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

COMMENTARY NUMBER 784 Labor Conditions, Employment Benchmark, Trade Deficit and Construction Spending February 6, 2016

Revisions Weakened Payroll Growth, Confirmed Non-Comparable Seasonal Adjustments and Disrupted Month-to-Month Household-Survey Detail

Mounting Concerns for U.S. Economy Have Begun to Trouble the Dollar

Year-to-Year Payroll Growth Hit a 20-Month Low

January 2016 Unemployment Rates: U.3 at 4.9%, U.6 at 9.9%, and ShadowStats at 22.9%

Worst Quarterly and Annual Real Merchandise Trade Deficits Since 2007

Fourth-Quarter Construction Spending Contracted

Repeating a Pattern Last Seen at Onset of the Economic Collapse, Growth Has Turned Lower for M3 and Higher for M2 and M1

Monetary Base Has Continued in Year-to-Year Decline

PLEASE NOTE: Early in the week of February 8th, Supplemental Commentary No. 784-A, will review more fully the February 5th annual benchmark revisions to the payroll employment series. Included will be detail of otherwise unpublished, historically-consistent payroll levels generated by the latest Bureau of Labor Statistics modeling. The next regular Commentary, scheduled for Friday, February 12th, will cover January nominal Retail Sales.

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

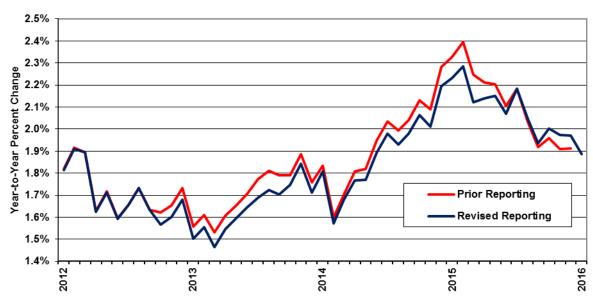
Downside Payroll Benchmark Revision Was as Promised. Five months ago, the Bureau of Labor Statistics (BLS) initially estimated a downside benchmark revision of 208,000 (-208,000) jobs for its base March 2015 payroll employment levels (see *Commentary No. 753*). Published February 5th, the headline downside revision to unadjusted March 2015 payroll employment was 206,000 (-206,000), with adjustments made to the headline detail going back to 2000 and forward to December 2015. The bulk of the changes to not-seasonally-adjusted data were made from October 2012 to date. The seasonally-adjusted numbers were revamped from January 2011 on, confirming the consistent patterns regularly corrected in ShadowStats missives.

Significant further and exclusive new detail on the revisions follows early in the week ahead, with *Supplemental Commentary No. 784-A*. The usual employment-related sections on the Concurrent Seasonal Factor distortions and the Birth-Death Model are abbreviated in today's *Reporting Detail* (last full versions in *Commentary No. 779*), but they will be detailed and fully updated in the *Supplement*.

Seen in *Graphs 1* to 3, the benchmarking process left the headline payroll-employment detail noticeably weaker, with year-to-year growth in unadjusted payrolls (*Graph 1*) revising consistently lower from the latter part of 2012 through mid-2015, when the BLS presumed that its revised modeling had updated the system adequately to eliminate the then-recognized upside reporting bias. That late pattern likely will revise sharply to the downside, as often happens with subsequent benchmarking.

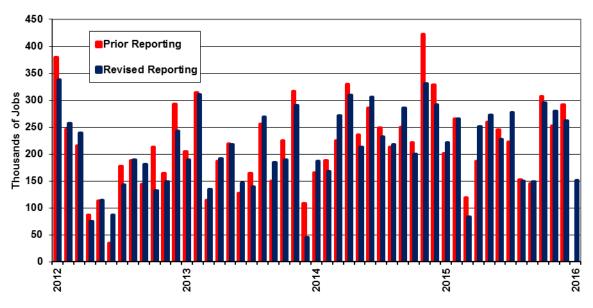
Graph 1: Payroll Benchmark Revision – Not-Seasonally-Adjusted , Year-to-Year Change in Payrolls





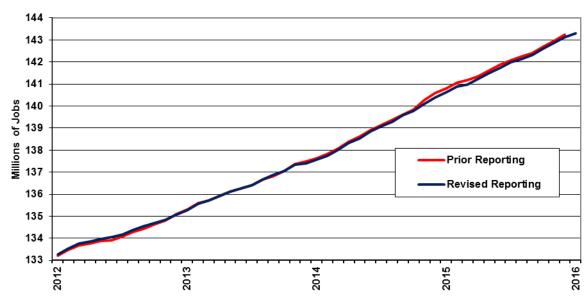
Graph 2: Payroll Benchmark Revision - Seasonally-Adjusted Month-to-Month Jobs Change

Payroll Employment Month-to-Month Change - 2015 Benchmark January 2012 to January 2016, Seasonally Adjusted [ShadowStats, BLS]



Graph 3: Payroll Benchmark Revision - Seasonally-Adjusted Payroll Levels

Payroll Employment Level - 2015 Benchmark Revisions To January 2016, Seasonally Adjusted [ShadowStats, BLS]



The timeframe for the unadjusted annual-growth revisions reflects the pure benchmarking based on the discovered sampling (usually upside) reporting biases. The timeframes for the revisions in *Graph 2* and *Graph 3*, however, encompass five years of revamped concurrent seasonal adjustment factors. Discussed

frequently (see for example *Headline Distortions from Shifting Concurrent Seasonal Factors* in <u>Commentary No. 779</u>) the BLS revises its historical seasonal-adjustment patterns every month, but only reports the headline and prior month on a fully consistent basis. The rest of the historical numbers are neither comparable nor consistent with the headline monthly detail. Such leads to large distortions in the published historical data and often in misleading near-term headlines.

Consider, for example, the largest revision in *Graph 2*. The headline monthly gain of 423,000 in November 2014 had been in place since the last benchmarking. It dropped in the latest benchmark revisions by 92,000 (-92,000) to show now a headline monthly gain of 331,000.

Noted in <u>Commentary No. 756</u> of October 2, 2015: "... the headline monthly gain for November 2014 payrolls still is 423,000, but that never was true. That number came out of the 2014 benchmark reporting, including headline January 2015, but the November change versus October—consistent with the headline reporting of the time—was 337,000, some 86,000 less. With intervening revisions each month, the actual aggregate November and October levels have changed some, but now consistent with the headline September 2015 reporting and recalculations, the November 2014 versus October 2014 gain was 329,000, down by 94,000 (-94,000) versus the still 423,000 headline number. The prior history changes each month, along with the new seasonal-factor calculations that determine the latest headline month's numbers, with the consistent series explored fully in <u>Commentary No. 695</u>."

Use of consistent seasonal-adjustment factors each month would eliminate these distortions and the deliberate misreporting of headline activity by the BLS. ShadowStats provides consistent reporting through its affiliate ExpliStats (that link takes you the ExpliStats analysis, including the November 2014 distortions). Details on the current situation follow in the Supplement. ExpliStats gets the consistent adjustment factors from the BLS, but while the BLS has the consistent factors available, it never publishes the consistent, historical monthly payroll-employment data more than one month back, even in its benchmark revisions. A.

Deteriorating Economic News Means Downside Pressure on GDP Revisions and Increasing Market Instabilities. Increasing concerns for the domestic economy have had some play in recent financial-market turmoil, with expectations for further Federal Reserve rate hikes increasingly on the wane. As those sentiments continue to shift, the U.S. dollar should come under mounting selling pressure, with resulting upside pressure on prices for gold, silver and oil (see *No. 777 Year-End Special Commentary*). Beyond the previously-promised negative tone of the 2015 annual payroll benchmark revision, headline December details for both the trade shortfall and construction spending have been weak enough to raise concerns for a February 26th downside revision to headline fourth-quarter 2015 GDP growth.

These circumstances follow the unusually-weak reporting of December 2015 new orders for durable goods on January 28th, which was too late for inclusion in the "advance" GDP estimate (see *Commentary No.* 782). Separately, shifting annual-growth patterns in the money supply have become suggestive of activity last seen heading into the economic collapse (see discussion in the *Hyperinflation Watch*).

Annual and Fourth-Quarter Real Trade-Deficit Deterioration—Worst Readings Since 2007. Already having had significant negative impact on the "advance" 0.7% annualized, inflation-adjusted, real growth in fourth-quarter 2015 GDP (see Commentary No. 783), the fourth-quarter 2015 real merchandise-trade

deficit, as reported February 5th, was the deepest since third-quarter 2007. In like manner, the annual 2015 real merchandise-trade shortfall was the worst since 2007. With significant trade revisions likely in the month ahead, downside revision pressures here on the second-estimate of last-quarter's GDP remain a fair bet. Discussed in the main text, collapsing oil prices have distorted heavily the relative nominal versus real trade data, where the nominal merchandise trade deficit in 2015 was the worst since 2008.

Graph 4: Inflation-Adjusted, Quarterly U.S. Merchandise Trade Deficit

Inflation-Adjusted U.S. Merchandise Trade Deficit Quarterly Deficit at Annual Rate (Billions of Chained 2009 Dollars) To 4q2015, Seasonally-Adjusted, Census Basis [ShadowStats, Census]



Fourth-Quarter Construction Spending Contracted both Before and After Inflation. In the context of ongoing downside revisions to recent historical growth, the headline February 1st reporting of domestic construction spending turned the series negative for fourth-quarter 2015, down at an annualized quarterly pace of 3.8% (-3.8%), following a third-quarter gain of 4.1%. Such should be enough to add downside revision pressures on the construction-related growth components in fourth-quarter GDP.

Today's *Commentary* (**February 6th**). The balance of these *Opening Comments* provides summary coverage of the January employment and unemployment numbers and the December trade deficit and construction spending detail.

The *Hyperinflation Watch* includes the regular update on *Monetary Conditions*. The latest *Hyperinflation Outlook Summary* is found in prior *Commentary No. 783*.

The Week Ahead previews January 2016 retail sales.

Employment and Unemployment—January 2016—Annual Benchmarking of Payroll Data, and Annual Population Revisions to Unemployment Data, Highlighted Heavily-Flawed Labor Reporting. Underlying reality for U.S. labor conditions in January 2016 was in the realm of a 22.9% broad unemployment rate, with headline monthly payroll employment change likely flat-to-minus, month-to-month and slowing sharply year-to-year, as reviewed in the main text.

The annual benchmark revisions to the Payroll-Employment or Establishment Survey were negative, as promised by the Bureau of Labor Statistics (BLS). Summary revision detail and graphs are found in the opening paragraphs of these *Opening Comments*, with more-extensive analysis following early next week in *Supplemental Commentary No.* 784-A.

Separately, Household-Survey reporting suffered a double set of distortions. First was the annual revamping of population controls, which made most headline numbers in the Household Survey not comparable between December and January. Changes in factors such as the level of employment, unemployment and labor force all varied (but not necessarily proportionately) along with changes in estimated population. For example, where the headline population rose month-to-month in January by 461,000, population-control changes accounted for 265,000 of the gain; where headline employment jumped by 615,000, population-control changes added 206,000.

The BLS does provide before and after numbers, however, that allow assessment of the population-control impact. Headline increases in measures such as full-time employment, the participation rate and the employment to population ratio (the last two measures beyond the first decimal point) all reflected some boost from the upped population guesstimates.

More disruptive over time, however, was the second issue, the return to fully non-comparable, month-to-month reporting of headline detail, where seasonal adjustments are recalculated each month, but none of the historical data (including the prior month) are revised to reflect same. Once-per-year revisions each December put all the historical Household-Survey data on a consistent basis for one month, but that all disappears with the subsequent January reporting (see the abbreviated *Headline Distortions from Shifting Concurrent Seasonal Factors* section in the *Reporting Detail*).

