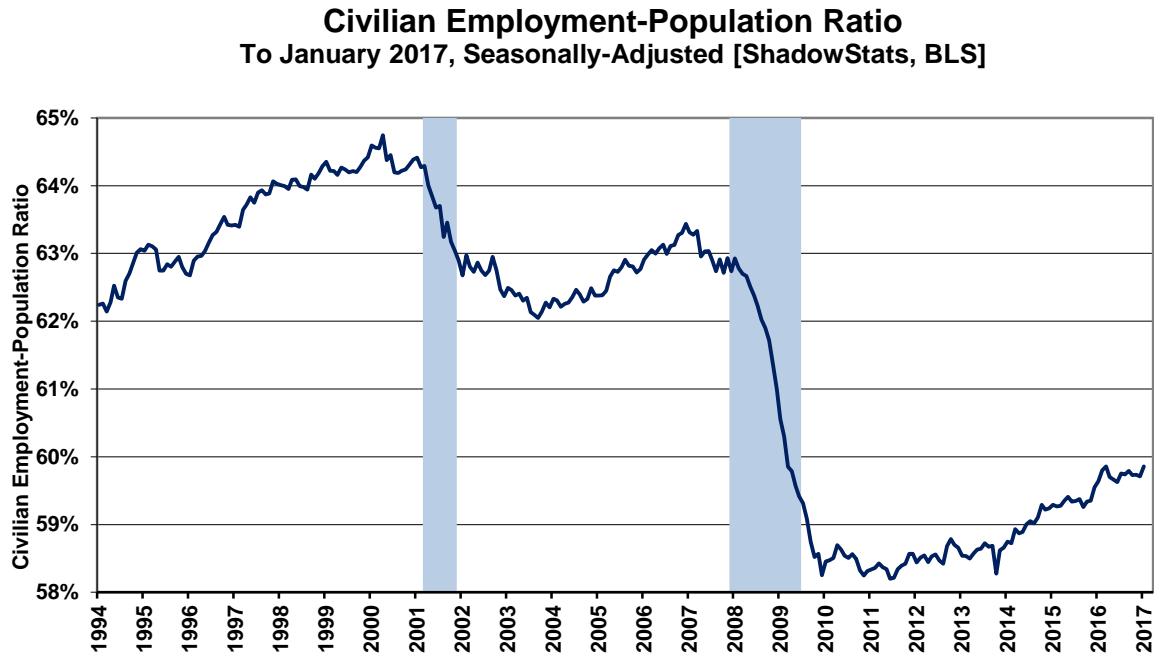
Graphs 6 to 8 reflect longer-term unemployment and discouraged-worker conditions. Graph 6 is of the ShadowStats unemployment measure, with an inverted scale. The higher the unemployment rate, the weaker will be the economy, so the inverted plot tends to move visually in tandem with plots of most economic statistics, where a lower number means a weaker economy.

Graph 6: Inverted-Scale ShadowStats Alternate Unemployment Measure



The inverted-scale of the ShadowStats unemployment measure also tends to move with the employment-to-population ratio, which had turned slightly weaker in second-half 2016, but increased in January 2017 with a monthly jump in the rejiggered headline employment. Nonetheless, that ratio still remains near its post-1994 record low, the historic low and bottom since the economic collapse (only the period following the series redefinition in 1994 reflects consistent reporting), as shown in *Graph 7*.

Graph 7: Civilian Employment-Population Ratio



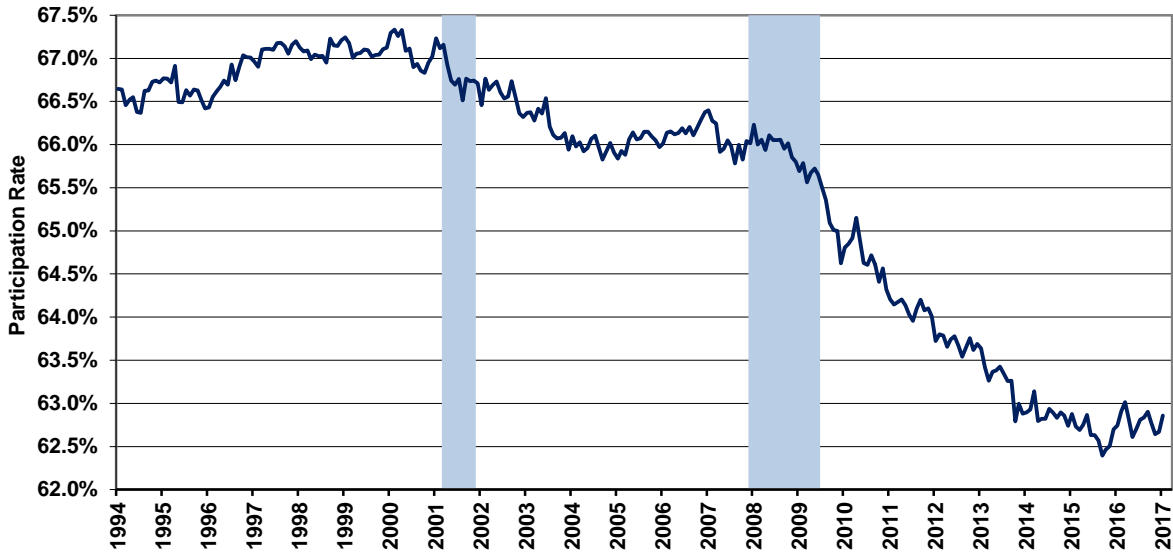
The labor force containing all unemployed (including total discouraged workers) plus the employed, however, tends to be correlated with the population, so the employment-to-population ratio remains something of a surrogate indicator of broad unemployment, and it has a strong correlation with the ShadowStats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

Shown in *Graph 8*, the January 2017 participation rate (the ratio of the headline labor force to the population) also increased month-to-month, having declined in second-half 2016. Both the Employment-to-Population Ratio and the Participation Rate appear to have suffered near-term spikes and volatility from the population redefinition in January 2016, but fell off again in the second half of 2016, only to spike again in the environment of the just-published January 2017 population redefinitions.

The Participation-Rate—one measure that has been followed closely by Fed Chair Janet Yellen—remains off the historic low hit in September 2015 (again, pre-1994 estimates are not consistent with current reporting). Again, it had moved lower in both in second-half 2016, holding flat in December, picking up in January 2017. 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, its holding near a post-1994 low in current reporting indicates problems with long-term discouraged workers. Their swelling ranks generally continue to depress the headline (U.3) labor force, and the plotted ratios.

Graph 8: Participation Rate

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



Graphs 5 through 8 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 December 2016 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](#), certain members of the Federal Reserve Board (see [Commentary No. 827](#)) have suggested that an unemployment rate near 5.0% reflects full-employment conditions in the United States. As noted in, and updated from, earlier employment/unemployment [Commentary No. 845](#) and earlier months, 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 January 2017 headline unemployment rate of 4.8%, 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 9.3%² instead of the headline 4.8%. Where the count of Household Survey employed generally is not gimmicked, that 66% full-employment participation rate—consistent with the latest hyped

² Consider with the revamped January 2017 population of 254.082 million, that the implied labor force at the full-employment participation rate of 66.0% would be $0.66 \times 254.082 = 167.694$. That labor force less current headline employed, $167.694 - 152.081 = 15.613$ million implied unemployed/ labor force of $168.130 = 9.3\%$ unemployment. The problem with the assumptions underlying these numbers and concept remains that the economy is not at full employment, as has been claimed.

“full-employment” economy—generally was consistent with a U.3 unemployment almost double the purported full-employment U.3 number.

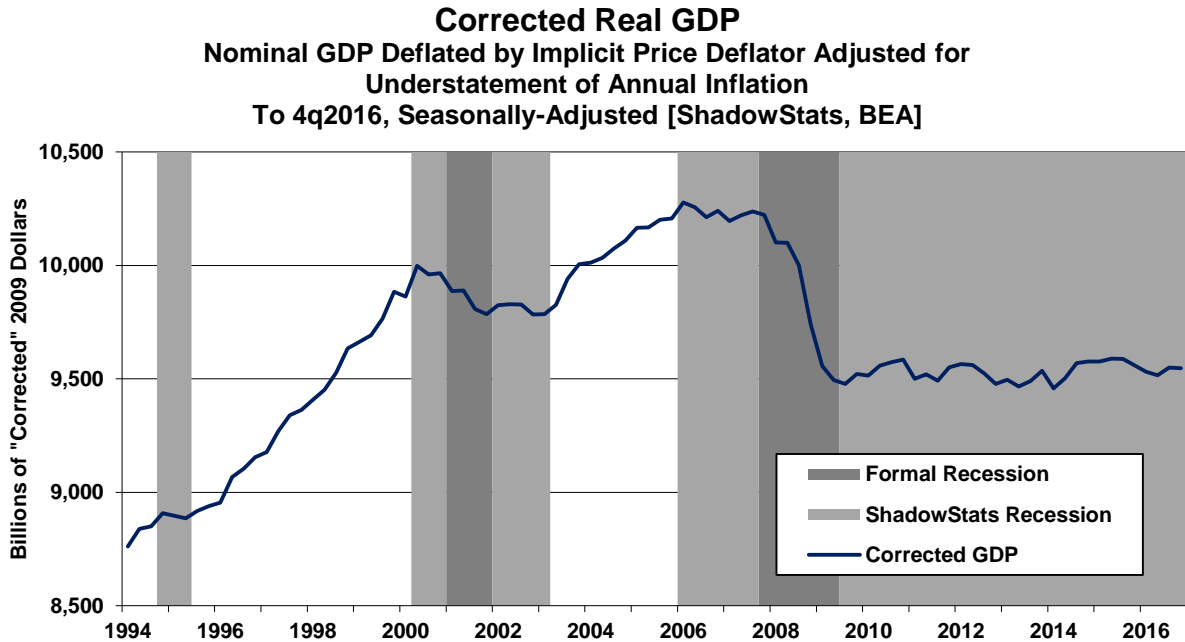
The reason for the heavily distorted current unemployment detail is that the numbers reflect the unusual nature of the post-recession drop in headline unemployment. The declining unemployment rate heavily has reflected discouraged, unemployed persons being defined out of the labor force, instead of the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

Other Economic Series Do Not Show a Growing, Recovering Economy. Regularly plotted here are various graphs that mirror the patterns of *Graphs 6 to 8* (1994-to-date where available), which do not confirm the purported headline economic recovery. Last month, that detail was expanded upon and covered in [No. 859 Special Commentary](#). Those updated such series return in this section.

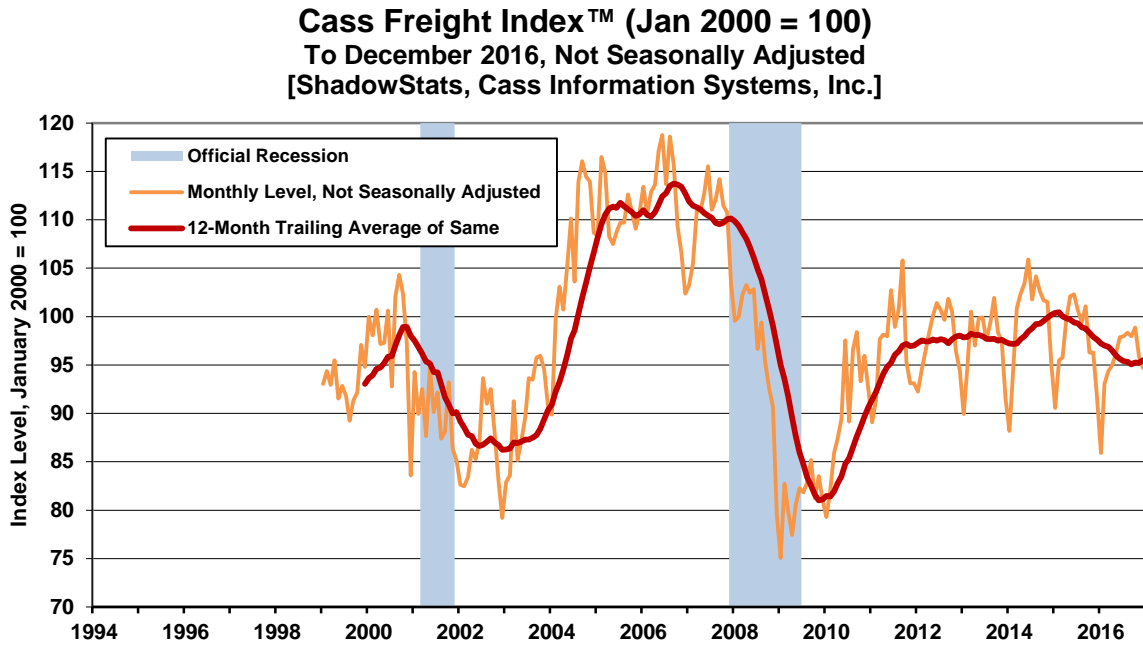
Consider *Graph 9*, which shows the ShadowStats version of the GDP, also from 1994 but through the January 27th first estimate of fourth-quarter 2016 GDP, where the GDP plot has been corrected for the understatement of inflation used in deflating the headline GDP series (further detail and a description of the approach and related links are found in prior [Commentary No. 863](#)).

Other graphs (see [No. 859](#)) range from the CASS Freight Index (*Graph 10*, see [Commentary No. 862](#)) to Real S&P 500 Revenues adjusted for share buybacks (*Graph 11*), and include U.S. Petroleum Consumption (*Graph 12*), Consumer Goods Manufacturing out of December 2016 Industrial Production (*Graph 13*, see [No. 862](#)) and Housing Starts (*Graph 14*, also [No. 862](#)). Consider, too, *Graph 40* of Real U.S. Construction Spending in today’s *Reporting Detail*.

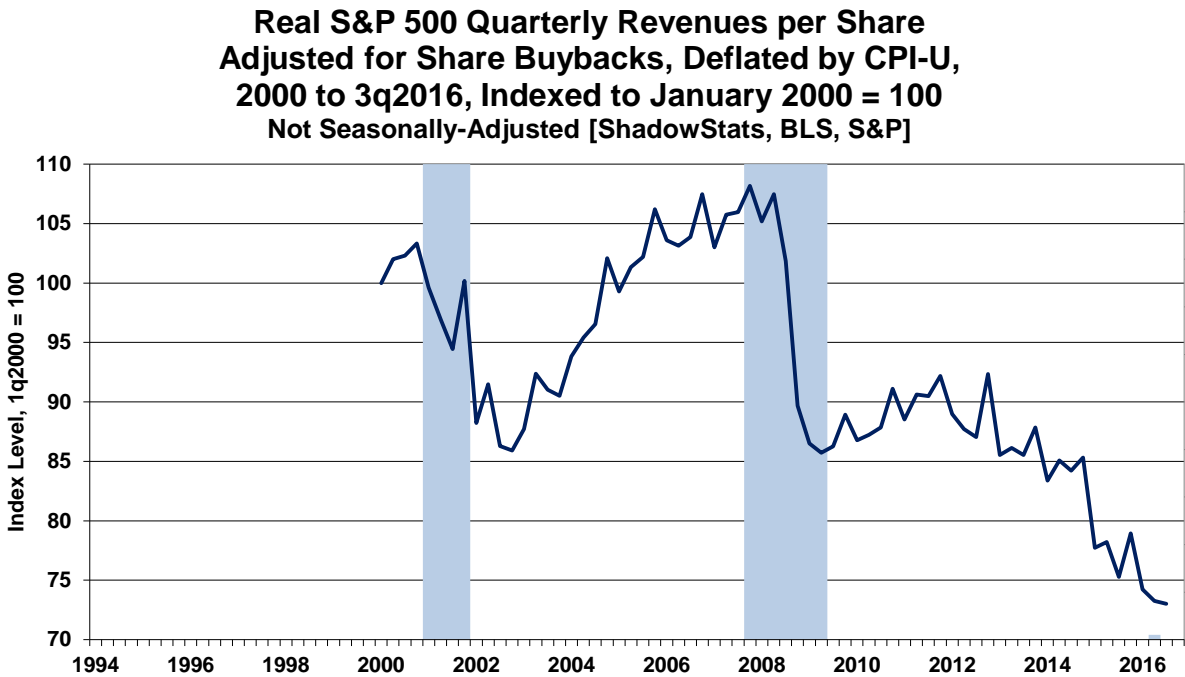
Graph 9: Corrected Real GDP through 4q2016, First Estimate



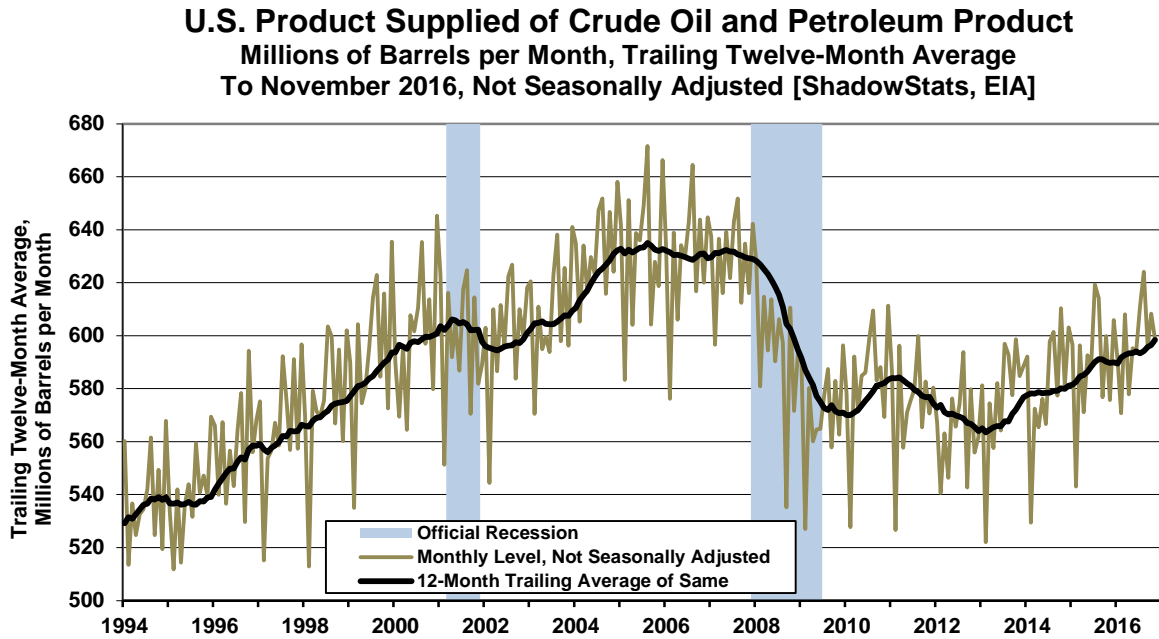
Graph 10: CASS Freight Index for North America (2000 - 2016), Indexed to January 2000 = 100



