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

COMMENTARY NUMBER 796
Production Revisions, Labor Conditions, Construction Spending, Consumer, M3
April 1, 2016

Downside Production Revisions Foreshadow GDP Changes

Level of February 2016 Production Revised Lower by 2.0% (-2.0%)

Industrial Production Recovery Pushed Back by Six Months

March Payroll and Unemployment Details Were Nonsense, Well Removed from Underlying Economic Reality

March 2016 Unemployment Rates Notched Higher: U.3 at 5.0%, U.6 at 9.8% and ShadowStats at 22.9%

Volatile Real Construction Spending Remained in Non-Recovery, Ongoing Low-Level Stagnation

Annual M3 Growth Rebounded to 3.9% in March 2016 from a Two-Year Low of 3.6% in February 2016

PLEASE NOTE: The next regular Commentary, scheduled for Tuesday, April 5th, will cover the full February trade deficit and a review of the just-released annual benchmark revision to industrial production.

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

Recent Fed Nervousness on Economy Likely Reflected Pending Production Benchmarking. The Federal Reserve published its annual benchmark revisions to Industrial Production, today, April 1st. The revisions were meaningfully to the downside (generally not in the mining sector), foreshadowing likely downside revisions in the July 29th GDP benchmark revision, discussed frequently by ShadowStats. Given timing restrictions in publishing today's review of the March 2016 employment and unemployment data, a detailed analysis of the new production numbers will follow in *Commentary No. 797* of April 5th, as discussed in *Commentary No. 793*, page 33.

From the Fed's *Press Release*, "Relative to earlier reports, the current rates of change are lower, especially for 2014 and 2015. Total IP [Industrial Production] is now estimated to have returned to its pre-recession peak in November 2014, six month later than previously estimated."

Again, detail follows in the next *Commentary*. Similar shifts in growth are likely to be seen in the retail sales benchmark revision scheduled for April 29th.

Today's *Commentary* (**April 1st**). The balance of these *Opening Comments* provides summary coverage of March labor conditions, February construction spending, and updated consumer conditions. The *Hyperinflation Watch* includes an update on monetary conditions, including the ShadowStats Ongoing M3 Measure for March 2016. The most recent *Hyperinflation Outlook Summary* is found in *Commentary No.* 783, again with *No.* 777 *Year-End Special Commentary* as background to currently unfolding financial-market circumstances. The *Week Ahead* section previews the reporting of the full February trade deficit.

Employment and Unemployment—March 2016—Headline Household- and Payroll-Survey Details Still Were Nonsense. Underlying reality for U.S. labor conditions in March 2016 was in the realm of a 22.9% broad unemployment rate, with headline monthly payroll employment change likely flat, plus-orminus.

Although the headline 2015 annual benchmark revisions to the Payroll-Employment Survey generally were negative, renewed and exaggerated upside monthly biases now are being added into the headline month-to-month payroll employment detail by the Bureau of Labor Statistics (BLS). BLS use of the Birth-Death Model (BDM) artificially inflates headline month-to-month payroll gains with add-factors that currently average well in excess of 200,000 jobs per month (see the discussion in the *Birth-Death/Bias-Factor Adjustment* section of the *Reporting Detail*).

A second major problem with the payroll estimates, as well as particularly with the unemployment-related numbers, is the lack of historical comparability of the seasonally-adjusted, monthly headline numbers. Such results from the BLS using concurrent seasonal adjustment factors, a process that revises the last

five years of seasonally-adjusted headline data, each and every month, but then the BLS does not publish the revised, consistent historical data (see the discussion in *Headline Distortions from Shifting Concurrent-Seasonal Factors* section of the *Reporting Detail*). As a result, headline month-to-month data usually are not comparable.

On the Household-Survey side, data-quality was worse than usual, for the third month this year. In the context of consistent month-to-month details, reporting patterns usually are not seen with employment and unemployment surging at the same time, as was the case again in March 2016.

Unemployment. Looking at headline detail, the U.3 unemployment rate (Household-Survey) rose to 5.0% in March 2016, versus 4.9% in February 2016. The broader U.6 unemployment measure notched higher to 9.8% in March, versus 9.7% in February. Adding back into the total unemployed and labor force the ShadowStats estimate of the ever-growing ranks of long-term discouraged workers—effectively displaced workers—the ShadowStats-Alternate Unemployment Estimate also notched higher, to 22.9% in March, versus 22.8% in February.

Payrolls. In the context of shifting seasonal-factor inconsistencies, nonfarm payroll activity slowed to a headline monthly gain of 215,000 jobs in March 2016, versus a revised 245,000 jobs gain in February 2016 and a revised 168,000 jobs gain in January 2016 (a number the BLS knows to be wrong). With aggregate, monthly upside biases added into these numbers in excess of 200,000 jobs, the actual March 2016 headline payroll change most likely was flat, plus-or-minus, in line with other recent months. On a not-seasonally-adjusted basis, year-to-year annual growth in March 2016 rose to 2.0% from at a twenty-month-low reading of 1.9%, the first uptick there in five months.

Headline Jobs Growth Detail. In the context of minimal prior-period revisions, the seasonally-adjusted, headline payroll gain for March 2016 was 215,000. That followed a revised headline gain of 245,000 jobs in February 2016, and revised but inconsistent 168,000 jobs gain in January 2016. The consistent jobs gain count in January was 160,000.

Not-seasonally-adjusted, year-to-year growth in nonfarm payrolls rose to 1.98% in March 2016, versus an unrevised 1.90% in February 2016 and an unrevised 1.91% in January 2016.

Counting All Discouraged Workers, March 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 the March 2016 headline 5.0%, has been due largely to the unemployed giving up looking for work (common in severe economic contractions and major economic displacements). 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.

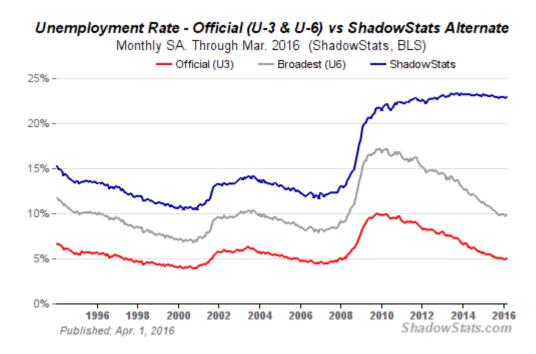
As new discouraged workers move regularly from U.3 into U.6 unemployment accounting, those who have been discouraged for one year are dropped from the U.6 measure. As a result, the headline U.6 measure has been declining along with headline U.3 for some time, but those being pushed out of U.6 still are counted in the ShadowStats-Alternate Unemployment Measure, which has remained relatively steady, near its historic-high 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—those who effectively have been displaced by circumstances beyond their control—as the BLS used to define and measure the series more broadly, 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-March 2016 unemployment rates of 5.0% (U.3) and 22.9% (ShadowStats).

Graph 1 reflects headline March 2016 U.3 unemployment at 5.00%, versus 4.92% in February 2016; headline March 2016 U.6 unemployment at 9.82%, versus 9.71% in February; and the headline March 2016 ShadowStats unemployment estimate at 22.9%, also up a notch from the headline level of 22.8% in February.

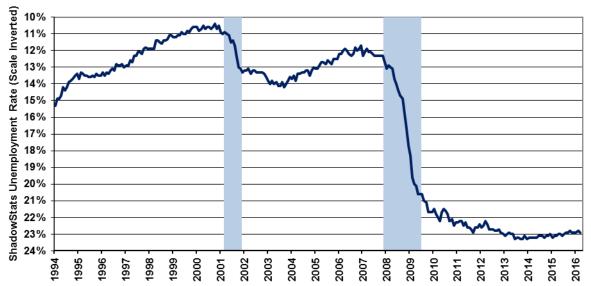
Graph 1: Comparative Unemployment Rates U.3, U.6 and ShadowStats



Graphs 2 to 4 reflect longer-term unemployment and discouraged-worker conditions. *Graph 2* 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.

Graph 2: Inverted-Scale ShadowStats Alternate Unemployment Measure

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



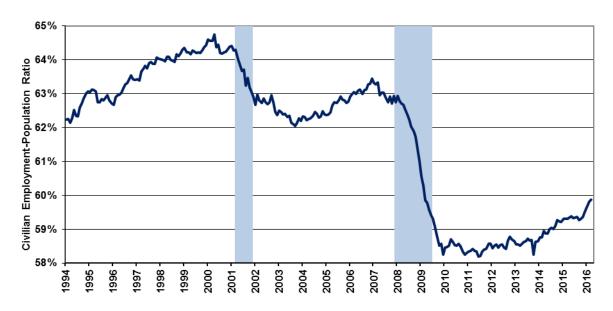
The inverted-scale of the ShadowStats unemployment measure also tends to move with the employment-to-population ratio, which notched higher, again, in March 2016. That ratio, though, still remains near its post-1994 record low, the historic low and bottom since economic collapse (only the period following the series redefinition in 1994 reflects consistent reporting), as shown in *Graph 3*. 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 4*, the March 2016 participation rate also notched higher. Both the near-term Employment-to Population Ratio and the Participation Rate appear to have received near-term spikes from a combination of population redefinition in January and specifically the lack of any consistency or comparability in the adjusted monthly detail from the source Household Survey so far in 2016. Unadjusted ratios for these series are running respectively about 0.5% and 0.2% below the bloated, adjusted numbers. There should be some corrective catch-up in the months ahead.

The Participation-Rate 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 3* of employment-to-population, its holding near a post-1994 low in current reporting indicates problems with long-term discouraged workers, the loss of whom continues to shrink the headline (U.3) labor force, and the plotted ratio.

Graph 3: Civilian Employment-Population Ratio

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



Graph 4: Participation Rate

Participation Rate (Labor Force as a Percent of Population) To March 2016, Seasonally-Adjusted [ShadowStats, BLS]



Graphs 1 through 4 reflect data available in consistent detail only back to the 1994 redefinitions of the Household Survey and the related employment and unemployment measures. Before 1994, employment and unemployment data consistent with March's Household-Survey reporting simply are not available, irrespective of protestations to the contrary by the BLS. Separately, consider *Graph 5*, which shows the

ShadowStats version of the GDP, also from 1994 but through the March 25th third-estimate of fourth-quarter 2015 activity, where the GDP plot has been corrected for the understatement of inflation used in deflating the headline GDP series (a detailed description and related links are found in prior *Commentary No. 795*).