These monthly reporting inconsistencies should account for the bulk of the difference between the headline, seasonally-adjusted 409,000 employment gain (net of population control distortions) in the January 2016 Household Survey, and the headline, seasonally-adjusted 151,000 jobs gain indicated for January 2016 Payroll Survey. Where the month-to-month changes in the January 2016 household data simply are not comparable, not meaningful versus December 2015, the month-to-month changes in the January 2016 payroll data are comparable with December 2015 headline detail, but not with the reporting of November 2015 and before. Accordingly, the Household-Survey 409,000 employment gain in January appears to be nonsense, with related distortions flowing through to other calculations, such as a decline of 0.1% (-0.1%) in the headline U.3 unemployment rate.

Unemployment. Indeed, putting reality aside, the headline (U.3) unemployment rate (Household-Survey) declined to 4.9% in January 2016, from 5.0% in December 2015, down from the October 2009 peak of 10.0%. The broader U.6 unemployment measure, including those marginally attached to the workforce (including short-term discouraged workers) and those working part-time for economic reasons, held at 9.9% in January 2016, the same level as December 2015, and down from its April 2010 peak of 17.2%. Again, the BLS advises that the headline January U.3 unemployment rate was not distorted month-to-

month by the new population controls, although it certainly was distorted otherwise by the non-comparability of the month-to-month headline detail.

Adding back into the total unemployed and labor force the ShadowStats estimate of the ever-growing ranks of long-term discouraged workers (excluded from government unemployment calculations)—a broad unemployment measure more in line with common experience—the ShadowStats-Alternate Unemployment Estimate held at 22.9% in January 2016. That was unchanged from December 2015, and down from the series high of 23.3%, last seen in December 2013. The ShadowStats measure absorbs the long-term discouraged workers who pass through accounting for U.3 and U.6 unemployment measures within very limited time horizons.

Payrolls. In the context of the annual benchmark revisions to payroll employment (Payroll-Survey), activity slowed sharply, to a headline gain of 151,000 in January 2016, versus a benchmarked 262,000 (292,000 pre-benchmark) gain in December 2015. Despite the annual revisions, headline payroll reporting remained in the context of continuing, unstable shifts in seasonal-adjustment patterns, subject to the usual reporting biases and distortions. Specifically, the headline January 2016 payroll data were not comparable to reporting in November 2015 and before.

With the 2015-benchmark revisions in place, the full recovery in headline payroll activity versus its prerecession peak was pushed back by one month to May 2014, from April 2014.

Despite the benchmarking, the headline Payroll-Survey numbers remained distorted by unreported inconsistencies in the historical data, again as generated by BLS reporting policies with its concurrent seasonal-factor adjustment modeling (see pending *Supplement*). Separately, the headline jobs gains still were inflated meaningfully by the monthly add-factors in the Birth-Death Model (BDM). With the aggregate, monthly upside biases still well in excess of 200,000 jobs, the actual January 2016 headline payroll change most likely was flat-to-minus. On a not-seasonally-adjusted basis, the generally-downside benchmark revisions to annual growth took January 2016 year-to-year growth to a twenty-month-low reading of 1.9%.

Revamped Payroll Survey Detail. In the context of the annual benchmark revisions, discussed and reflected in *Graphs 1* to 3 in the opening paragraphs of these *Opening Comments*, the seasonally-adjusted, headline payroll gain for January 2016 was 151,000 jobs, versus a downwardly-benchmarked 262,000 jobs gain in December 2015 and an upwardly-benchmarked November 2015 employment gain of 280,000.

With the benchmarking in place, year-to-year growth in unadjusted payrolls generally revised lower (see *Graph 1*), where the post-recession peak growth now stands at downwardly-benchmarked 2.29% in February 2015. That was the strongest annual growth since June 2000 (another recession), but subsequent annual growth has slowed. Year-to-year nonfarm payroll growth in January 2016 was 1.89%, down from an upwardly benchmarked 1.97% in both December and November 2015. The headline January 2016 reading was the weakest annual growth rate in the last twenty months. Various plots and comparative charts of payroll levels and annual change are found in the *Reporting Detail* section, *Graphs 18* to 24.

Payroll employment 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. As of latest

benchmarking, headline payroll employment first moved above its pre-recession high in May 2014. That previously had been in April 2014, as of the prior. Payroll employment has continued to rise since. Including the headline jobs gain of 151,000 in January 2016, headline payroll employment now is about 4.9-million jobs above its pre-recession peak.

Such gains heavily reflect growth in people holding multiple jobs, often part-time jobs for economic reasons (the payroll survey counts jobs, not people). With temporary upside monthly distortions, the count of people holding full-time jobs recovered its pre-recession high in August 2015, currently 1.3-million jobs above its pre-recession peak.

Counting All Discouraged Workers, January 2016 Unemployment Was at About 22.9%. 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 for work actively 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, 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 and enter the realm of "long-term discouraged workers," as defined and counted by ShadowStats (see the extended comments in the ShadowStats Alternate Unemployment Measure in the Reporting Detail).

In the ongoing economic collapse into 2008 and 2009, and the non-recovery thereafter, the broad drop in the U.3 unemployment rate from its headline peak of 10.0% in 2009, to holding at a "post-recession" low of 4.9% in January 2016, has been due largely to unemployed giving up looking for work (common in severe conditions). Those giving up looking for work are redefined out of headline reporting and the labor force, as discouraged workers. The declines in the headline unemployment reflect same, much more so than the unemployed finding new and gainful employment.

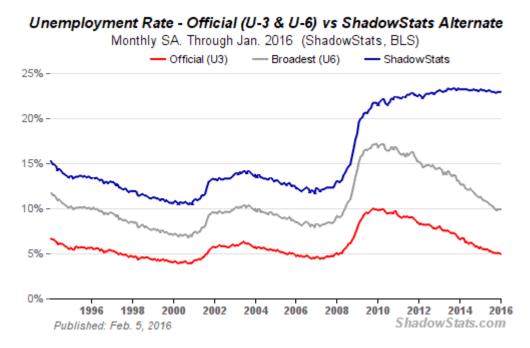
As new discouraged workers move regularly from U.3 into U.6 unemployment accounting, those who have been discouraged for one year are dropped from the U.6 measure. As a result, the U.6 measure has been declining along with U.3 for some time, but those being pushed out of U.6 still are counted in the ShadowStats-Alternate Unemployment Measure, which has remained relatively steady, near its historichigh rate for the last couple of years.

Moving on top of U.3, the broader U.6 unemployment rate—the government's broadest unemployment measure—includes only the short-term discouraged workers (those marginally attached to the labor force). The still-broader ShadowStats-Alternate Unemployment Measure includes an estimate of all discouraged workers, including those discouraged for one year or more, as the BLS used to define and measure the series, before 1994.

Again, when the headline unemployed become "discouraged," they are rolled over from U.3 to U.6. As the headline, short-term discouraged workers roll over into long-term discouraged status, they move into the ShadowStats measure, where they remain. Aside from attrition, they are not defined out of existence for political convenience, hence the longer-term divergence between the various unemployment rates. The resulting difference here is between headline-January 2016 unemployment rates of 4.9% (U.3) and 22.9% (ShadowStats).

Graph 5 reflects headline January 2016 U.3 unemployment at 4.92%, versus 5.01% in December 2015; headline January U.6 unemployment at 9.89%, versus 9.87% in December; and the headline January 2016 ShadowStats unemployment estimate at 22.9%, holding at the same level as in December.

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 in tandem with plots of most economic statistics, where a lower number means a weaker economy.

The inverted-scale of the ShadowStats unemployment measure also tends to move with the employment-to-population ratio, which notched higher, again, in January 2016, boosted somewhat artificially by revised population controls. The ratio, though, still remains near its post-1994 record low, the historic low and bottom since economic collapse (only the period following the series redefinition in 1994 reflects consistent reporting), as shown in *Graph 7*. 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 2016 participation rate also ticked higher, again receiving a minimal boost from new population controls. It remains off the historic low hit in September 2015 (again, pre-1994 estimates are not consistent with current reporting). The labor force used in the participation-rate calculation is the headline employment plus U.3 unemployment. As with *Graph 7* of employment-to-population, its holding near a post-1994 low in current reporting is another indication of problems with long-term discouraged workers, the loss of whom continues to shrink the headline (U.3) labor force, and the plotted ratio.

Graph 6: Inverted-Scale ShadowStats Alternate Unemployment Measure

ShadowStats-Alternate Unemployment Rate (Inverted Scale) Long-Term Discouraged Workers Included (BLS Excluded Since 1994) To January 2016, Seasonally-Adjusted [ShadowStats, BLS]



Graph 7: Civilian Employment-Population Ratio

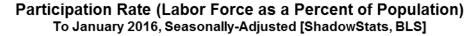
Civilian Employment-Population Ratio To January 2016, Seasonally-Adjusted [ShadowStats, BLS]

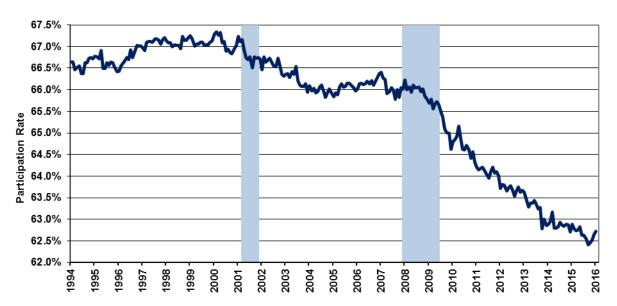


Graphs 5 through 8 reflect data available in consistent detail back to the 1994 redefinitions of the Household Survey and the related employment and unemployment measures. Before 1994, employment

and unemployment data consistent with January's Household-Survey reporting simply are not available, irrespective of protestations to the contrary by the BLS.

Graph 8: Participation Rate

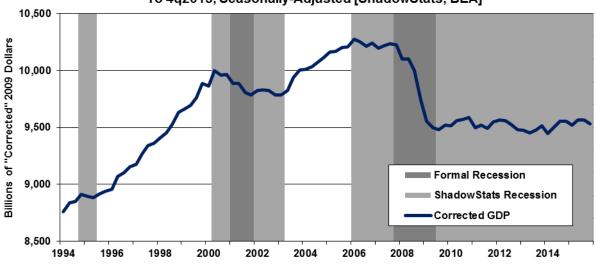




Separately, consider *Graph 9*, which shows the ShadowStats version of the GDP, also from 1994 to date, where the GDP is corrected for the understatement of inflation used in deflating that series (a detailed description and related links are found in GDP *Commentary No. 783*).

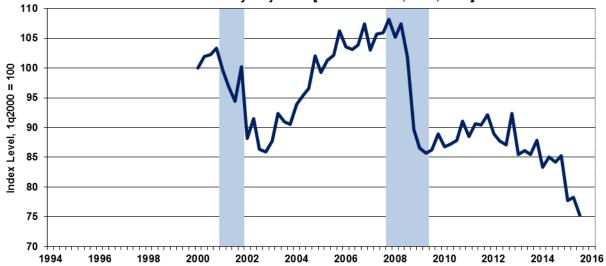
Graph 9: Corrected Real GDP

Corrected Real GDP Nominal GDP Deflated by Implicit Price Deflator Adjusted for Understatement of Annual Inflation To 4q2015, Seasonally-Adjusted [ShadowStats, BEA]



Graph 10: Real S&P 500 Sales Adjusted for Share Buybacks (2000 - 2015), Indexed to January 2000 = 100





In particular, the broad patterns of activity seen in *Graphs 6* and 7 generally are mirrored in *Graph 9* of the "corrected" GDP and also largely are consistent with the post-2000 period shown in *Graph 10* of real S&P 500 revenues from *No. 777 Year-End Special Commentary*. *Graph 10* initially was prepared with a quarterly data range from 2000 to third-quarter 2015, but the time scale of the plot has been shifted here back to 1994 to show the S&P 500 revenue detail on roughly a comparative, coincident basis with the detail in *Graphs 6* to 9. Of note, unlike *Graphs 6* to 9, *Graph 10* is not seasonally adjusted.

