

COMMENTARY NUMBER 824

July Labor Conditions and M3, June Trade Deficit and Construction Spending

August 5, 2016

**Just a Week into Headline 1.2% Second-Quarter GDP Growth,
New Trade and Construction Spending Details Promise a Downside Revision**

Trade Deficit Widened and Deepened in Revision, Worst Since 2007

**With Quarterly and Annual Growth Collapsing Anew,
Real Construction Spending Growth Was Weakest Since 2011 Series Trough**

**Ten Years after its June 2006 Pre-Recession Peak, Real Construction Spending
Remained Down 26% (-26%) from Recovering that Benchmark Level**

**Month-to-Month Unemployment Data Remained Meaningless and Nonsensical,
Heavily Skewed by Inconsistent and Not-Comparable Seasonal Adjustments**

**Though Heavily Bloated by Seasonal-Factor Distortions and Add-Factors,
Annual Payroll Growth Effectively Held at a 29-Month Low**

**July 2016 Unemployment: U.3 Held at 4.9%, U.6 Notched Higher to 9.7%
and the ShadowStats-Alternate Rate Rose to 23.0%**

**Annual M3 Growth Eased to 4.1% in July 2016, from 4.5% in June,
While the Monetary Base Firmed Slightly**

PLEASE NOTE: The next regular Commentary, scheduled for Friday August 12th, will cover July nominal Retail Sales and the Producer Price Index (PPI).

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

Headline Second-Quarter GDP Growth of 1.22% Did Not Last Very Long. Just one week ago, the Bureau of Economic Analysis (BEA) reported its “advance” or first estimate of second-quarter 2016 real annualized growth in second-quarter 2016 at 1.22%. In the context of the annual GDP benchmark revisions, that headline growth was less than half the consensus expectation (see [Commentary No. 823](#)).

Covered in today’s *Commentary*, subsequent reporting of June 2016 and full-second-quarter details of construction spending, and the merchandise trade deficit, came in sharply below estimates used for the “advance” guesstimate of second-quarter GDP. Indicated are downside growth revisions to the GDP estimate in its second rendition, due on August 26th. Between the negative adjustments to the trade-deficit and to business, residential and government construction, the headline 1.22% GDP likely would revise to about 0.6%. The new headline detail and revisions to the quarterly data have just begun.

Yet, headline July 2016 employment detail was not particularly meaningful, with minimal impact in terms of a second-quarter GDP revision. The headline payroll and unemployment reporting rapidly are rising to challenge the GDP as the least-meaningful and most-heavily-biased of major U.S. economic series.

In Continued Misreporting, Payroll Activity Remained Massively Overstated; Monthly Unemployment Details Remained Not Comparable. Underlying reality for July 2016 U.S. labor conditions was in the realm of a 23.0% broad unemployment rate, with the actual monthly payroll-employment change likely on the downside of flat.

The “unchanged” headline U.3 unemployment at 4.9% in July was continued nonsense, simply reflecting not-comparable and meaningless month-to-month changes in the Household Survey data, as discussed in in the opening paragraphs of [Commentary No. 819](#) and in *Headline Distortions from Shifting Concurrent-Seasonal Factors* in the *Reporting Detail*. Consider that headline Household Survey detail showed the number of employed increasing by 420,000 in July 2016, while the number of unemployed declined by only 13,000 (-13,000)? This general pattern was seen repeatedly earlier in the year. Normally, large swings in the count of the employed have some meaningful offset in the count of the unemployed, going either way. That did not happen here, because the seasonally-adjusted June and July data were not reported on a consistent basis and simply were not comparable month-to-month.

The gimmicked, headline payroll gain of 255,000 more realistically should have come in below zero, net of built-in upside biases. Discussed in the *Birth-Death/Bias-Factor Adjustment* section in the *Reporting Detail*, subsequent to the downside payroll-benchmark revisions of February 2016, the usual, excessive monthly biases added into the headline monthly payroll detail by the Bureau of Labor Statistics (BLS) were revised to the upside. This less-obvious use by the BLS of the Birth-Death Model (BDM) artificially has inflated headline month-to-month payroll gains with meaningless add-factors that currently

are well in excess of 200,000 jobs per month. Such is separate from the constantly shifting seasonal-adjustment patterns that can boost headline data in a given month (as in May 2016), with no prior-period offset accounting. Again, see the *Headline Distortions from Shifting Concurrent-Seasonal Factors*.

Today's Commentary (August 5th). The balance of these *Opening Comments* provides summary detail of the July employment and unemployment numbers, the June 2016 and full second-quarter 2016 trade deficit and construction spending.

The *Hyperinflation Outlook* shows the headline estimate for the ShadowStats Ongoing M3 Estimate for July, along with the regular update to U.S. monetary conditions. The most-recent *Hyperinflation Outlook Summary* is found in [Commentary No. 783](#), with an updated outlook for Fed activity and the U.S. dollar in the *Hyperinflation Watch* of [Commentary No. 820](#). The various background *Commentaries* will be updated and consolidated in a new *Special Report*. With first half-2016 economic detail in place, that publication is anticipated for August 19th.

The *Week and Month Ahead* section previews next week's releases of July nominal Retail Sales and the Producer Price Index (PPI).

Employment and Unemployment—July 2016—Continued Nonsense Reporting. Discussed in the opening paragraphs, headline monthly jobs growth is bloated meaningfully by upside biases; monthly payroll data are not comparable more than one month back, and unemployment detail in the headline month is not comparable with the month before. One has to wonder why the Bureau of Labor Statistics (BLS) bothers to publish numbers that largely are without meaning, other than to help incumbent politicians, or to provide Wall Street traders with some betting excitement on the first Friday of the month. These issues have been discussed here many times before, and links to key detail are provided. Headline distortions are getting worse, not better. That said, following are the latest official numbers.