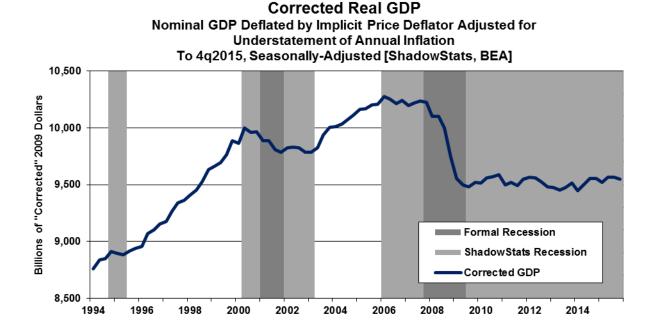
ShadowStats is pleased to introduce a new economic series to the regular indicators of broad economic activity, shown in *Graph 6*. U.S. aggregate consumption of crude oil petroleum product, measured in physical barrel count, is an extraordinarily broad indicator of general activity. The <u>U.S. Energy Information Agency</u> (EIA), Department of Energy, publishes this detail. Many thanks to Tom Pochari of <u>www.worldaffairsmonthly.com</u> for bringing this series to my attention.

As with the CASS freight index, where the monthly data are not seasonally adjusted, ShadowStats has plotted the petroleum series using a trailing twelve-month average. January through March 2016 averages are estimated from related weekly data. The resulting smoothed pattern reflects the economic collapse into 2009, followed by a protracted period of variable, low-level stagnation. In contrast, the CASS index currently is turning down anew in its twelve-month trailing average.

In particular, the broad patterns of activity seen in *Graphs 2* and *3* generally are mirrored in *Graph 5* of the "corrected" GDP. They also are largely consistent with the post-1994 period shown in *Graph 6 of* petroleum consumption, *Graph 7* of the CASS Freight Index and *Graph 8* of real S&P 500 revenues, previously published in *Commentary No. 789* and *No. 777 Year-End Special Commentary*.

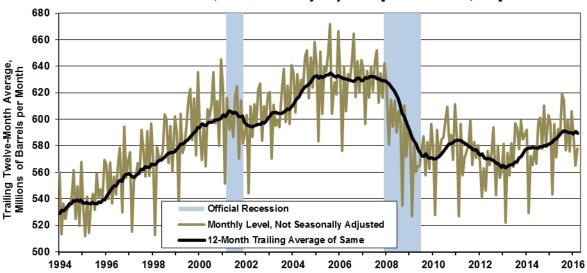
Introduced in <u>Commentary No. 782</u>, the graphic detail on the <u>Cass Freight Index</u>TM, a measure of North American freight volume, is calculated by, and used with the permission of Cass Information Systems, Inc. Few measures better reflect the actual flow of goods in commerce than freight activity.

Graph 5: Corrected Real GDP through 4q2015, Third Estimate



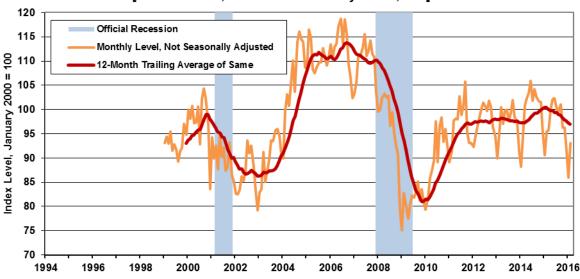
Graph 6: U.S. Petroleum Consumption

U.S. Product Supplied of Crude Oil and Petroleum Product Millions of Barrels per Month, Trailing Twelve-Month Average To March 2016, Not Seasonally Adjusted [ShadowStats, EIA]



Graph 7: CASS Freight Index for North America (2000 - 2016), Indexed to January 2000 = 100

Cass Freight Index (Jan 2000 = 100) To February 2016, Not Seasonally Adjusted [ShadowStats, Cass Information Systems, Inc.]

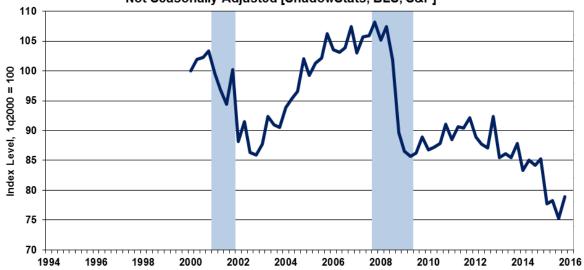


Graph 8 of S&P 500 revenues usually is plotted with quarterly data beginning in 2000, but the time scale of the plot was shifted here back to 1994 to show the S&P 500 revenue detail on roughly a comparative,

coincident basis with the detail in *Graphs 2* to 6. A similar re-plotting of the monthly time scale was used for the freight index detail in *Graph 7*. Of note, unlike *Graphs 2* to 5, *Graphs 6* to 8 are not seasonally adjusted, although the primary plots in *Graphs 6* and 7 are trailing 12-month averages. As an aside, apparent recession-band widths in the graphs vary depending on whether the base plotting period is monthly (such as seen in *Graphs 2* to 4, 6 and 7) or quarterly (such as seen in *Graphs 5* and 8).

Graph 8: Real S&P 500 Sales Adjusted for Share Buybacks (2000 - 2015), Indexed to January 2000 = 100





Headline Unemployment Rates. At the first decimal point, the headline March 2016 unemployment rate (U.3) notched higher to 5.0%, from 4.9% in February. At the second decimal point, the headline March 2016 U.3 was 5.00%, versus 4.92% in February. Formally, the 0.08% increase in March U.3 was statistically-insignificant.

The headline gain in March U.3, however, also 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 (again, see *Headline Distortions from Shifting Concurrent Seasonal*). This issue remains 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 eased to 5.11% in March 2016, versus 5.19% in February 2016.

The headline seasonally-adjusted increase in the March 2016 U.3 unemployment rate reflected a 151,000 increase in unemployment and a 246,000 gain in employment, with a resulting gain of 396,000 (rounding differences). For the second month, it was unusual to have jumps in both employment and unemployment, suggestive again of the incompatibility and inconsistency of the month-to-month headline

detail in the seasonally-adjusted, household-survey numbers (see the *Reporting Detail* section on *Headline Distortions from Shifting Concurrent-Seasonal Factors*). Again, the inconsistencies here mean that the headline month-to-month changes in everything from the employed and unemployed counts to the Employment-to-Population Ratio and Participation Rate simply were meaningless.

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 relatively 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).

On top of an underlying increases in the seasonally-adjusted U.3 rate, and an increase in the adjusted number of people working part-time for economic reasons, more than offsetting a decline in those marginally attached to the workforce (including short-term discouraged workers), and the headline March 2016 U.6 unemployment notched higher to 9.82%, from 9.71% in February. The unadjusted U.6 unemployment rate was at 9.95% (rounds to 9.9%) in March 2016, versus 10.07% in February.

ShadowStats Alternate Unemployment Estimate. Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced workers, of long-term discouraged workers—a broad unemployment measure more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for March 2016 notched higher to 22.9%, from 22.8% in February. The March 2016 reading was down by 40 basis points or 0.4% (-0.4%) from the 23.3% series high last seen in December 2013.

In contrast, the March 2016 headline U.3 unemployment reading of 5.0% was down by a 500 basis points or 5.0% (-5.0%) from its peak of 10.0% in October 2009. The broader U.6 unemployment measure of 9.8% in March 2016, was down from its April 2010 peak of 17.2% by 740 basis points or 7.4% (-7.4%).

Construction Spending—February 2016—Broad-Based, Real Spending Continued in Low-Level, Stagnating Non-Recovery. Still shy of its pre-recession peak in February 2006 by 24.5% (-24.5%), inflation-adjusted real construction spending fell in fourth-quarter 2015 and otherwise generally has continued to stagnate, at a low-level of activity. That activity, however, was somewhat up-trending in the initial reporting of February 2016 detail, where despite a headline month-to-month decline, this particularly volatile series—virtually worthless in initial headline detail—revised upward by an even greater amount in the prior reporting for January 2016.

With all revisions in place, fourth-quarter 2015 real construction spending contracted at a narrowed annualized quarterly pace of 2.5% (-2.5%), 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 still was consistent with a contraction in annualized real fourth-quarter 2015 GDP, although that GDP measure recently revised up to 1.4%. Yet, in conjunction with other underlying economic detail, real construction

spending still is consistent, ultimately, with a likely benchmark downside revision to fourth-quarter 2015 GDP growth.

Based solely on the initial and unstable reporting for January and February 2016, and in the context of contracting headline construction inflation, which boosts inflation-adjusted real growth, first-quarter 2016 real construction spending was on track for annualized quarterly growth of 11.3%.

Graphs 9 to 12 show comparative nominal- and real-construction spending activity for the aggregate series, as well as for private-residential and nonresidential construction, and public construction. Seen after adjustment for inflation, the real aggregate series had remained in low-level stagnation into first-quarter 2015, with some short-lived gains turning down anew in the fourth-quarter 2015, and now with some upside movement in early-2016. 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, except for a low-level uptrend in private-residential construction. The general pattern of real activity remains one of low-level, up-trending stagnation.

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 9* to *12*.

Seasonally-adjusted February 2016 FDCI month-to-month inflation contracted by 0.09% (-0.09%), having been down by 0.35% (-0.35%) in January 2016. In terms of year-to-year inflation, the February 2016 FDCI was up by 0.98%, versus 1.16% annual inflation in January 2016. The subsidiary series often track the aggregate inflation detail. Further deflation details follow in the *Reporting Detail*.

Headline Reporting for February 2016. The headline, total value of construction put in place in the United States for February 2016 was \$1,144.0 billion, on a seasonally-adjusted, but not-inflation-adjusted annual-rate basis. That estimate was down by a statistically-insignificant 0.5% (-0.5%), versus an upwardly-revised \$1,150.1 in January 2016. Net of prior-period revisions, the headline February change would have been a gain of 0.3%.

January 2016 spending increased in revision by 2.1% versus an upwardly-revised \$1,125.9 billion in December 2015. In turn, December spending was up by a revised 0.8%, from an unrevised \$1,117.0 billion of spending in November 2015. Adjusted for FDCI inflation (negative inflation in recent months), total real monthly spending in February 2016 was down by 0.4% (-0.4%), versus a gain of 2.5% in January 2016 and a gain of 0.8% in December 2015.

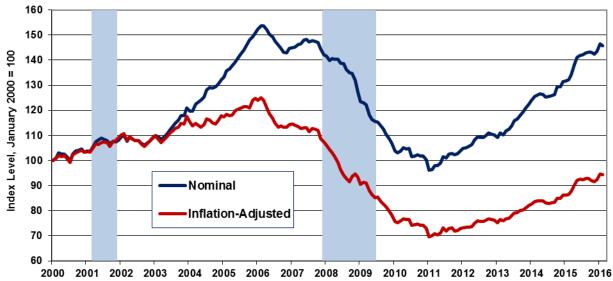
On a year-to-year basis, February 2016 nominal construction spending rose by a statistically-significant 10.3%, versus upwardly revised annual gains of 11.3% in January 2016 and 9.1% in December 2015. Net of construction costs indicated by the FDCI, the year-to-year gain in total real construction spending was at 9.2% in February 2016, 10.0% in January 2016 and 7.1% in December 2015.