Headline Unemployment Rates. At the first decimal point, the headline January 2016 unemployment rate (U.3) was 4.9%, down from 5.0% in December 2015. At the second decimal point, headline January 2016 U.3 declined by 0.09-percentage point to 4.92% in January, from 5.01% in December. Technically, the headline January decline in U.3 was statistically-insignificant.

The headline decline in U.3 is without meaning, given that the seasonally-adjusted, month-to-month details simply are not comparable, thanks to the BLS's reporting methodology and use of concurrent-seasonal-adjustment factors (see *Headline Distortions from Shifting Concurrent Seasonal Factors*). Components of the headline January 2016 detail are warped heavily by the annual changes to the BLS population controls, although the headline U.3 purportedly is not affected until the third decimal point. These issues remain separate from official questions raised as to falsification of the Current Population Survey (CPS), from which are derived the unemployment details.

On an unadjusted basis, the unemployment rates are not revised and are consistent in post-1994 reporting methodology. The unadjusted U.3 unemployment rate rose to 5.28% in January 2016 from 4.80% in December 2015.

The minimal decline in the seasonally-adjusted, headline January 2016 U.3 unemployment rate reflected population-enhanced boosts in employment and the labor force, with some decline in unemployment. Those movements, however, separately are skewed by the non-comparability of the adjusted headline monthly data, and while they were relatively positive in January 2016, those month-to-month changes are not meaningful, as discussed earlier.

New discouraged and otherwise marginally-attached workers always are moving into U.6 unemployment accounting from U.3, while those who have been discouraged 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 stable.

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).

Despite a decline in the underlying seasonally-adjusted U.3 rate, a negligible decline in the adjusted number of people working part-time for economic reasons, and a more-than -offsetting gain in those marginally attached to the workforce (short-term discouraged workers rose for the month), headline January 2016 U.6 unemployment increased negligibly to 9.89%, from 9.87% in December 2015. The unadjusted U.6 unemployment rate was at 10.54% in January 2016, versus 9.78% in December 2015.

ShadowStats Alternate Unemployment Estimate. Adding back into the total unemployed and labor force the ShadowStats estimate of the still-growing ranks of excluded, long-term discouraged workers—a broad unemployment measure more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for January 2016 held at 22.9%, the same as in December 2015.

Off the October 2015 near-term low of 22.8%, the ShadowStats January 2016 reading still was down by 40 basis points or by 0.40% (-0.40%) from the 23.3% series high last seen in December 2013. In contrast, the headline U.3 reading for January 2016 of 4.9% was the lowest rate since February of 2008, down from its 10.0% peak in October 2009 by a full 510 (-510) basis points or 5.10% (-5.10%).

Trade Deficit—December 2015—Real Annual and Fourth-Quarter Merchandise Trade-Deficits Had Their Worst Showings Since 2007. With the initial estimate of the inflation-adjusted December 2015 merchandise trade deficit in hand, reporting of the real, or inflation-adjusted, fourth-quarter 2015 merchandise trade deficit was the worst since third-quarter 2007 (see *Graph 4*), while the 2015 real annual merchandise trade deficit also was the worst since 2007. Collapsing oil prices have skewed relative nominal- versus real-trade measures, with the nominal 2015 merchandise trade deficit the worst since 2008. Add in reporting gimmicks with the nebulous, guessed-at services sector, and the 2015 nominal deficit in goods and services had it worst showing since 2012.

Nominal- versus Real-Trade Data Skewed Heavily by Collapsing Oil Prices. Adjusted for inflation, in real terms, economic data such as the Gross Domestic Product (GDP) are intended to reflect physical volume instead of current dollar volume. With collapsing oil prices, the United States still has a huge trade deficit in physical oil volume, in real terms, which remains a net negative in the estimation of

domestic growth in real GDP, yet that problem becomes somewhat muted in nominal terms in the current circumstance of rapidly plunging oil prices.

In nominal terms, the headline merchandise-trade deficit for the United States (Census basis) widened to \$727.2 billion in 2015 versus \$689.9 billion in 2014. Such included a deeper trade deficit with China of \$365.7 billion in 2015 versus \$343.1 billion in 2014, a widened trade deficit with the European Union of \$153.3 billion in 2015 versus \$142.1 billion in 2014, and larger deficit with Japan of \$68.6 billion in 2015 versus \$67.2 billion in 2014. In contrast, the trade balance with OPEC turned to a surplus of \$6.6 billion in 2015, versus a deficit of \$50.0 billion in 2014, thanks to dropping oil prices.

The difference in nominal- versus real-trade deterioration here in 2015 was a nominal widening in the annual trade deficit of 5.4%, versus a real widening in the deficit of 17.0% along with increasingly negative impact on headline real GDP growth. The headline trade detail continues to suggest further negative impact on real GDP, going forward.

Nominal (Not-Adjusted-for-Inflation) December 2015 Trade Deficit. The headline nominal, seasonally-adjusted monthly trade deficit in goods and services for December 2015, on a balance-of-payments basis, widened by \$1.131 billion to \$43.357 billion, versus a revised \$42.226 billion in November. That was in the context of all other monthly detail for 2015 being revised for updated seasonal adjustments. The December 2015 nominal deficit narrowed versus a non-comparable \$45.549 billion trade shortfall in December 2014 (see *Ongoing Cautions...* section in the *Reporting Detail*).

In terms of month-to-month trade patterns, the headline \$1.131 billion deterioration in the December deficit reflected a decline of \$0.513 billion in monthly exports plus an increase of \$0.617 billion in monthly imports (difference is in rounding). Where the decline in exports largely reflected lower exports of automobiles and petroleum products, the increase in imports primarily reflected increased imports of those same products.

<u>Energy-Related Petroleum Products.</u> For December 2015, the not-seasonally-adjusted average price of imported oil declined to \$36.60 per barrel, versus \$39.24 per barrel in November 2015, and versus \$82.92 per barrel in December 2014. Separately, not-seasonally-adjusted physical oil-import volume in December averaged 8.207 million barrels per day, up from 7.035 million in November 2015 and up from 7.935 million in December 2014.

Real (*Inflation-Adjusted*) *December 2015 Trade Deficit.* Adjusted for seasonal factors, and net of oilprice swings and other inflation (2009 chain-weighted dollars, as used in GDP deflation), the December 2015 merchandise trade deficit (no services) widened to \$60.273 billion, versus a revised \$59.227 billion in November, in the context of seasonal factor revisions for the full year. The December 2015 shortfall also widened sharply versus a still-comparable \$53.130 billion real deficit in December 2014.

As currently reported, the annualized quarterly real merchandise trade deficit was \$588.6 billion for third-quarter 2014, \$605.5 billion for fourth-quarter 2014, a revised \$692.4 billion for first-quarter 2015, a revised \$694.8 billion for second-quarter 2015, a revised \$706.1 billion for third-quarter 2015, and an initial estimate of \$722.4 billion for fourth-quarter 2015. That last number was responsible for subtracting 0.47% from the initial headline estimate of fourth-quarter 2015 real GDP growth.

Construction Spending—December 2015—Fourth-Quarter Activity Contracted. In the Census Bureau's extended corrections to "processing errors" in construction spending reporting last month (see *Commentary No.* 778), recent historical growth patterns were reduced. In the February 1st reporting of the new headline December 2015 detail, further weakness in general activity and new prior-period downside revisions have turned the series to outright contraction in fourth-quarter 2015.

Indeed, with initial full reporting in place, fourth-quarter 2015 real construction spending contracted quarter-to-quarter at an annualized face of 3.8% (-3.8%), following annualized quarterly real gains of 4.1% in third-quarter 2015, 25.0% in second-quarter 2015, and 6.0% in first-quarter 2015. The latest detail would be consistent with a contraction in annualized fourth-quarter 2015 GDP, currently up by 0.7%, and suggestive of a pending downside revision to same.

Accompanying *Graphs 11* to *14* show comparative nominal and real construction activity for the aggregate series, as well as for private residential- and nonresidential-construction and public-construction spending. Seen after adjustment for inflation (see the *Reporting Detail* for the discussion on inflation), the aggregate series had remained in low-level stagnation into first-quarter 2015, with some short-lived gains, but now it has flattened and turned down anew in the last several months of reporting. The real series in December 2015 held at 26.0% (-26.0%) below its pre-recession peak of March 2006. Areas of recent relative real strength in all of the major subcomponents have flattened out, or turned down in revision, both before and after construction inflation.

Headline Reporting for December 2015. The headline, total value of construction put in place in the United States for December 2015 was \$1,116.6 billion, on a seasonally-adjusted, but not-inflation-adjusted basis annual-rate basis. That estimate was up by a statistically-insignificant 0.1%, versus a downwardly revised \$1,116.0 billion in November 2015. Net of prior-period revisions, the headline December change was a decline of 0.5% (-0.5%).

In turn, November spending was down by a revised 0.6% (-0.6%) versus a revised \$1,122.7 billion in October 2015, which in turn was down by a revised 0.1% (-0.1%) versus an unrevised \$1,123.9 billion in September 2015.

Adjusted inflation, total real monthly spending in December 2015 was up by 0.1%, and down more deeply versus prior reporting by headline contractions of 0.3% (-0.3%) in November and 1.1% (-1.1%) in October.

On a year-to-year or annual-growth basis, December 2015 nominal construction spending rose by a statistically-significant 8.2%, versus downwardly-revised year-to-year gains of 9.8% in November 2015, and 10.6% in October 2015.

Net of construction costs, the year-to-year gain in total real construction spending was at 6.2% in December 2015, versus downwardly-revised annual growth rates of 7.7% in November 2015 and 8.1% in October 2015.

The statistically-insignificant, headline monthly nominal gain of 0.1% in aggregate December 2015 construction spending, versus a revised decline of 0.6% (-0.6%) in aggregate November 2015 spending, included a headline monthly gain of 1.9% in December public spending, versus a decline of 2.4% (-2.4%) in November. Private spending declined by 0.6% (-0.6%) in December, following an unchanged reading in November. Within total private construction spending, the residential sector rose by 0.9% in

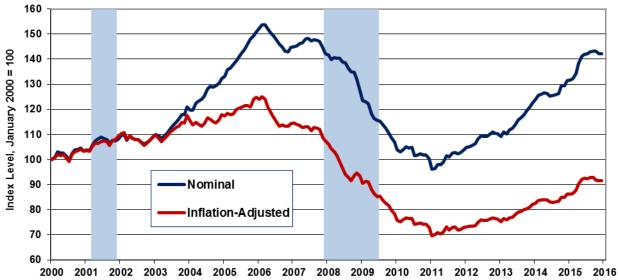
December, versus a 0.3% gain in November, while the nonresidential sector fell by 2.1% (-2.1%) in December, following a 0.2% (-0.2%) contraction in November.