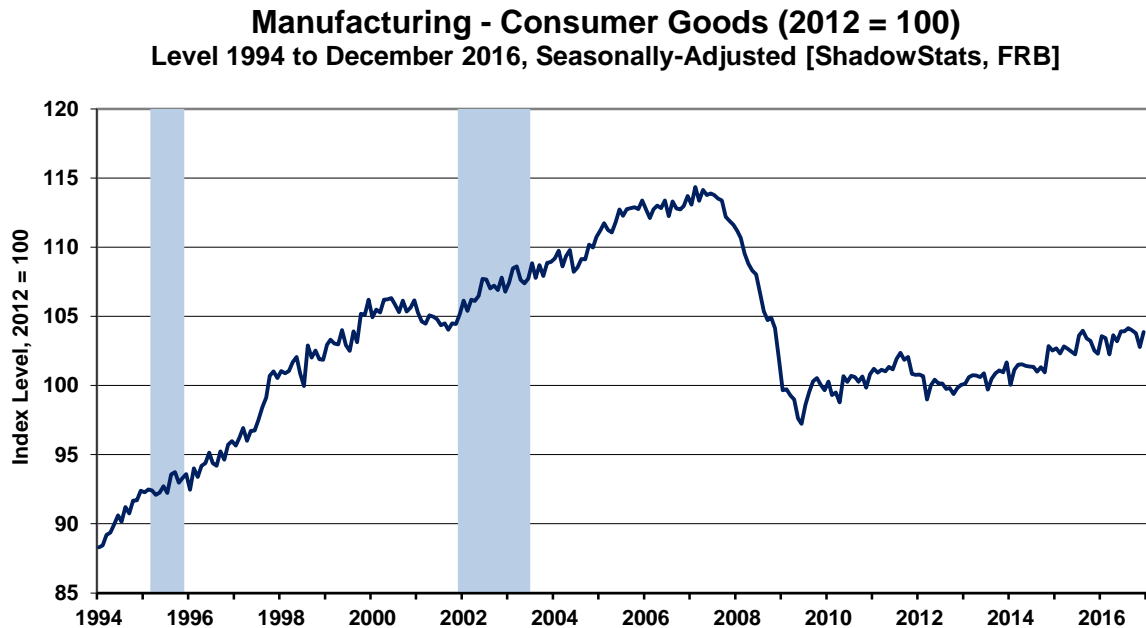
Graph 11: Real S&P 500 Sales Adjusted for Share Buybacks (2000 - 2016), Indexed to January 2000 = 100



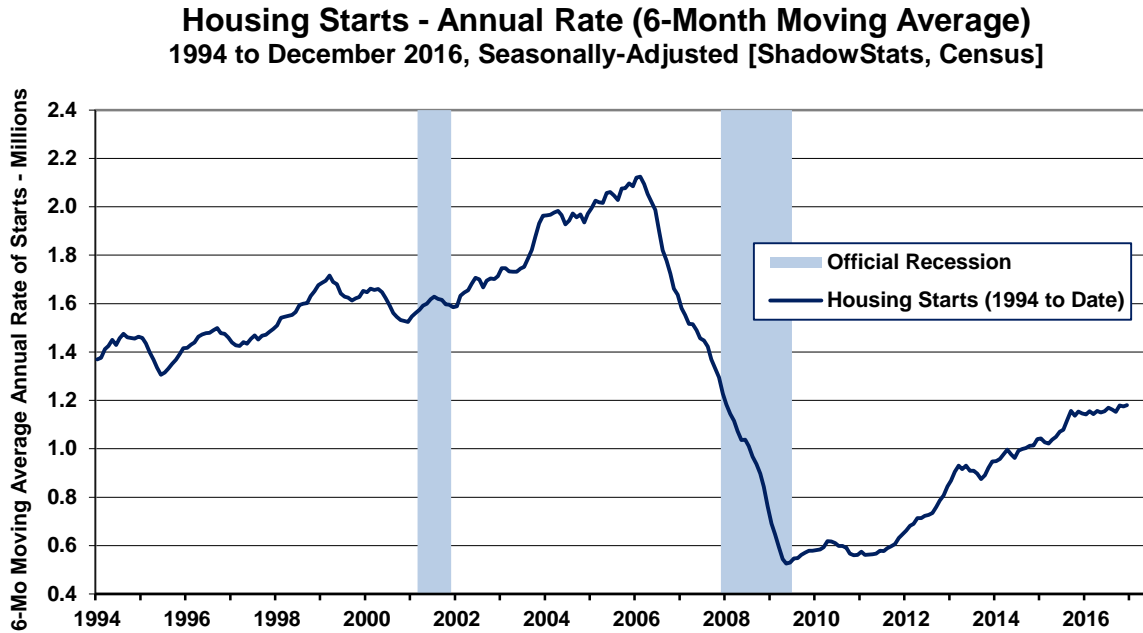
Graph 12: U.S. Petroleum Consumption to November 2016



Graph 13: Industrial Production – Consumer Goods Manufacturing (1994 - 2016)



Graph 14: Housing Starts, Annual Rate by Month (1994 – December 2016)



Headline Unemployment Rates. Again, in the context of revamped underlying population estimates for January, the headline January 2017 unemployment rate (U.3) rose to 4.78%, versus 4.72% in December 2016. On an unadjusted basis, unemployment rates are not revised and, in theory, are consistent in post-1994 reporting methodology. The unadjusted U.3 unemployment rate increased to 5.14% in January 2017, versus 4.51% in December 2016.

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 the increase in the seasonally-adjusted U.3 unemployment rate, an unadjusted gain in the count of marginally-attached workers of 74,000 and a gain of 261,000 in the adjusted number of people working part-time for economic reasons (all consistent for population revisions) combined to generate an adjusted headline January 2017 U.6 unemployment rate of 9.43%, versus 9.18% in December 2016. The unadjusted U.6 unemployment rate rose to 10.08% in January 2017, from 9.06% in December 2016.

ShadowStats Alternate Unemployment Estimate. 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 January 2017 rose to 22.9%, from 22.7% in December 2016.

Construction Spending—December 2016—In Nominal Monthly Decline, Bloated Again by Inflation and Upside Revisions, December Real Construction Spending Still Was 22.7% (-22.7%) Shy of Recovering Its Pre-Recession Peak. Where this series remains highly volatile—subject to large monthly revisions—nominal December 2016 spending declined by 0.2% (0.02%) in the month, in the context of upside revisions to November and October activity, and rising inflation. The weaker nominal activity was seen primarily in the public-construction spending sub-category.

Construction Inflation—ShadowStats Composite Construction Deflator (CCD). Deflation of the Construction Spending series 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*.

Headline Reporting for December 2016. In the context of upside revisions to November and October spending, the headline, total value of construction put in place in the United States for December 2016 was \$1,181.5 billion on a seasonally-adjusted, but not-inflation-adjusted, annual-rate basis. That estimate was down month-to-month by a statistically-insignificant 0.2% (-0.2%), versus an upwardly-revised \$1,184.4 billion in November 2016. Net of prior-period revisions, December activity would have declined month-to-month by 0.1% (-0.1%).

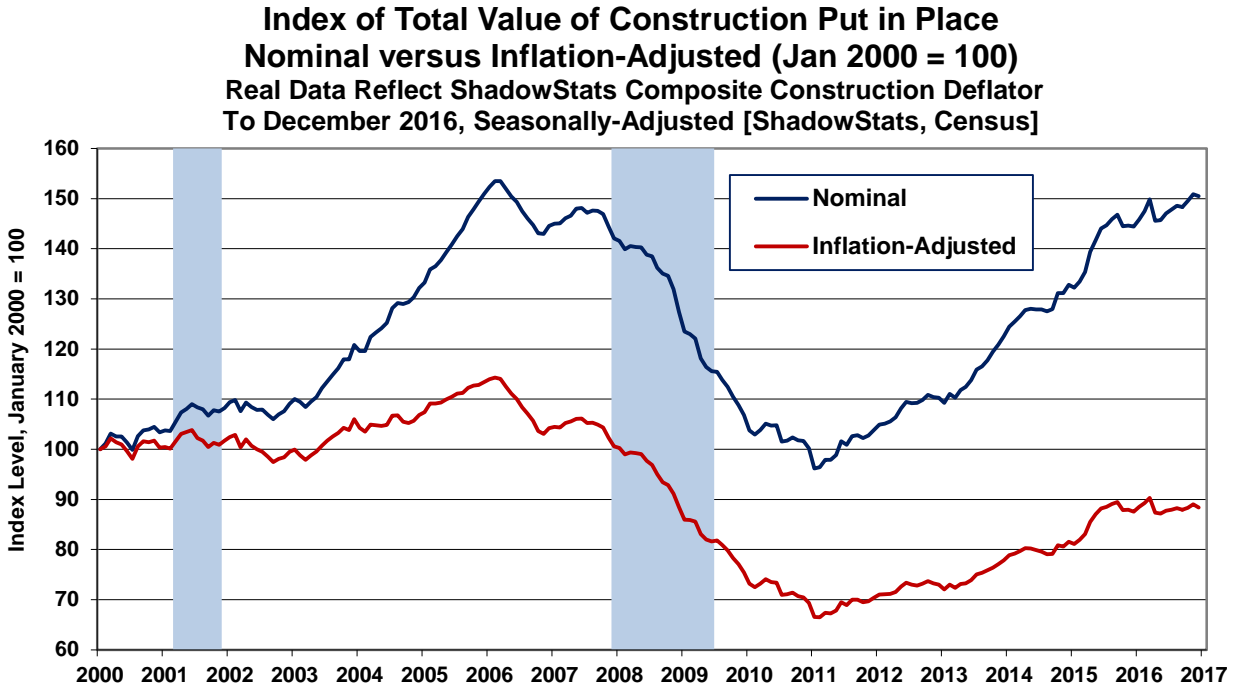
In turn, November 2016 showed an unrevised gain of 0.9%, versus an upwardly revised \$1,173.7 billion in October 2016. October 2016 was up by a revised 0.9% versus an unrevised \$1,164.4 billion in September 2016. Adjusted for CCD inflation, total real month-to-month spending in December declined by 0.7% (-0.7%), versus revised monthly gains of 0.8% in November 2016 and 0.4% in October 2016.

On a year-to-year annual-growth basis, December 2016 nominal construction spending rose by a statistically-significant 4.2%, following a revised November 2016 annual gain of 4.3% and a revised October 2016 annual gain of 3.5%. Net of construction costs indicated by the CCD, the annual growth in total real construction eased to 1.0% in December 2016, from upwardly-revised gains of 1.3% in November 2016 and 0.5% in October 2016.

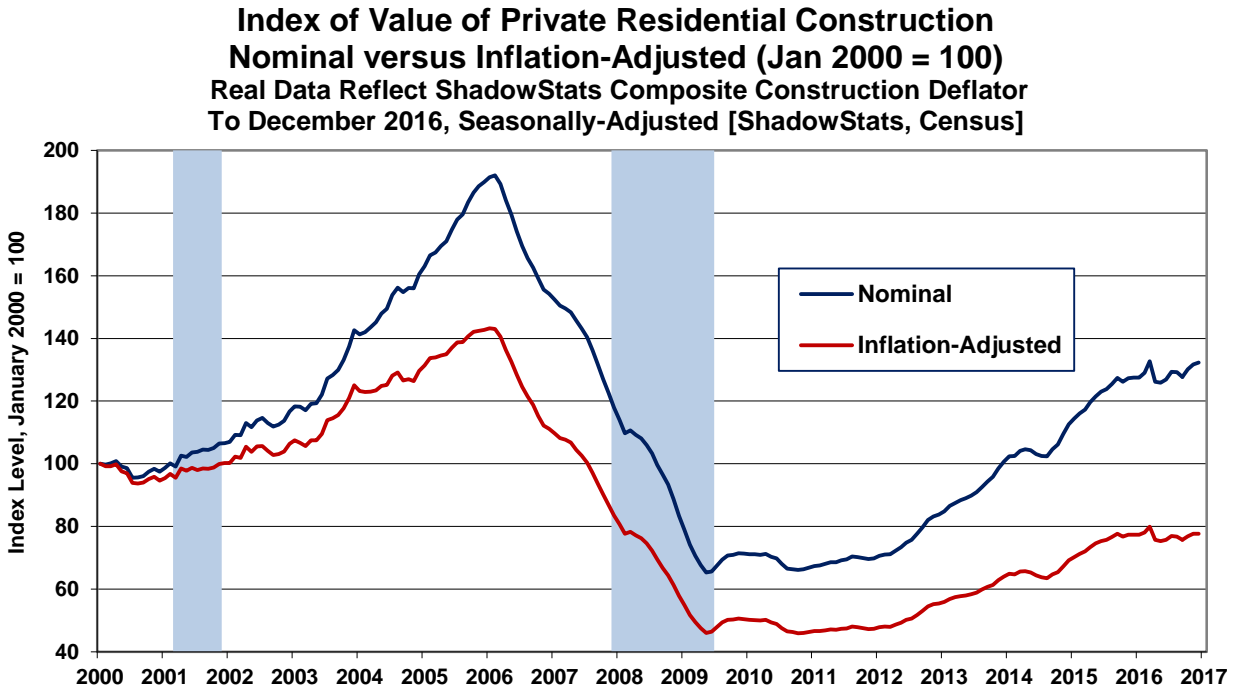
See the *Reporting Detail* for the full analysis.

[Graphs 15 to 18 begin on the next page.]

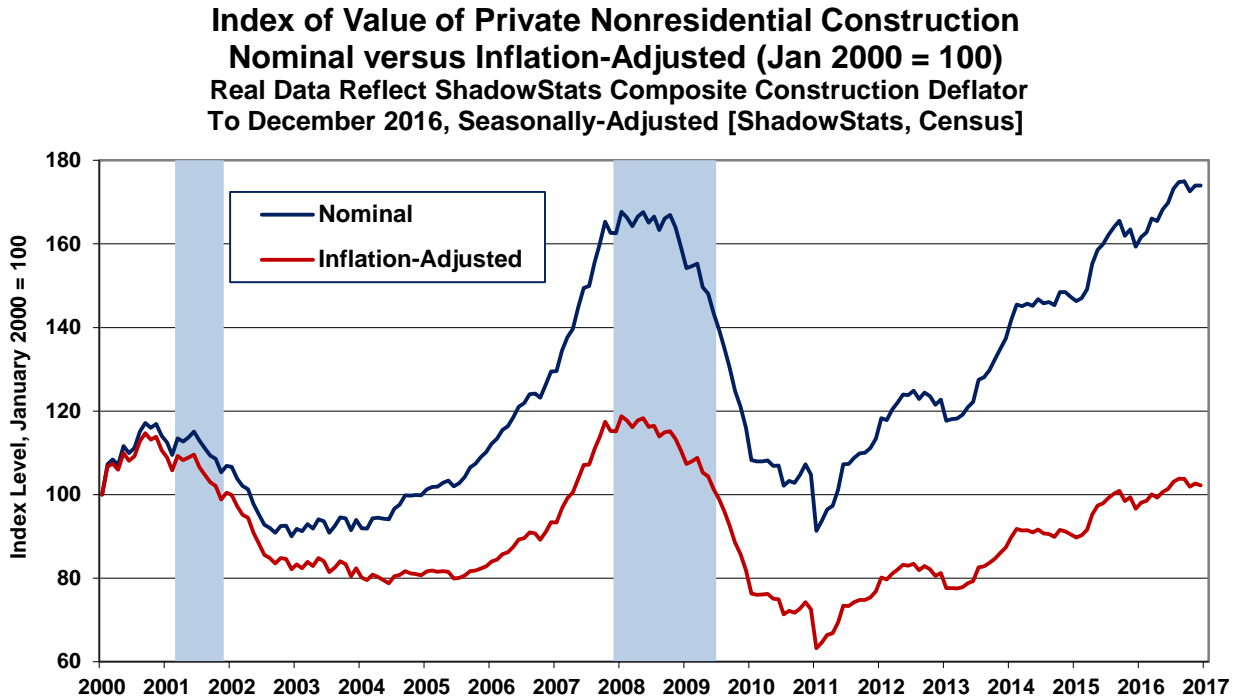
Graph 15: Index, Nominal versus Real Value of Total Construction



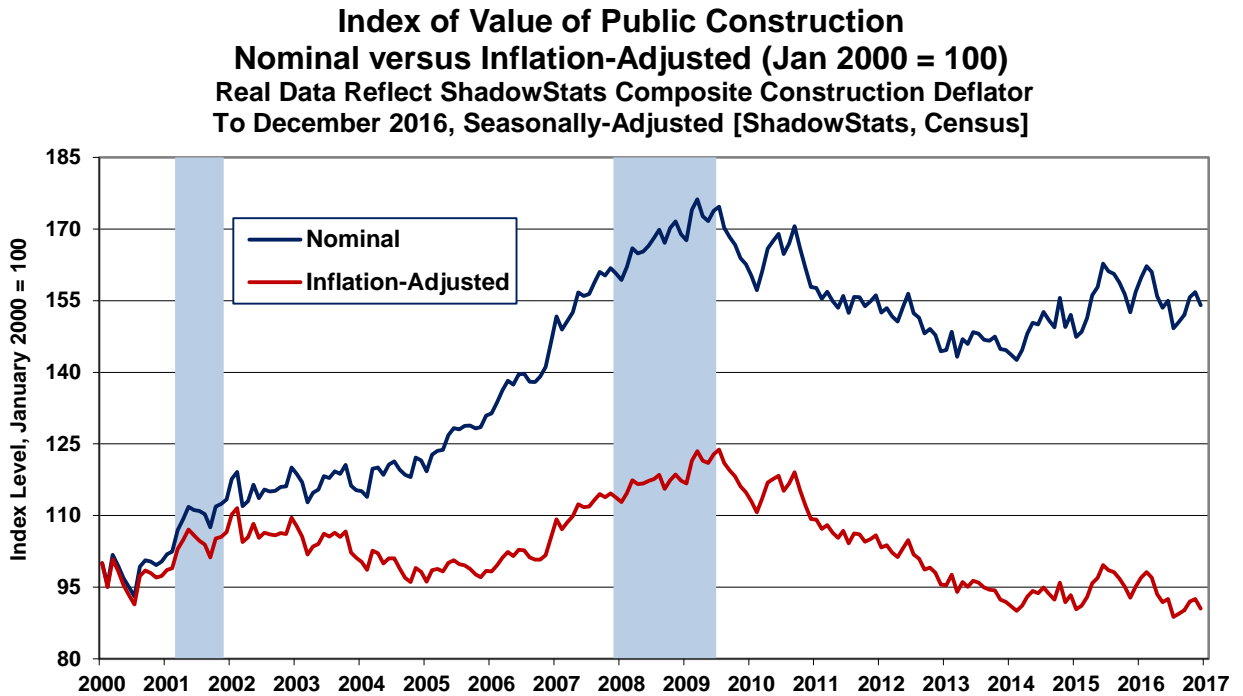
Graph 16: Index, Nominal versus Real Value of Private Residential Construction



Graph 17: Index, Nominal versus Real Value of Private Nonresidential Construction



Graph 18: Index, Nominal versus Real Value of Public Construction



Consumer Liquidity Update—Statistically-Significant Decline in December 2016 Real Median Household Income. This section regularly updates the measures of consumer conditions and liquidity, as last fully reviewed in the *CONSUMER LIQUIDITY* section of [No. 859 Special Commentary](#). 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 ability and willingness 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. Where the post-election environment showed a near-term surge in consumer optimism, that has flattened out at relatively high levels, while underlying liquidity conditions and reality still remain shy of consumer hopes. Accompanying details are updated for the January 2017 readings of the University of Michigan's Consumer Sentiment Index of January 27th, and the Conference Board's Consumer Confidence Survey[®] of January 31st (see *Graphs 19 to 21*). Also, on the consumer-liquidity front, updated detail from February 2nd is shown for December 2016 Real Median Household Income from www.SentierResearch.com (see *Graph 22*), as well as the revised plot of Real Average Weekly Earnings, updated in the February 3rd payroll-survey benchmarking (see *Graph 24*). Separately updated is the November 2016 Consumer Credit Outstanding of January 9th (see *Graphs 26 to 28*).