The statistically-insignificant, headline monthly nominal contraction of 1.5% in aggregate February 2016 construction, versus a gain of 2.1% in aggregate January spending, included a headline monthly drop of 1.7% (-1.7%) in February public spending, versus a 3.3% gain January. Private spending notched lower by 0.1% (-0.1%) month-to-month in February, following a 1.7% gain in January. Within total private

construction spending, the residential sector gained 0.9% in February, following similar gain in January, while the nonresidential sector fell by 1.3% (-1.3%) in February, having gained by 2.7% in January.

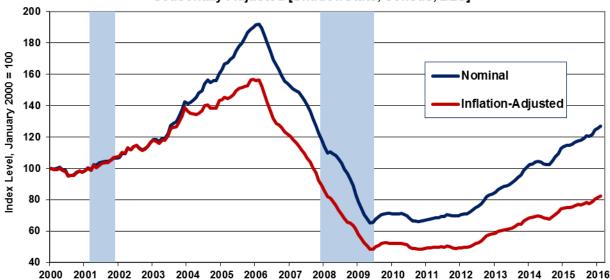
Graph 9: Index, Nominal versus Real Value of Total Construction

Index of Total Value of Construction Put in Place Nominal versus Inflation-Adjusted (Jan 2000 = 100) To February 2016, Deflated by PPI Construction Indices Seasonally-Adjusted [ShadowStats, Census, BLS]

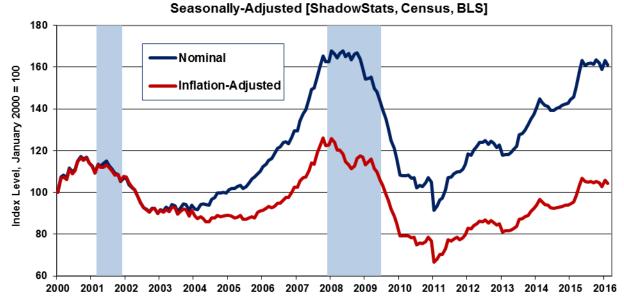


Graph 10: Index, Nominal versus Real Value of Private Residential Construction
Index of Value of Private Residential Construction

Nominal versus Inflation-Adjusted (Jan 2000 = 100)
To February 2016, Deflated by PPI Construction Indices
Seasonally-Adjusted [ShadowStats, Census, BLS]

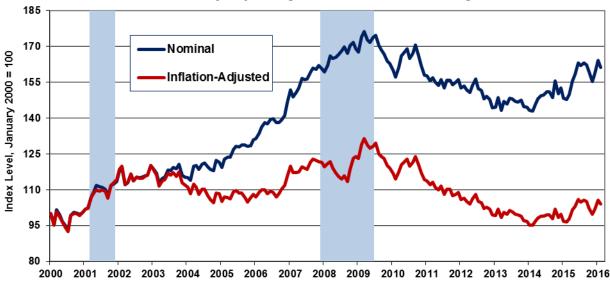


Graph 11: Index, Nominal versus Real Value of Private Nonresidential Construction
Index of Value of Private Nonresidential Construction
Nominal versus Inflation-Adjusted (Jan 2000 = 100)
To February 2016, Deflated by PPI Construction Indices



Graph 12: Index, Nominal versus Real Value of Public Construction

Index of Value of Public Construction Nominal versus Inflation-Adjusted (Jan 2000 = 100) To February 2016, Deflated by PPI Construction Indices Seasonally-Adjusted [ShadowStats, Census, BLS]



Construction Graphs. Despite protracted and variable stagnation 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. 795*). To the contrary, the latest

broad construction reporting in real terms generally has shown a pattern of low-level, albeit variably uptrending stagnation, where activity never recovered pre-recession highs, but now has continued to stagnate.

A variety of construction spending and related, comparative graphs (*Graphs 31* to *38*) are found in the *Reporting Detail* section. *Graphs 9* to *12*, which follow here, show plots of the comparative construction series both before and after adjustment for headline inflation.

Consumer Conditions Continue to Prevent Sustainable Economic Growth. This full update of consumer liquidity conditions, originally planned for *Commentary No.* 797 of April 5th, was advanced to this *Commentary*, with the publication of the February 2016 monthly median household income data, and with all the other awaited new consumer data in place. It updates *Commentary No.* 790 the frequent weekly updates, and the more general *No.* 777 *Year-End Special Commentary*, which also discusses household income variance in the annual 2014 income numbers.

Underlying fundamentals to consumer economic activity, such as liquidity, have been severely impaired in the last decade or so, having driven economic activity into collapse and prevented meaningful or sustainable economic rebound, recovery or ongoing growth. The level of and growth in sustainable real income, and the ability and willingness of the consumer to take on new debt, remain at the root of the liquidity issues.

Generally, the higher and stronger those measures are, the healthier is consumer spending. Although most measures of consumer liquidity and attitudes are off their lows, and one—real monthly median household—income actually has been spiked to pre-recession levels by a temporary collapse in gasoline prices, these underlying economic fundamentals simply have not supported, and do not support a turnaround in broad economic activity. Never recovering in the post-Panic era, limited growth in household income and credit, and a faltering consumer outlook, have eviscerated and continue to impair broad, domestic U.S. business activity, which feeds off the financial health and liquidity of consumers.

Such has driven the housing-market collapse and ongoing stagnation in consumer-related real estate and construction activity, as well as constraining both nominal and real retail sales activity and the related, personal-consumption-expenditures and residential construction categories of the Gross Domestic Product (GDP). Together, those sectors account for more than 70% of total GDP activity in the United States.

Now, with the economy having never fully recovered from the collapse into 2009, consumers again are pulling back on consumption, as evidenced by a renewed slowdown of broad economic activity. There has been no economic recovery, and there remains no chance of meaningful, broad economic growth, without a meaningful, fundamental upturn in consumer- and banking-liquidity conditions.

The relative distribution of income among the general population—income variance—also is a significant indicator of the health of an economy as well as the attendant financial markets. At its current extremes, the imbalances are consistent with continued economic disruption and significant, negative financial-market turmoil (again, see the general discussion in *No. 777 Year-End Special Commentary*).

Household Income Measures Signal Broad-Based Economic Difficulties. Discussed and graphed in *Commentary No. 752* are the Census Bureau's most-recent (2014) annual measures of household income. Unexpected weakness in some of the headline annual income data, though partially masked by changes in survey questions, signaled increasing liquidity difficulties for U.S. households.

Shown first in *Graph 13* is the latest monthly real median household income detail through February 2016, as reported March 31st by www.SentierResearch.com. Notched minimally off its near-term January 2016 peak, the February detail encompasses the recent annual seasonal-adjustment benchmark revisions to the CPI-U, used in deflating the series. The differences were not large enough to justify showing a revised-versus-prior graph.

This measure of real monthly median household income generally can be considered as a monthly version of the annual detail shown in *Graph 14*, but the monthly specifics are generated from separate surveying and questioning by the Census Bureau.

On a monthly basis, when headline GDP purportedly started its solid economic recovery in mid-2009, the monthly household income number nonetheless plunged to new lows. Generally, the income series had been in low-level stagnation, with the recent uptrend in the monthly index boosted specifically by collapsing gasoline prices and related negative headline consumer inflation. The index reached pre-recession levels in the December 2015 reporting, but it remains minimally below the pre-recession highs for both the formal 2007 and 2001 recessions. It should continue to top out or turn down anew as consumer inflation rebounds in the months ahead.

Where lower gasoline prices have provided some minimal liquidity relief to the consumer, indications are that any effective extra cash generally has been used to pay down unsustainable debt or other obligations, not to fuel new consumption.

Differences in the Monthly versus Annual Median Household Income. That general pattern of relative historical weakness also has been seen in the headline reporting of the annual Census numbers, shown in *Graph 14*, with the latest 2014 real annual median household income at a ten-year low. The Sentier numbers had suggested a small increase in 2014 versus 2013 levels. Still, the monthly and annual series remain broadly consistent, although based on separate questions within the monthly Consumer Population Series (CPS), as conducted by the Census Bureau.

Where Sentier uses monthly questions surveying current annual household income, the headline annual Census detail is generated by a once-per-year question in the March CPS survey, as to the prior year's annual household income.

Again, discussed in <u>Commentary No. 752</u>, the Census Bureau changed its annual income questionnaire for 2014, with the effect of boosting income levels reported in 2014. The details on changes between 2013 and 2014, however, also were available on a consistent and comparable basis, and the consistent aggregate annual percentage change of median household income in 2014, versus 2013, was applied to the otherwise consistent historical series to generate *Graph 14*.

In historical perspective from *Graph 14*, 2011, 2012 and 2013 income levels were below levels seen in the late-1960s and early-1970s, with the 2014 income level below the readings through most of the 1970s, aside from being at a ten-year low. Such indicates the long-term nature of the evolution of the major structural changes squeezing consumer liquidity and impairing the current economy (see related discussions in 2014 Hyperinflation Report—The End Game Begins and particularly 2014 Hyperinflation Report—Great Economic Tumble).

Graph 13: Monthly Real Median U.S. Household Income through February 2016

Monthly Real Median Household Income Index

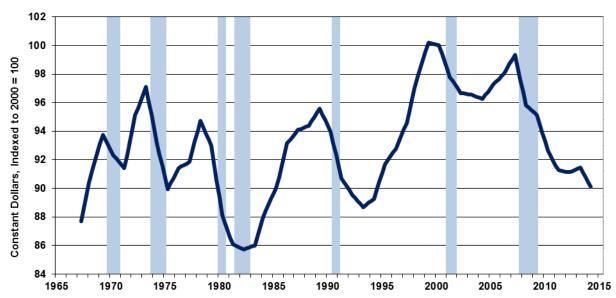
Deflated by Headline CPI-U, January 2000 to February 2016

Seasonally-Adjusted [ShadowStats, www.SentierResearch.com]



Graph 14: Annual Real Median U.S. Household Income through 2014

Annual Real Median Household Income Index Deflated by Headline CPI-U, 1967 to 2014 [ShadowStats, Census, BLS]



Consumer Confidence, Sentiment and Credit. The March 2016 reading for the Conference Board's Consumer-Confidence measure (March 29th) and for the full-March 2016 reading for the University of Michigan's Consumer-Sentiment measure (today, April 1st) are shown in *Graphs 15* to *16*.

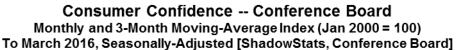
The sentiment and confidence indications are accompanied by the latest readings on fourth-quarter 2015 household-sector credit-market debt outstanding (*Graph 18*) and January 2016 consumer credit outstanding (*Graph 19*). New headline detail will be available April 7th for *Graph 19*.