Construction Graphs. Despite protracted stagnation and with a renewed decline in broad activity, the pattern of inflation-adjusted activity here—net of government inflation estimates—does not confirm the economic recovery indicated by the headline GDP series (see Commentary No. 783 and No. 777 Year-End Special Commentary). To the contrary, the latest broad construction reporting, both before (nominal) and, more prominently, after (real) inflation adjustment, generally has shown a pattern of low-level, albeit variably up-trending stagnation, where activity not only never had recovered pre-recession highs, but also now has turned down anew.

A variety of construction spending and related, comparative graphs (*Graphs 25* to 32) are found in the *Reporting Detail* section. *Graphs 11* to 14, which follow here, show plots of the comparative construction series both before and after adjustment for inflation.

Graph 11: Index, Nominal versus Real Value of Total Construction Index of Total Value of Construction Put in Place

Nominal versus Inflation-Adjusted (Jan 2000 = 100)
To December 2015, Deflated by PPI Construction Indices
Seasonally-Adjusted [ShadowStats, Census, BLS]



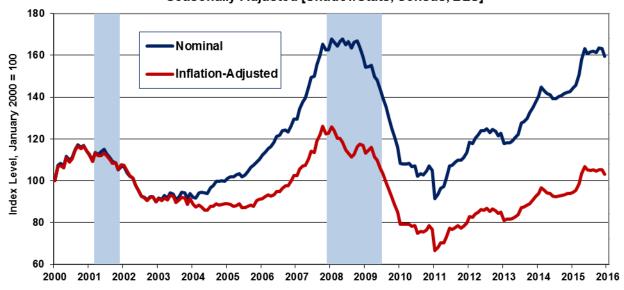
[Graphs continue on the next page.]

Graph 12: Index, Nominal versus Real Value of Private Residential Construction

Index of Value of Private Residential Construction Nominal versus Inflation-Adjusted (Jan 2000 = 100) To December 2015, Deflated by PPI Construction Indices Seasonally-Adjusted [ShadowStats, Census, BLS]



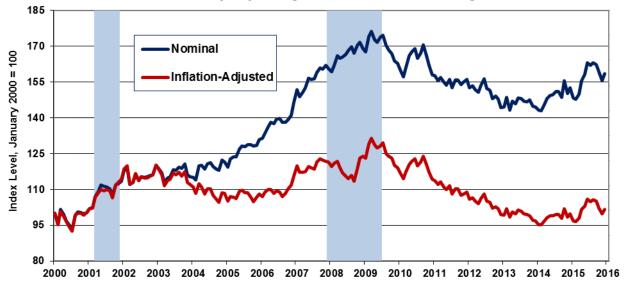
Graph 13: Index, Nominal versus Real Value of Private Nonresidential Construction
Index of Value of Private Nonresidential Construction
Nominal versus Inflation-Adjusted (Jan 2000 = 100)
To December 2015, Deflated by PPI Construction Indices
Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 14: Index, Nominal versus Real Value of Public Construction

Index of Value of Public Construction Nominal versus Inflation-Adjusted (Jan 2000 = 100) To December 2015, Deflated by PPI Construction Indices

Seasonally-Adjusted [ShadowStats, Census, BLS]



[The *Reporting Detail* section includes additional detail and graphs on the labor, trade and construction spending circumstances.]

HYPERINFLATION WATCH

MONETARY CONDITIONS—SINKING M3 GROWTH VERSUS RISING M2 AND M1

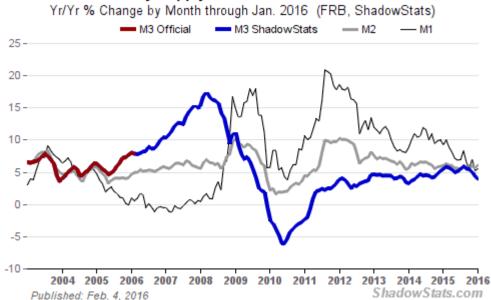
Last Seen at the Onset of the Economic Collapse, Annual M3 Growth Has Turned Down Sharply with M1 and M2 Growth on the Rise. Last time annual M3 growth turned down, with M1 and M2 turning higher, the economy was collapsing to 2008. That pattern of shifting money supply growth has begun to repeat itself in current reporting. This area could be flashing a warning signal on the economy if the trends continue to suggest an increasing flight of cash to relative safety. This area will be reviewed fully in the CPI Commentary No. 787 of February 19th. In the prior CPI Commentary No. 781, real

annual M3 growth as of December 2015, pre-money supply revisions, was beginning to move-in on a formal recession signal.

Discussed in prior <u>Commentary No. 783</u>, an early estimate of January 2016 annual growth in the broad money supply—the ShadowStats Ongoing M3-Measure—indicated a sharp slowing in January 2016 annual M3 growth to 3.8%, from 4.3% in December 2015. With an extra week's worth of underlying data in hand, the January annual growth now looks like 3.9%. The continuing downturn in annual M3 growth, as seen in accompanying *Graph 15*, was in the context of downside annual benchmark revisions to the underlying data, as published by the Federal Reserve Board (FRB) on January 28th.

Those revisions lowered recent annual growth estimates of M1, M2 and the ShadowStats M3, with the latest numbers available on the <u>Alternate Data</u> tab of <u>www.ShadowStats.com</u>. For example, where annual growth in M3 previously had slipped to 4.5% in December 2015, down from 5.2% in November and a six-year high, near-term peak growth of 6.0% in August 2015, those respective annual growth rates revised lower to 4.3%, 5.0% and 5.9%. In that context, year-to-year to growth in January 2016 broad money supply M3 continued to slow sharply, standing now at 3.9%, the lowest level in twenty-two months.

On a month-to-month basis, January 2016 M3 rose by 0.3%, having been a revised "unchanged" 0.0% at the first decimal point [previously down by 0.1% (-0.1%)] in December 2015, and having gained 0.3% in November [previously up by 9.4%].



Graph 15: Comparative Money Supply M1, M2 and M3 Year-to-Year Changes through January 2016
Annual U.S. Money Supply Growth - ShadowStats Continuation

Mixed Annual Money Supply Growth May Be Sending an Unusual Signal. The relative weakness in annual M3 growth reflects renewed flight of funds from accounts included just in M3, such as large time deposits and institutional money funds, into accounts in M2 and M1, bloating the less-inclusive measures relative to M3. Following are January 2016 year-to-year and month-to-month changes for the narrower

M1 and M2 measures (M2 includes M1; M3 includes M2). See the <u>Money Supply Special Report</u> for full definitions of those measures. Again, the latest estimates of level and annual growth for January 2016 M3, M2 and M1, and for earlier periods are available on the <u>Alternate Data</u> tab of <u>www.ShadowStats.com</u>.

Annual M2 growth in January 2016 rose to 6.1%, versus downwardly-revised annual gains of 5.7% [previously up by 6.0%] in December 2015, and 6.0% [previously up by 6.2%] in November 2015, with a month-to-month increase of 1.0% in January 2016, versus unrevised monthly gains of 0.3% in December 2015 and 0.7% in November.

For M1, January 2016 year-to-year growth rose to 5.5%, from a downwardly-revised 5.3% [previous up by 6.2%] in December 2015, but it still was down versus revised annual growth of 7.0% [previously up by 7.3%] in November 2015, with a month-to-month gain of 0.6% in January 2016, versus a narrowed monthly decline of 0.2% (-0.2%) [previously down by 0.8% (-0.8%)] in December 2015 and a downwardly revised monthly gain of 1.6% [previously up by 1.9%] in November.

Setting a Pattern of Negative Annual Growth, the Monetary Base Has Stabilized Below Pre-FOMC Rate-Hike Levels. Following up on prior *Commentary No. 783*, *Commentary No. 779* and *No.779-A*, the St. Louis Fed's monetary base had declined to a seasonally-adjusted, 28-month low in the two-week period ended January 6, 2016, plunging by 7.4% (-7.4%) year-to-year in the steepest annual decline in the 30-year history of the series. Much of the activity there was due to the New York Fed's Open-Market operations, post-FOMC rate hike, aimed at setting in place the new target range of 0.25% to 0.50% for the federal funds rate.

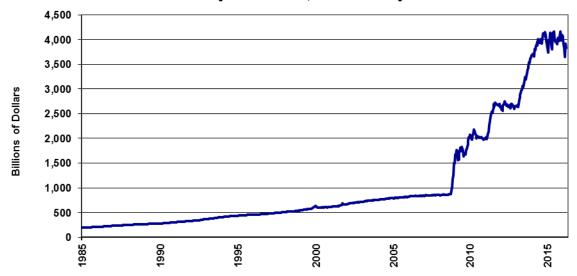
Graphs 16 and 17 show subsequent reporting of the St. Louis Fed's Monetary Base for the two-week periods ended January 20th, and the February 4th detail through the two-week period ended February 3rd. While the period-to-period plunge in the post-FOMC monetary base largely has reversed in recent periods, the level remains off recent highs, with annual change in the January 20th period remaining down year-to-year in by 5.3% (-5.3%), the second-worst year-to-year decline in the series, with the annual decline holding at 5.2% (-5.2%) in the February 3rd period. These data will be updated here regularly.

Late in 2014, the Federal Reserve ceased net new purchases of U.S. Treasury securities as part of its quantitative easing QE3, but its outright holdings of Treasury securities have remained stable at \$2.5 trillion, rolling over maturing issues. Again, where the monetary base during the last year had been plusor-minus 5% around the St. Louis Fed's estimated 12-month average of \$4.0 trillion, that range was broken to the downside only once, in the immediate post-FOMC period ended January 6th, again, due largely to related New York Fed activities.

[Graphs continue on the next page.]

Graph 16: Monetary Base Level, Bi-Weekly through February 3, 2016

St. Louis Fed Adjusted Monetary Base Bi-Weekly to February 3, 2016, Seasonally Adjusted [ShadowStats, St. Louis Fed]



Graph 17: Monetary Base, Year-to-Year Percent Change, through February 3, 2016

St. Louis Fed Adjusted Monetary Base, Yr/Yr % Bi-Weekly to February 3, 2016, Seasonally Adjusted [ShadowStats, St. Louis Fed]



HYPERINFLATION OUTLOOK SUMMARY (The latest version: in *Commentary No. 783*.)

REPORTING DETAIL

EMPLOYMENT AND UNEMPLOYMENT—January 2016

Employment and Unemployment—January 2016—Annual Revisions to Payroll Data and Annual Population Revisions to Unemployment Data, Highlighted Heavily-Flawed Labor Reporting. [Note: This section, through the PAYROLL SURVEY DETAIL, largely is repeated from the Opening Comments.] Underlying reality for U.S. labor conditions in January 2016 was in the realm of a 22.9% broad unemployment rate, with headline monthly payroll employment change likely flat-to-minus, month-to-month and year-to-year growth slowing sharply, as reviewed in the main text.

The annual benchmark revisions to the Payroll-Employment or Establishment Survey were negative, as promised by the Bureau of Labor Statistics (BLS). Summary revision detail and graphs are found in the opening paragraphs of the *Opening Comments*, with a more-extensive analysis following soon in *Supplemental Commentary No. 784-A*.

Separately, Household-Survey reporting suffered a double set of distortions. First was the annual revamping of population controls, which made most headline numbers in the Household Survey absolutely not comparable between December and January. Changes in factors such as the level of employment, unemployment and labor force all varied (but not necessarily proportionately) along with changes in estimated population. For example, where the headline population rose in the month by 461,000, population control changes accounted for 265,000, where headline employment jumped by 615,000, population control changes added 206,000.