Payroll Survey: Seasonality Distortions and Upside Bias Factors Leave Reported Jobs Growth with Little Meaning. In the context of heavily-distorted seasonal adjustments, bias-factor bloating and minimal upside revisions to May and June activity, the seasonally-adjusted, headline payroll gain for July 2016 was a meaningless 255,000. That followed an upwardly-revised 292,000 gain June, and an upwardly-revised, but demonstrably false, not-comparable 24,000 gain in May 2016. Consistent headline detail showed the May 2016 gain to have been 20,000, while the now formal headline gain of 144,000 in April 2016 really was 127,000 (see *Headline Distortions from Shifting Concurrent-Seasonal Factors*). Net of prior-period revisions, July 2016 payrolls rose by 273,000, instead of the headline 255,000.

Except for the revised 28-month low for May 2016, the not-seasonally-adjusted, year-to-year growth in July 2016 nonfarm payrolls hit a twenty-nine month low of 1.70%. Such followed revised annual growth of 1.75% in June 2016 and 1.63% the in May 2016 near-term low.

Household Survey: Counting All Discouraged Workers, July 2016 Unemployment Notched Higher to 23.0%. Discussed frequently in these *Commentaries* on monthly unemployment conditions, what removes headline-unemployment reporting from common experience and broad, underlying economic

reality, simply is definitional. To be counted among the headline unemployed (U.3), an individual has to have looked actively for work within the four weeks prior to the unemployment survey. If the active search for work was in the last year, but not in the last four weeks, the individual is considered a “discouraged worker” by the BLS and not counted in the headline labor force.

ShadowStats defines that group as “short-term discouraged workers,” as opposed to those who, after one year, no longer are counted by the government. Instead, they enter the realm of “long-term discouraged workers,” those displaced by extraordinary economic conditions, including regional/local business activity affected negatively by trade agreements or by other factors shifting U.S. productive assets offshore, as defined and counted by ShadowStats (see the extended comments in the *ShadowStats Alternate Unemployment Measure* in the *Reporting Detail*).

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 July 2016 headline 4.9%, 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 rate reflect that, much more so than the happier circumstance of 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 most-comprehensive 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.

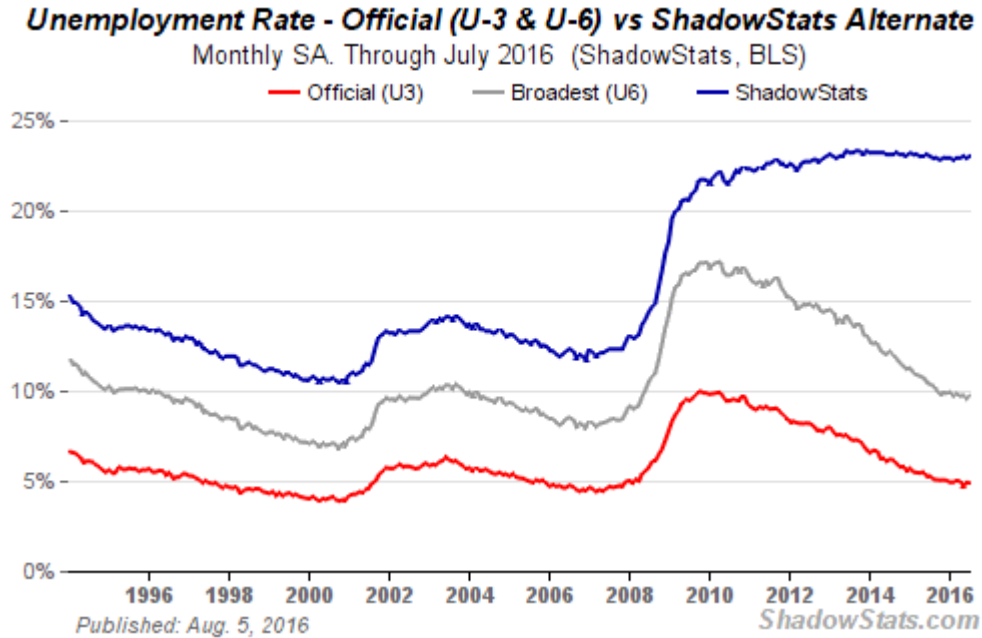
Again, when the headline unemployed become “discouraged,” they are rolled over from U.3 to U.6. As the headline, short-term discouraged workers roll over into long-term discouraged status, they move into the ShadowStats measure, where they remain. Aside from attrition, they are not defined out of existence by ShadowStats for political convenience (as is done after one year by the BLS), hence the longer-term divergence between the various unemployment rates. The resulting difference here is between headline-July 2016 unemployment rates of 4.9% (U.3) and 23.0% (ShadowStats).

Graph 1 reflects headline July 2016 U.3 unemployment at 4.88%, versus 4.90% in June 2016; headline July 2016 U.6 unemployment at 9.71%, versus 9.56% in June 2016; and the headline July 2016 ShadowStats unemployment estimate at 23.0%, versus 22.9% in June 2016.