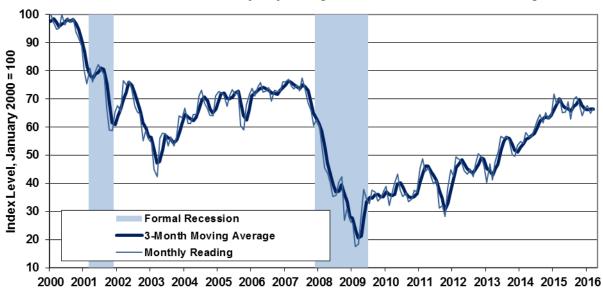
For purposes of showing the Consumer Confidence and Consumer Sentiment measures on a comparable basis, $Graphs\ 15$ to 17 reflect both measures re-indexed to January 2000 = 100 for the monthly reading. Standardly reported, the Conference Board's Consumer Confidence Index is set with 1985 = 100, while the University of Michigan's Consumer Sentiment Index is set with January 1966 = 100.

The Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index (*Graph 15*) rose in March after a February contraction, with March still below the December and January levels. The University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph 16*) declined for both February and March 2016. Both measures fell in March, smoothed by three-month moving averages.

Both series continued to move lower or to hold off near-term peaks, though, smoothed for their three-month and six-month moving-average readings. The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in *Commentary No. 764*), and often are highly volatile month-to-month, as a result. With increasingly-negative, headline financial and economic reporting and developments at hand and ahead, successive negative hits to both the confidence and sentiment readings remain likely to continue in the months ahead.

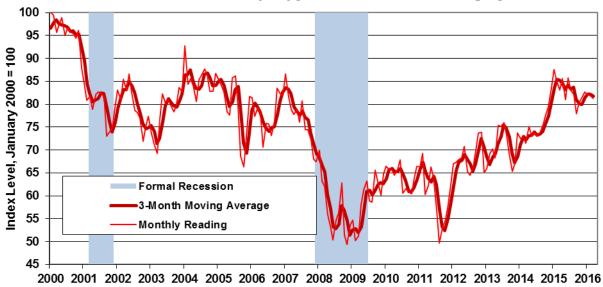
Graph 15: Consumer Confidence to March 2016





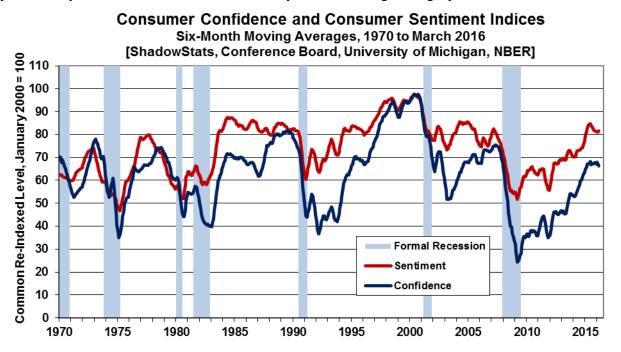
Graph 16: Consumer Sentiment to March2016

Consumer Sentiment -- University of Michigan Monthly and 3-Month Moving-Average Index (Jan 2000 = 100) To March 2016, Not-Seasonally-Adj [ShadowStats, Univ of Michigan]



Smoothed for irregular, short-term volatility, the two series remain at levels seen typically in recessions. Suggested in *Graph 17*—plotted for the last 45 years—the latest readings of Confidence and Sentiment generally have not recovered levels preceding most formal recessions of the last four decades. Broadly, the consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth seen in 2014 and as indicated for second-and third-quarter 2015 GDP growth.

Graph 17: Comparative Confidence and Sentiment (6-Month Moving Averages) since 1970



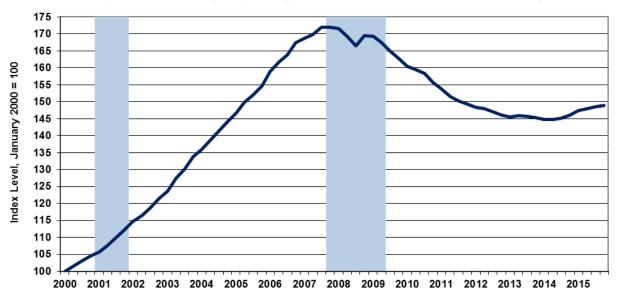
Again, the last two graphs in this section address consumer borrowing. Debt expansion can help make up for a shortfall in income growth. Shown in *Graph 18* of *Household Sector, Real Credit Market Debt Outstanding*, household debt declined in the period following the Panic of 2008, and it has not recovered, based on the Federal Reserve's flow-of-funds accounting for fourth-quarter 2015.

Graph 18: Household Sector, Real Credit Market Debt Outstanding through Fourth-Quarter 2015

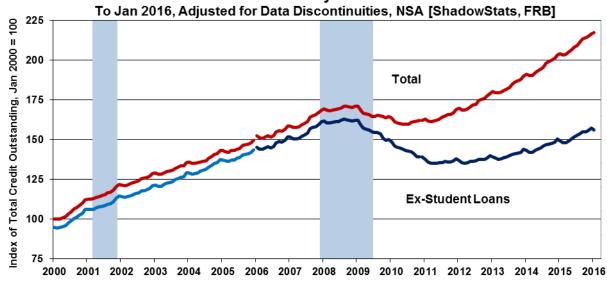
Household Sector, Real Credit Market Debt Outstanding

Deflated by CPI-U. Indexed to January 2000 = 100

To 4q2015, Seasonally-Adjusted [ShadowStats, FRB Flow-of-Funds, BLS]



Graph 19: Nominal Consumer Credit Outstanding through January 2016
ShadowStats Index of Nominal Consumer Credit Outstanding
Total and Ex-Federally Held Student Loans



The series includes mortgages, automobile and student loans, credit cards, secured and unsecured loans, etc., all deflated by the headline CPI-U. The level of real debt outstanding has remained stagnant for several years, reflecting, among other issues, lack of normal lending by the banking system into the regular flow of commerce.

The slight upturn seen in the series through 2015, as also seen in the patterns of the real monthly median household income survey, was due partially to gasoline-price-driven, negative CPI inflation, which continues to impact the system. Fourth-quarter activity also reflected surging student loans, as shown in the *Graph 19*.

Shown through January 2016 reporting, *Graph 19* of monthly Consumer Credit Outstanding is a subcomponent of *Graph 18* on real Household Sector debt, but *Graph 19* is not adjusted for inflation. Post-2008 Panic, outstanding consumer credit has continued to be dominated by growth in federally-held student loans, not in bank loans to consumers that otherwise would fuel broad consumption or housing growth. Although in slow uptrend, the nominal level of Consumer Credit Outstanding (ex-student loans) has not recovered since the onset of the recession. These disaggregated data are available and plotted only on a not-seasonally-adjusted basis, with January 2016 levels reflecting a drop in a not-seasonally-adjusted series.

[The *Reporting Detail* section includes significant additional detail and graphics on March labor conditions and February construction spending.]

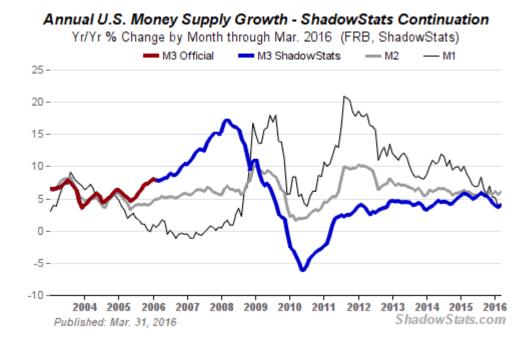
HYPERINFLATION WATCH

MONETARY CONDITIONS

Annual M3 Annual Growth Rebounded in March, along with M2 and M1. Subject to review and possible revision, given limited underlying data available here accompanying a first-of-the month employment report, the ShadowStats Ongoing M3 Money Supply annual growth rebounded to 3.9%, its preliminary estimate for March 2016, up from a two-year low of 3.6% in February 2016. Both M1 and M2 annual growth rallied in tandem, also based on somewhat shy of three weeks' worth of hard numbers. This circumstance, including updated historical comparisons, will be reviewed in *Commentary No. 800* of April 15th, when more-substantive detail is in hand.

Headline Details. The early preliminary estimate of the year-to-year change in the ShadowStats Ongoing M3 Money Supply Measure was 3.9% in March 2016, up from an unrevised 3.6% in February 2016 and against an unrevised 3.9% January 2016. The annual change had been in continual month-to-month slowing since the near-term peak growth of 5.9% in August 2015, as seen in *Graph 20*. On a month-to-month basis, March 2016 M3 rose by 0.7%, following an unrevised 0.4% in February.

Graph 20: Comparative Money Supply M1, M2 and M3 Year-to-Year Changes through March2016



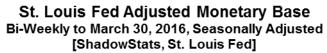
The now minor, relative weakness in annual M3 growth versus M2 reflects the shift over time in funds from accounts included just in M3, such as large time deposits and institutional money funds, into accounts in M2. Following are initial estimates of March 2016 year-to-year and month-to-month changes for the narrower M1 and M2 measures (M2 includes M1; M3 includes M2). See the *Money Supply Special Report* for full definitions of those measures. Again, the latest estimates of level and annual growth for March 2016 M3, M2 and M1, and for earlier periods are available on the <u>Alternate Data</u> tab of www.ShadowStats.com.

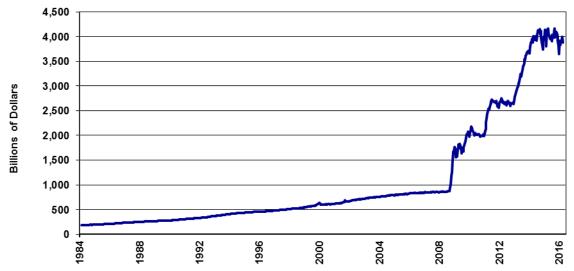
Annual M2 growth in March 2016 rose to 6.0% from unrevised annual gains of 5.7% in February 2016 and 6.1% in January 2016, with a month-to-month increase of 0.6% in March 2016, versus an unrevised gain of 0.4% in February.

For M1, year-to-year growth rose to 4.4% in March 2016, up from a revised 3.9% [previously 3.5%] annual gain in February 2016 and against unrevised annual growth of 5.2% in January 2016, with a month-to-month 0.6% increase in March 2016, versus a revised 0.4% gain [previously "unchanged" at 0.0%] in February.