Generally, the higher and stronger these measures are, the healthier is consumer spending. Most measures of consumer liquidity and attitudes remain off their lows, and one—real monthly median household income—actually had spiked recently to pre-recession levels, reflecting the temporary collapse in gasoline prices and deflation by the otherwise underestimated headline CPI-U inflation. Having stagnated briefly, real monthly median household income generally has begun to move lower, along with a developing pickup in consumer inflation.

Still, the broad underlying consumer liquidity fundamentals simply have not supported, and still do not support a turnaround in broad economic activity. Never truly recovering in the post-Panic of 2008 era, limited growth in household income and credit, have eviscerated and continue to impair broad, domestic U.S. business activity, which feeds off the financial health and liquidity of consumers. This circumstance remains in play in the context of that post-election surge in consumer expectations that has approached or exceeded pre-recession levels.

The combined issues here have driven the housing-market collapse and ongoing stagnation in consumer-related real estate sales and construction activity, and have constrained both nominal and real retail sales activity and the related, personal-consumption-expenditure and residential-construction categories of the Gross Domestic Product (GDP). Those sectors account for more than 70% of total U.S. GDP activity.

Now, with the economy never having recovered fully from the collapse into 2009, consumers again have been pulling back on consumption, as evidenced by a renewed slowdown in broad economic activity, where that reality is evident in more-meaningful series—not the GDP—irrespective of the transient, gimmicked boosts to third-quarter 2016 GDP activity (see earlier *Graphs 6 to 14*).

Consumer Confidence and Sentiment. This detail incorporates full January 2017 readings for the Conference Board's Consumer-Confidence the University of Michigan Consumer-Sentiment measures. Reflected in *Graphs 19 to 20*, both confidence and sentiment rose in September and plunged in October,

likely reflecting concerns as to the direction of the presidential race. The November measures rallied sharply, reflecting post-election consumer optimism and continued to explode in December, generally consistent with post-election reaction in the domestic stock-market and U.S. dollar. As with the markets, though, those numbers flattened out or notched minimally lower in January 2017, although at near-term highs.

Again, the Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index[®] (*Graph 19*), and the University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph 20*) both soared post-election into December 2016 and took a breather in January 2017. While the three-month moving average in sentiment in January rose to a pre-recession high, the three-month moving average in confidence as of January set a new post-recession high.

Showing the Consumer Confidence and Consumer Sentiment measures on something of a comparable basis, *Graphs 19 to 21* reflect both measures re-indexed to January 2000 = 100 for the monthly reading. Standardly reported, the Conference Board's Consumer Confidence Index[®] is set with 1985 = 100, while the University of Michigan's Consumer Sentiment Index is set with January 1966 = 100.

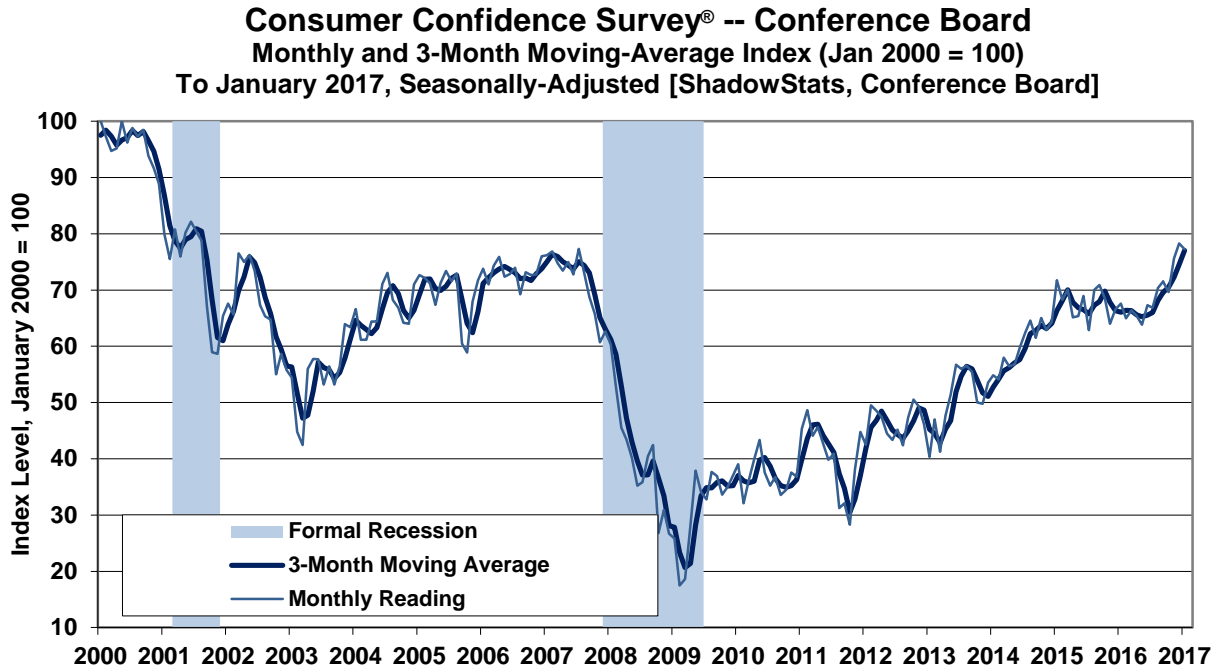
Consumer Sentiment continued to hold off its June 2015 near-term peak, smoothed for its six-month moving-average reading, but Confidence, again, broke to a new post-recession high (*Graph 21*), still below but rapidly closing in on pre-recession levels.

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 initial change-in-government euphoria—successive negative hits to both the confidence and sentiment readings remain increasingly likely in the near future.

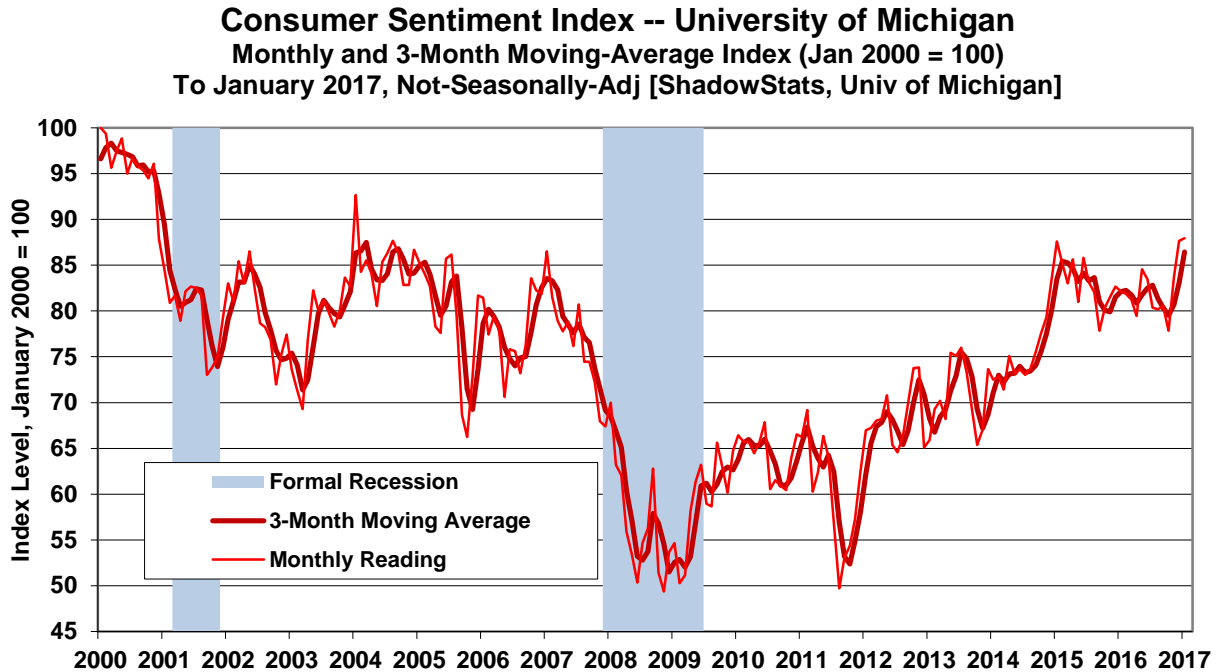
Smoothed for irregular, short-term volatility, the two series still generally remain at levels seen typically in recessions. Suggested in *Graph 21*—plotted for the last 47 years—the latest readings of Confidence and Sentiment generally have not recovered levels preceding most formal recessions of the last four decades. Broadly, the 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 third-quarter 2016.

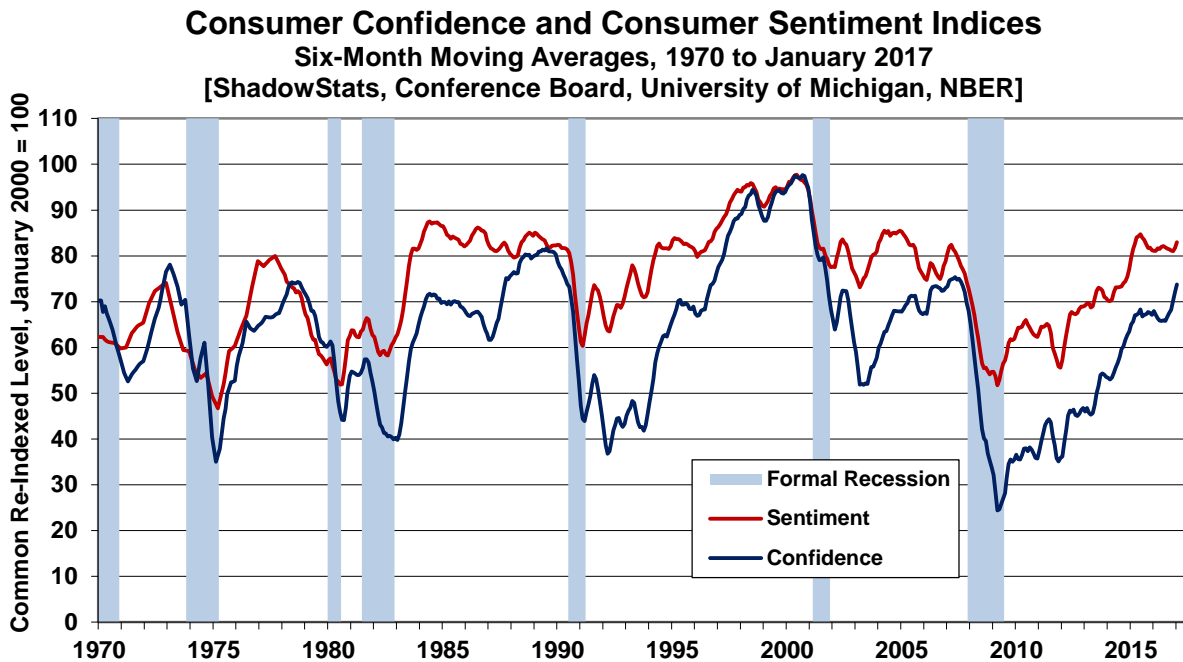
[Graphs 19 to 21 begin on the following page.]

Graph 19: Consumer Confidence (2000 to 2017)



Graph 20: Consumer Sentiment (2000 to 2017)



Graph 21: Comparative Confidence and Sentiment (6-Month Moving Averages, 1970 to 2017)

December 2016 Monthly Household Income Declined to a Seven-Month Low, Still Signaling Broadly-Based Liquidity Difficulties. Beyond the happy expectations that built up post-election, December 2016 real median U.S. household income indicated re-intensifying liquidity problems. Shown in *Graph 22*, headline December detail, published by www.SentierResearch.com, declined month-to-month by a statistically-significant 0.1% (-0.1%), to a seven-month low. Since the prior statistically-significant monthly decline in May 2016, there have been six months of statistically-insignificant flutterings around the near-term January 2016 peak. Where much of the post-2014 upturn in the series reflected collapsing gasoline prices and CPI inflation, a reversal in those circumstance has begun to take a renewed toll on real income.

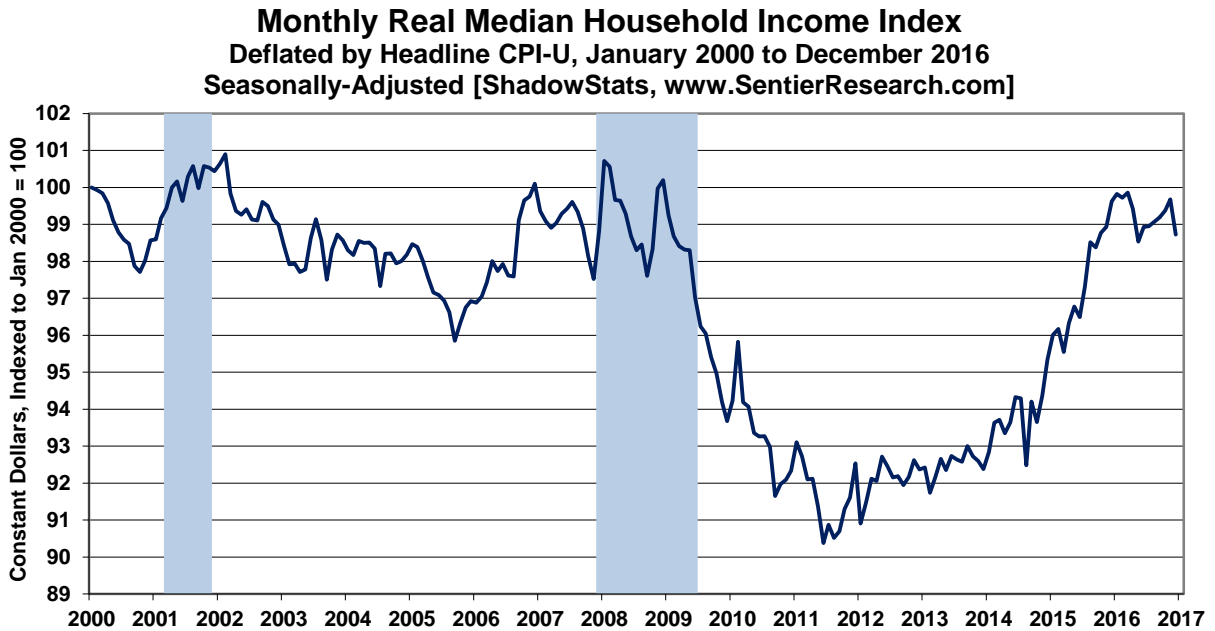
On a monthly basis, when headline GDP purportedly started its solid economic recovery in mid-2009, the monthly household income number nonetheless plunged to new lows. Again, the income series had been in low-level stagnation, with the post-2014 uptrend in the inflation-adjusted monthly index boosted specifically by collapsing gasoline prices and related, negative headline CPI-U consumer inflation. 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. It should continue turning down anew, as headline monthly consumer inflation picks up at an accelerating pace.

Where lower gasoline prices had provided some minimal liquidity relief to the consumer, indications are that any effective extra cash generally was used to help pay down unsustainable debt or other obligations, not to fuel new consumption. Again, the effects of changing gasoline prices have reversed, pushing headline consumer inflation higher.

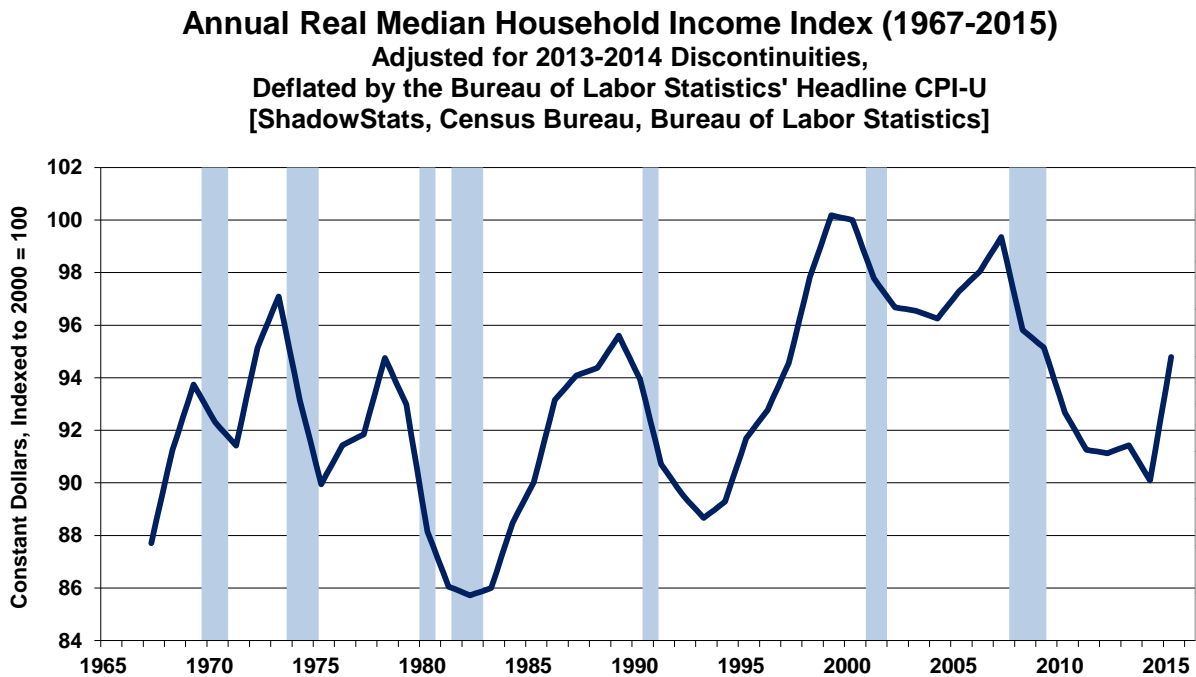
This measure of real monthly median household income generally can be considered as a monthly version of the annual detail shown in *Graph 23*, which was updated recently for 2015 detail (see the full analysis of the 2015 annual household income reporting in [Commentary No. 833](http://www.ShadowStats.com)). The relative jump seen in 2015

median income, despite formal adjustment for discontinuities in the most-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 22: Monthly Real Median Household Income (2000 to 2016)



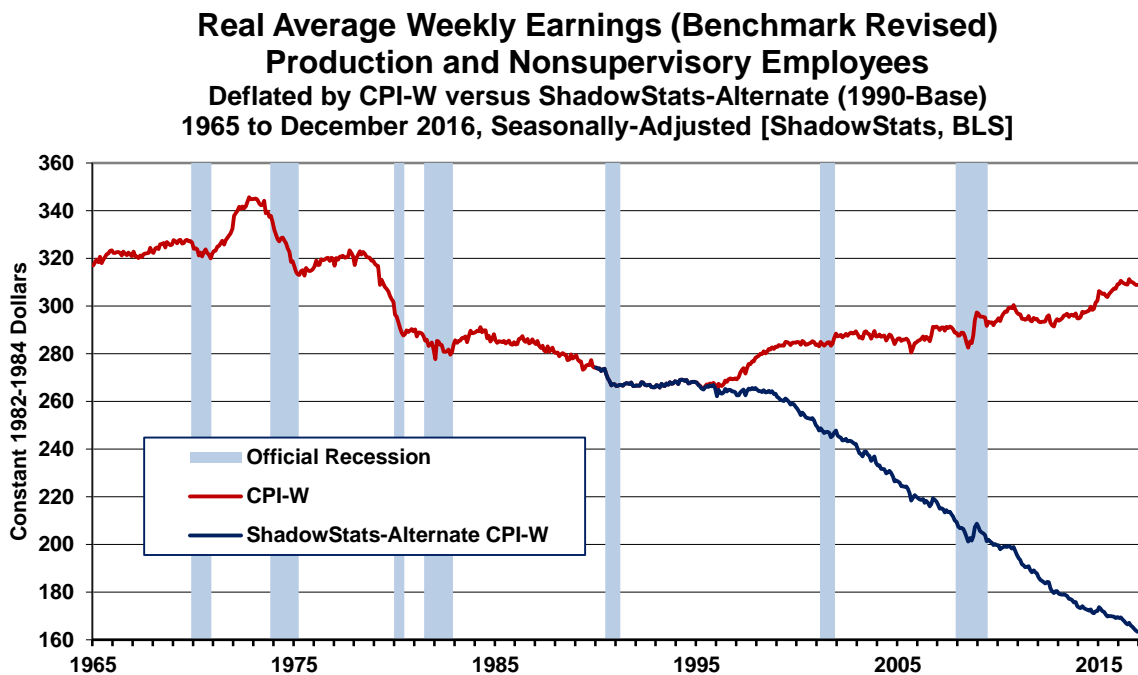
Graph 23: Annual Real Median U.S. Household Income (1967 to 2015)



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 numbers, shown in *Graph 23*, 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 uses monthly questions surveying current annual household income, the headline annual Census 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 through December 2016, as shown in *Graph 24* and as reported by the Bureau of Labor Statistics and minimally revised in the February 3rd Establishment Survey benchmarking (see [Commentary No. 862](#) for full background on the series). Detail for January 2017 will be published with the February 16th *Commentary*.