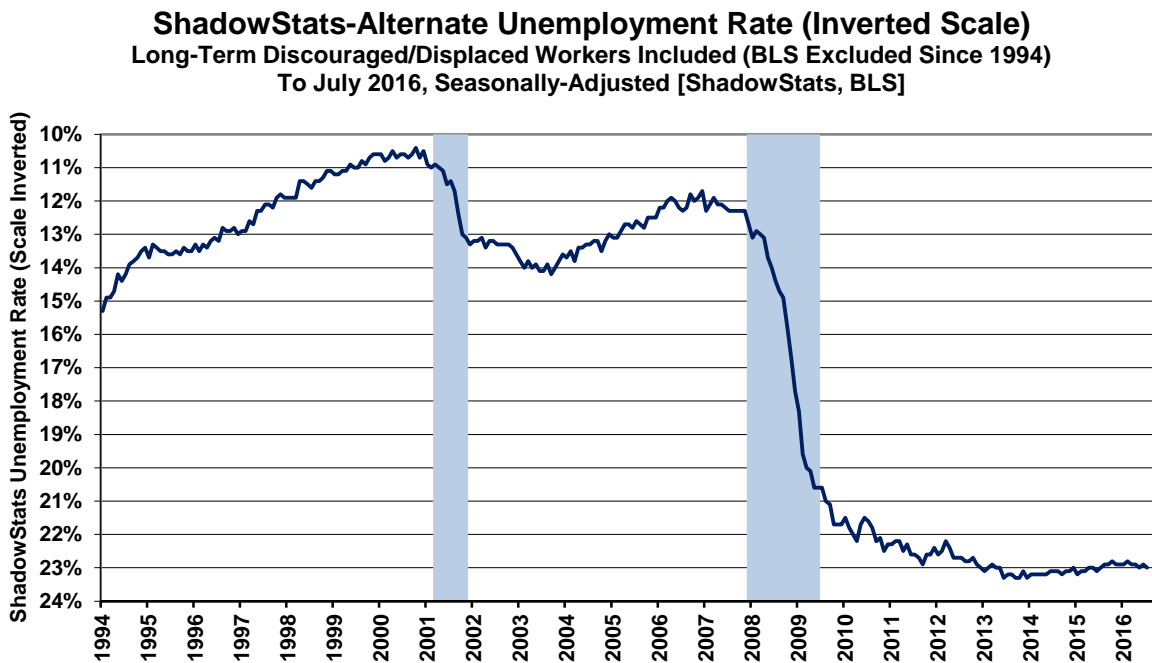
Graphs 2 to 4 reflect longer-term unemployment and discouraged-worker conditions. *Graph 2* is of the ShadowStats unemployment measure, with an inverted scale. The higher the unemployment rate, the

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

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

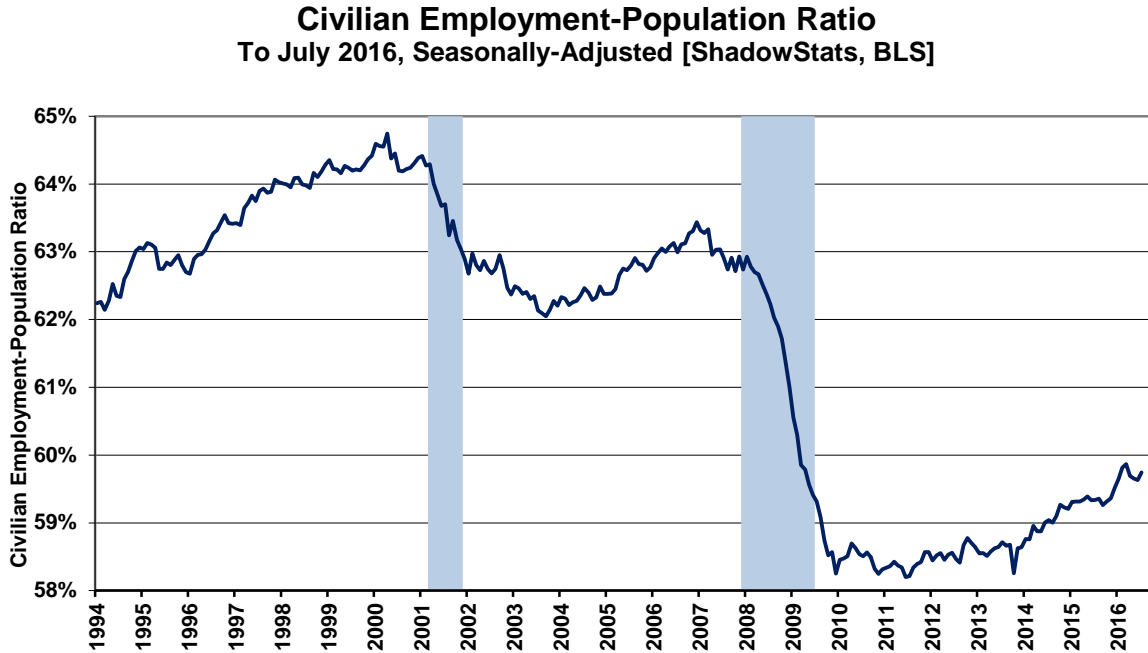


Graph 2: Inverted-Scale ShadowStats Alternate Unemployment Measure

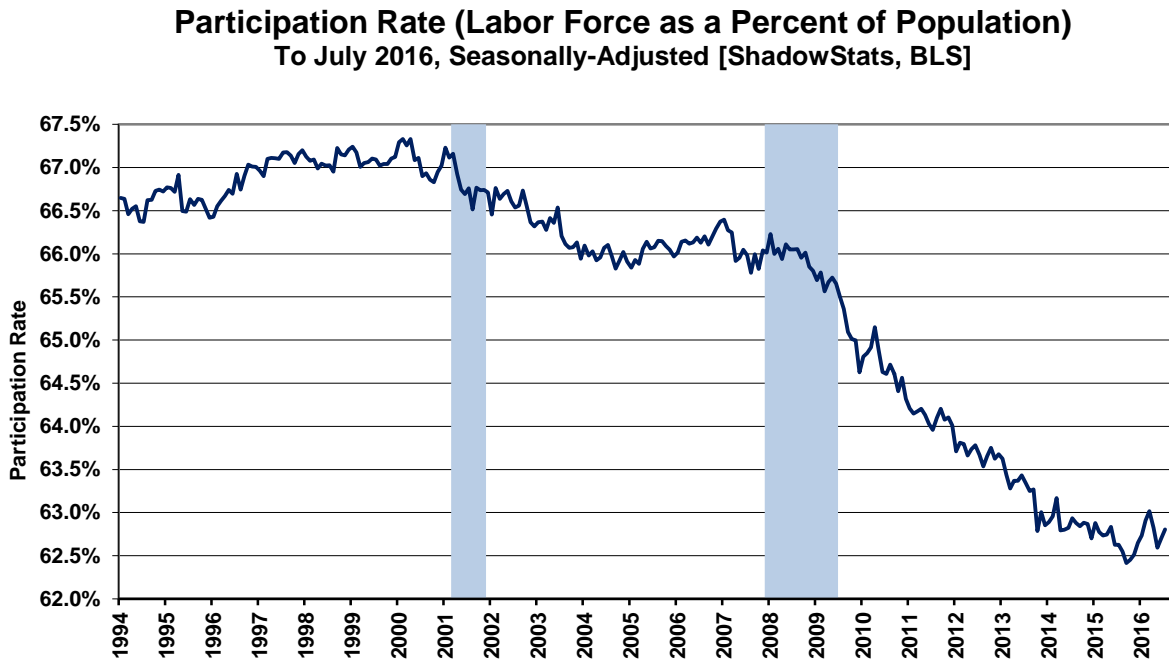


The inverted-scale of the ShadowStats unemployment measure also tends to move with the employment-to-population ratio, which had turned lower in April, May and June, but notched higher in July 2016.