Monetary Base Is Reasonably Stable in the Context of Continued Fed Waffling. Following up on earlier <u>Commentary No. 790</u>, <u>No. 783</u>, <u>No. 779</u>, <u>No.779-A</u>, and <u>No. 784</u> the St. Louis Fed's monetary base appears to have stabilized both in terms of level and annual change, the wake of the December 2015 rate hike. Subsequently, the Fed did not raise rates as planned in March, and further "tightening" appears to be on hold indefinitely

Graph 21: Monetary Base Level, Bi-Weekly through March 30, 2016





Graph 22: Monetary Base, Year-to-Year Percent Change, through March 30, 2016

St. Louis Fed Adjusted Monetary Base, Yr/Yr % Bi-Weekly to March 30, 2016, Seasonally Adjusted [ShadowStats, St. Louis Fed]



Graphs 21 and 22 show reporting of the St. Louis Fed's Monetary Base through the two-week period ended March 30th, with a level of \$3.875 trillion, versus \$3.996 trillion as of March 16th, then the highest monetary base reading since November 2015. Year-to-year growth showed a decline of 4.6% (-4.6%), versus a 3.6% (-3.6%) annual contraction in the prior period. Those recent measures all are on the deep side of normal volatility in annual change.

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. Discussed in the previously-referenced *Commentaries*, where the monetary base during the last year had been plus-or-minus 5% around the St. Louis Fed's estimated 12-month average of \$4.0 trillion, that range was broken once, and on the downside, in the immediate post-FOMC period ended January 6th, due largely to related New York Fed activities establishing the newly boosted federal funds rate. *Graphs 21* and 22 show reporting of the St. Louis Fed's Monetary Base through the two-week period ended March 30th, with a level of \$3.875 trillion, versus \$3.996 trillion as of March 16th, then the highest monetary base reading since November 2015. Year-to-year growth showed a decline of 4.6% (-4.6%), versus a 3.6% (-3.6%) annual contraction in the prior period. Those recent measures all are on the deep side of normal volatility in annual change.

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REPORTING DETAIL

EMPLOYMENT AND UNEMPLOYMENT (March 2016)

Headline March Household- and Payroll-Survey Details Still Were Nonsense. [Note: This section, through the PAYROLL SURVEY DETAIL, largely is repeated from the Opening Comments.] Underlying reality for U.S. labor conditions in March 2016 was in the realm of a 22.9% broad unemployment rate, with headline monthly payroll employment change likely flat, plus-or-minus.

Discussed in <u>Commentary No. 784</u> and <u>Commentary No. 784-A</u>, which assessed the 2015 annual benchmark revisions to the Payroll-Employment or Establishment Survey, although the revisions were negative, renewed and exaggerated upside monthly biases now are being added into the headline monthly detail by the Bureau of Labor Statistics (BLS). BLS use of the Birth-Death Model (BDM) artificially inflates headline month-to-month payroll gains with add-factors that currently exceed 200,000 jobs per month (see the discussion in the *Birth-Death/Bias-Factor Adjustment* section).

The second major problem with the payroll estimates, as well as particularly with the unemployment-related detail, is the lack of historical comparability of the seasonally-adjusted, monthly headline numbers. Such results from the BLS using concurrent seasonal adjustment factors, a process that revises the last five years of seasonally-adjusted headline data, each and every month, but where BLS does not publish the revised historical data (see the discussion in *Headline Distortions from Shifting Concurrent-Seasonal Factors* section).

On the Household-Survey side, data-quality, again, was worse than usual. In the context of consistent month-to-month details, March seasonally-adjusted reporting patterns are not commonly seen, such as employment and unemployment surging at the same time.

Unemployment. Looking at headline detail, the U.3 unemployment rate (Household-Survey) rose to 5.0% in March 2016, versus 4.9% in February 2016. The broader U.6 unemployment measure, encompassing those "marginally attached" to the workforce, notched higher to 9.8% in March, versus 9.7% in February. Adding back into the total unemployed and labor force the ShadowStats estimate of the ever-growing ranks of long-term discouraged workers—effectively displaced workers—the ShadowStats-Alternate Unemployment Estimate also notched higher, to 22.9% in March, versus 22.8% in February.

Payrolls. In the context of heavy upside biases and shifting seasonal-factor inconsistencies, nonfarm payroll activity slowed to a headline monthly gain of 215,000 jobs in March 2016, versus a revised 245,000 jobs gain in February 2016, and revised 168,000 jobs gain in January 2016 (a number the BLS knows to be wrong). With aggregate, monthly upside biases added into these numbers in excess of 200,000 jobs, the actual March 2016 headline payroll change most likely was flat, plus-or-minus, in line with other recent months. On a not-seasonally-adjusted basis, year-to-year annual growth in March 2016 rose to 2.0% from at a twenty-month-low reading of 1.9%, the first uptick there in five months.

PAYROLL SURVEY DETAIL. The Bureau of Labor Statistics (BLS) published the headline payroll-employment detail for March 2016 on April 1st, in the context of minimal prior-period revisions. Seasonally-adjusted, the headline payroll gain for March 2016 was 215,000 jobs +/- 129,000 [more appropriately +/- 300,000] at a 95% confidence interval. That followed a revised headline gain of 245,000 [previously 242,000] jobs in February 2016, and revised 168,000 [previously 172,000, initially 151,000] jobs gain in January 2016.

Not-seasonally-adjusted, year-to-year growth in nonfarm payrolls rose to 1.98% in March 2016, versus an unrevised 1.90% in February 2016 and an unrevised 1.91% [initially 1.89%] in January 2016.

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.

Construction-Payroll Growth Has Slowed. Graph 33 of Construction Payroll Employment through March 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 picked up to 0.6% in March 2016, versus upwardly revised gains of 0.3% [previously up by 0.2%] in February 2016 and 0.3% [previously up by 0.2%, initially up by 0.3%] in January 2016. The pace of monthly jobs growth has continued on the upside, but most headline construction activity and real construction spending have started to turn down or stagnate.

The March 2016 construction-payroll level of 6.672 million, showed a headline gain of 37,000 jobs for the month, versus a revised 6.635 million in February and 6.615 million in January.

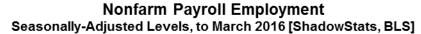
Headline construction-payroll numbers remain heavily biased to the upside (officially bloated by 6,400 jobs per month, unofficially at an order of magnitude of 20,000 jobs per month). Nonetheless, total March 2016 construction jobs remained down by 13.6% (-13.6%) from the April 2006 pre-recession series peak, but was up by an unadjusted 4.9% from the year-ago March 2015.

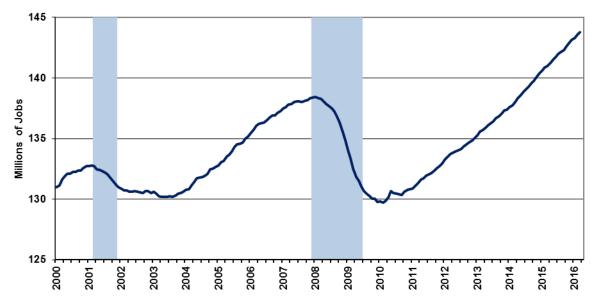
Historical Payroll Levels. Payroll employment (Payroll Survey) is a coincident indicator of economic activity, and irrespective of all the reporting issues with the series, payroll employment formally regained its pre-recession high in 2014, despite the GDP purportedly having done the same somewhat shy of three years earlier, back in 2011. Reflected in the next two graphs, headline payroll employment moved to above its pre-recession high in May 2014, as of the 2015 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 215,000 in March 2016, headline payroll employment now is about 5.3-million jobs above its pre-recession peak.

Graphs 23 and *24* 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 (again, 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 has been in multiple part-time jobs—many taken on for economic reasons—where full-time employment was desired but could not be found.

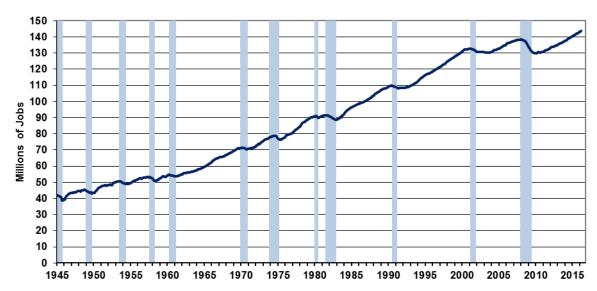
Graph 23: Nonfarm Payroll Employment to March 2016





Graph 24: Nonfarm Payroll Employment 1945 to March 2016

Nonfarm Payrolls Seasonally-Adjusted Jobs to March 2016 [ShadowStats, BLS]



Full-Time Employment versus Part-Time Payroll Jobs. Shown in *Graph 25*, the level of full-time employment (Household Survey) recovered its pre-recession high in August 2015, at least temporarily. Headline March 2016 detail now stands at roughly 1.6 million above that pre-recession high for the series,

thanks in particular to irregularly-volatile monthly gains in the seasonally-adjusted data of recent months. That will gyrate further in the next several months, likely to drop from the current headline level.

Such compares with the headline payroll-employment level that now is 5.3-million above its prerecession high, having regained its peak some 23-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 likely-temporary, current recovery in full-time employment.

Graph 25: Full-Time Employment (Household Survey) to March 2016





Graphs 26 and 27 plot comparisons of activity in full-time employment versus payroll jobs, post-economic collapse. Full-time employment was hit hardest, with headline employment "recovery" coming largely from individuals having to settle for part-time work.

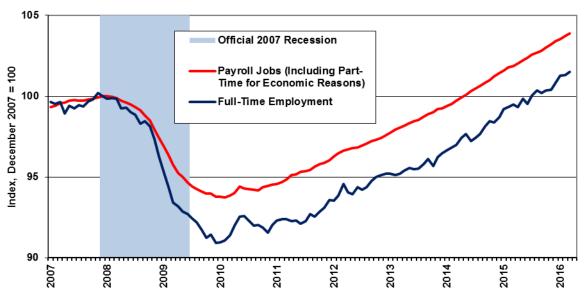
Headline month-to-month volatility in the full-time employment reporting is more a function of the instabilities from the non-comparability of the headline, seasonally-adjusted monthly data (see the discussion in the *Headline Distortions from Shifting Concurrent Seasonal Factors* section) and the recent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

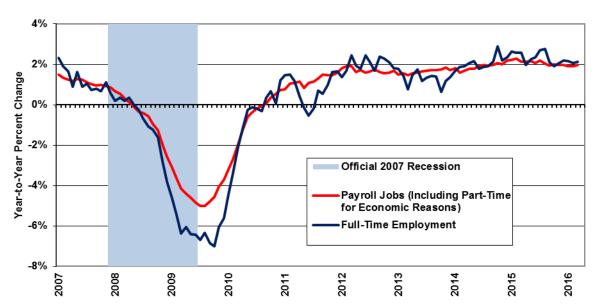
Graph 26: Full-Time Employment (Household Survey) versus Jobs Count (Payroll Survey)

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



Graph 27: Full-Time Employment (Household Survey) versus Jobs Count (Payroll Survey), Year-to-Year

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



Annual Percent Changes in Headline Payrolls. 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.