Graph 24: Real Average Weekly Earnings, Production and Nonsupervisory Employees (1965 to 2016)



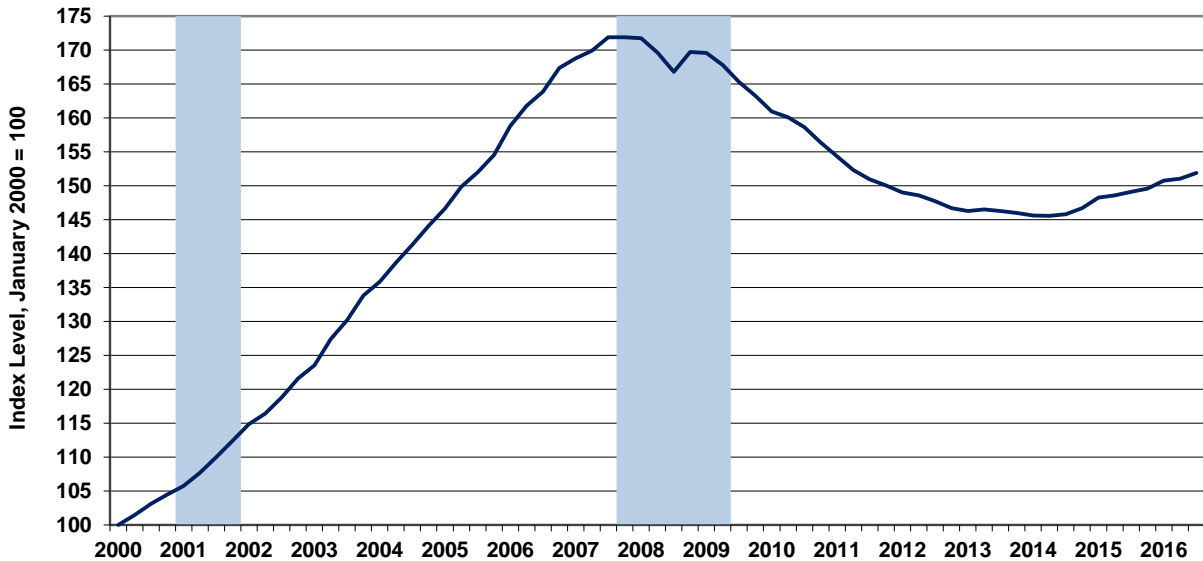
Consumer Credit Has Remained Constrained. The final four graphs on consumer conditions address consumer borrowing. Debt expansion can help make up for a shortfall in income growth. Shown in *Graph 25 of Household Sector, Real Credit Market Debt Outstanding*, household debt declined in the period following the Panic of 2008, and it has not recovered, based on the Federal Reserve's flow-of-funds accounting through third-quarter 2016. Household Sector, Real Credit Market Debt Outstanding in third-quarter of 2016 declined by 11.6% (-11.6%) from its pre-recession peak in third-quarter 2007.

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 surging student loans, as shown in the *Graphs 26 to 28*.

Shown through the latest reporting (November 2016), *Graph 26* of monthly Consumer Credit Outstanding is a subcomponent of *Graph 25* on real Household Sector debt. Where *Graph 26* reflects the nominal reporting, not adjusted for inflation, inflation-adjusted real activity for Consumer Credit Outstanding is shown both in terms of level (*Graph 27*) and in terms of year-to-year change (*Graph 28*).

Graph 25: Household Sector, Real Credit Market Debt Outstanding (2000 through Third-Quarter 2016)

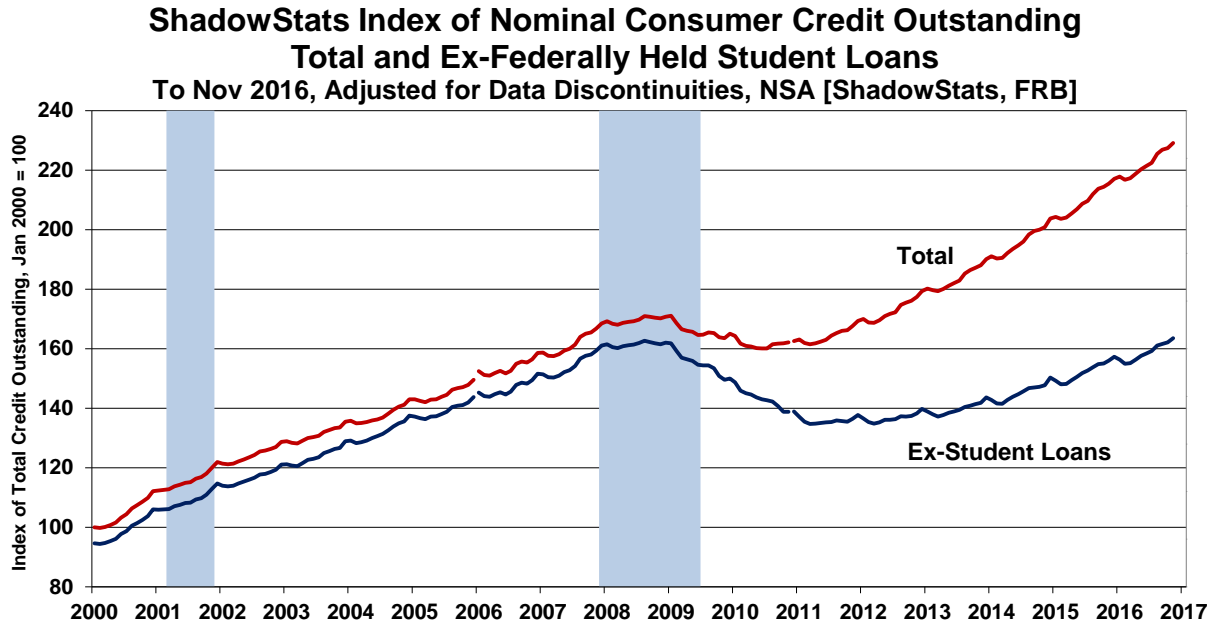
Household Sector, Real Credit Market Debt Outstanding
 Deflated by CPI-U. Indexed to January 2000 = 100
 To 3q2016, Seasonally-Adjusted [ShadowStats, FRB Flow-of-Funds, BLS]



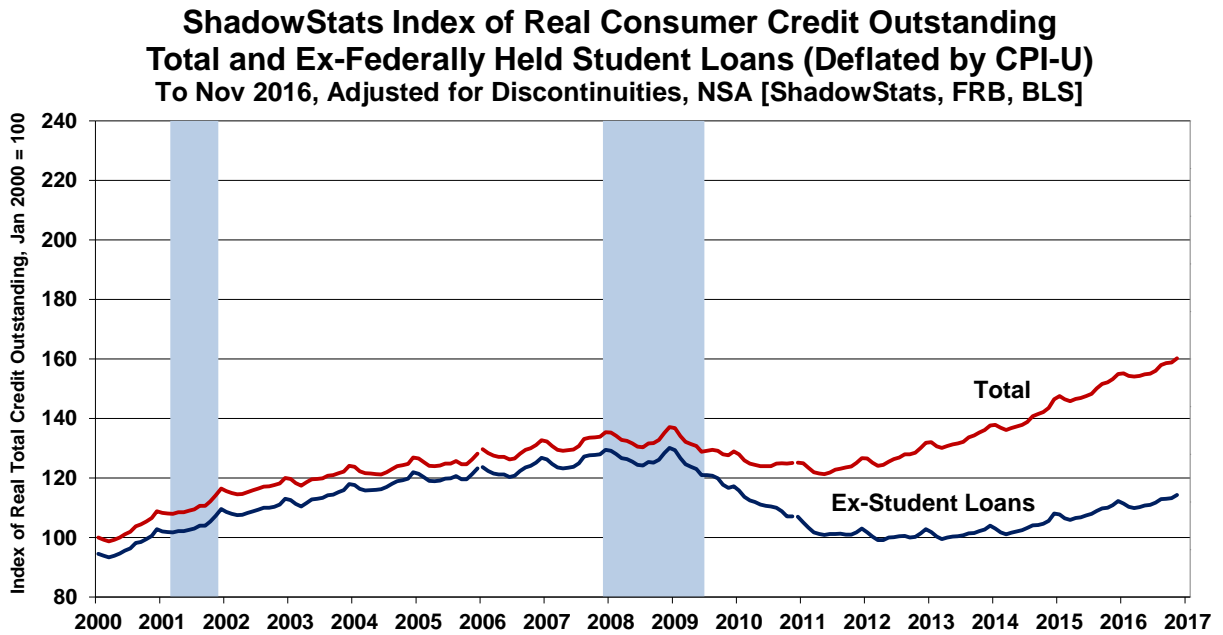
Post-2008 Panic, outstanding consumer credit has continued to be dominated by growth in federally-held student loans, not in bank loans to consumers that otherwise would fuel broad consumption or housing growth. Although in slow uptrend, the nominal level of Consumer Credit Outstanding (ex-student loans) 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 over 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. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in November 2016 was down from its December 2007 pre-recession peak by 11.8% (-11.8%). Year-to-year growth in *Graph 28* tends to resolve most of the monthly distortions in not-seasonally-adjusted data.

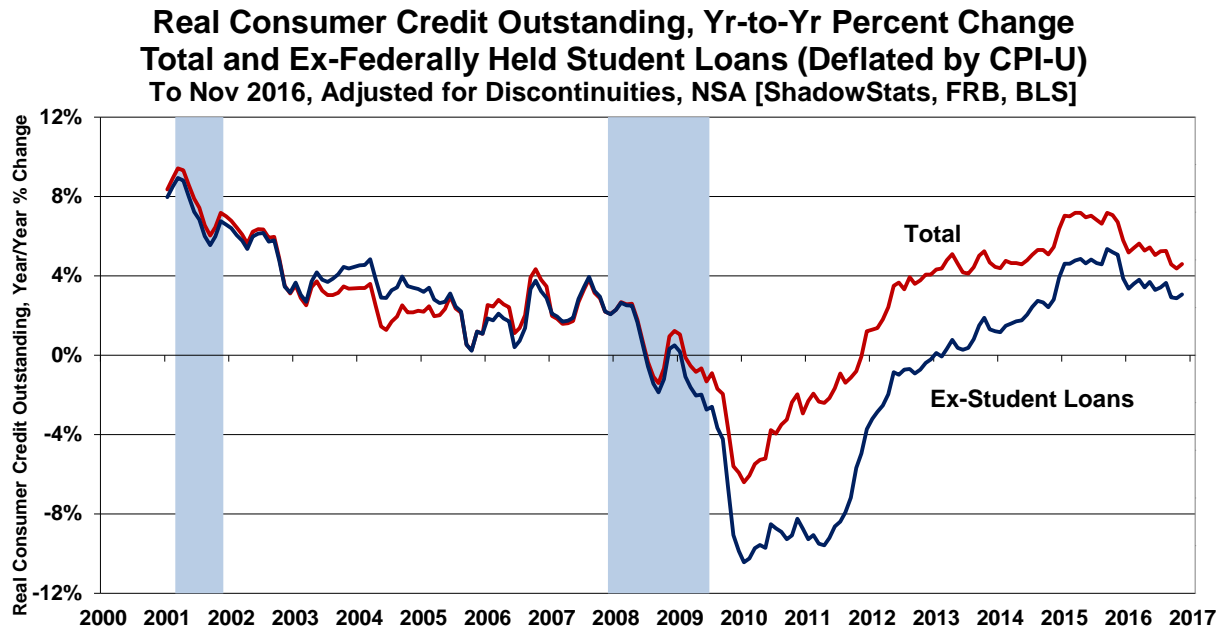
Graph 26: Nominal Consumer Credit Outstanding (2000 to 2016)



Graph 27: Real Consumer Credit Outstanding (2000 to 2016)



Graph 28: Year-to-Year Percent Change, Real Consumer Credit Outstanding (2000 to 2016)



[The Reporting Detail contains significant further analysis and graphs of the January Labor Conditions and December Construction Spending.]

HYPERINFLATION WATCH

MONETARY CONDITIONS

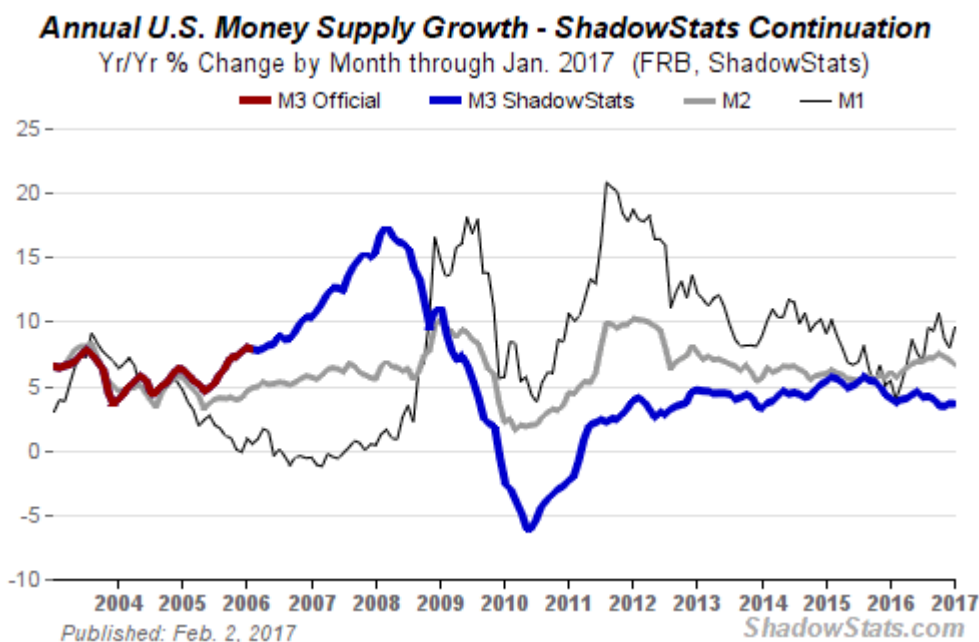
Hit by Major Benchmark Revisions from the Fed, Annual M3 Growth Held at 3.6% in January 2017, Same as the Downwardly-Revised December 2016 M3, Reflecting a Heavier Flight to Cash. Based on three-plus weeks of reporting, and in the context of major annual-benchmark revisions by the Federal Reserve, estimated January 2017 annual growth for the ShadowStats Ongoing M3 Money Supply held at 3.6%. That was the same as the downwardly-revised annual growth in December 2016 (previously up by 3.9%) and against downwardly-revised annual growth rates of 3.4% (previously 3.8%) in November 2016 3.4% (previously 3.6%) in October 2016 and 4.0% (previously 4.1%) in September 2016. The October and November annual growth rates were at a 34-month low.

Annual M2 growth in January 2017 softened to a ten-month low of 6.7%, versus downwardly-revised estimates of 7.1% (previously 7.6%) in December 2016, 7.3% (previous 7.8%) in November 2016, 7.6% (previously 7.9%) in October 2016 and 7.3% (previously 7.4%) in September 2016.

The relatively weaker M3 annual growth reflected a continuing flight from the large time deposits and institutional money funds in M3, into accounts in the subsidiary M2 and M1 series (M2 includes M1; M3 includes M2), with relatively stronger growth in M1 indicating an increased flight to cash.

In contrast, January 2017 M1 annual growth increased to 9.6%, from an upwardly-revised estimate of 8.0% (previously 7.9%) in December 2016, an unrevised 8.8% in November 2016, and upwardly-revised estimates of 10.7% (previously 10.2%) in October 2016 and 9.4% (previously 8.6%) September 2016. The October 2016 annual growth of 10.7% was at a 25-month high.

Graph 29: Comparative Money Supply M1, M2 and M3 Yr-to-Yr Changes through January 2017



For those living in the headline money-supply world comprised of just the Fed’s headline M1 and M2, money growth has been relatively stronger for both M1 and M2, but that growth does not necessarily imply a pending inflation surge, since it reflects a flow of funds down from the more-inclusive M3 category, not due to any apparent Fed effort to boost the basic money supply. The relative weakness in annual M3 growth versus M2 and M1 (again, M2 includes M1; M3 includes M2) reflected the shift over time in funds from accounts included just in M3, such as large time deposits and institutional money funds, into accounts in M2.