The BLS does provide before and after numbers, however, that allow assessment of the population-control impact. Headline increases in measures such as full-time employment, the participation rate and the employment to population ratio (the last two measures beyond the first decimal point) all reflected some boost from the upped population guesstimates.

More disruptive over time, however, was the second issue, the return to fully non-comparable, month-to-month reporting of headline detail, where seasonal adjustments are recalculated each month, but none of the historical data (including the prior month) are revised to reflect same. Once-per-year revisions in December put all the historical Household-Survey data on a consistent basis for one month, but that all disappears with the subsequent January reporting (see the abbreviated *Headline Distortions from Shifting Concurrent Seasonal Factors* section in this *Reporting Detail*).

These monthly reporting inconsistencies should account for the bulk of the difference between the headline, seasonally-adjusted 409,000 employment gain (net of population control distortions) in the January 2016 Household Survey, and the headline, seasonally-adjusted 151,000 jobs gain indicated for January 2016 Payroll Survey. Where the month-to-month changes in the January 2016 household data

simply are not comparable, not meaningful versus December 2015, the month-to-month changes in the January 2016 payroll data are comparable with December 2015 headline detail, but not with the reporting of November 2015 and before. Accordingly, the Household-Survey 409,000 employment gain in January appears to be nonsense, with related distortions flowing through to other calculations, such as a decline of 0.1% (-0.1%) in the headline U.3 unemployment rate.

Unemployment. Indeed, putting reality aside, the headline (U.3) unemployment rate (Household-Survey) declined to 4.9% in January 2016, from 5.0% in December 2015, down from the October 2009 peak of 10.0%. The broader U.6 unemployment measure, including those marginally attached to the workforce (including short-term discouraged workers) and those working part-time for economic reasons, held at 9.9% in January 2016, the same level as December 2015, and down from its April 2010 peak of 17.2%. Again, the BLS advises that the headline January U.3 unemployment rate was not distorted month-to-month by the new population controls, although it certainly was by the otherwise non-comparability of the month-to-month headline detail.

Adding back into the total unemployed and labor force the ShadowStats estimate of the ever-growing ranks of long-term discouraged workers (excluded from government unemployment calculations)—a broad unemployment measure more in line with common experience—the ShadowStats-Alternate Unemployment Estimate held at 22.9% in January 2016, unchanged from December 2015, and down from the series high of 23.3%, last seen in December 2013. The ShadowStats measure absorbs the long-term discouraged workers who pass through accounting for U.3 and U.6 within very limited time horizons.

Payrolls. In the context of the annual benchmark revisions to payroll employment (Payroll-Survey), activity slowed sharply, to a headline gain of 151,000 in January 2016, versus a benchmarked 262,000 (292,000 pre-benchmark) gain in December 2015. Despite the annual revisions, headline payroll reporting remained in the context of continuing, unstable shifts in seasonal-adjustment patterns, subject to the usual reporting biases and distortions. Specifically, the headline January 2016 payroll data were not comparable to reporting in November 2015 and before.

With the 2015 benchmark revisions in place, the full recovery in headline payroll activity versus its prerecession peak was pushed back by one month to May 2014, from April 2014, as was seen following the 2014 benchmarking.

Despite the benchmarking, the headline Payroll-Survey numbers remained distorted by unreported inconsistencies in the historical data, again as generated by BLS reporting policies with its concurrent seasonal-factor adjustment modeling. Separately, the jobs gains still were inflated meaningfully by the monthly add-factors in the Birth-Death Model (BDM). With the aggregate, monthly upside biases still well in excess of 200,000 jobs, the actual January 2016 headline payroll change most likely was flat-to-minus. On a not-seasonally-adjusted basis, the generally-downside benchmark revisions to annual growth took January 2016 year-to-year growth to a twenty-month-low reading of 1.9%.

PAYROLL SURVEY DETAIL. The Bureau of Labor Statistics (BLS) published the headline payroll-employment detail for January 2016, including historically-inconsistent benchmark revisions, February 5th. In the context of those downside revisions to payroll activity, reflected in *Graphs 1* to 3 in the

Opening Comments section, headline unadjusted payroll numbers showed year-to-year annual payroll growth slowing to a twenty-month low.

Seasonally-adjusted, the headline payroll gain for January 2016 was 151,000 jobs +/- 129,000 (95% confidence interval). December 2015 growth benchmarked to a revised 262,000 [up by 292,000 prebenchmark], with November employment up by 280,000 [up by 252,000 pre-benchmark].

Not-seasonally-adjusted, year-to-year growth in nonfarm payrolls slowed to 1.89% in January 2016, a twenty-month low, down from benchmarked annual growth rates of 1.97% [up by 1.91% pre-benchmark] in both December and November 2015.

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 +/- 129,000. 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.

Benchmarked Construction-Payrolls Higher Despite Contracting Construction Activity. Graph 27 of revised Construction Payroll Employment through January 2016 is found in the Construction Spending segment, which follows in this Reporting Detail. 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). Headline month-to-month growth in construction employment was 0.3% in January 2016, versus a benchmarked 0.7% [pre-benchmark also up by 0.7%] in December 2015. The pace monthly of growth here has continued, despite headline construction activity and real construction spending having started to turn down anew at an accelerating pace.

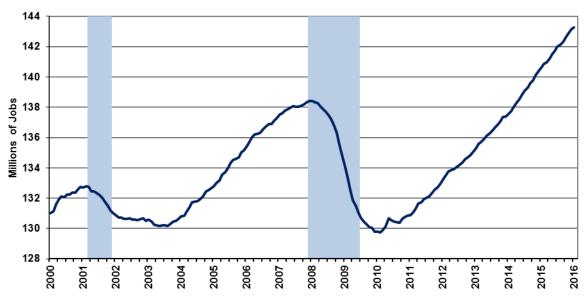
The January 2016 construction-payroll level of 6.615 million, showed a headline gain of 18,000 for the month. Where the December 2015 construction-payroll level revised higher by 0.9%, to 6.597 million, the benchmarked headline monthly gain was 48,000 [pre-benchmark up by 45,000].

Headline construction-payroll numbers remain heavily biased to the upside (officially bloated by 6,400 jobs per month, unofficially at an order of magnitude of 20,000 jobs per month). Nonetheless, total January 2016 construction jobs remained down by 14.2% (-14.2%) from the April 2006 pre-recession series peak, and was down by an unadjusted 4.5% (-4.5%) from the year-ago January 2015, with the benchmarked December 2015 down by 4.9% (-4.9%) year-to-year.

Historical Payroll Levels. Payroll employment is a coincident indicator of economic activity, and irrespective of all the reporting issues with the series, payroll employment formally regained its prerecession 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 benchmarking. Previously that had been April 2014, as of the 2014 benchmarking. Payroll employment has continued to rise since. Including the headline jobs gain of 151,000 in January 2016, headline payroll employment now is about 4.9-million jobs above its pre-recession peak.

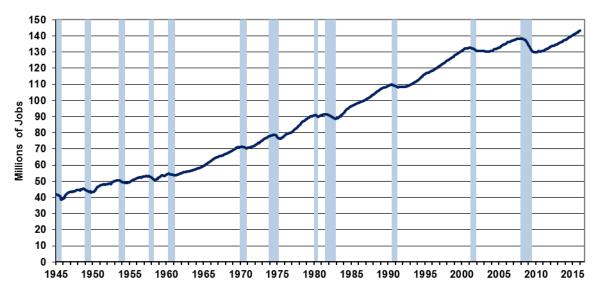
Graph 18: Revised Nonfarm Payroll Employment to January 2016





Graph 19: Revised Nonfarm Payroll Employment 1945 to January 2016

Nonfarm Payrolls (Benchmark Revision) Seasonally-Adjusted Jobs to January 2016 [ShadowStats, BLS]



Graphs 18 and *19* show the revised 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 that payroll "jobs" growth is in multiple part-time jobs—many taken on for economic reasons—where full-time employment has been desired but could not be found.

Full-Time Employment versus Part-Time Payroll Jobs. Shown in Graph 20, the level of full-time employment (Household Survey) recovered its pre-recession high in August 2015, at least temporarily. Headline January 2016 detail now stands at roughly 1.3 million above the pre-recession high for the series, thanks in particular to the irregularly-volatile gain of 504,000 jobs in December 2015 and the population-change enhanced spike of 538,000 in January 2016. That will gyrate further in the next several months, likely to drop from the current headline level.

Again, such compares with the headline payroll-employment level that now is 4.9-million above its prerecession high, having regained its peak some 21-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.

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 four years ago, more than two years before similar payroll activity, and more than four years before the temporary, current recovery in full-time employment.

Graph 20: Full-Time Employment (Household Survey) to January 2016

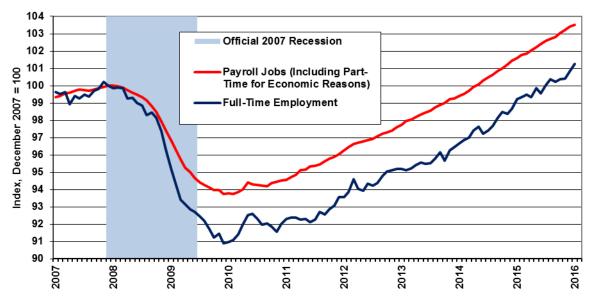
Civilian Full-Time Employment Level - (Household Survey)
Counts Number of People Who Are Employed (Not Number of Jobs Held)
Seasonally-Adjusted Levels, to January 2016 [ShadowStats, BLS]



Graphs 21 and 22 plot comparisons of activity in full-time employment versus payroll jobs, post-economic collapse. Full-time employment was hit hardest, with headline employment "recovery" coming largely from individuals having to settle for part-time work.

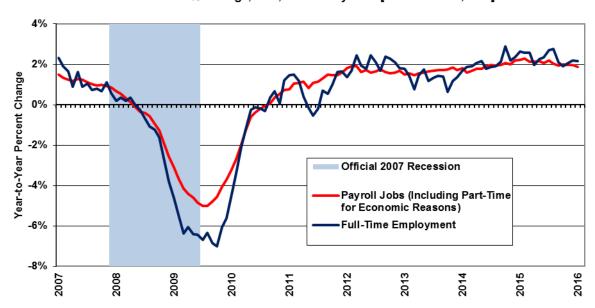
Graph 21: Full-Time Employment (Household Survey) versus Revised Jobs Count (Payroll Survey)

Full-Time Employment versus Revised Payroll Jobs Recession Timed Formally from December 2007 = 100 To January 2016, Seasonally Adjusted [ShadowStats, BLS]



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

Full-Time Employment versus Revised Payroll Jobs Year-to-Year % Change, NSA, to January 2016 [ShadowStats, BLS]



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) and the current population upside revision, than it is as an indicator of actual month-to-month volatility in economic activity.

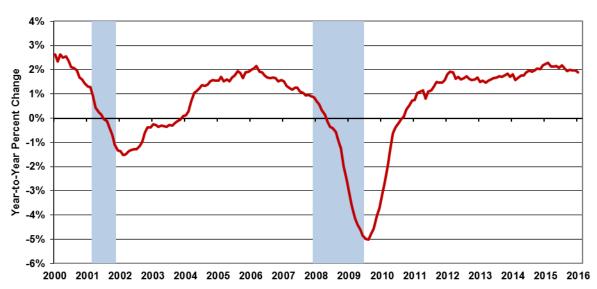
The graph of full-time employment excludes the count of those employed with only part-time jobs, one or more. Total employment, including those employed with part-time work, has recovered its pre-recession high, but it still is not close to the payroll reporting. Again, the Household-Survey numbers count 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).