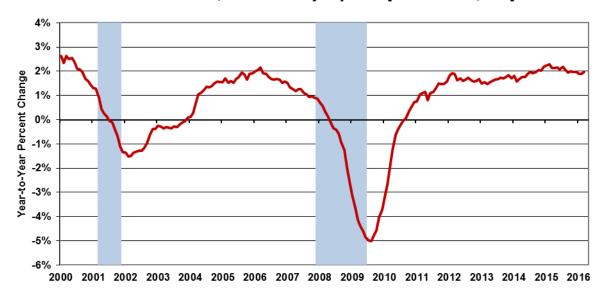
Year-to-year growth in unadjusted payrolls stood at a post-recession peak of 2.29% in February 2015, reflected in the headline detail of *Graphs 28* and 29. Such remains the strongest annual growth since June 2000 (another recession), but subsequent annual growth has slowed. Year-to-year nonfarm payroll growth in March 2016 was 1.98%, up from an unrevised 1.90% in February 2016 and 1.91% in January 2016.

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

[Graphs 28 and 29 follow on the next page]

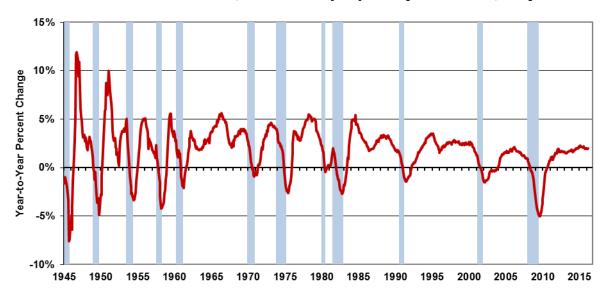
Graph 28: Payroll Employment, Year-to-Year Percent Change, to March 2016

Nonfarm Payrolls Year-to-Year Percent Change 2000 to March 2016, Not Seasonally Adjusted [ShadowStats, BLS]



Graph 29: Payroll Employment, Year-to-Year Percent Change, 1945 to February 2016

Nonfarm Payrolls Year-to-Year Percent Change 1945 to March 2016, Not Seasonally Adjusted [ShadowStats, BLS]



Headline Distortions from Shifting Concurrent-Seasonal Factors. Discussed and graphed here, with extended commentary and the latest detail available from ShadowStats affiliate ExpliStats, there are serious and deliberate flaws with the government's seasonally-adjusted, monthly reporting of both employment and unemployment. Each month, the BLS uses a concurrent-seasonal-adjustment process to adjust both the payroll and unemployment data for the latest seasonal patterns. As new headline data are seasonally-adjusted for each series, the re-adjustment process also revises the monthly history of each series. A new seasonally-adjusted history is recalculated for every month, going back five years, so as to be consistent with the new seasonal patterns generated for the current headline number.

<u>Effective Reporting Fraud.</u> 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 meaningfully large. 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.

Household Survey. Circumstances here are highlighted in the today's *Opening Comments*. In the case of the published Household Survey (unemployment rate and related data), the seasonally-adjusted headline numbers usually are not comparable with the prior monthly data or any month before. Accordingly, the published headline detail as to whether the unemployment rate was up, down or unchanged in a given month is not meaningful, and what actually happened is not knowable by the public. Month-to-month comparisons of these popular numbers are of no substance, other than for market hyping or political propaganda. The headline month-to-month reporting in the Household Survey is made consistent only in the once-per-year reporting of December data, with annual revisions back for five years. All historical comparability disappears, though, with the ensuing headline January 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 data are comparable only with the prior month's reporting, not before. Due to the BLS modeling process, the historical data never are published on a consistent basis, even with publication of the annual benchmark revision (see the comments on *Graph 30*).

Where the BLS does provide modeling detail for the Payroll Survey, allowing for third-party calculations, no such accommodation has been made for the Household Survey. Again, ShadowStats affiliate ExpliStats does such third-party calculations for the payroll series, and the resulting detail of the differences between the current headline reporting and the constantly-shifting, consistent and comparable history are reflected here in *Graph 30*.

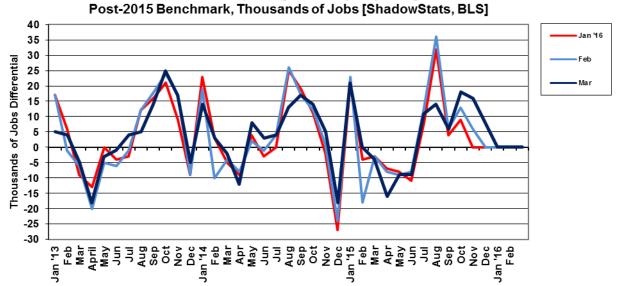
Consider in the latest headline (and benchmarked) payroll detail that the March 2016 data were comparable only with the headline changes in the February 2016 numbers, not with January 2016 or any earlier months. Per BLS headline reporting, seasonally-adjusted March 2016 payrolls rose month-tomonth by 215,000 from February, while February payrolls rose by 245,000 from January, and January payrolls rose by 168,000 from December. That headline January monthly gain was not accurate and not comparable with the headline details for March and February, because the December payroll level was not adjusted for the new seasonal adjustments. Had the BLS revised headline December reporting to be on a

consistent basis with the headline reporting, the December-to-January change would have been a comparable gain of 160,000, instead of the purported 168,000 increase. In like manner, the current headline gain of 271,000 for December 2015 versus November, really was 263,000 in the latest calculations.

The differences go both ways and often are much larger, as was seen in the case of November 2014, coming out of the 2014 benchmark revision. That particular incident is detailed at the <u>ExpliStats</u> link, and it was discussed in the *Opening Comments* of <u>Commentary No. 784</u>.

Graph 30: Concurrent-Seasonal-Factor Irregularities - Headline Detail in March 2016 versus 2015 Benchmark

Seasonal-Factor Misreporting versus 2015 Benchmark Seasonally-Adjusted Nonfarm Payroll Employment Difference Between Actual Series and Distorted Official Reporting Levels by Reporting Month



Graph 30 details how far the monthly payroll employment data already have strayed from being consistent with the actual, most-recent benchmark revision, which was in October but not published. The revised series is run in the background in October, November and December, with January being the first month where the new numbers are published. Yet, at that point, the headline detail already has three months of inconsistent seasonal adjustments in play; March makes that five. If the historical data were consistent with the headline reporting, the dark blue line would be flat and at zero. As seen here, consistent data never have been published.

The difference seen between the light-blue (February) and dark-blue (March), indicates shifting seasonal patterns between just this month's headline detail and last month's headline detail.

Birth-Death/Bias-Factor Adjustment. Despite the ongoing, general overstatement of monthly payroll employment, the BLS adds in upside monthly biases to the payroll employment numbers. The continual overstatement is evidenced usually by regular and massive, annual downward benchmark revisions (2011 and 2012 and 2014 excepted). Even with recently-published downside revision of 206,000 (-206,000) to March 2015 payrolls in the 2015 benchmarking (see *Commentary No. 784* and *Commentary No. 784-A*),

the BLS upped its annual upside bias factors currently by 107,000 jobs. Such discrepancies, however, are not unusual.

Discussed in the benchmark detail of <u>Commentary No. 598</u>, the regular benchmark revision to March 2013 payroll employment was to the downside by 119,000 (-119,000), where the BLS had overestimated standard payroll employment growth.

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

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

Historically, the upside-bias process was created simply by adding in a monthly "bias factor," so as to prevent the otherwise potential political embarrassment to the BLS of understating monthly jobs growth. The "bias factor" process resulted from such an actual embarrassment, with the underestimation of jobs growth coming out of the 1983 recession. That process eventually was recast as the now infamous Birth-Death Model (BDM), which purportedly models the relative effects on payroll employment of jobs creation due to new businesses starting up, versus jobs lost due to bankruptcies or closings of existing businesses.

<u>March 2016 Add-Factor Bias.</u> The not-seasonally-adjusted March 2016 bias was a positive monthly add-factor of 64,000, versus a positive add-factor 129,000 in February 2016, and a positive add-factor of 72,000 in March 2015.

The revamped, aggregate upside bias for the trailing twelve months through March 2016 was 888,000, up by 107,000 or 13.7% from 781,000 in December 2015. That is a monthly average of 74,000 in March 2016 (versus 65,100 pre-2015 benchmarking) jobs created out of thin air, on top of some indeterminable amount of other jobs that are lost in the economy from business closings. Those losses simply are assumed away by the BLS in the BDM, as discussed below.

<u>Problems with the Model.</u> The aggregated upside annual reporting bias in the BDM reflects an ongoing assumption of a net positive jobs creation by new companies versus those going out of business. Such becomes a self-fulfilling system, as the upside biases boost reporting for financial-market and political needs, with relatively good headline data, while often also setting up downside benchmark revisions for the next year, which traditionally are ignored by the media and the politicians. The BLS cannot measure meaningfully the impact of jobs loss and jobs creation from employers starting up or going out of business, on a timely basis (within at least five years, if ever), or by changes in household employment that were incorporated into the 2015 redefined payroll series. Such information simply is guesstimated by the BLS, along with the addition of a bias-factor generated by the BDM.

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

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

The presumed net additional "surplus" jobs created by start-up firms are added on to the payroll estimates each month as a special add-factor. On top of that, the monthly BDM add-factors have been increased now to an average of 74,000 jobs per month for the current year. As a result, in current reporting, the aggregate average overstatement of employment change easily exceeds 200,000 jobs per month (the underlying positive base-assumption upside bias, plus the monthly Birth-Death Model add-factor).

HOUSEHOLD SURVEY DETAIL. Noted in the *Opening Comments*, the continued jump in both the employed and unemployed count in the seasonally-adjusted, month-to-month Household-Survey detail likely are particularly egregious examples of the BLS misreporting practices, in its use of concurrent seasonal factors (see *Headline Distortions from Shifting Concurrent-Seasonal Factors*).

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 remains open to serious question.

Headline Unemployment Rates. At the first decimal point, the headline March 2016 unemployment rate (U.3) notched higher to 5.0%, from 4.9% in February. At the second decimal point, the headline March 2016 U.3 was 5.00%, versus 4.92% in February. Formally, the 0.08% increase in March U.3 was statistically-insignificant.

The headline gain in March U.3, however, also 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 (again, see *Headline Distortions from Shifting Concurrent Seasonal*).

On an unadjusted basis, the unemployment rates are not revised and are consistent in post-1994 reporting methodology. The unadjusted U.3 unemployment rate eased to 5.11% in March 2016, versus 5.19% in February 2016.