Despite the stronger M1 and weaker M2 and M3 annual growth rates, headline month-to-month growth rates picked up in January 2017. Month-to-Month change in January 2017 for M3 rose to 0.3%, versus a revised 0.2% in December and an unrevised 0.5% in November, M2 monthly growth jumped to 0.7% in January 2017, having slowed to a revised 0.2% in December from an unrevised 0.6% in November, while

M1 soared month-to-month by 2.2% in January 2017, having declined by a revised 0.4% (-0.4%), against a revised monthly gain of 0.3% in November.

The latest estimates of level and annual changes for December 2016 M3, M2 and M1 and for earlier periods are detailed on the [Alternate Data](#) tab of www.ShadowStats.com. See the [Money Supply Special Report](#) for full definitions of those measures and the *FED* section of [No. 859 Special Commentary](#) for the latest discussion on Federal Reserve Activity. The quarterly update to the velocity of money was published in the *Hyperinflation Watch* of prior [Commentary No. 863](#). The latest monetary conditions as reflected in the Monetary Base and in the U.S. dollar exchange rates and the price of gold will be updated in the February 15th *Commentary*.

REPORTING DETAIL

EMPLOYMENT AND UNEMPLOYMENT (January 2017)

Underlying Recession Continued in Play, Headline Labor Conditions Continued to Overstate U.S. Economic Health. *[The following five paragraphs largely reflect material from the Opening Comments section.]* Underlying reality for January 2017 labor conditions remained in the realm of a 22.9% broad unemployment rate, with the actual monthly payroll-employment change likely flat-to-minus, despite the more-upbeat headline indications out of the BLS. Specifically, the government showed the headline U.3 unemployment rate notching higher to 4.8%, with a benchmarked and re-adjusted headline monthly jobs gain of 227,000. What otherwise often is just nonsense reporting with these series, went to artificial extremes in the latest headline detail.

Reporting quality of January headline employment and unemployment data suffered from regular monthly distortions, exacerbated this month by an annual benchmark revision and changes to seasonal-adjustment methodologies for payroll employment, and by annual population re-estimation in the unemployment series, which went through seasonal-adjustment revisions last month. Those changes are discussed in some detail in the *Opening Comments*. Most reporting gimmicks continue to evolve out of the fine-tuning of longer-range political manipulation.

Such includes changes to methodology with the upside bias-factors created post-1983 recession for payroll counts. That became the current birth-death modeling, with the upside biases created for enhancing the payroll-employment count, an area that was further bloated in the current annual revisions (see the later *Birth-Death/Bias-Factor Adjustment [BDM]* section).

Consider too, the politically-orchestrated changes to methodology, such as redefining “discouraged workers” out of longer-term unemployment accounting, in coordination with the NAFTA agreement (see the late *ShadowStats-Alternate Unemployment Rate Measure* section).

As designed, intended and implemented over decades, the regularly-gimmicked headline employment and unemployment numbers and annual revisions meaningfully have overstated labor-market health in the January jobs and unemployment reporting. Separately, the headline monthly reporting details for the both the payroll and unemployment series broadly are not consistent month-to-month. Concurrent seasonal-factor-adjustment are used to revise the prior five years of seasonal adjustments each and every month for both series, but the consistent, revised historical data are not published each month (see the later *Headline Distortions from Shifting Concurrent-Seasonal Factors* section).

PAYROLL SURVEY DETAIL. The Bureau of Labor Statistics (BLS) published the headline payroll-employment detail for January 2017 on February 3rd, in conjunction with the 2016 annual payroll benchmark revisions. In the context of increased, heavily-distorted bloating, unstable seasonal adjustments, and inconsistent benchmarking, the seasonally-adjusted, headline payroll gain for January 2017 was 227,000 +/- 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 a benchmark-revised 157,000 [156,000 pre-benchmark] gain in December 2016 and a downwardly-revised gain of 164,000 [pre-benchmark 204,000, initially 178,000] jobs gain in November 2016.

Net of prior-period revisions, January 2016 payrolls rose by 251,000, instead of the headline 227,000. So much for what purportedly was to be a downside revision to prior history.

Collapsing Annual Growth. The benchmarked, not-seasonally-adjusted, year-to-year growth in January 2017 nonfarm payrolls of 1.51% notched higher from a benchmark-revised 1.46% [pre-benchmark 1.41%] in December 2016, but was down from an 1.62% [pre-benchmark 1.59%, initially 1.58%] in November 2016. The benchmarked annual growth as of 1.46% in December 2016 was the lowest level of growth in 62 months, since October 2011, when payrolls were first recovering from the economic collapse. The uptick in January 2017 annual growth to 1.51% remained at a level rarely seen except going into or coming out of recessions.

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 Revised Higher and Rose in January. Gaining 36,000 post-benchmarking jobs in January 2017 to 6.809 million, benchmarked construction payroll-employment revised higher in December 2016, gaining 2,000 jobs to 6.773 million [previously declining by 3,000 (3,000) jobs to 6.699 million]. November jobs increased by an upwardly-revised 28,000 [pre-benchmark 17,000, initially 19,000]. The upside benchmarking generally was in line with the initial announcement of the pending annual revisions (see [Commentary No. 830](#)). 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). Details, including both pre- and post-benchmarking levels are plotted in *Graph 41* in the later *Construction Spending* section. The recent general pattern of flattening-out and turning lower increasingly now is somewhat up-trending, post-benchmark, but it still is broadly consistent with the low-level plateauing and weakness seen in real construction spending and other construction measures.

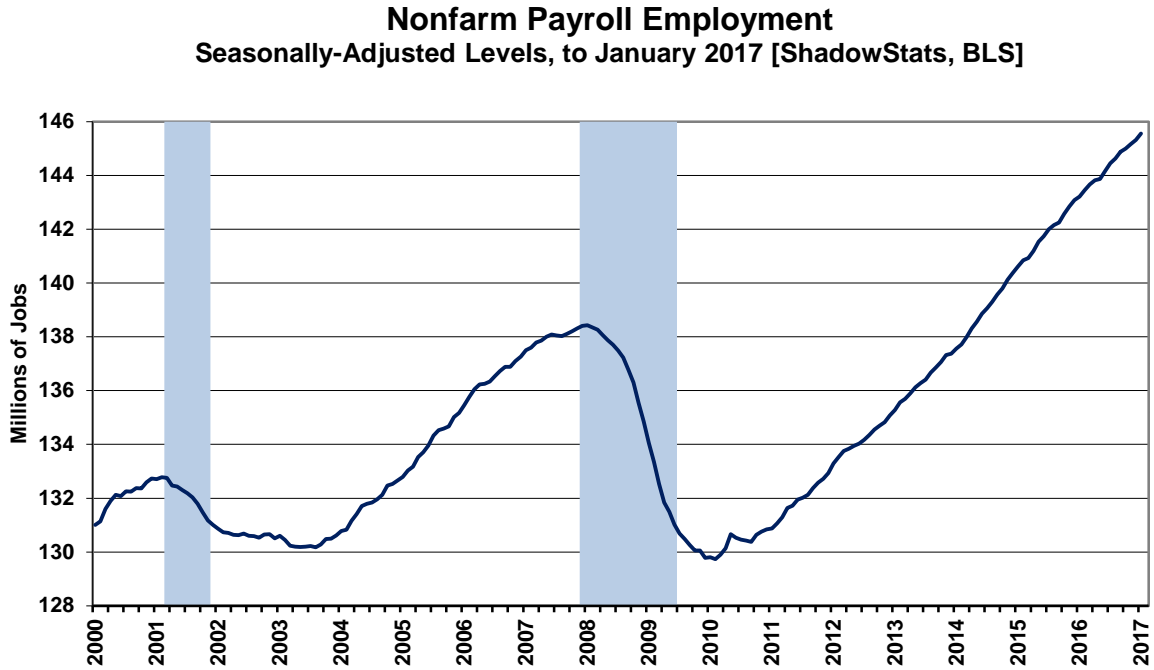
Headline month-to-month construction employment rose by 0.53% in January 2017, having gained by a revised 0.03% [pre-benchmark declined by 0.04% (-0.04%)] in December 2016, following a revised 0.42% [pre-benchmark 0.25%, initially 0.28%] gain in November 2016. Year-to-year growth rallied to 2.64% in January 2017, from an upwardly revised 1.77% [previously 1.49%] gain in December 2016 and against an upwardly-revised 2.75% [pre-benchmark 2.42%, initially 2.39%] in November 2016.

Headline construction-payroll numbers remain heavily biased to the upside (officially bloated by 7,600 [previously 6,300] jobs per month, unofficially at an order of magnitude of 21,000 jobs per month). That said, in the context of the upside benchmarking in January 2017, the level of construction jobs was the highest seen since October 2008, but it remained down by 11.86% (-11.86%) from the April 2006 pre-recession series peak.

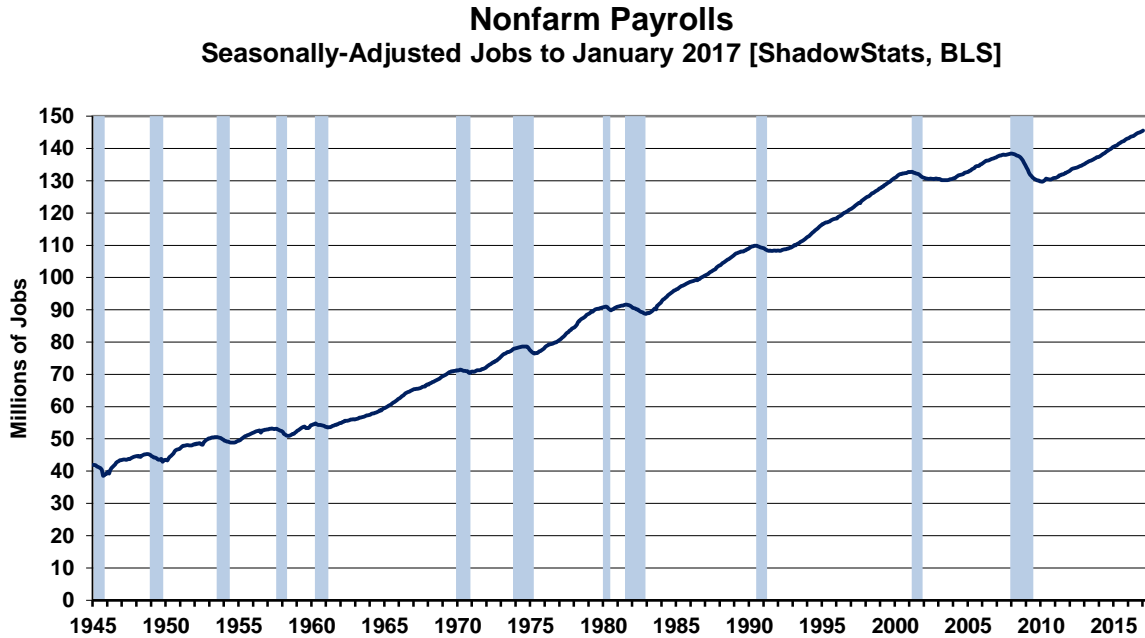
Historical Payroll Levels. Payroll employment (Payroll Survey) is a coincident indicator of economic activity, and irrespective of all the reporting issues with the series, payroll employment formally regained its pre-recession high in 2014, despite the GDP purportedly having done the same somewhat shy of three years earlier, back in 2011. 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. Through January 2017, headline payroll employment was 7.12-million jobs above its pre-recession peak.

Graphs 30 and 31 follow on the next page]

Graph 30: Nonfarm Payroll Employment 2000 to Date



Graph 31: Nonfarm Payroll Employment 1945 to Date

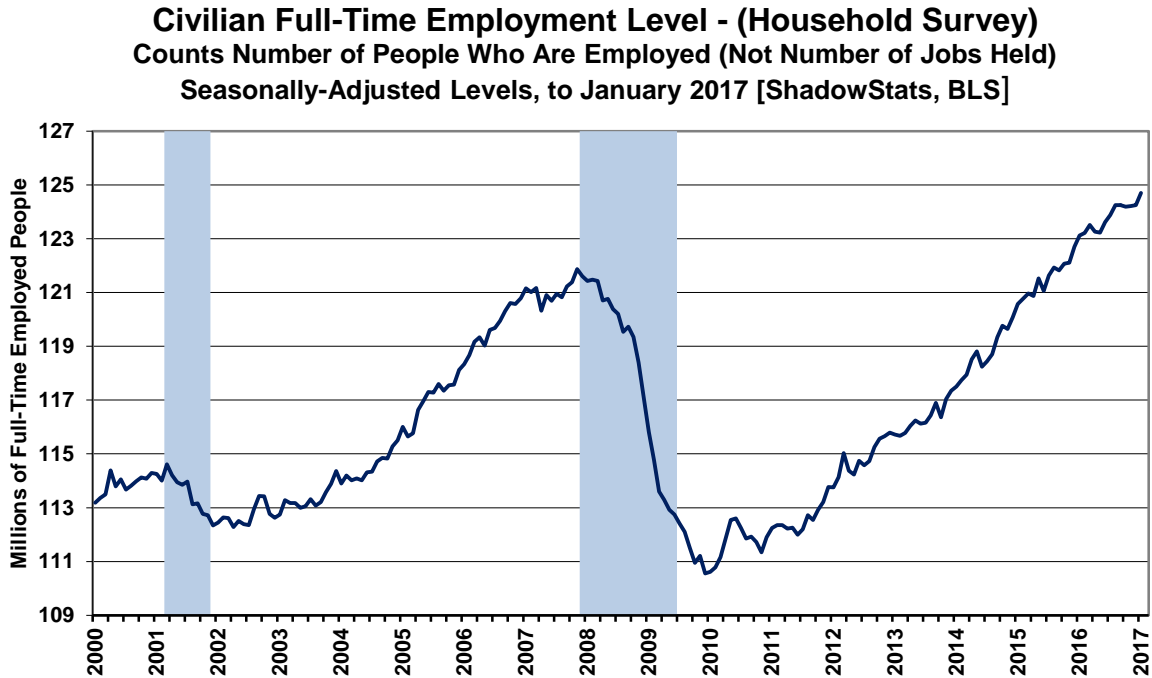


Graphs 31 and 32 show the headline payroll series, both on a shorter-term basis, since 2000, and on a longer-term historical basis, from 1945. In perspective, the longer-term graph of the headline payroll-

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.

Graph 32: Full-Time Employment (Household Survey) to Date

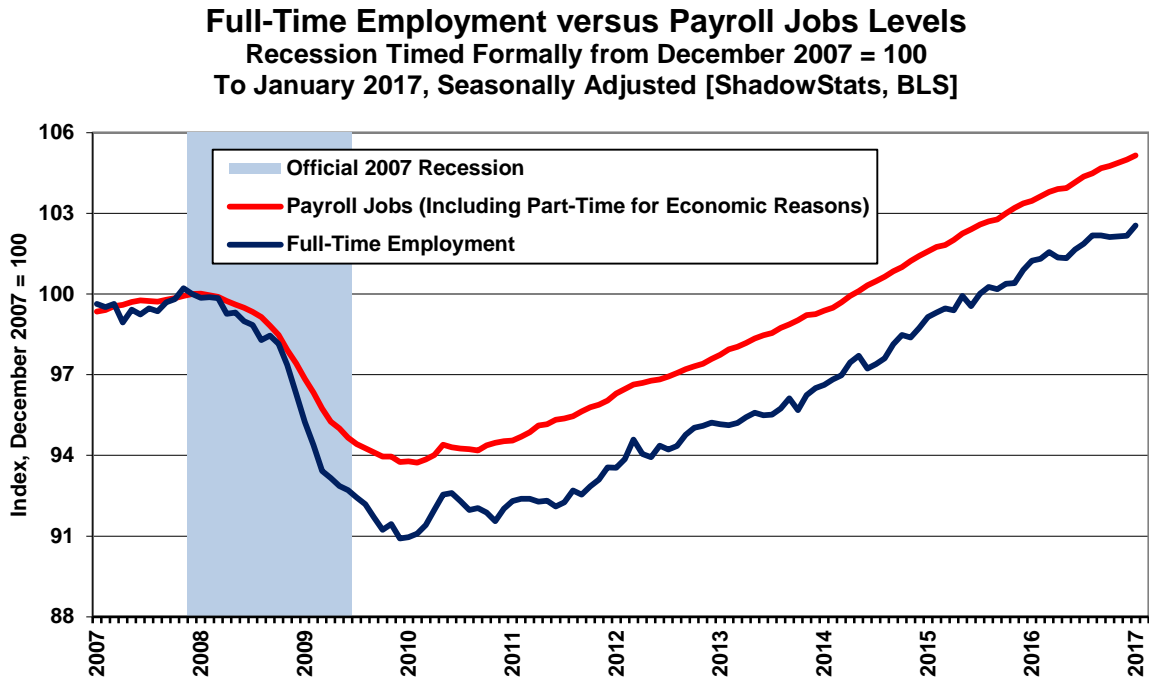


Full-Time Employment versus Part-Time Payroll Jobs. Shown in *Graph 32* (using a roughly-proportionate scale to *Graph 30*), the level of full-time employment (Household Survey) recovered its pre-recession high in August 2015, at least temporarily. Headline January 2017 full-time employment rose by a not believable headline 457,000 [an implied nonsensical 865,000 if the population revisions are to be believed], 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, and having gained 368,000 in August.

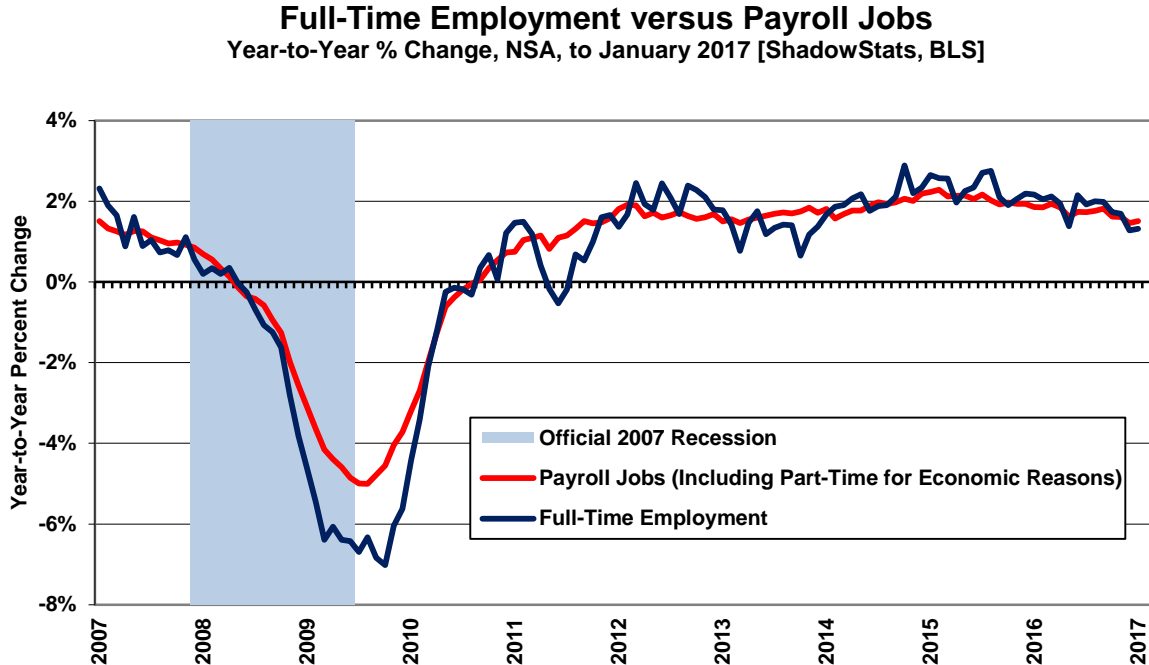
Headline detail now stands at 2.83-million above that pre-recession high for the series. That gain is due in particular to irregularly-volatile monthly gains in the seasonally-adjusted data of January 2017, June through August 2016 and in earlier months of 2016. The series will gyrate further in the next several months, still likely to drop again from the current headline level, with the current numbers having been revamped last month with annual revisions to seasonal adjustment.