Revised Annual Percent Changes in Headline Payrolls—Slowing Growth. 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.

With the 2015 benchmarking in place, year-to-year growth in unadjusted payrolls generally revised lower, where the post-recession peak growth now stands at 2.29% [pre-benchmark 2.39%] in February 2015 as shown in *Graph 1* of the *Opening Comments* and in the headline detail of *Graphs 23* and 24. Such remains the strongest annual growth since June 2000 (another recession), but subsequent annual growth has slowed. Year-to-year nonfarm payroll growth in January 2016 was 1.89%, down from 1.97% [pre-benchmark 1.91%] in December 2015. The new January 2016 reading was the weakest annual growth rate in the last twenty months.

Graph 23: Benchmarked Payroll Employment, Year-to-Year Percent Change, to January 2016

Nonfarm Payrolls Year-to-Year Percent Change (Benchmarked) 2000 to January 2016, Not Seasonally Adjusted [ShadowStats, BLS]



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.

Nonfarm Payrolls Year-to-Year Percent Change (Benchmarked)

Graph 24: Benchmarked Payroll Employment, Year-to-Year Percent Change, 1945 to January 2016



-10% 1945

1950

1960

1965

1970

1975

1980

1985

2005

Commentary No. 694 and Commentary No. 695, and as shall be updated in Supplemental Commentary No. 784-A, there are serious and deliberate reporting flaws with the government's seasonally-adjusted, monthly reporting of both employment and unemployment. Each month, the BLS uses a concurrentseasonal-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, recalculating adjusted reporting for every month, going back five years, so as to be consistent with the new seasonal patterns generating the current headline number.

Headline Distortions from Shifting Concurrent-Seasonal Factors (Abbreviated Version). Detailed in

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 prior data, and the unreported actual monthly variations versus headline detail can be large (see the opening paragraphs of the *Opening Comments*). 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 consistent data, where those data are calculated each month and are available internally to the Bureau.

<u>Household Survey.</u> 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-peryear reporting of December data, seen in last month's headline reporting and annual revisions back for five years. All historical comparability evaporated, though, with the ensuing headline January 2016 reporting, and with each monthly estimate thereafter.

<u>Payroll or Establishment Survey.</u> In the case of the published Payroll Survey data (payroll-employment change and related detail), monthly changes in the seasonally-adjusted headline January 2016 data are comparable only with the headline changes in the December 2015 numbers, not with November 2015 or any earlier months. Due to the BLS modeling process, the historical data never are published on a consistent basis, even with publication of the annual benchmark revision.

The BLS does provide modeling detail for the Payroll Survey, allowing for third-party calculations, but no such accommodation has been made for the Household Survey. Noted in the opening paragraphs of the *Opening Comments*, ShadowStats affiliate www.ExpliStats.com 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 will be shown, shortly, in *Supplemental Commentary No. 784-A*.

Birth-Death/Bias-Factor Adjustment (Abbreviated Version). Historically, an upside-bias process was created for payroll-employment reporting 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 "bias factor" process resulted from such an actual reporting 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.

Separately there a preset upside bias, plus a presumed net additional "surplus" of jobs added on to the payroll estimates each month as a special add-factor. In current reporting, the aggregate average overstatement of monthly employment change easily exceeds 200,000 jobs per month. These details and section shall be updated fully in the pending *Supplement*.

HOUSEHOLD SURVEY DETAIL. Noted in the *Opening Comments*, all the regular comparability and consistency issues are back in play for the headline January 2016 reporting, complicated by the once-per-year adjustments to the headline population estimates.

Separately, detailed in <u>Commentary No. 669</u>, 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. Further investigation purportedly is underway in Congress. 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 is open to serious question.

Headline Unemployment Rates. At the first decimal point, the headline January 2016 unemployment rate (U.3) was 4.9%, down from 5.0% in December 2015. At the second decimal point, headline January 2016 U.3 decline by 0.09-percentage point (-0.09%) to 4.92% from 5.01% in December. Technically, the headline January decline in U.3 was statistically-insignificant, where the official 95% confidence interval around a monthly change in headline U.3 is +/- 0.23-percentage point.

The headline decline in U.3 is without meaning, given that the seasonally-adjusted, month-to-month details simply are not comparable, thanks to the BLS's reporting methodology and use of concurrent-seasonal-adjustment factors (see *Headline Distortions from Shifting Concurrent Seasonal Factors*). Components of the headline January 2016 detail are warped heavily by the annual changes to the BLS population controls, although the headline U.3 purportedly is not affected until the third decimal point. These issues remain separate from official questions raised as to falsification of the Current Population Survey (CPS), from which are derived the unemployment details.

On an unadjusted basis, the unemployment rates are not revised and always are consistent in post-1994 reporting methodology. The unadjusted U.3 unemployment rate rose to 5.28% in January 2016 from 4.80% in December 2015.

The minimal decline in the seasonally-adjusted, headline January 2016 U.3 unemployment rate reflected population-enhanced boosts in employment and the labor force, with some decline in unemployment. Those movements, however, separately are skewed by the non-comparability of the adjusted headline monthly data, and while they were relatively positive in January 2016, those month-to-month changes are not meaningful, as discussed earlier.

New discouraged and otherwise marginally-attached workers always are moving into U.6 unemployment accounting from U.3, while those who have been discouraged 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 stable.

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).

Despite a decline in the underlying seasonally-adjusted U.3 rate, a negligible decline in the adjusted number of people working part-time for economic reasons, and a more-than -offsetting gain in those marginally attached to the workforce (short-term discouraged workers rose for the month), headline January 2016 U.6 unemployment increased negligibly to 9.89%, from 9.87% in December 2015. The unadjusted U.6 unemployment rate was at 10.54% in January 2016, versus 9.78% in December 2015.

"Short-Term" Discouraged Workers. The count of short-term discouraged workers in January 2016 (never seasonally-adjusted) declined by 40,000 (-40,000) to 623,000, from 663,000 in December 2015, where the total, short-term marginally-attached discouraged workers rose to 2,089,000 in January 2016 from 1,833,000 in December 2015. The latest, official discouraged number 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 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.

ShadowStats Alternate Unemployment Estimate. Adding back into the total unemployed and labor force the ShadowStats estimate of the still-growing ranks of excluded, long-term discouraged workers—a broad unemployment measure more in line with common experience—the ShadowStats-Alternate Unemployment Estimate held at 22.9% in January 2016, the same as in December 2015.

Off the October 2015 near-term low of 22.8%, the ShadowStats January 2016 reading still was down by 40 basis points or by 0.4% (-0.4%) from the 23.3% series high last seen in December 2013. In contrast, the headline U.3 reading for January 2016 of 4.9% was the lowest rate since February of 2008, down from its 10.0% peak in October 2009 by 510 (-510) basis points or 5.1% (-5.1%).

Again, the ShadowStats estimate generally shows the toll of long-term unemployed leaving the headline labor force, as discussed in greater detail in the following section.

SHADOWSTATS-ALTERNATE UNEMPLOYMENT RATE MEASURE. In 1994, the BLS overhauled its system for estimating unemployment, including changing survey questions and unemployment definitions. In the new system, measurement of the previously-defined discouraged 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 for work.

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

The post-1994 survey techniques also fell far shy of adequately measuring the long-term displacement of workers tied to the economic collapse into 2008 and 2009, and from the lack of subsequent economic recovery. 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 "discouraged workers" category used in the U.6, those not in the labor force currently wanting a job rose to 4.077 million in January 2016, from 3.872 million in December 2015 and 3.608 million in November 2015. While some will contend that that number includes all those otherwise-uncounted discouraged workers, such is far shy of underlying reality.

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 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 from the BLS.

Some broad systemic labor measures from the BLS, though, are consistent in pattern with the ShadowStats measure, even allowing for shifts tied to an aging population. Shown in the *Opening Comments*, 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, as well as with the ShadowStats-Alternate GDP Estimate and S&P 500 Real Revenues (see *No. 777 Year-End Special Commentary*). Those labor-related series all are plotted subsequent to the 1994 overhaul of unemployment surveying (see *Graphs 6* to *10*).

Headline January 2016 Detail. Adding back into the total unemployed and labor force the ShadowStats estimate of long-term discouraged workers, the January 2016 ShadowStats-Alternate Unemployment Estimate held even with December 2015 at 22.9%. The January reading was down by 40 basis points or 0.4% (-0.4%) from the 23.3% series high last seen in December 2013.

Again, in contrast, the January 2016 headline U.3 unemployment reading of 4.9% was at the lowest level since February 2008, down by a 510 basis points or 5.1% (-5.1%) from its peak of 10.0% in October 2009. The broader U.6 unemployment measure, including those marginally attached to the workforce (including short-term discouraged workers) and those working part-time for economic reasons, held at 9.9% in January 2016, the same level as December 2015, and down from its April 2010 peak of 17.2% by 730 basis points or 7.3% (-7.3%).

Seen in the usual graph of the various unemployment measures (*Graph 5* in the *Opening Comments*), there continues to be a noticeable divergence in the ShadowStats series versus U.6 and U.3, with the headline BLS headline unemployment measures heading lower against a currently-stagnant, high-level ShadowStats number.

The reason for this is that U.6, again, 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 accounts 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 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 long-term discouraged 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 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.

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%.

U.S. TRADE BALANCE (December 2015)

Real Annual and Fourth-Quarter Merchandise Trade-Deficits Had Their Worst Showings Since 2007. With the initial estimate of the inflation-adjusted December 2015 merchandise trade deficit in hand, reporting of the real, or inflation-adjusted, fourth-quarter 2015 merchandise trade deficit was the worst since third-quarter 2007 (see *Graph 4* in the *Opening Comments*), while the 2015 real annual merchandise trade deficit also was the worst since 2007. Collapsing oil prices have skewed relative nominal versus real trade measures, with the 2015 nominal merchandise trade deficit the worst since 2008. Add in the reporting gimmicks in the nebulous, guessed-at services sector and the 2015 nominal trade deficit in goods and services was the worst showing since 2012.

Nominal-versus Real-Trade Data Skewed Heavily by Collapsing Oil Prices. Adjusted for inflation, in real terms, economic data such as the Gross Domestic Product (GDP) are intended to reflect physical volume instead of current dollar volume. With collapsing oil prices, the United States still has a huge trade deficit in physical oil volume, in real terms, which remains a net negative in the estimation of domestic growth in real GDP, yet that problem becomes somewhat muted in nominal terms in the current circumstance of rapidly plunging oil prices.

In nominal terms, the headline merchandise-trade deficit for the United States (Census basis) widened to \$727.2 billion in 2015, versus \$689.9 billion in 2014. Such included a deeper trade deficit with China of \$365.7 billion in 2015 versus \$343.1 billion in 2014, a widened trade deficit with the European Union of \$153.3 billion in 2015 versus \$142.1 billion in 2014, and larger trade deficit with Japan of \$68.6 billion in 2015 versus \$67.2 billion in 2014. In contrast, the trade balance with OPEC turned to a surplus of \$6.6 billion in 2015, versus a deficit of \$50.0 billion in 2014, thanks to dropping oil prices.

The difference in nominal versus real trade deterioration here in 2015, was a nominal widening in the annual trade deficit of 5.4%, versus a real widening in the deficit of 17.0% along with increasingly negative impact on headline real GDP growth. The headline trade detail continues to suggest further negative impact on real GDP, going forward.