Graph 3: Civilian Employment-Population Ratio



Graph 4: Participation Rate



That ratio 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), shown in *Graph 3*. The labor force containing all unemployed (including total discouraged workers) plus the employed,

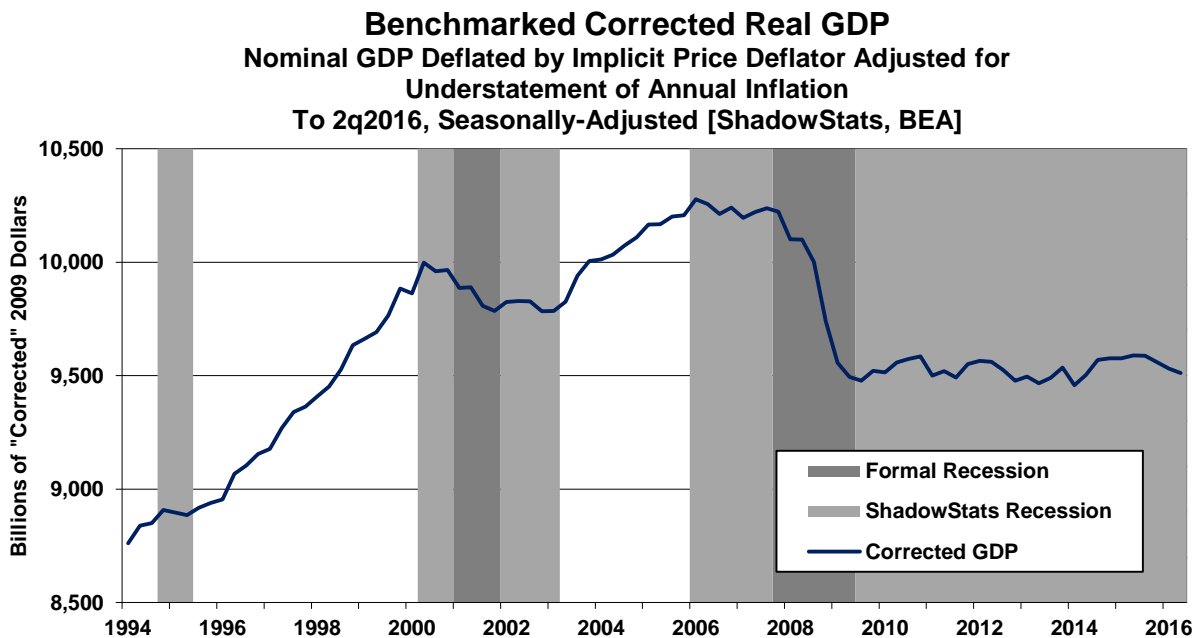
however, tends to be correlated with the population, so the employment-to-population ratio remains something of a surrogate indicator of broad unemployment, and it has a strong correlation with the ShadowStats unemployment measure.

Shown in *Graph 4*, the July 2016 participation rate (the ratio of the headline labor force to the population) notched higher again, as it did in June, having turned down in April and May. Both the near-term Employment-to-Population Ratio and the Participation Rate appear to have suffered near-term spikes and volatility from a combination of population redefinition in January 2016 and specifically the lack of any consistency or comparability in the seasonally-adjusted monthly detail from the source Household Survey, so far, through July 2016. Unadjusted ratios for these series had been respectively above the adjusted numbers in June, with those differences holding about the same in July.

The Participation-Rate—one followed closely by Fed Chair Janet Yellen—remains off the historic low hit in September 2015 (again, pre-1994 estimates are not consistent with current reporting), but it also notched minimally to the upside in July. 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. Their swelling ranks generally continue to shrink the headline (U.3) labor force, and the plotted ratio.

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 the June 2016 Household-Survey reporting simply are not available, irrespective of any protestations to the contrary by the BLS.

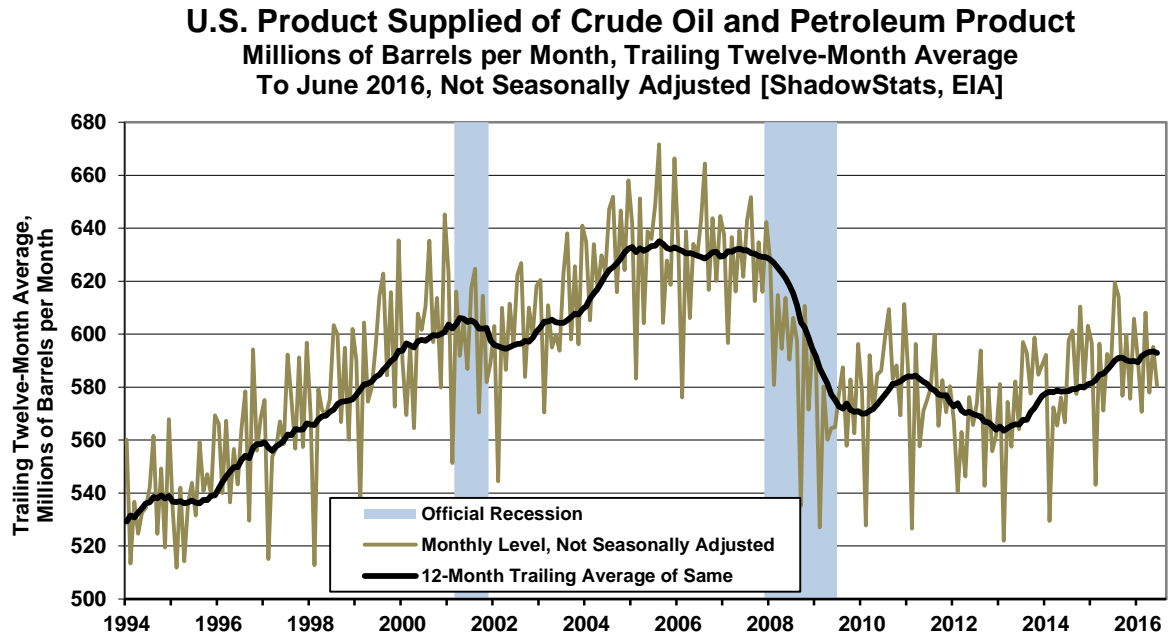
Graph 5: Corrected Real GDP through 2q2016, First Estimate and Annual Benchmark Revisions