Still the 2.83-million gain compares with the headline payroll-employment level that is 7.12-million above its pre-recession high, regained some 32-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 taken on for economic reasons, where full-time employment was desired but could not be found.

Graph 33: Full-Time Employment (Household Survey) versus Jobs Count (Payroll Survey)



Graph 34: Full-Time Employment (Household Survey) versus Jobs Count (Payroll Survey), Year-to-Year



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 33 and 34* 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.

Headline month-to-month volatility in the full-time employment reporting 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 graph of full-time employment excludes 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).

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.

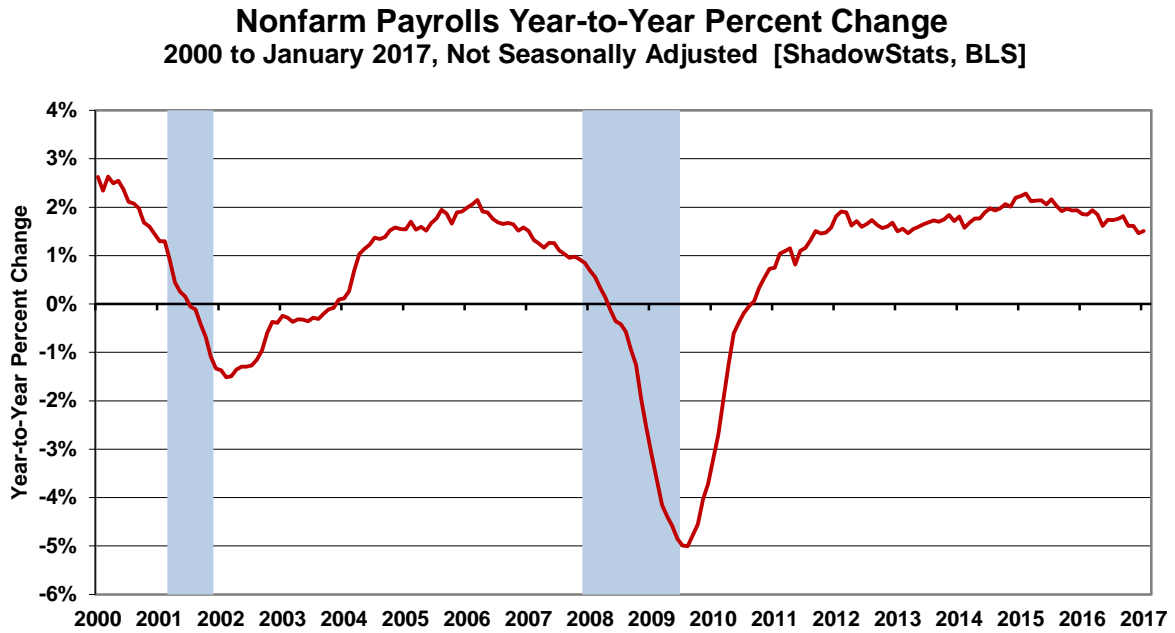
Annual Percent Changes in Headline Payroll Employment. Not-seasonally-adjusted, year-to-year change in payroll employment is untouched by the concurrent-seasonal-adjustment issues, so the monthly comparisons of year-to-year change at least are reported on a consistent basis, although they are, in theory, the basis for the core annual benchmarking of payroll employment.

Year-to-year growth in unadjusted payrolls still stands at a post-recession peak of 2.29% in February 2015, reflected in the headline detail of *Graphs 35 and 36*. Such remains the strongest annual growth since June 2000 (another recession), but subsequent annual growth has slowed sharply. Year-to-year nonfarm payroll benchmarked growth in January 2017 notched higher to 1.51%, from a 62-month low of 1.46% in December 2016, the lowest level of growth since purportedly coming out of the recession. November 2016 annual growth was a benchmarked 1.62%. See the recent discussion of “healthy” annual payroll growth in [Commentary No. 843](#).

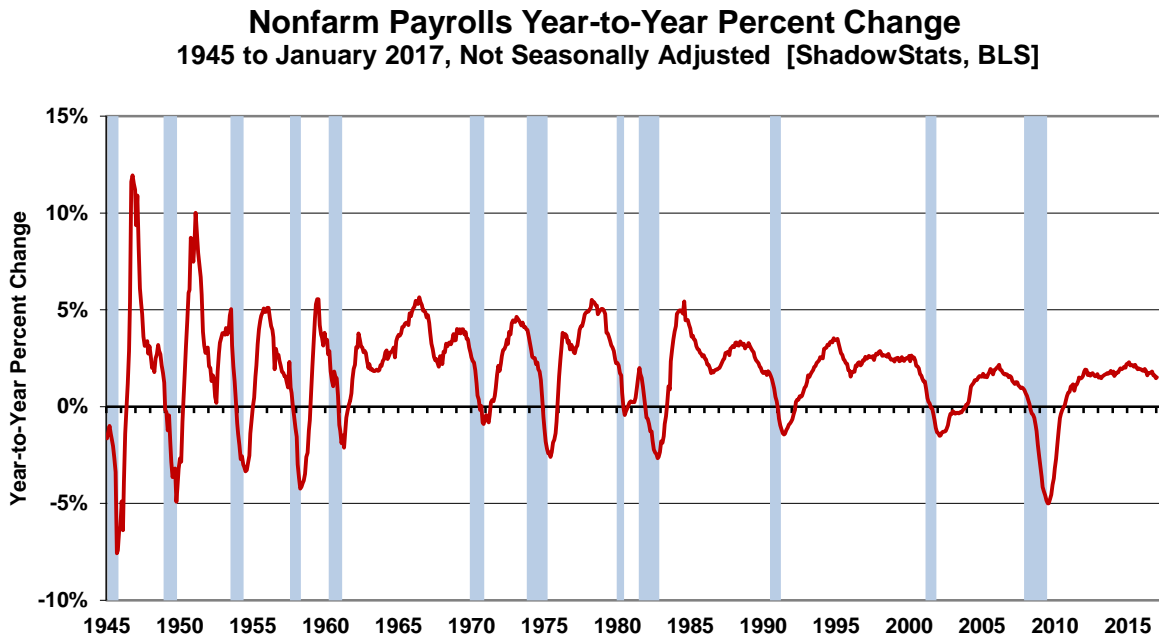
With bottom-bouncing patterns of recent years, current headline annual growth has recovered from the post-World War II record benchmarked decline of 5.01% (-5.01%) seen in August 2009, as shown in the accompanying graphs. That decline remains the most severe annual contraction since the production shutdown 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.

[Graphs 35 and 36 follow on the next page.]

Graph 35: Payroll Employment, Year-to-Year Percent Change, 2000 to Date



Graph 36: Payroll Employment, Year-to-Year Percent Change, 1945 to Date



Headline Distortions from Shifting Concurrent-Seasonal Factors. Discussed and graphed here, with extended commentary and the latest detail available from ShadowStats affiliate [ExpliStats](http://ExpliStats.com), there are 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 as was seen last month, but the numbers become inconsistent, once again, with the ensuing January 2017 reporting. Headline month-to-month inconsistencies in the household survey are highly variable every month, but that detail never is published nor officially 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. All historical comparability disappears, though, again, with the ensuing headline January reporting, and with each monthly estimate thereafter.

Consider *Graphs 37* and *38*, 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

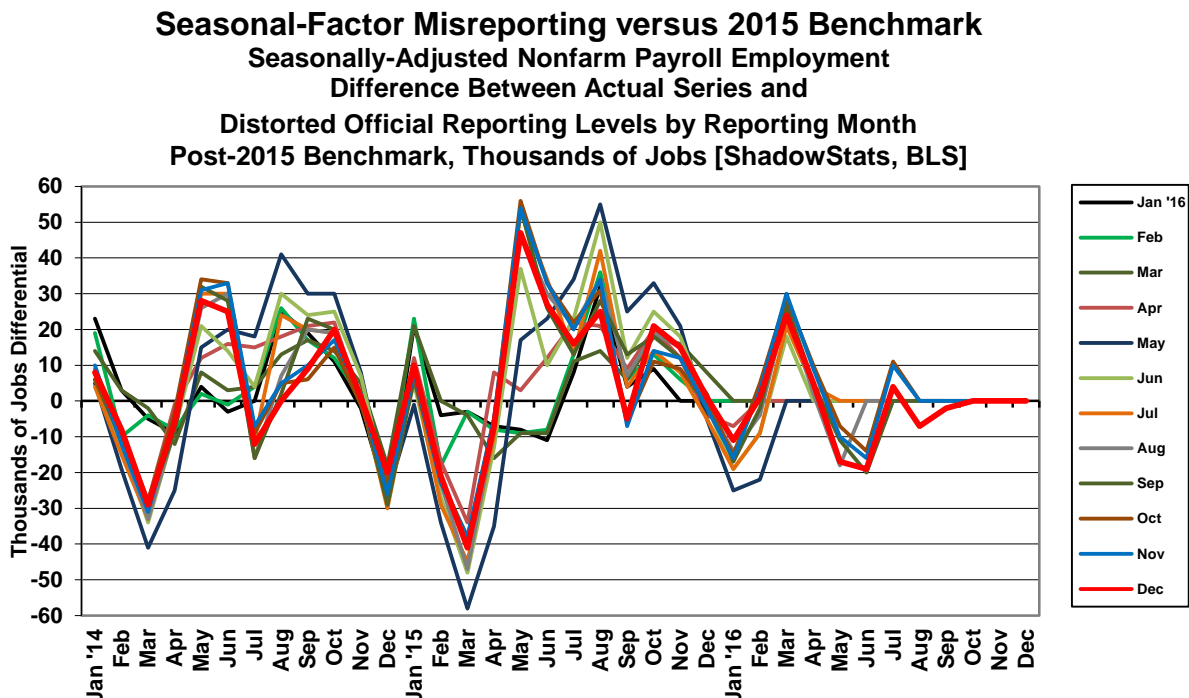
Survey, yet the month-to-month instability likely is of similar magnitude. At least with the Payroll Survey, the headline January 2017 payroll level was prepared on a consistent basis with the levels of December 2016 and November 2016, but not with October 2016, with the result the headline monthly gains are consistent only for January and December. With the Household Survey, except for December, however, the latest 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 37* and *38*).

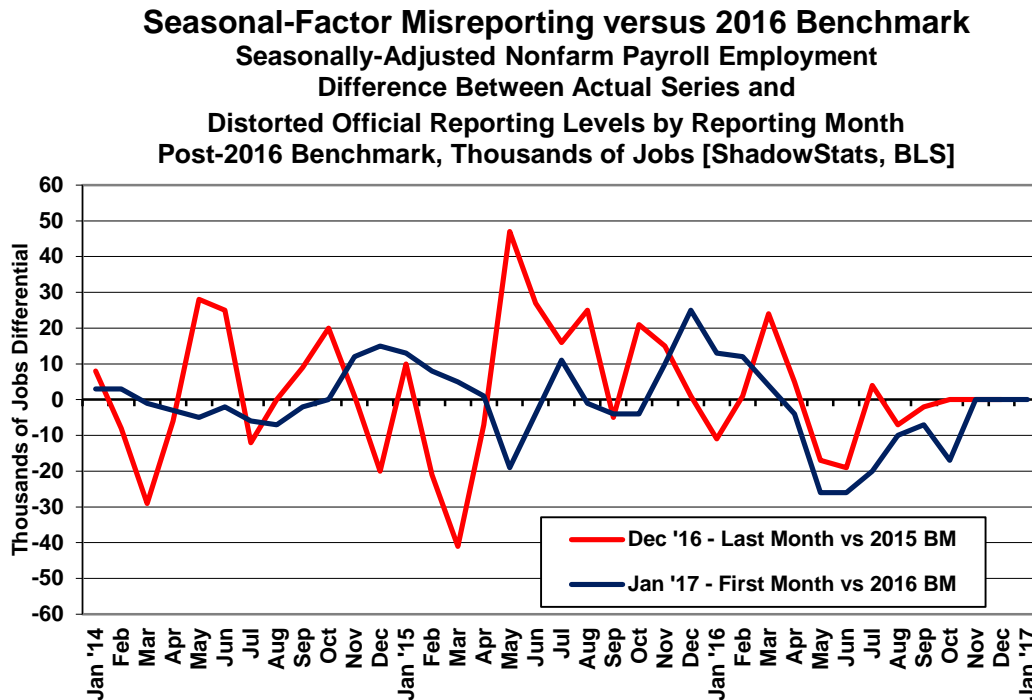
Where the BLS does provide modeling detail for the Payroll Survey, allowing for third-party calculations, no such accommodation has been made for the Household Survey. Again, ShadowStats affiliate ExpliStats does such third-party calculations for the payroll series, and the resulting detail of the differences between the current headline reporting and the constantly-shifting, consistent and comparable history are reflected here in *Graph 37*, showing the monthly variability in the historical seasonal adjustments in the period since last year's 2015 payroll benchmark revision. As seen here, consistent data never have been published.

The benchmark-revised system is run in the background for three months before the headline January publication. *Graph 38* shows how far the system has strayed from the initial 2016 benchmarking, so far.

Graph 37: Concurrent-Seasonal-Factor Irregularities – December 2016 Detail versus 2015 Benchmarking



Graph 38: Concurrent-Seasonal-Factor Irregularities – January '17 Detail versus 2016 Benchmarking



Where the red line reflects last year’s seasonal-factor straying through December 2016, the blue line indicates the straying so far against the initial 2016 benchmarking. The January 2017 detail suggests 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.

Consider in the latest headline detail that January 2017 monthly payroll changes were comparable only with the headline changes in the December 2016 numbers, not with November 2016 or any earlier months. Per BLS headline reporting (straight from the current press release *Summary Table B*), seasonally-adjusted January 2017 payrolls rose month-to-month by 227,000 from December, while December payrolls rose by a revised 157,000 from November, and November payrolls rose by a revised 164,000 from October. October payrolls are currently reported up by 124,000 from September.

Again, only the January and December gains were calculated consistent with each other. Following are the official headline data, with currently-consistent headline detail of monthly gain in parentheses: November was up by 164,000 (181,000), October was up by 124,000 (114,000), etc. The consistent numbers change each month as the seasonals factors are revised anew.

The published, headline November monthly gain and all of the other prior-period monthly changes were calculated on different basis than the new January 2017-based seasonal adjustments. All earlier months’ details are available upon request sent to the e-mail: support@shadowstats.com.

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 at the [ExpliStats](#) link, and discussed in the *Opening Comments* of [Commentary No. 784](#).

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.

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, as discussed in the *Opening Comments*.

Despite the published downside revision of 206,000 (-206,000) to March 2015 payrolls in the last year's 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.

January 2017 Add-Factor Bias. The not-seasonally-adjusted January 2017 add-factor bias was a negative 247,000 (-247,000), following a revised, narrower negative 17,000 (-17,000) [previously down by 28,000 (-28,000)], but a somewhat larger downside adjustment than the negative 233,000 (-233,000) add-factor in January 2016.

The revamped, aggregate upside annual bias for the trailing twelve months through January 2017 is estimated from current headline bias reporting at 993,000, up by 132,000 or 18.1% from 841,000 in

December 2016 and up 212,000 or 27.1% from 781,000 in December 2015. That is a monthly average of 82,750, in January 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 82,750 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 prior December labor-condition 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 prior December 2016 reporting were most of the headline Household Survey details historically consistent, but only for that one month. With the January 2017 headline detail, all the monthly inconsistencies returned, plus the regular annual break in January detail, based on the introduction of new population controls. As a result, January versus December details, in particular, never are fully consistent or compatible.

Separately detailed in [Commentary No. 669](#), and with updated 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. At the first decimal point, the headline January 2017 unemployment rate (U.3) rose to 4.8%, versus 4.7% in December 2016. At the second decimal point, the headline January 2017 U.3 was 4.78%, versus 4.72% in December 2016. Formally, the gain of 0.06% in January U.3 was well shy of being statistically-significant. 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 one per year, in December, which disappears with the ensuing January reporting.

On an unadjusted basis, the unemployment rates are not revised and are consistent in post-1994 reporting methodology. The unadjusted U.3 unemployment rate increased to 5.41% in January 2017, versus 4.51% in December 2016.

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.

The monthly count of short-term discouraged workers in January 2017 (never seasonally-adjusted) gained by about 108,000 (correcting for month-to-month population distortions) to 534,000, with marginally-attached workers increasing by 74,000 to 1,758,000, having declined by 165,000 (-165,000) to 426,000, with total marginally-attached workers declining by 248,000 (-248,000) to 1,684,000 in December.

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 workers. The remaining redefined short-term discouraged and redefined marginally-attached workers were included in U.6.

U.6 Unemployment Rate. The broadest unemployment rate published by the BLS, U.6 includes accounting for those marginally attached to the labor force (including short-term discouraged workers) and those who are employed part-time for economic reasons (*i.e.*, they cannot find a full-time job).

On top of the increase in the seasonally-adjusted U.3 unemployment rate, an increase in the count of marginally-attached workers and a gain of 261,000 (approximate consistent reporting) in the adjusted number of people working part-time for economic reasons combined to generate an adjusted headline January 2017 U.6 unemployment rate of 9.43%, versus 9.18% in December 2016. The unadjusted U.6 unemployment rate rose to 10.08% in January 2017, versus 9.06% in December 2016.

ShadowStats Alternate Unemployment Estimate. Adding back into the unemployed and labor force the ShadowStats estimate of the still-growing ranks of displaced workers—a broad unemployment measure more in line with common experience—the ShadowStats-Alternate Unemployment Estimate increased to 22.9% in January 2017, from 22.7% in December 2016, versus 22.8% in November 2016, 22.9% in October 2016 and 23.0% in September, August and July. Again, 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 following January 2017 details in terms of level have been adjusted to remove the month-to-moth distortions of the population revisions.

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. Net of the currently-defined “marginally attached workers,” which includes the currently-defined and undercounted “discouraged workers” category used in the U.6 (1.758 million in January 2017), those not in the labor force currently wanting a job increased to a net 4.195 million in January 2017 (an increased total of 5.953 million), versus a net 3.765 million in December 2016 (a total of 5.449 million), 3.322 million (a total of 5.524 million) in November 2016, 3.913 million in October

2016 (a total of 5.613 million), 3.909 million in September 2016 (a total of 5.753 million), 4.111 million in August 2016 (a total of 5.824 million) and against 4.294 million in July 2016 (a total of 6.244 million).