The headline seasonally-adjusted increase in the March 2016 U.3 unemployment rate reflected a 151,000 increase in unemployment and a 246,000 gain in employment, with a resulting gain of 396,000 (rounding differences). For the second month, it was unusual to have jumps in both employment and unemployment, suggestive again of the incompatibility and inconsistency of the month-to-month headline detail in the seasonally-adjusted, household-survey numbers.

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 relatively 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).

On top of an underlying increase in the seasonally-adjusted U.3 rate, and an increase in the adjusted number of people working part-time for economic reasons, more than offsetting a decline in those marginally attached to the workforce (including short-term discouraged workers), and the headline March 2016 U.6 unemployment notched higher to 9.82%, from 9.71% in February. The unadjusted U.6 unemployment rate was at 9.95% (rounds to 9.9%) in March 2016, versus 10.07% in February.

"Short-Term" Discouraged Workers. The monthly count of short-term discouraged workers in March 2016 (never seasonally-adjusted) declined by 14,000 (-14,000) to 585,000, following a decline of 24,000 (-24,000) to 599,000 in February 2016, where the total, short-term marginally-attached discouraged workers declined by 83,000 (-83,000) to 1,720,000 in March 2016, having declined 286,000 (-286,000) to 1,803,000 in February 2016. 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 displaced workers—the long-term discouraged-worker category—that defines the ShadowStats-Alternate Unemployment Measure. There is a continuing rollover from the short-term to the long-term category, with the ShadowStats measure encompassing U.6 and the short-term discouraged workers, plus the long-term discouraged workers. In 1994, "discouraged workers"—those who had given up looking for a job because there were no jobs to be had—were redefined so as to be counted only if they had been "discouraged" for less than a year. This time qualification defined away a large number of long-term discouraged workers. The remaining redefined short-term discouraged and redefined marginally-attached workers were included in U.6.

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 rose to 22.9% in March 2016, from 22.8% in February.

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

SHADOWSTATS-ALTERNATE UNEMPLOYMENT RATE MEASURE. In 1994, the Bureau of Labor Statistics (BLS) overhauled its system for estimating unemployment, including changing survey questions and unemployment definitions. In the new system, measurement of the previously-defined discouraged 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. These were individuals who would be considered displaced workers, due to circumstances of severely-negative economic conditions or other factors such as changing industrial patterns resulting from shifting global trade patterns.

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

The post-1994 survey techniques also fell far shy of adequately measuring the long-term displacement of workers tied to the economic collapse into 2008 and 2009, and from the lack of subsequent economic recovery. In current headline reporting, the BLS has a category for those not in the labor force who currently want a job. Net of the currently-defined "marginally attached workers," which includes the currently-defined and undercounted "discouraged workers" category used in the U.6, those not in the labor force currently wanting a job declined to 3.726 million in March 2016, versus 4.146 million in February 2016, 4.077 million in January 2016, 3.872 million in December 2015 and 3.608 million in November 2015 (those numbers are counted only on an unadjusted basis). While some 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-plus decades. Beyond using the BLS U.6 estimate as an underlying monthly base, I have not found a way of accounting fully for the current unemployment circumstance and common experience using just the monthly headline data 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*

<u>Commentary</u>), the CASS Freight Index and petroleum consumption. Those economic- and labor-related series all are plotted subsequent to the 1994 overhaul of unemployment surveying (see *Graphs 2* to 8).

Headline March 2016 Detail. Adding back into the total unemployed and labor force the ShadowStats estimate of long-term discouraged workers—effectively workers displaced by severe economic contractions and/or shifting trade patterns that have relocated industries—the March 2016 ShadowStats-Alternate Unemployment Estimate notched higher to 22.9%, versus 22.8% in February 2016. The March 2015 reading and was down by 40 (-40) basis points or 0.4% (-0.4%) from the 23.3% series high last seen in December 2013.

Again, in contrast, the March 2016 headline U.3 unemployment reading of 5.0%, notched higher versus 4.9% in February 2016, was down by 500 (-500) basis points or 5.0% (-5.0%) 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, March 2016 notched higher to 9.8%, from 9.7% in February, down from its April 2010 peak of 17.2% by 740 (-740) basis points or 7.4% (-7.4%).

Seen in the usual graph of the various unemployment measures (*Graph 1* 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 accounted for the early divergence between the U.6 and U.3 categories.

With the continual rollover, the flow of headline workers continues into the short-term discouraged workers category (U.6), and from U.6 into long-term discouraged worker or displaced-worker status (the ShadowStats measure). There was a lag in this happening as those having difficulty during the early months of the economic collapse, first moved into short-term discouraged status, and then, a year later they began moving increasingly into 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%.

CONSTRUCTION SPENDING (February 2016)

Broad-Based, Real Construction Spending Continued in Low-Level, Stagnating Non-Recovery. Still shy of its pre-recession peak in February 2006 by 24.5% (-24.5%), inflation-adjusted real construction spending fell in fourth-quarter 2015 and otherwise generally has continued to stagnate, at a low-level of activity. That activity, however, was somewhat up-trending in the initial reporting of February 2016 detail, where despite a headline month-to-month decline, this particularly volatile series—virtually worthless in initial headline detail—revised upward by an even greater amount in the prior reporting for January 2016.

With all revisions in place, fourth-quarter 2015 real construction spending contracted at a narrowed quarter-to-quarter at annualized pace of 2.5% (-2.5%) [previously down by 2.9% (-2.9%), initially down by 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 still was consistent with a contraction in annualized real fourth-quarter 2015 GDP, although that GDP measure recently revised to 1.4% [previously 1.0%, initially 0.7%]. Yet, in conjunction with other underlying economic detail, real construction spending still is consistent ultimately with a likely benchmark downside revision to fourth-quarter GDP growth.

Based solely on the initial and unstable reporting for January and February 2016, and in the context of contracting headline construction inflation, which boosts inflation-adjusted real growth, first-quarter 2016 real construction spending was on track for annualized quarterly growth of 11.3%. That had been estimated at 9.1%, based on just the initial January 2016 reporting.

Graphs 9 to 12 in the Opening Comments show comparative nominal and real construction activity for the aggregate series as well as for private residential- and nonresidential-construction and public-construction. Again, seen after adjustment for inflation, the real aggregate series had remained in low-level stagnation into first-quarter 2015, with some short-lived gains that turned down anew in the fourth-quarter 2015, with some faltering rebound/stagnation in early-2016. Areas of recent relative real strength in all of the major subcomponents have flattened out, or turned down, both before and after inflation, except for the private residential sector, which is trending somewhat higher—albeit still at a low level—reflecting the most recent revisions. The general pattern of real activity remains one of low-level, up-trending stagnation. The aggregate nominal detail, before inflation adjustment, is shown in Graph 31 of this Reporting Detail, with the real, inflation-adjusted activity plotted in Graph 32. Graph 34 and the new Graph 34-A show the relative patterns of nominal and real activity aggregated by sector.

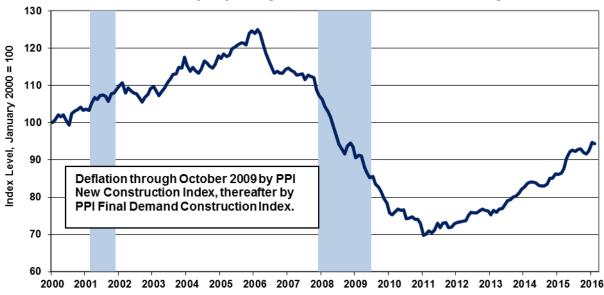
Graph 31: Total Nominal Construction Spending

Total-Construction Spending, Monthly to February 2016 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Graph 32: Index of Total Real Construction Spending

Real Index of Total Value of Construction Put in Place To February 2016, Inflation Adjusted (Jan 2000 = 100) Seasonally-Adjusted [ShadowStats, Census Bureau, BLS]



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 9* to 12 in the *Opening Comments* and in *Graph 34-A*.

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*] usually runs well above the headline pace of annual inflation in the PPI's Final Demand Construction Index. Where, the annual PPI construction-inflation measure recently had moved to about even with, if not somewhat higher than the private-sector measures, it has fallen significantly below them in the latest detail.

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 subsidiary series thereafter.

Seasonally-adjusted February 2016 FDCI month-to-month inflation declined by 0.09% (-0.09%), having contracted by 0.35% (-0.35%) in January. In terms of year-to-year inflation, the February 2016 FDCI was up by 0.98%, versus 1.16% annual inflation in January 2016, also on an adjusted basis.

February 2016 headline inflation for government-funded construction also fell by 0.09% (-0.09%) for the month, having contracted by 0.44% (-0.44%) in January 2016, while it rose by 1.34% year-to-year in February 2016, having shown an annual gain of 1.43% in January 2016. Separately, inflation for privately-funded construction also declined month-to-month by 0.09% (0.09%) in February 2016, having been down by 0.26% (-0.26%) in January, with year-to-year inflation up by 0.89% in February 2016, versus a gain of 0.98% in January 2016.

Headline Reporting for February 2016. The Census Bureau reported this morning, April 1st, that the headline, total value of construction put in place in the United States for February 2016 was \$1,144.0 billion, on a seasonally-adjusted, but not-inflation-adjusted annual-rate basis. That estimate was down by a statistically-insignificant 0.5% (-0.5%) +/- 1.9% (all confidence intervals are at the 95% level), versus an upwardly-revised \$1,150.1 [previously \$1,140.8 billion] in January 2016. Net of prior-period revisions, the headline February change was a gain of 0.3%.

January 2016 spending was up by a revised 2.1% [previously up by 1.5%] versus an upwardly-revised \$1,125.9 [previously \$1,123.5, initially \$1,116.6] billion in December 2015.

December spending was up by a revised 0.8% [previously up by 0.6%, initially up by 0.1%] versus an unrevised \$1,117.0 billion of spending in November 2015. Adjusted for FDCI inflation (negative inflation in recent months), total real monthly spending in February 2016 was down by 0.4% (-0.4%), versus a gain of 2.5% in January 2016 and a gain of 0.8% in December 2015.

On a year-to-year annual-growth basis, February 2016 nominal construction spending rose by a statistically-significant 10.3% +/- 2.5%, versus revised year-to-year gains of 11.3% [previously up by 10.4%] in January 2016, and 9.1% [previously up 8.9%, initially up by 8.2%] in December 2015. Net of

construction costs indicated by the FDCI, the year-to-year gain in total real construction spending was at 9.2% in February 2016, 10.0% in January 2016 and 7.1% in December 2015.

The statistically-insignificant, headline monthly nominal contraction of 1.5% in aggregate February 2016 construction spending, versus a gain of 2.1% in aggregate January 2016 spending, included a headline monthly drop of 1.7% (-1.7%) in February public spending, versus a 3.3% gain January. Private spending notched lower by 0.1% (-0.1%) month-to-month in February, following a 1.7% gain in January. Within total private construction spending, the residential sector gained 0.9% in February, following similar gain in January, while the nonresidential sector fell by 1.3% (-1.3%) in February, having gained by 2.7% in January.