Separately, consider *Graph 5*, which shows the ShadowStats version of the GDP, also from 1994 but through the July 29th GDP benchmark revisions and the first estimate of second-quarter 2016 activity

(now subject to downward revision), where the GDP plot has been corrected for the understatement of inflation used in deflating the headline GDP series (a description of approach and related links are found in [Commentary No. 823](#)).

Graph 6: U.S. Petroleum Consumption to June 2016

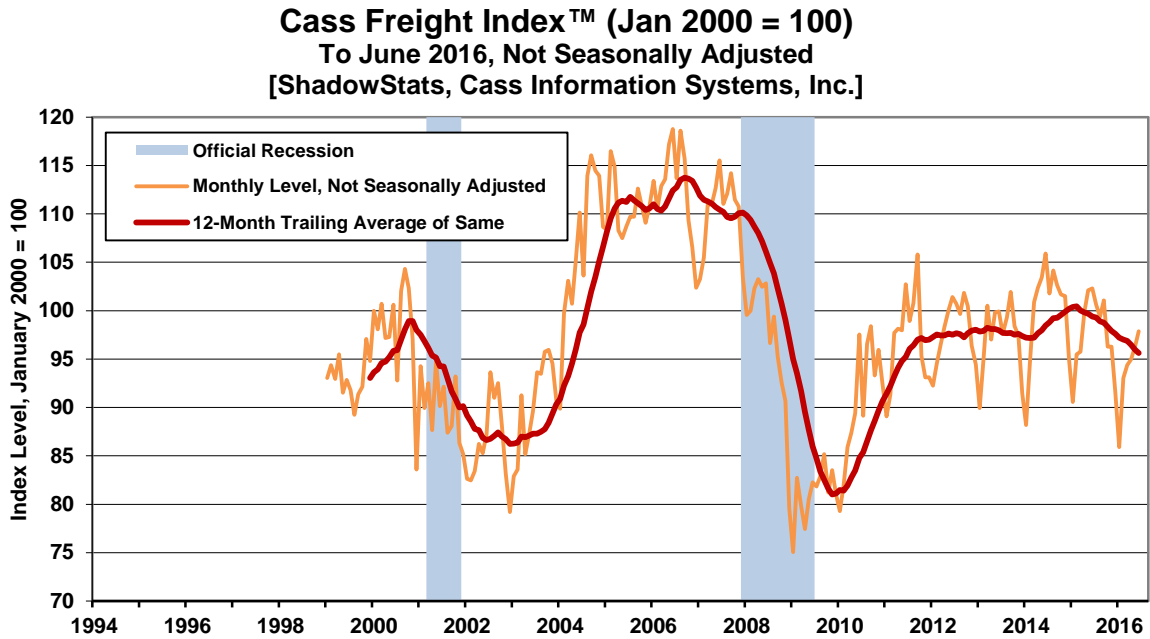


ShadowStats also regularly publishes generally unbiased series from a variety of sources. Shown in *Graph 6*, for example, is the U.S. aggregate consumption of crude oil petroleum product, measured in physical barrel count, is an extraordinarily broad indicator of general activity. The [U.S. Energy Information Agency](#) (EIA), Department of Energy, publishes this detail on a monthly basis.

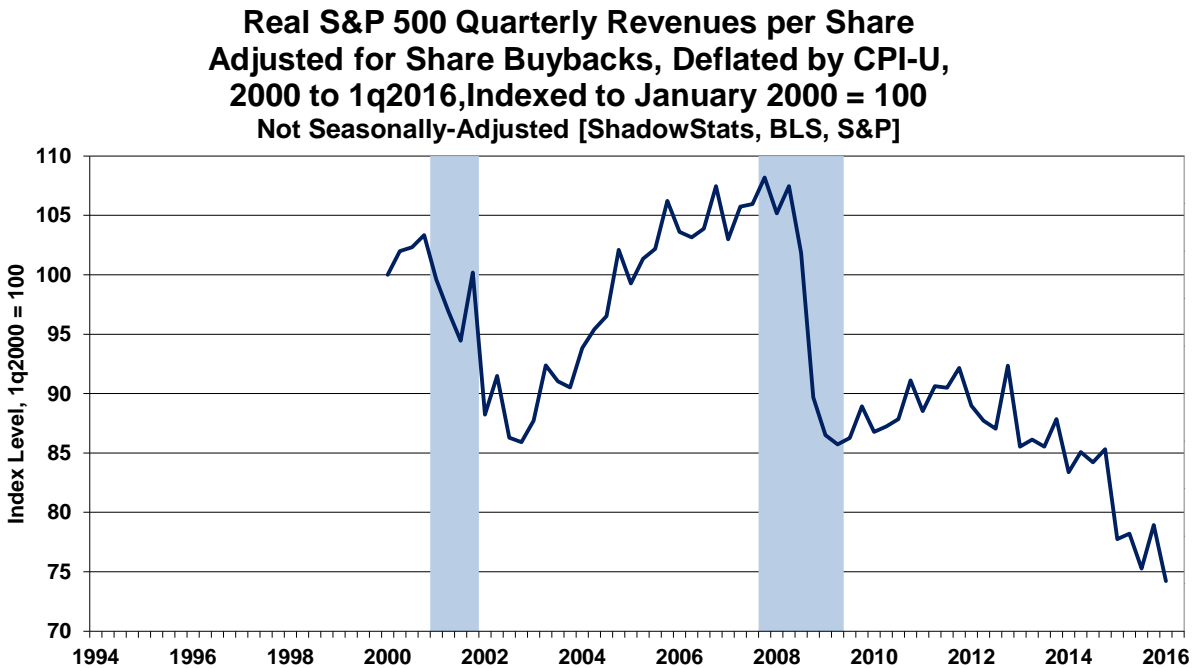
As with the CASS freight index (*Graph 7*), where the monthly data are not seasonally adjusted, ShadowStats has plotted the petroleum series using a trailing twelve-month average, through headline monthly detail of June 2016. The resulting smoothed pattern reflects the economic collapse into 2009, followed by a protracted period of variable, low-level stagnation, and an upside notch into March, and flat-to-down in second-quarter 2016. In contrast, the CASS index currently (also through June 2016) continues to turn down in its twelve-month trailing average, with deepening year-to-year contractions on a monthly basis (see [Commentary No. 822](#)). Introduced in [Commentary No. 782](#), the graphic detail on the [Cass Freight Index](#)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.