In theory, those numbers are counted only on an unadjusted basis, yet the BLS publishes a seasonally-adjusted estimate of 5.758 million wanting a job in January 2017, versus 5.662 million in December 2016, 5.837 million in November 2016, 5.889 million in October 2016, 6.082 million in September 2016 and 5.841 million in August 2016.

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. Beyond 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 6 to 8*). 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 *Graphs 9 to 14* and in the *ECONOMY* section of [No. 859 Special Commentary](#).

Headline January 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 January 2017 increased to 22.9% from 22.7% December 2016. The January 2017 reading was down by 40 basis points or 0.4% (-0.4%) from the 23.3% series high last seen in December 2013.

In contrast, January 2017 headline U.3 unemployment of 4.8% was down by 520 basis points or by 5.2% (-5.3%) from its peak of 10.0% in October 2009. The broader U.6 unemployment measure of 9.4% in January 2017, was down by 780 basis points or 7.8% (-7.8%) from its peak of 17.2% April 2010.

A subscriber recently raised the question as to why the ShadowStats Alternate Unemployment Estimate has 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 5* in the *Opening Comments*), 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 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 around 23% 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 (December 2016)

Reflecting a Nominal Monthly Decline, Bloated Again by Inflation and Upside Revisions, December Real Construction Spending Was Still 23% (-23%) Shy of Recovering Its Pre-Recession Peak.

Where this series remains highly volatile—subject to large monthly revisions—nominal December 2016

spending declined by 0.2% (-0.2%) in the month, in the context of upside revisions to November and October activity, and rising inflation. The weaker nominal activity was seen primarily in the public-construction spending sub-category.

Where third-quarter and fourth-quarter 2016 real activity showed small non-annualized real gains, the series broadly has been flat in its recent history. Real construction spending has remained in low-level, stagnating non-recovery, with December 2016 real activity still shy of its June 2006 pre-recession peak by 22.7% (-22.7%).

Ongoing Consumer Liquidity Issues Constrain Residential Construction Spending. Updated in the *Executive Summary Section* and last fully reviewed in the [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 to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in broad domestic 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 dominant residential-construction category—irrespective of stronger, recent upside revisions to 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.

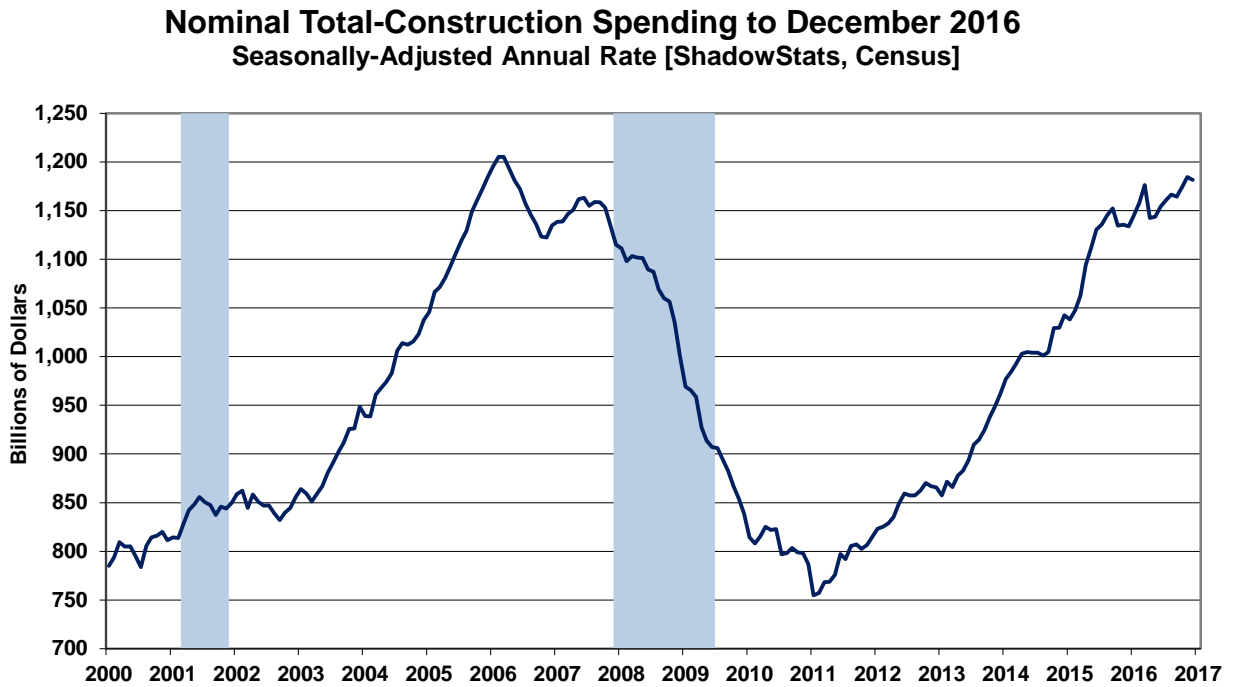
Accordingly, ShadowStats constructed the CCD specifically for deflating construction spending. The CCD is a composite of pricing series, weighted by broad industry segment as compiled in the headline construction spending, with consistent historical tabulation back to before 2000. The combined indices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

There is no perfect inflation measure, public or private for deflating construction. For the historical series in the accompanying plots, as shown in *Graphs 15 to 18* in the *Executive Summary*, and in the accompanying *Graphs 40 and 43* in this section, the inflation-adjusted numbers are deflated by the CCD.

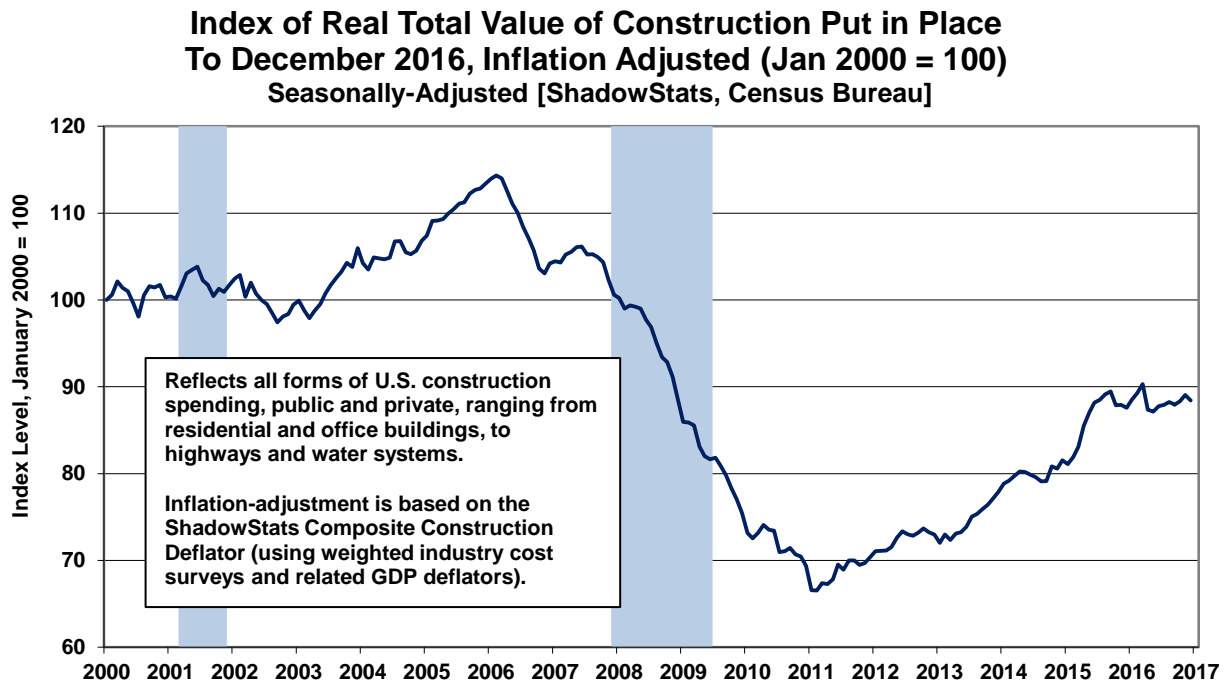
Seasonally-adjusted December 2016 CCD month-to-month inflation rose by 0.49%, following revised monthly gains of 0.07% [previously 0.22%] in November and 0.40% [previously 0.32%] in October. In terms of year-to-year inflation, the December 2016 CCD gained 3.24%, following revised annual gains of 3.01% [previously 3.18%] in November 2016 and 2.96% [previously 2.98%] in October 2016.

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 be reasonably smooth in the residual month-to-month change. Note the comparative monthly volatilities in the non-smoothed *Graphs 44 and 45*.

Graph 39: Total Nominal Construction Spending



Graph 40: Index of Total Real Construction Spending



Headline Reporting for December 2016. In the context of upside revisions to November and October spending, the Census Bureau reported February 1st that the headline, total value of construction put in place in the United States for December 2016 was \$1,181.5 billion on a seasonally-adjusted, but not-

inflation-adjusted, annual-rate basis. That estimate was down month-to-month by a statistically-insignificant 0.2% (-0.2%) +/- 1.2% (all confidence intervals are at the 95% level), versus an upwardly-revised \$1,184.4 [previously \$1,182.1] billion in November 2016. Net of prior-period revisions, December activity would have declined month-to-month by 0.1% (-0.1%).

In turn, November 2016 showed an unrevised gain of 0.9%, versus an upwardly revised \$1,173.7 [previously \$1,171.4, initially \$1,172.6] billion in October 2016. October 2016 was up by a revised 0.9% [previously 0.6%, initially 0.5%] versus an unrevised \$1,164.4 billion in September 2016.

Adjusted for CCD inflation, total real month-to-month spending in December declined by 0.7% (-0.7%), versus revised monthly gains of 0.8% in November 2016 and 0.4% in October 2016.

On a year-to-year annual-growth basis, December 2016 nominal construction spending rose by a statistically-significant 4.2% +/- 1.5%, following a revised November 2016 annual gain of 4.3% [previously 4.1%] and a revised October 2016 annual gain of 3.5% [previously 3.3%, initially 3.6%]. Net of construction costs indicated by the CCD, the annual growth in total real construction eased to 1.0% in December 2016, from upwardly-revised gains of 1.3% in November 2016 and 0.5% in October 2016.

The statistically-insignificant, nominal monthly decline of 0.2% (-0.2%) in aggregate December 2016 construction spending, versus an unrevised 0.9% gain in aggregate November 2016, included a headline monthly decline of 1.7% (-1.7%) in December 2016 public spending, versus a downwardly-revised 0.7% gain in November. Private construction spending rose by 0.2% in December, having gained a downwardly-revised 0.9% November. Within total private construction spending, residential-sector activity rose by 0.5% in December, having gained an upwardly-revised 1.1% in November, while the nonresidential sector was unchanged at 0.0% in December, having gained a downwardly-revised 0.8% in November.

Quarterly Trends. Based on initial fourth-quarter 2016 reporting real construction spending, quarterly activity was indicated at an annualized real growth rate of 2.5%. Revised third-quarter 2016 reporting showed revised annualized growth of 2.8% (previously 2.6%). That followed an unrevised real second-quarter 2016 contraction of 8.4% (-8.4%). First-quarter 2016 real construction spending rose at an unrevised pace of 7.3%.

Going back into 2015, fourth-quarter real construction spending contracted at an annualized pace of 5.4% (-5.4%), following annualized quarterly real gains of 10.1% in third-quarter 2015, 26.0% in second-quarter 2015 and 5.3% in first-quarter 2015.

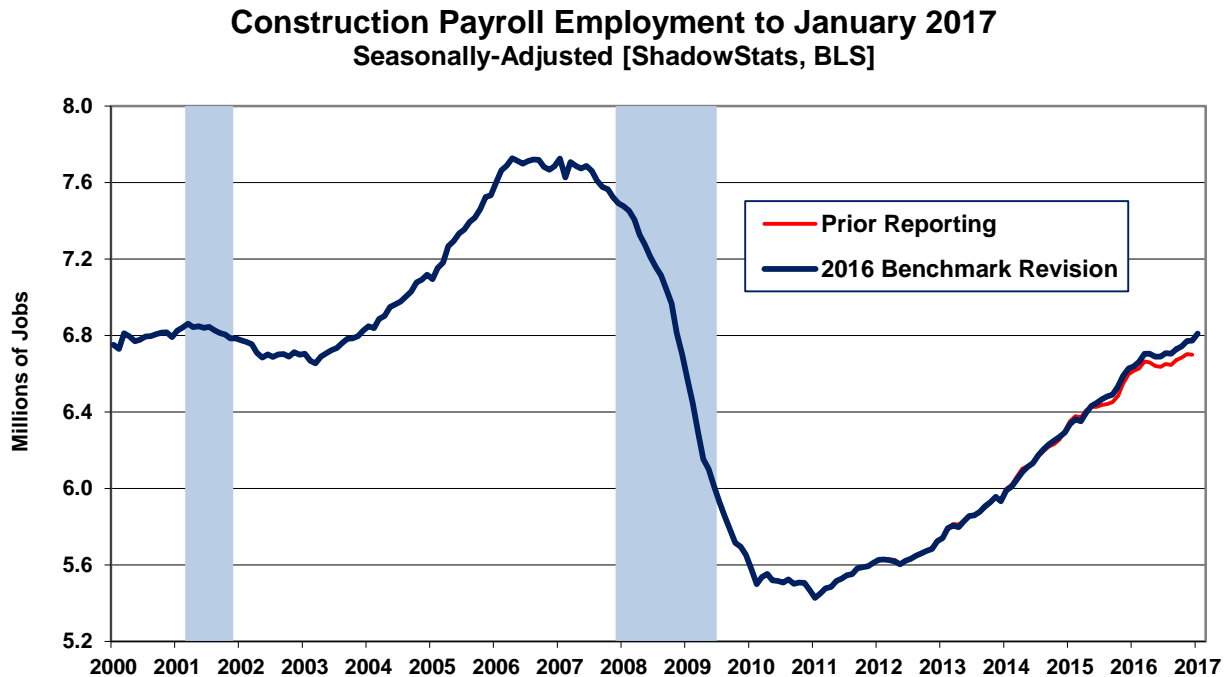
Graphs 15 to 18 in the Executive Summary of the Opening Comments show comparative nominal and real construction activity for the aggregate series as well as for private residential- and nonresidential-construction and public-construction. Seen after adjustment for inflation, the real aggregate series generally have remained in low-level stagnation, now effectively flat through 2016. 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 that now has turned generally flat in recent quarters. The aggregate nominal detail, before inflation adjustment, is shown in *Graph 39* of this *Reporting Detail*, with the real, inflation-adjusted activity plotted in *Graph 40*. *Graphs 42* and *43* show the relative patterns of nominal and real activity aggregated by sector.

Construction and Related Graphs. Earlier *Graphs 39* and *40*, and later *Graphs 42* and *43* reflect total construction spending through December 2016, both in the headline nominal dollar terms, and in real terms, after inflation adjustment. *Graph 40* is on an index basis, with January 2000 = 100.0. 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 and then some boost into early-2015. Activity declined in fourth-quarter 2015, with a fluttering trend that generally flattened out in 2016.

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 series (see the today’s *Executive Summary* covering unemployment and the *ECONOMY* section of [No. 859 Special Commentary](#)). To the contrary, the broad construction reporting, both before (nominal) and after (real) inflation adjustment, generally still shows a pattern of low-level activity, where aggregate activity never recovered pre-recession highs and, again, has flattened-out anew.

Graph 41: Construction Payroll Employment to Date



Construction Employment Revised Higher but Still Is 12% Shy of Recovering. *Graph 41* shows upwardly revised activity through January 2017 construction employment, reflecting annual benchmark revisions as detailed in the *Payroll Employment* section. In theory, payroll levels should move more closely with the inflation-adjusted aggregate series, where the nominal series reflects the impact of costs and pricing, as well as measures of the level of physical activity. Where construction payrolls generally have flattened out, albeit somewhat more up-trending, such is broadly consistent with patterns of stagnating non-recovery seen in a variety of residential real estate construction and sales activity measures, and with the faltering growth patterns seen here in headline real construction spending.

Graphs of Construction Activity. *Graph 42* shows total nominal construction spending, broken out by the contributions from total-public (blue), private-nonresidential (yellow) and private-residential (red) spending. *Graph 43* shows the same breakout as in *Graph 42*, but the detail is in real, inflation-adjusted terms, reflected in constant November 2009 dollars, deflated by the *ShadowStats Composite Construction Deflator (CCD)*, as discussed in the earlier *Construction Inflation* section.

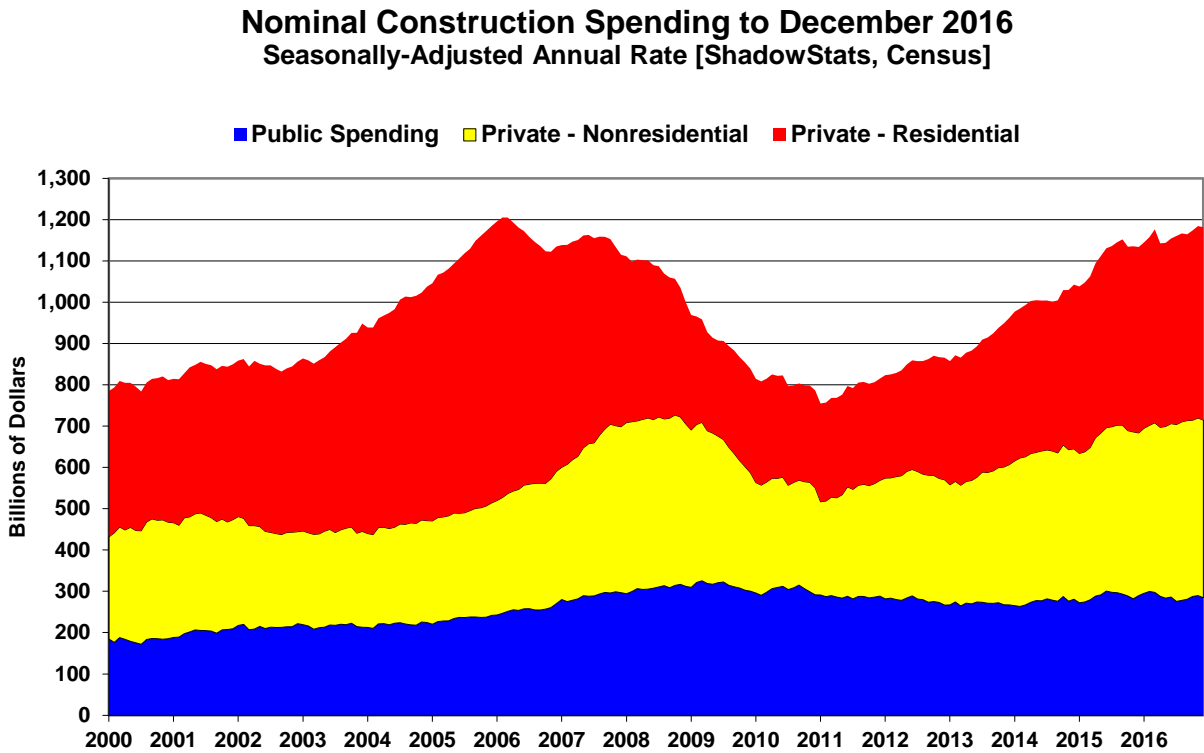
Graphs 44 and *45* cover private residential construction spending, along with housing starts (combined single- and multiple-unit starts) for December 2016 (see [Commentary No. 862](#)). Keep in mind that the construction spending series is in nominal terms, while housing starts reflect unit volume, which should be parallel with the inflation-adjusted series shown in *Graph 16* of the *Opening Comments* section, *Graph 43* and presumably with the headline construction-payroll data in *Graph 41*.