Construction and Related Graphs. The earlier Graphs 31 and 32, and later Graphs 34 and 34-A reflect total construction spending through February 2016, both in the headline nominal dollar terms, and in real terms, after inflation adjustment. Graph 32 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 and some boost into early-2015. Activity declined in fourth-quarter 2015, with an early first-quarter 2016 trend to the plus-side.

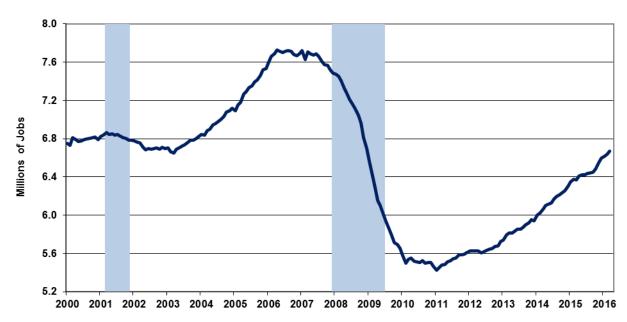
The pattern of non-recovered, inflation-adjusted activity here—net of government inflation estimates—does not confirm the economic recovery indicated by the headline GDP series (see prior <u>Commentary No. 795</u> and <u>No. 777 Year-End Special Commentary</u>). To the contrary, the latest broad construction 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, but trending to the upside in first-quarter 2016.

[Graph 33 on Construction Payrolls follows on the next page]

Graph 33: Construction Payroll Employment to Date

Construction Payroll Employment to March 2016

Seasonally-Adjusted [ShadowStats, BLS]



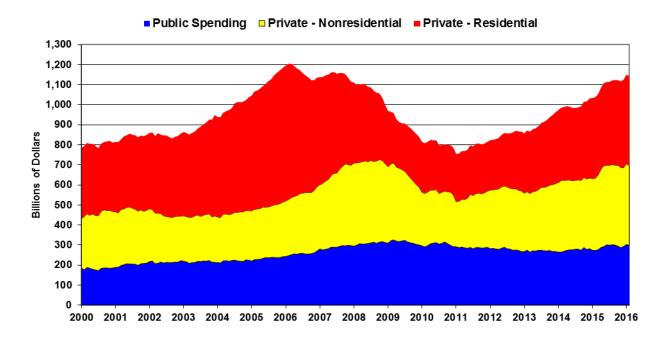
Graph 33 shows March 2016 construction employment, as discussed and detailed in the earlier Payroll Employment section. In theory, payroll levels should move more closely with the inflation-adjusted aggregate series, where the nominal series reflects the impact of costs and pricing, as well as a measure of the level of physical activity. Ironically, 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—generally has begun to slow, flatten-out or turn down anew.

Graph 34 shows total nominal construction spending, broken out by the contributions from total-public (blue), private-nonresidential (yellow) and private-residential (red) spending. The new *Graph 34-A* shows the same breakout by sector as in *Graph 34*, but the detail is in real, inflation-adjusted terms, reflected in constant November 2009 dollars, deflated by the final-demand PPI inflation measure for construction, as discussed otherwise in the earlier *PPI Final Demand Construction Index* section.

[Graphs 34 and 35 follows on the next page]

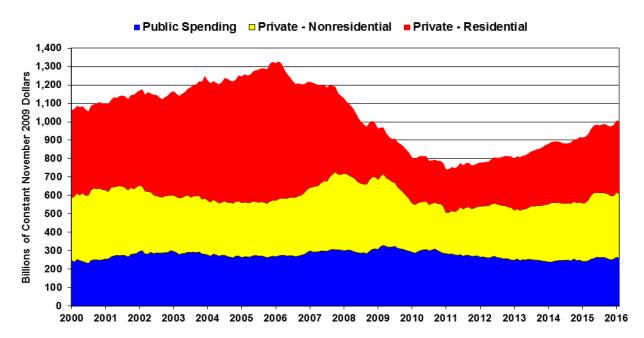
Graph 34: Aggregate Nominal Construction Spending by Major Category to Date

Construction Spending, Monthly to February 2016 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



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

Real Construction Spending (\$2009), Monthly to February 2016 Seasonally-Adjusted Annual Rate [ShadowStats, Census, BLS]

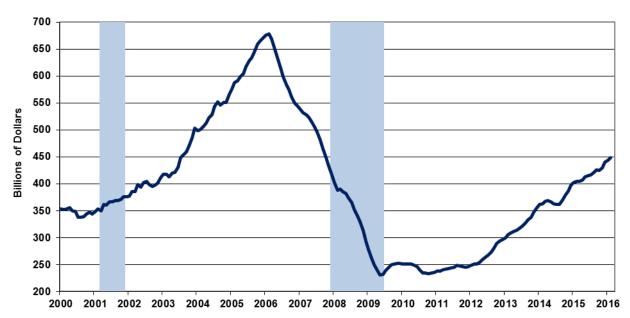


The next two graphs (*Graph 35* and *36*) cover private residential construction along with housing starts (combined single- and multiple-unit starts) for February 2016 (see <u>Commentary No. 793</u>).

Graph 35: Nominal Private Residential Construction Spending to Date

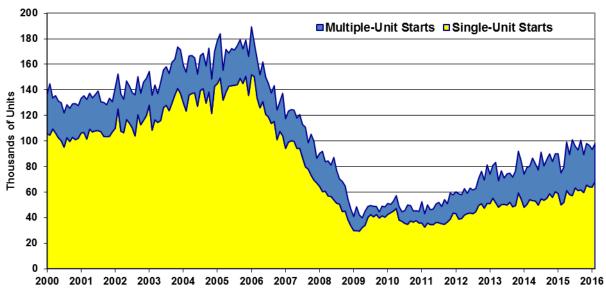
Private Residential Construction to February 2016

Seasonally-Adjusted Annual Rate [ShadowStats, Census]



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

Single- and Multiple-Unit Housing Starts (Monthly Rate) To February 2016, Seasonally-Adjusted [ShadowStats, Census]



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 10* of the *Opening Comments* section and presumably with the headline construction-payroll data in *Graph 33*.

Graph 37: Nominal Private Nonresidential Construction Spending to Date

Private Nonresidential Construction to February 2016

Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Graph 38: Nominal Public Construction Spending to Date

Public Construction to February 2016

Seasonally-Adjusted Annual Rate [ShadowStats, Census]



The final two graphs (*Graphs 37* and *38*) show 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 in early-2015.

Public construction spending, which is 98% nonresidential, had continued in a broad downtrend into 2014, with intermittent bouts of fluttering stagnation and then some upturn in growth 2015, now fluttering in what appears to be something of a topping out process, still shy of its pre-recession peak. Viewed net of inflation, as shown in *Graphs 11*, *12* and *34-A*, indeed, both series appear stalled shy of their pre-recession peaks.

WEEK AHEAD

Economic Reporting Generally Should Continue on the Downside of Expectations, Increasingly Pummeling the Dollar and Boosting Gold, Silver and Oil Prices. Likely moving to the downside, amidst intensifying, negative headline reporting in the weeks and months ahead, market expectations for business activity should deteriorate sharply. The broad trend in weakening expectations for business activity, and movement towards looming recession recognition continue, despite the second upside revision to fourth-quarter GDP, as discussed in the *Commentary No. 795*, *Commentary No. 794*, *Commentary No. 789* and in *No. 777 Year-End Special Commentary*. In response to continuing non-recovery and down-trending in underlying economic activity, increasingly-negative reactions have surfaced in trading of the U.S. dollar and in related financial markets, with some upside movement in prices for gold and silver. Circumstances here also should limit further heavy selling in the oil market, increasingly turning oil prices to the upside in response to intensified dollar selling.

Weaker headline reporting of the regular monthly economic numbers increasingly should be accompanied by much worse-than-expected—negative—reporting for at least the next several quarters of GDP (and GDI and GNP). That includes an eventual outright quarterly contraction in fourth-quarter 2015 GDP activity, as well as other pending downside revisions to GDP history in the 2016 annual benchmark revisions, due on July 29th.

In conjunction with today's downside revisions to industrial production (see *Opening Comments*) pending downside benchmark revisions to retail sales, construction and durable goods orders, expectations for the GDP benchmarking should fall sharply. That GDP benchmarking also likely will be the point at which the currently-positive headline fourth-quarter 2015 GDP growth revises to contraction. Separately, the potential for a first-quarter 2016 headline GDP contraction, before the benchmarking, also remains very much in play.

CPI-U consumer inflation—intermittently driven lower in 2015 and early-2016 by collapsing prices for gasoline and other oil-price related commodities—likely has seen its near-term, year-to-year low. Although headline monthly February inflation was negative, annual inflation remained positive. Monthly prices should turn positive, again, as early the headline March 2016 detail, in tandem with rising gasoline prices. Inflation will rise more sharply, going forward, pending a weakening U.S. dollar environment, and a continued, related upturn in oil prices and other commodities. Fundamental reporting issues with the headline CPI also are discussed here: *Public Commentary on Inflation Measurement*.

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 nine-to-eleven years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn provide particularly unstable headline economic results, when concurrent seasonal adjustments are used (as with retail sales, durable goods orders, employment and unemployment data). That has been discussed and explored in the labor-numbers related Supplemental Commentary No. 784-A and Commentary No. 695.

Further, discussed in <u>Commentary No. 778</u>, a heretofore unheard of spate of "processing errors" has surfaced in recent surveys of earnings (Bureau of Labor Statistics) and construction spending (Census Bureau). This is suggestive of deteriorating internal oversight and control of the U.S. government's headline economic reporting. At the same time, it indicates an openness of the involved statistical agencies in revealing the reporting-quality issues.

Combined with ongoing allegations in the last year or two of Census Bureau falsification of data in its monthly Current Population Survey (the source for the BLS Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular economic series (see *Commentary No. 669*).

PENDING RELEASE:

U.S. Trade Balance (**February 2016**). The Commerce Department and Bureau of Economic Analysis (BEA) will release their full version of the monthly U.S. trade balance for February 2016 on Tuesday, April 5th, covered in *Commentary No. 797* of that date. Such will updated the limited and highly questionable "advance" February merchandise trade detail published on March 28th. Where the "advance" report indicated some monthly deficit deterioration in February for the fourth straight month, the early deficit estimate has had negligible reporting stability and significance since its creation last year. Look for greater than promised trade deterioration here, along with the implications for negative impact on the initial estimate of first-quarter 2016 GDP growth on April 28th. The broad trend going forward should remain for regular monthly and quarterly deteriorations in the real trade deficit.