In particular, the broad patterns of activity seen in the weakened employment measures 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, as estimated for the impact of share buybacks, previously published in [Commentary No. 796](#) and [No. 777 Year-End Special Commentary](#).

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



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



Graph 8 of S&P 500 revenues usually is plotted by ShadowStats with quarterly data beginning in 2000, but the time scale of the graph was shifted here back to 1994 to show the S&P 500 revenue detail on roughly a comparative, coincident basis with the related 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 (*Graphs 2 to 4, 6 and 7*) or quarterly (*Graphs 5 and 8*).

Headline Unemployment Rates. At the first decimal point, the headline July 2016 unemployment rate (U.3) held at 4.9%, the same level as in June. At the second decimal point, the headline July 2016 U.3 was 4.88%, versus 4.90% in June. Formally, the 0.02% (0.02%) decline in July U.3 was statistically-insignificant. All that is nonsense, though, given that the monthly numbers are reported on an inconsistent basis and are not comparable with each other (see the opening paragraphs).

On an unadjusted basis, the unemployment rates are not revised and are consistent in post-1994 reporting methodology. The unadjusted U.3 unemployment rate rose to 5.14% in July 2016, from 5.08% in June.

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

The monthly count of short-term discouraged workers in June 2016 (never seasonally-adjusted) rose by 89,000 to 591,000, while the total, short-term marginally-attached discouraged workers rose by 171,000 to 1,950,000 in July. The latest, official “discouraged” number, again, reflected the flow of the headline unemployed—giving up looking for work—leaving the headline U.3 unemployment category and being rolled into the U.6 measure as short-term “marginally-attached discouraged workers,” net of the further increase in the number of those moving from short-term discouraged-worker status into the netherworld of long-term discouraged-worker status.

It is the displaced workers—the long-term discouraged-worker category—that defines the ShadowStats-Alternate Unemployment Measure. There is a continuing rollover from the short-term to the long-term category, with the ShadowStats measure encompassing U.6 and the short-term discouraged workers, plus the long-term discouraged workers. In 1994, “discouraged workers”—those who had given up looking for a job because there were no jobs to be had—were redefined so as to be counted only if they had been “discouraged” for less than a year. This time-qualification defined away a large number of long-term discouraged workers. The remaining redefined short-term discouraged and redefined marginally-attached workers were included in U.6.

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

On top of an unchanged, seasonally-adjusted U.3 unemployment rate, a jump in the count of marginally-attached workers, and a 97,000 increase the adjusted number of people working part-time for economic reasons, all pushed the headline July 2016 U.6 unemployment to 9.71%, up from 9.56% in June. The unadjusted U.6 unemployment rate rose to 10.07% in July 2016, from 9.91% in June 2016.

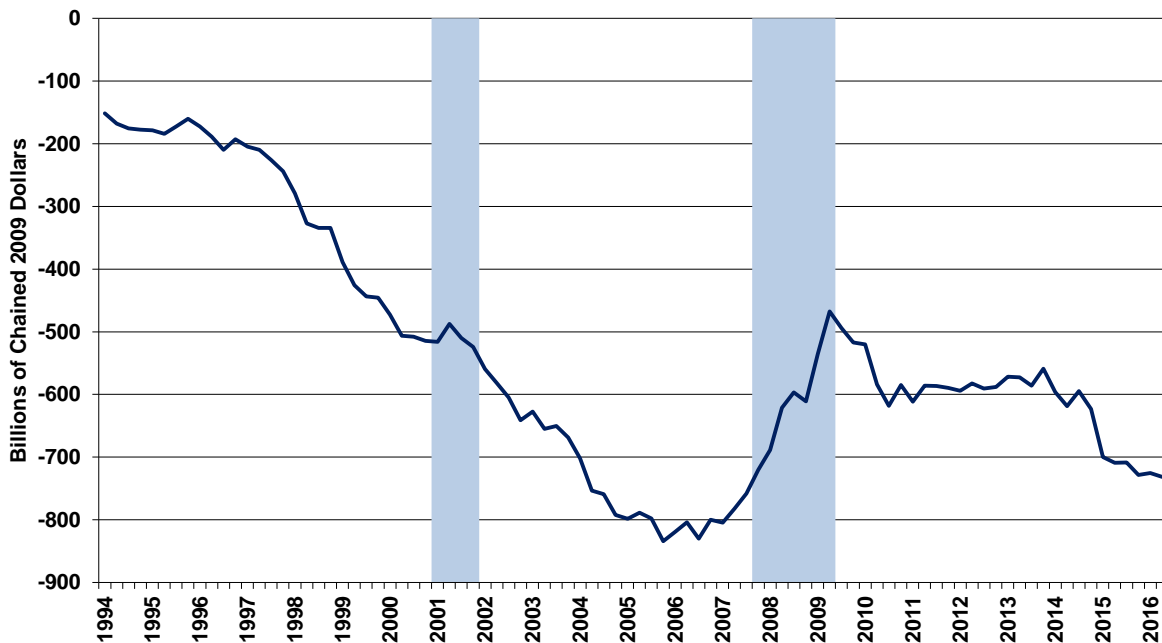
ShadowStats Alternate Unemployment Estimate. Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced workers, of long-term discouraged workers—a broad unemployment measure more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for July 2016 was 23.0%, versus 22.9% in June 2016. The July 2016 reading was down by 30 basis points or 0.3% (-0.4%) from the 23.3% series high last seen in December 2013.