Nominal (Not-Adjusted-for-Inflation) December 2015 Trade Deficit. The Bureau of Economic Analysis (BEA) and the Census Bureau reported February 5th, that the nominal, seasonally-adjusted monthly trade deficit in goods and services for December 2015, on a balance-of-payments basis, widened by \$1.131 billion to \$43.357 billion, versus a revised \$42.226 [previously \$42.374] billion in November. That was in the context of all other monthly detail for 2015 being revised for updated seasonal adjustments. That December 2015 nominal deficit narrowed versus a non-comparable \$45.549 billion trade shortfall in December 2014 (see *Ongoing Cautions...* section).

In terms of month-to-month trade patterns, the headline \$1.131 billion deterioration in the December deficit reflected a decline of \$0.513 billion in monthly exports plus an increase of \$0.617 billion in monthly imports (difference is in rounding). Where the decline in exports largely reflected lower exports of automobiles and petroleum products, the increase in imports primarily reflected increased imports of those same products.

<u>Energy-Related Petroleum Products.</u> For December 2015, the not-seasonally-adjusted average price of imported oil declined to \$36.60 per barrel, versus \$39.24 per barrel in November 2015, and versus \$82.92 per barrel in December 2014. Separately, not-seasonally-adjusted physical oil-import volume in December averaged 8.207 million barrels per day, up from 7.035 million in November 2015 and up from 7.935 million in December 2014.

Ongoing Cautions and Alerts on Data Quality. Potentially heavy distortions in headline data continue from seasonal adjustments. Similar issues affect other economic releases, such as retail sales and payrolls, where the headline number reflects month-to-month change. Discussed frequently (see 2014 Hyperinflation Report—Great Economic Tumble for example), the extraordinary length and depth of the current business downturn and disruptions have disrupted regular seasonality patterns. Accordingly, the markets should not rely too heavily on the accuracy of the monthly headline data.

Noted in trade-related <u>Commentary No. 748</u>, at least a three-percent understatement of the historical U.S. trade deficit awaits correction in its June 2016 benchmark revision, along with implied, subsequent downside benchmark revisions to historical GDP growth in July 2016. Such formalizes, temporarily, distortions in comparability of near-term (comparable) versus long-term (not comparable) reporting of the goods and services trade detail.

Where imports are counted on the negative side of the trade balance, a change in reporting methodology has shown that imports have been understated regularly, with the effect of underestimating the size of the

U.S. trade deficit by at least three-percent. Such has negative implications for historical, broad economic growth and indeed for future GDP benchmark revisions.

Beginning with the headline reporting for July 2015, the Bureau of Economic Analysis (BEA) and the Census Bureau introduced a change in the trade-deficit calculation, now counting low-value imports, which previously neither were reported nor calculated in the monthly balance-of-payments estimates. To allow for near-term reporting consistency in recent headline data, trade detail back to January 2015 also was restated with July 2015 and subsequent reporting to incorporate a "temporary balance of payments adjustment for low-value imports," included in the trade calculations.

Those changes, along with other regular minor revisions to the trade deficit for first-half 2015, had the net effect of widening the six-month trade deficit by 3.3%. The bulk of that was due to the new reporting approach. Even-greater trade deterioration looms with further, new detail, still to be added. Separately, as a result of the temporary restatement of historical post-December 2014 reporting, current headline balance-of-payment data no longer are consistent with earlier data, such as might be seen with year-ago comparisons.

Noted in the July 2015 trade balance <u>Press Release</u>, "The Census Bureau will revise historical statistics in June 2016 with the annual revision release. To maintain time-series consistency for imports of goods on a balance of payments (BOP) basis, the U.S. Bureau of Economic Analysis has applied temporary BOP adjustments to imports of goods on a Census basis beginning with January 2015 statistics. These adjustments will be removed from imports of goods on a BOP basis in June 2016 when the Census Bureau revises historical statistics."

Real (Inflation-Adjusted) December 2015 Trade Deficit. Adjusted for seasonal factors, and net of oilprice swings and other inflation (2009 chain-weighted dollars, as used in GDP deflation), the December 2015 merchandise trade deficit (no services) widened to \$60.273 billion, versus a revised \$59.227 [previously \$59.603] billion in November, in the context of seasonal factor revisions for the full year. The December 2015 shortfall also widened sharply versus a still-comparable \$53.130 billion real deficit in December 2014.

As currently reported, the annualized quarterly real merchandise trade deficit was \$588.6 billion for third-quarter 2014, \$605.5 billion for fourth-quarter 2014, a revised \$692.4 [previously \$692.1] billion for first-quarter 2015, a revised \$694.8 [previously \$694.5] billion for second-quarter 2015, a revised \$706.1 [previously \$705.8] billion for third-quarter 2015, and an initial estimate of \$722.4 billion for fourth-quarter 2015. That last number subtracted 0.47% from the initial headline estimate of fourth-quarter 2015 real GDP growth.

As suggested in prior *Commentaries*, and as discussed in the opening paragraphs of this Trade Deficit section, the real fourth-quarter 2015 deficit was the worst quarterly shortfall since third-quarter 2007, and it likely will get even worse in the months ahead, deepening the already negative impact on GDP growth.

CONSTRUCTION SPENDING (December 2015)

Broad-Based, Fourth-Quarter Construction Spending Activity Contracted Both Before and After Inflation. In the Census Bureau's extended corrections to "processing errors" in construction spending

reporting last month (see <u>Commentary No. 778</u>), recent historical growth patterns were reduced. In the February 1st reporting of the new headline December 2015 detail, further weakness in general activity and new prior-period downside revisions have turned the series to outright contraction in fourth-quarter 2015.

Indeed, with initial full reporting in place, fourth-quarter 2015 real construction spending contracted quarter-to-quarter at an annualized face of 3.8% (-3.8%), following annualized quarterly real gains of 4.1% in third-quarter 2015, 25.0% in second-quarter 2015, and 6.0% in first-quarter 2015. The latest detail would be consistent with a contraction in annualized fourth-quarter 2015 GDP, currently up by 0.7%, and suggestive of a pending downside revision to same.

Graphs 11 to 14 in the Opening Comments section show comparative nominal and real construction activity for the aggregate series as well as for private residential- and nonresidential-construction and public-construction spending. Seen after adjustment for inflation, the aggregate series had remained in low-level stagnation into first-quarter 2015, with some short-lived gains, but now it has flattened and turned down anew in the last several months of reporting. The real series in December 2015 held at 26.0% (-26.0%) below its pre-recession peak of March 2006. Areas of recent relative real strength in all of the major subcomponents have flattened out, or turned down in revision, both before and after construction inflation. The general pattern of real activity now is one of low-level, down-trending stagnation. The aggregate nominal detail is shown in Graph 25 of this Reporting Detail, with the real detail shown in Graph 26.

PPI Final Demand Construction Index (FDCI). ShadowStats uses the Final Demand Construction Index (FDCI) component of the Producer Price Index (PPI) for deflating the current aggregate activity in the construction-spending series. The subsidiary private- and public-construction PPI series are used in deflating the subsidiary series, again, all as shown in *Graphs 11* to *14* in the *Opening Comments*.

The previously-used New Construction Index (NCI) in the PPI was so far shy of reflecting construction costs as to be virtually useless. Although closely designed to match this construction-spending series, the FDCI and subsidiary numbers have two problems. First, the historical data only go back to November 2009. Second, they generally still understate actual construction inflation. Private surveys tend to show higher construction-related inflation than is reported by the government. For example, year-to-year inflation reflected in the privately-published Building Cost Index and Construction Cost Index [Dodge Data and Analytics (McGraw Hill) *Engineering News-Record*] had been running well above the headline pace of annual inflation in the PPI's Final Demand Construction Index, but the annual PPI inflation measure moved to about even, if not somewhat higher with the private-sector measures in recent months.

There is no perfect, publicly-available inflation measure for deflating construction. For the historical series in the accompanying graphs, the numbers are deflated by the NCI through November 2009, and by the FDCI and subsidiaries thereafter.

Seasonally-adjusted December 2015 FDCI month-to-month inflation was "unchanged" at 0.00%, having been down by 0.26% (-0.26%) in November. In terms of year-to-year inflation, the December 2015 FDCI was up by 1.88%, versus 1.97% annual inflation in November 2015.

Where the subsidiary series tend to track the aggregate inflation detail over time, December 2015 headline inflation for publicly-funded construction rose by 0.09% in the month, having declined 0.09% (-0.09%) in November, and it rose by 1.96% year-to-year in December 2015, having gained 2.06% in November

2015. Inflation for privately-funded construction was "unchanged" at 0.00% in the month of December 2015, having declined month-to-month by 0.35% (-0.35%) in November, with year-to-year inflation up by 1.80% in December 2015, versus 1.98% in November 2015.

Graph 25: Total Nominal Construction Spending

Total-Construction Spending, Monthly to December 2015 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Graph 26: Index of Total Real Construction Spending

Real Index of Total Value of Construction Put in Place To December 2015, Inflation Adjusted (Jan 2000 = 100) Seasonally-Adjusted [ShadowStats, Census Bureau, BLS]



Headline Reporting for December 2015. The Census Bureau reported February 1st that the headline, total value of construction put in place in the United States for December 2015 was \$1,116.6 billion, on a seasonally-adjusted, but not-inflation-adjusted basis annual-rate basis. That estimate was up by a statistically-insignificant 0.1% +/- 1.4% (all confidence intervals are at the 95% level), versus a downwardly revised \$1,116.0 [previously \$1,122.5] billion in November 2015. Net of prior-period revisions, the headline December change was a decline of 0.5% (-0.5%).

In turn, November spending was down by a revised 0.6% (-0.6%) [previously down by 0.4% (-0.4%)] versus a revised \$1,122.7 [previously, \$1,121.0] billion in October 2015, which in turn was down by a revised 0.1% (-0.1%) [previously up by a revised 0.3%] versus an unrevised \$1,123.9 billion in September 2015.

Adjusted for FDCI inflation, total real monthly spending in December 2015 was up by 0.1%, and down more deeply by headline contractions of 0.3% (-0.3%) in November and by 1.1% (-1.1%) in October.

On a year-to-year or annual-growth basis, December 2015 nominal construction spending rose by a statistically-significant 8.2% +/- 2.1%, versus a revised year-to-year change of 9.8% [previously up by 10.5%] in November 2015, and a revised year-to-year change in October 2015 of 10.6% [previously up by 10.9%]. Net of construction costs indicated by the FDCI, the year-to-year gain in total real construction spending was at 6.2% in December 2015, versus downwardly-revised annual growth rates of 7.7% in November 2015 and 8.1% in October 2015.

The statistically-insignificant, headline monthly nominal gain of 0.1% in aggregate December 2015 construction spending, versus a revised decline of 0.6% (-0.6%) in aggregate November 2015 spending, included a headline monthly gain of 1.9% in December public spending, versus a decline of 2.4% (-2.4%) in November. Private spending declined by 0.6% (-0.6%) in December, following an unchanged reading in November. Within total private construction spending, the residential sector rose by 0.9% in December, versus a 0.3% gain in November, while the nonresidential sector fell by 2.1% (-2.1%) in December, following a 0.2% (-0.2%) contraction in November.

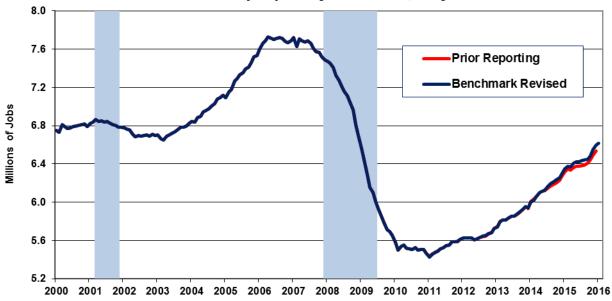
Construction and Related Graphs. The earlier Graphs 25 and 26 reflected total construction spending through December 2015, both in the headline nominal dollar terms, and in real terms, after inflation adjustment. The inflation-adjusted graph is on an index basis, with January 2000 = 100.0. Adjusted for the PPI's NCI measure through October 2009 and the PPI's Final Demand Construction Index thereafter, 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, some boost into 2015, and now in a renewed downturn, both before and after inflation.