The final two graphs (*Graphs 46* and *47*) 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 had surged to a pre-recession nominal peak in August 2016, but the series has fluttered minimally lower since.

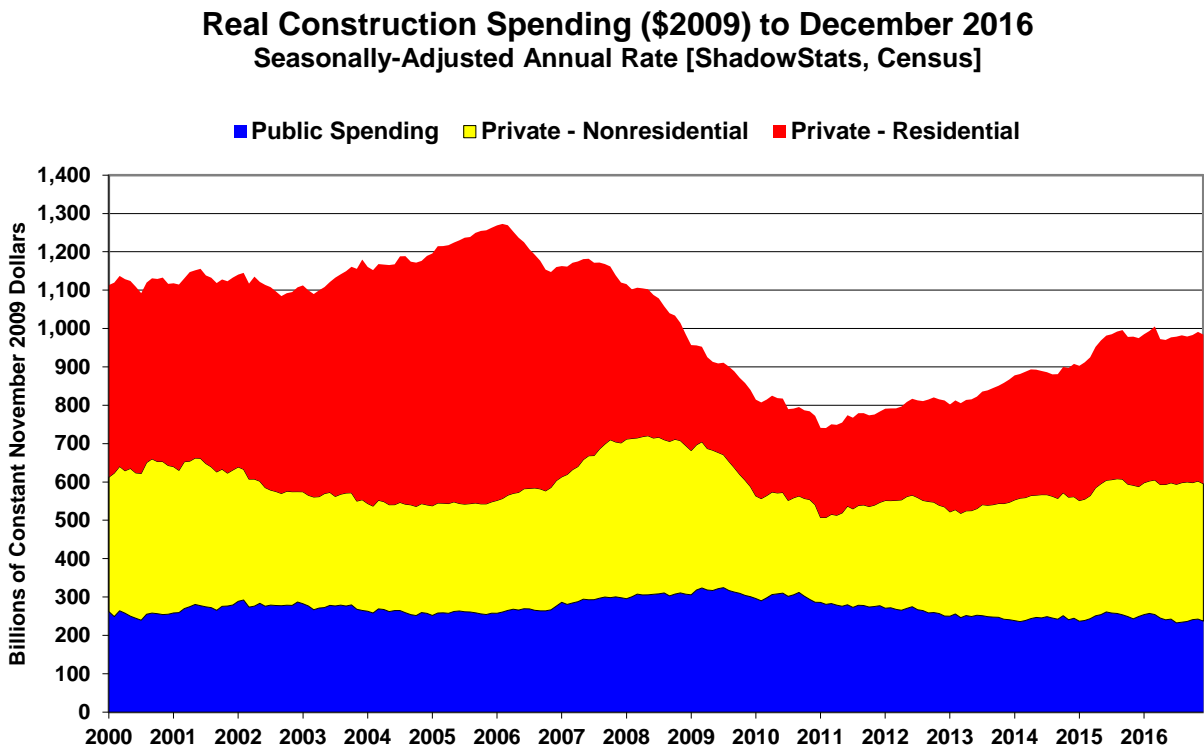
Public Construction spending, which is 98% nonresidential, had continued in a broad downtrend into 2014, with intermittent bouts of fluttering stagnation and then some upturn in 2015. In 2016, the nominal series still appears to be fluttering in something of a volatile topping-out process, still shy of its pre-recession peak. Viewed net of inflation, in *Graphs 17, 18* and *24*, both series appear stalled shy of their pre-recession peaks.

[Graphs 42 to 47 begin on the following page]

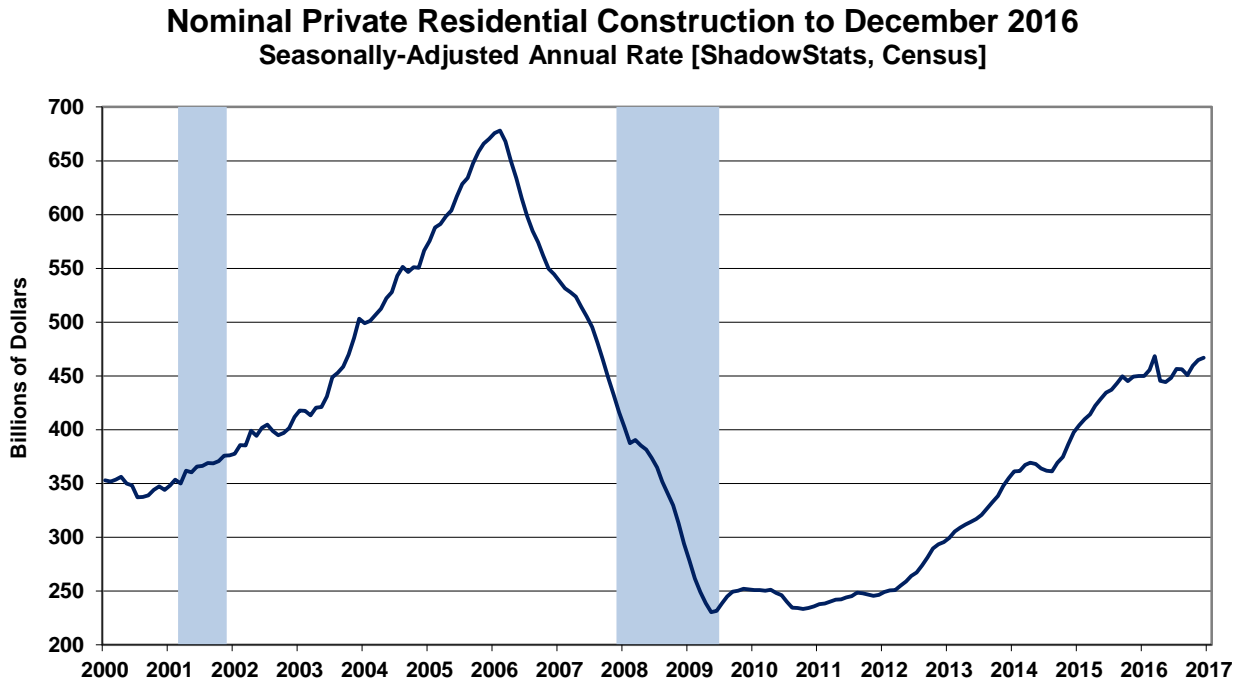
Graph 42: Aggregate Nominal Construction Spending by Major Category to Date



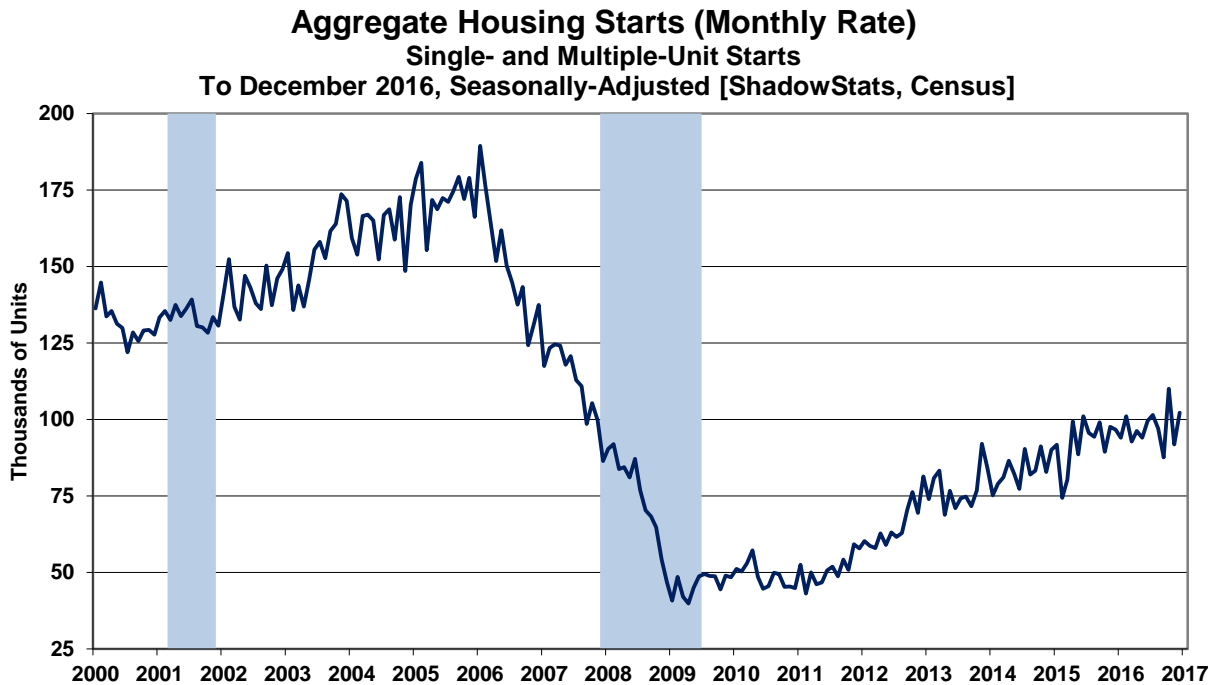
Graph 43: Aggregate Real Construction Spending by Major Category (Billions of November 2009 Dollars)



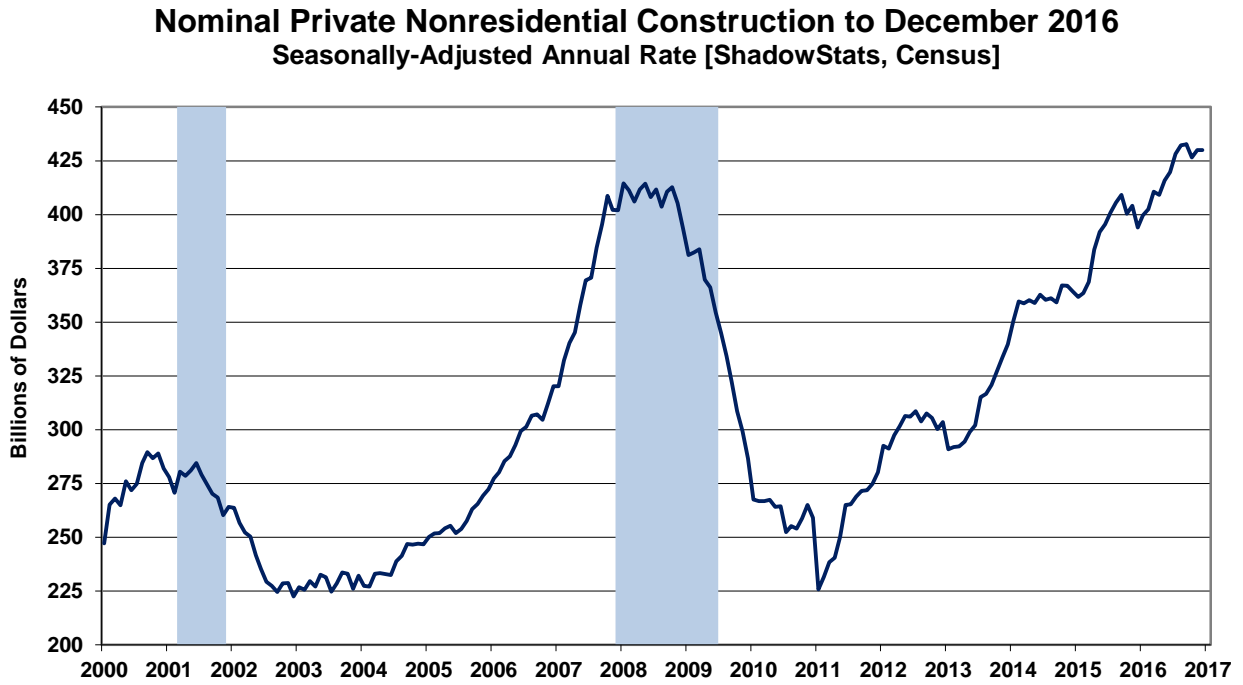
Graph 44: Nominal Private Residential Construction Spending to Date



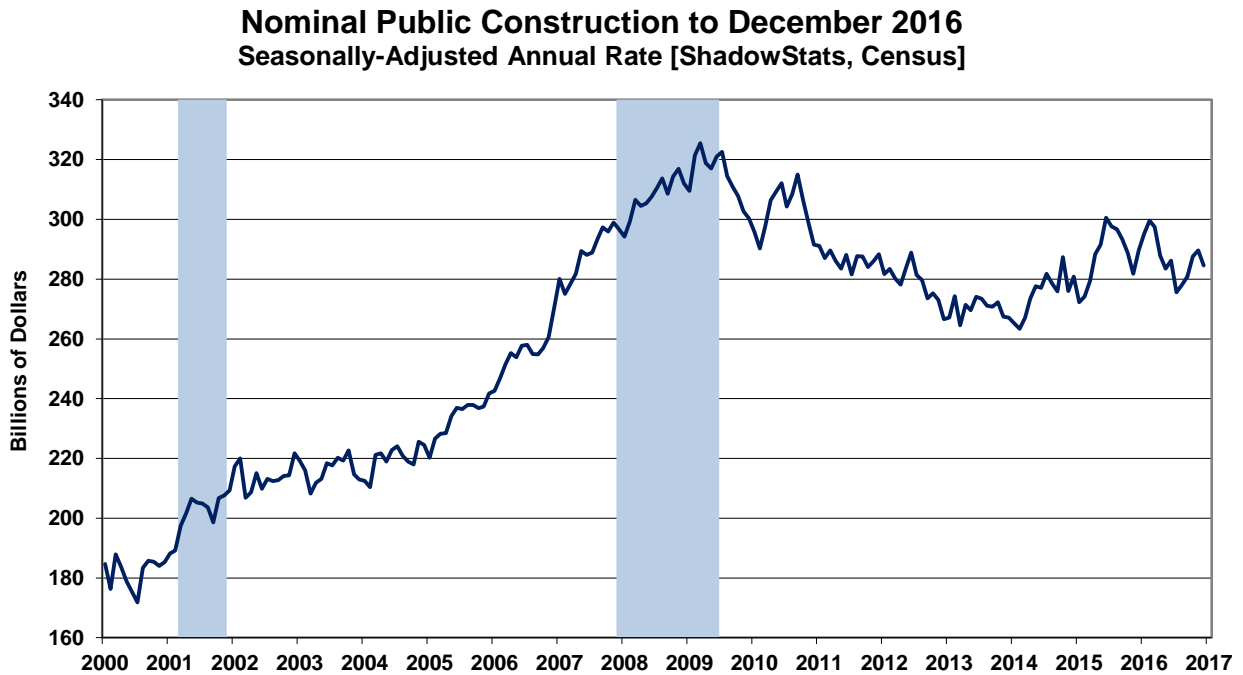
Graph 45: Combined Single- and Multiple-Unit Housing Starts to Date



Graph 46: Nominal Private Nonresidential Construction Spending to Date



Graph 47: Nominal Public Construction Spending to Date



WEEK, MONTH AND YEAR AHEAD

Deepening Economic Downturn Promises a Frustrated Fed and Rapidly Deteriorating Support for the U.S. Dollar, Despite Market Optimism for the New Administration. [*The opening section here has not been revised meaningfully.*] [No. 859 Special Commentary](#) updated near-term economic and inflation conditions, and the outlook for same, including the general economic, inflation and systemic distortions evolving out of the Panic of 2008 that have continued in play, and which need to be addressed by the new Administration in the near future (see also the *Hyperinflation Watch* of [Commentary No. 862](#)).

Contrary to the official reporting of an economy that collapsed from 2007 into 2009 and then recovered strongly into ongoing expansion, underlying domestic reality remains that the U.S. economy started to turn down somewhat before 2007, collapsed into 2009 and never fully recovered. While the economy bounced off its 2009 trough, it began to turn down anew in December 2014, a month that should mark the beginning of a “new” formal recession.

Coincident with and tied to the economic collapse 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. As this ongoing crisis evolves towards its unhappy end, the U.S. dollar ultimately should face unprecedented debasement with a resulting runaway domestic inflation.

The current general trend in weakening data and what should be increasingly-negative expectations for near-term business activity, along with movement towards looming recession recognition, reflect an ongoing broad spectrum of market-disappointing headline data. That should pressure the FOMC back towards expanded quantitative easing, despite the Fed’s December 2016 and rate hike and continuing market hype as to multiple rate hikes looming in the year ahead.

In response to an intensifying downturn, financial market expectations should shift towards renewed Fed “easing,” with the effect of triggering a massive U.S. dollar sell-off, accompanied by a sharp upturn in oil prices, domestic inflation and heavy flight to the safe-haven qualities of physical gold and silver, with a commensurate rally in the prices of those precious metals. Again, see [No. 859](#) for extended discussion.

Broad economic and systemic conditions are reviewed regularly, with the following *Commentaries* of particular note: [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](#).

Commentaries of the last month:

[Commentary No. 863](#) assessed the “advance” estimate of fourth-quarter 2016 GDP and reviewed December 2016 New Orders for Durable Goods and New- and Existing-Home Sales.

[Commentary No. 862](#) discussed December 2016 Industrial Production, Housing Starts, Consumer Prices (including real Retail Sales and earnings), along with December detail of the CASS Freight Index™.

[Commentary No. 861](#) covered 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.

[Commentary No. 860](#) reviewed the December 2016 prior labor conditions reporting, the November 2016 trade deficit and the November 2016 prior construction spending detail.

[No. 859 Special Commentary](#) reviewed and previewed economic, financial and systemic developments of the year passed and the year or so ahead.

[Commentary No. 858](#) previewed the year-ahead *Special Commentary*.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. 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 to understate inflation and to overstate economic activity—as generally viewed in common experience by Main Street, U.S.A.—ongoing headline reporting issues are tied largely to systemic distortions of monthly seasonal adjustments.

Data instabilities—induced partially by the still-evolving economic turmoil of the last nine-to-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). 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 year or two 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](#)). John Crudele of the *New York Post* continues his investigations in reporting irregularities: [Crudele Investigation](#), and as updated on October 24th: [Crudele](#). Mr. Crudele’s latest investigation focuses on retail sales reporting: [John Crudele on Retail Sales](#).

[Pending Releases will be updated in Commentary No. 865.]