In contrast, the July 2016 headline U.3 unemployment reading of 4.9% was down by 510 basis points or 5.1% (-5.1%) from its peak of 10.0% in October 2009. The broader U.6 unemployment measure of 9.7% in July 2016, was down from its April 2010 peak of 17.2% by 750 basis points or 7.5% (-7.5%).

Trade Deficit—June 2016—Nominal- and Real-Monthly and Quarterly Trade Deficits Deteriorated Sharply with the June Detail. Shown in *Graph 9*, the second-quarter 2016 real merchandise trade deficit deepened to its worst reading since third-quarter 2007, reversing recent headline improvement and putting the lie to the otherwise useless “advance” trade deficit estimate of July 28th. That “advance” gimmick has been used repeatedly by the Bureau of Economic Analysis (BEA) to provide a little boost to what otherwise have been tepid growth estimates in “advance” GDP reporting. Accordingly, the second-quarter 2016 hard trade detail indicates a downside revision for the second estimate of second-quarter 2016 GDP, as discussed in the opening paragraphs of these *Opening Comments*.

Graph 9: Inflation-Adjusted, Quarterly U.S. Merchandise Trade Deficit through Full 2q2016

**Real U.S. Merchandise Trade Deficit (Census Basis)
Quarterly Deficit at Annual Rate (Billions of Chained 2009 Dollars)
Through Full 2q2016, Seasonally-Adjusted [ShadowStats, Census]**



Nominal (Not-Adjusted-for-Inflation) July 2016 Trade Deficit. The nominal, seasonally-adjusted monthly trade deficit in goods and services for June 2016, on a balance-of-payments basis, deteriorated by

\$3.554 billion to \$44.510 billion, versus a revised \$40.956 billion in May 2016. The June 2016 deficit also widened from the June 2015 trade shortfall of \$42.973 billion.

The \$3.554 billion deterioration in the headline monthly deficit reflected a gain of \$0.611 billion in monthly exports, more than offset by an increase of \$4.164 billion in imports (rounding difference). Surging imports were oil, which was affected in nominal terms by rising prices.

Energy-Related Petroleum Products. From an import standpoint, declining oil prices had bottomed out in February 2016, inching higher by 0.7% in March, gaining 6.5% in April, 16.0% in May and another 15.2% in June. Such was exacerbated by rising physical import volume. The unadjusted average price of imported oil increased to \$39.38 in June 2016, from \$34.19 in May 2016. That still was down from \$53.76 per barrel in June 2015. Separately, not-seasonally-adjusted, physical oil-import volume in June 2016 averaged 8.156 million barrels per day, up from 7.208 million in May 2016 and up from 7.446 million in June 2015.

Real (Inflation-Adjusted) June 2016 Trade Deficit. Seasonally-adjusted, and net of oil-price swings and other inflation (2009 chain-weighted dollars, as used in GDP deflation), the June 2016 merchandise trade deficit (no services) widened to \$64.692 billion, from a revised \$60.892 billion in May 2016. That was against revised deficits of \$57.316 billion in April 2016, \$56.033 billion in March 2016, \$63.607 billion in February 2016 and \$61.668 billion in January 2016. The June 2016 real shortfall also widened versus an unrevised \$60.306 billion deficit in June 2015.

Again, reflected in *Graph 9*, the annualized quarterly real merchandise trade deficit was \$623.1 billion for fourth-quarter 2014, \$700.0 billion for first-quarter 2015, \$709.1 billion for second-quarter 2015, \$708.4 billion for third-quarter 2015, \$728.6 billion for fourth-quarter 2015 and a minimally-revised \$725.2 billion for first-quarter 2016.

Based on full reporting, the second-quarter 2016 real trade shortfall was at an annualized quarterly pace of \$731.6 billion. Much deeper than earlier trends, this was the worst quarterly showing since third-quarter 2007, and should turn the trade-deficit contribution for second-quarter 2016 GDP growth from its initial positive-contribution reading, to a negative-contribution reading. Headline deficits likely will get even deeper in the months and quarters ahead, intensifying the ongoing negative impact on headline GDP.

Construction Spending—June 2016—Collapsing into a New Industry Depression. In the context of downside revisions back through April 2016, inflation-adjusted real activity in the construction spending series turned sharply negative, on a monthly, quarterly and annual basis. Real monthly spending fell by 0.7% (-0.7%) in June 2016, and second quarter 2016 real spending showed an annualized quarter-to-quarter contraction of 9.5% (-9.5%). Year-to-year growth in real spending turned negative for the first time since the 2011 trough in activity, down year-to-year by 1.7% (-1.7%) in June 2016, with year-to-year real growth dropping to 0.5% in second-quarter 2016, again the weakest growth since the 2011 series trough.

Real construction spending generally continued in down-trending, low-level, stagnating non-recovery, with June 2016 real spending still shy of its June 2006 pre-recession peak by 26.0% (-26.0%).

While this series remains highly volatile and subject to large monthly revisions, the headline year-to-year growth in real inflation-adjusted terms was tumbling sharply as of June 2016, continuing to follow a pattern as though the series were falling rapidly into a recessionary contraction.