The pattern of non-recovered, inflation-adjusted activity here—net of government inflation estimates—does not confirm the economic recovery indicated by the headline GDP series (see prior <u>Commentary No. 783</u> and <u>No. 777 Year-End Special Commentary</u>). To the contrary, the latest broad construction reporting, both before (nominal) and after (real) inflation adjustment, generally still shows a pattern of low-level activity, where activity never recovered pre-recession highs and has flattened-out anew, turning lower in fourth-quarter 2015.

Graph 27 shows the benchmark-revised January 2016 construction employment, as discussed and detailed in the earlier *Payroll Employment* section.

Graph 27: Construction Payroll Employment to Date (Benchmark Revision)

Construction Payroll Employment to January 2016 Reflecting 2015 Benchmark Revisions Seasonally-Adjusted [ShadowStats, BLS]

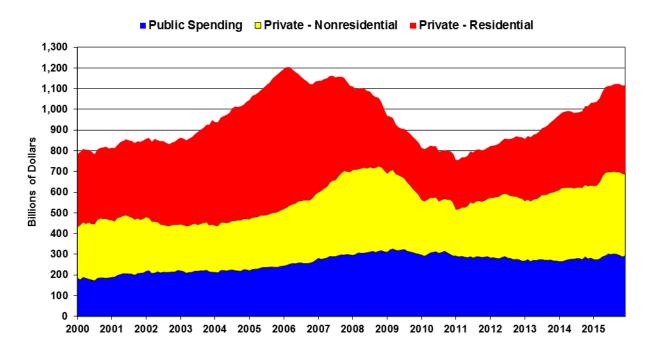


In theory, payroll levels should move more closely with the inflation-adjusted aggregate series, where the nominal series reflects the impact of costs and pricing, as well as a measure of the level of physical activity. Ironically, in the context of the upside benchmark revision, construction payrolls have shown increasing strength at the same time that broad construction activity—measured in terms of units or in real, inflation-adjusted dollars—has begun to slow or turn down anew.

[Graphs continue on the next page.]

Graph 28: Aggregate Nominal Construction Spending by Major Category to Date

Construction Spending, Monthly to December 2015 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Graph 28 shows total nominal construction spending, broken out by the contributions from total-public (blue), private-nonresidential (yellow) and private-residential (red) spending.

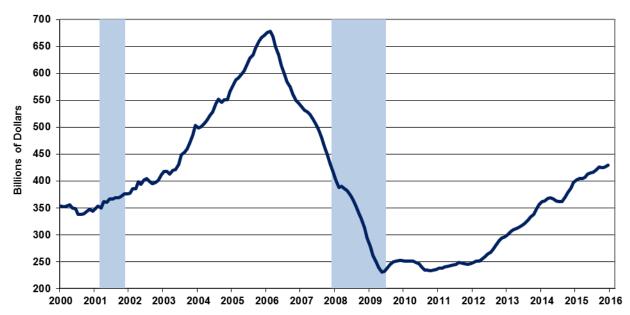
The next two graphs (*Graph 29* and *30*) cover private residential construction along with housing starts (combined single- and multiple-unit starts) for December 2015 (see <u>Commentary No. 781</u>). Keep in mind that the construction spending series is in nominal terms, while housing starts reflect unit volume, which should be parallel with the inflation-adjusted series shown in *Graph 14* of the *Opening Comments* section and presumably with the headline construction-payroll data in *Graph 27*.

[Graphs continue on the next page.]

Graph 29: Nominal Private Residential Construction Spending to Date

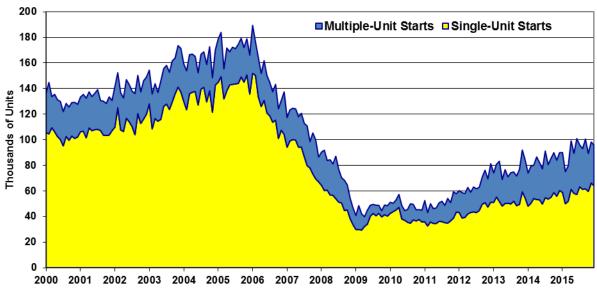
Private Residential Construction to December 2015

Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Graph 30: Single- and Multiple-Unit Housing Starts to Date

Single- and Multiple-Unit Housing Starts (Monthly Rate) To December 2015, Seasonally-Adjusted [ShadowStats, Census]



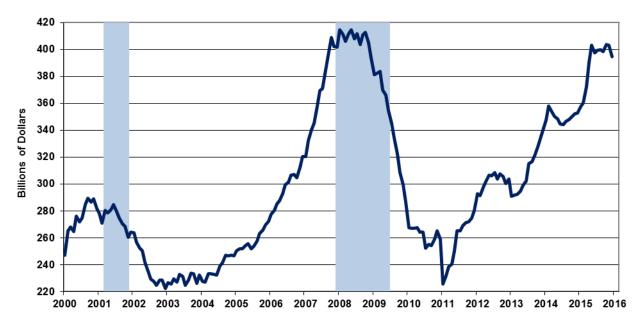
The final set of two graphs (*Graphs 31* and *32*) shows the patterns of the monthly level of activity in private nonresidential-construction spending and in public-construction spending. The spending in private-nonresidential construction has turned flat, remaining off its historic peak, although it recently had been closing in on the pre-recession high, rallying sharply. Public construction spending, which is 98%

nonresidential, had continued in a broad downtrend, with intermittent bouts of fluttering stagnation and then some upturn in growth in the last year, turning down anew, most recently. Both series appear stalled shy of their pre-recession peaks, particularly as viewed net of inflation, as shown in *Graphs 13* and *14*.

Graph 31: Nominal Private Nonresidential Construction Spending to Date

Private Nonresidential Construction to December 2015

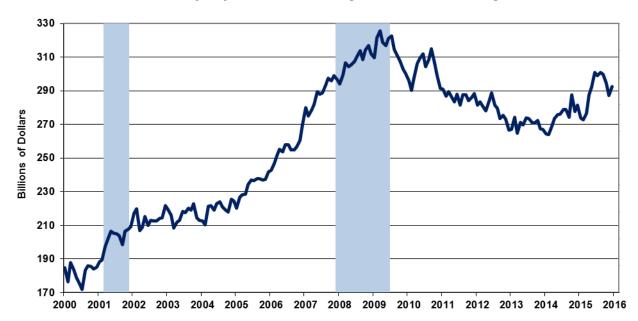
Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Graph 32: Nominal Public Construction Spending to Date

Public Construction to December 2015

Seasonally-Adjusted Annual Rate [ShadowStats, Census]



WEEK AHEAD

Economic Reporting Should Continue Trending Weaker than Expected, Well into 2016 Reporting; Inflation Should Rise Anew—Along with Oil Prices—in Response to a Weakening Dollar. Fluctuating increasingly to the downside, amidst intensifying, negative headline reporting, market expectations for business activity nonetheless still gyrate with the latest economic hype in the popular media. That effect helps to hold the consensus outlook at overly-optimistic levels, with current expectations still exceeding underlying reality. Along with the broad trend in weakening expectations, however, movement towards looming recession recognition continues at an accelerating pace, as discussed in *Commentary No. 783* and in *No. 777 Year-End Special Commentary*.

Headline reporting of the regular monthly economic numbers increasingly should weaken in the weeks and months ahead, along with much worse-than-expected reporting for at least the next several quarters of GDP (and GDI and GNP), for fourth-quarter 2015 and well into 2016. That includes mounting odds for an eventual outright quarterly contraction in fourth-quarter 2015 GDP activity, as well as pending downside revisions to recent GDP history in the 2016 annual benchmark revision, due on July 29th.

CPI-U consumer inflation—intermittently driven lower this year by collapsing prices for gasoline and other oil-price related commodities—likely has seen its near-term, year-to-year low. Annual CPI-U turned minimally positive in June 2015, for the first time in six months, notched somewhat higher in July and August, with a minimal fallback in September, tied to renewed weakness in gasoline prices. With positive seasonal adjustments countering some of the monthly weakness in gasoline prices, combined with particularly weak headline inflation one year ago, headline November 2015 CPI-U annual inflation rose to 0.5%, with annual inflation up to 0.7% in December. The potential for some pullback in January CPI inflation, however, was discussed in *No.781*. Separately, fundamental reporting issues with the CPI are discussed here: *Public Commentary on Inflation Measurement*.

Despite heavily-negative price pressure from oil-supply circumstances, at present, significant inflation pressures still should mount anew, at such time as oil prices rebound. That process should develop and accelerate, along with a pending sharp downturn in the exchange-rate value of the U.S. dollar. Those areas, the general economic outlook and longer range reporting trends were reviewed broadly, most recently, in *No. 777 Year-End Special Commentary* in complement to *No. 742 Special Commentary: A World Increasingly Out of Balance*, *No. 692 Special Commentary: 2015 - A World Out of Balance* and the 2014 Hyperinflation Reports: <u>The End Game Begins</u> and <u>Great Economic Tumble</u>.

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 actual inflation and

to overstate actual economic activity, 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 eight-to-ten 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, when concurrent seasonal adjustments are used (as with retail sales, durable goods orders, employment and unemployment data, discussed and explored in the labor-numbers related *Commentary No.* 695).

Separately, discussed in <u>Commentary No. 778</u>, a heretofore unheard of spate of "processing errors" has surfaced, currently involving surveys of earnings and construction spending. This is suggestive of deteriorating internal oversight and control of the U.S. government's headline economic reporting. At the same time, it indicates an openness of the involved statistical agencies in revealing the reporting-quality issues. Combined with recent allegations of Census Bureau falsification of data in its monthly Current Population Survey (the source for the Bureau of Labor Statistics' Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular economic series (see <u>Commentary No. 669</u>).

PENDING RELEASES:

Nominal and Real Retail Sales (January 2016). The Census Bureau has scheduled release of January 2016 nominal (not-adjusted-for-inflation) Retail Sales for Friday, February 12th, which will be covered in *Commentary No.* 785 of that date. Real (inflation-adjusted) Retail Sales for January will follow in ShadowStats *Commentary No.* 787 of February 19th, in conjunction with the publication of detail on headline January CPI-U and annual revisions to that seasonally-adjusted series. With a fair chance for a month-to-month decline in January CPI inflation, there is a parallel chance for real growth in January sales to be stronger than the headline nominal sales activity. The pace of annual CPI-U inflation, however, again should remain positive, with an intensifying the recession signal currently generated by annual real growth in retail sales.

As usual, market expectations likely will be on the plus-side of flat for the nominal numbers. In the current environment, however, downside-reporting surprises remain a good bet for this series, including a much weaker-than-expected headline number, along with potential downside revisions to the November and December detail. An outright monthly contraction in headline January activity is a good possibility. Continued weakness in these numbers should intensify the accelerating shift in consensus expectations towards renewed economic contraction or a "new" recession.

Constraining retail sales activity, the consumer remains in an extreme liquidity bind with weakening confidence, discussed broadly in <u>No. 777 Year-End Special Commentary</u> and updated in prior <u>Commentary No. 783</u>. Without sustained growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer is unable to sustain positive growth in domestic personal consumption, including retail sales, real or otherwise.