Quarterly Trends. Reflecting headline June 2016 detail in the context of downside revisions to April and May 2016 data second-quarter 2016 real construction plunged quarter-to-quarter. As set by last month's annual revision, fourth-quarter 2015 real construction spending contracted at an annualized quarterly pace of 6.8% (-6.8%), following annualized quarterly real gains of 9.5% in third-quarter 2015, 25.8% in second-quarter 2015 and 4.2% in first-quarter 2015.

Post-benchmarking, first-quarter 2016 real construction spending rose at a slightly weaker, revised annualized pace of 11.1%, reflecting minor inflation revisions. Based just on full reporting for second-quarter 2016, the quarter showed an annualized real contraction of 9.5% (-9.5%).

Accompanying *Graphs 10 to 13* 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 generally has remained in low-level stagnation, now down-trending into second-quarter 2016. Areas of recent relative real strength in all of the major subcomponents have flattened out, or turned down, after inflation adjustment.

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 12 to 15*.

Seasonally-adjusted June 2016 FDCI month-to-month inflation rose by 0.09% for the second month. That followed headline monthly gains of 0.79% in April 2016 and 0.09% in March 2016. In terms of year-to-year inflation, the June 2016 FDCI was up by 1.96%, versus 1.87% in May and April 2016, and up from 1.07% annual inflation in March 2016, on both a seasonally-adjusted and unadjusted basis.

Headline Reporting for June 2016. In the context of downside revisions to April and May activity, the headline, total value of construction put in place in the United States for June 2016 was \$1,133.5 billion, on a seasonally-adjusted, but not-inflation-adjusted, annual-rate basis. That estimate was down month-to-month by a statistically-insignificant 0.6% (-0.6%), versus a downwardly-revised \$1,140.9 billion in May 2016. In turn May was down by a revised 0.1% (-0.1%) from a downwardly revised level of \$1,142.5 billion in April 2016. In turn, April was down by 2.9% (-2.9%) from the unrevised March 2016 level of \$1,176.4 billion.

Adjusted for FDCI inflation, total real month-to-month spending in June 2016 fell by 0.7% (-0.7%), versus real declines in May 2016 of 0.2% (-0.2%) and in April of 3.6% (-3.6%).

On a year-to-year annual-growth basis, June 2016 nominal construction spending rose by a statistically-insignificant 0.3%, versus annual gains of 2.6% in May 2016 and 4.4% in April 2016. Net of construction costs indicated by the FDCI, the year-to-year change in total real construction spending dropped to 56-month low of minus 1.7% (-1.7%) in June 2016, versus 0.7% in May 2016 and an annual gain of 2.5% in April. The headline annual real decline an annual activity was the weakest since the historical series troughed in its collapse into 2011.

The statistically-insignificant, headline month-to-month nominal decline of 0.6% (-0.6%) in aggregate June 2016 construction spending, versus a decline of 0.1% (-0.1%) in May 2016, included a headline monthly drop of 0.6% (-0.6%) in June public spending, versus a 1.2% (-1.2%) decline in May. Private spending fell by 0.6% (-0.6%) month-to-month in June, following a 0.2% gain in May. Within total private construction spending, residential-sector activity was unchanged at 0.0% in June, having gained just 0.1% in May, while the nonresidential sector fell by 1.3% (-1.3%) in June, following a gain of 0.4% in May. All major categories contracted month-to-month in June, after inflation adjustment.

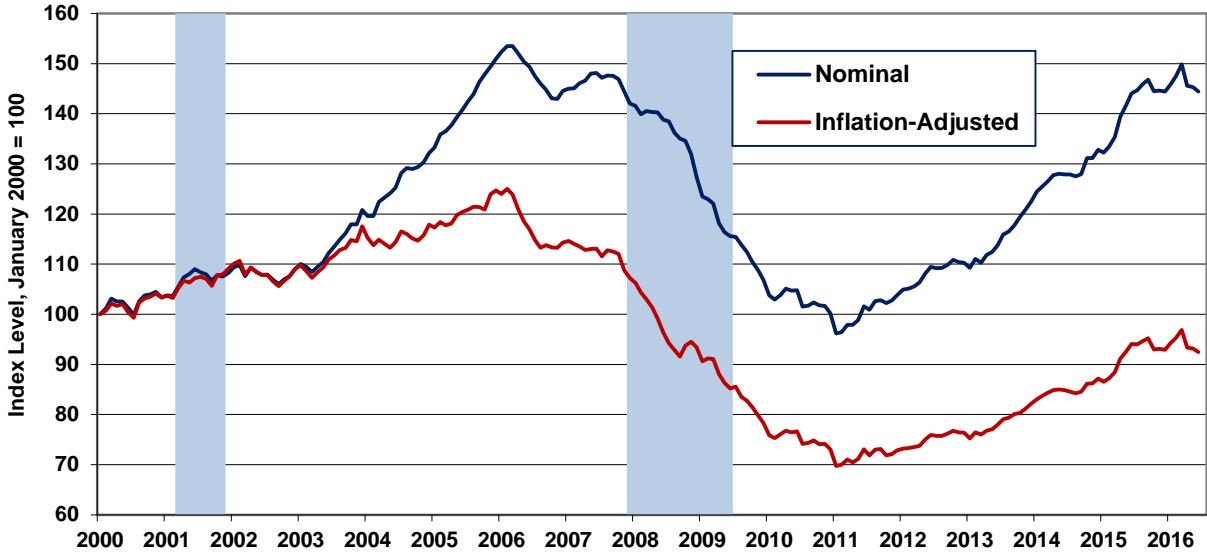
Construction Graphs. Despite protracted and variable stagnation in broad activity, the pattern of inflation-adjusted activity here—net of government inflation estimates—does not confirm the economic recovery indicated by the headline GDP or employment series, as discussed in the *Reporting Detail*. To the contrary, the latest broad construction reporting in real terms generally has shown a pattern of low-level stagnation, where activity never recovered pre-recession highs, and where the pattern of stagnation has begun to turn down anew.

A variety of construction spending and related, comparative graphs (*Graphs 25 to 33*) are found in the *Reporting Detail* section. *Graphs 10 to 13*, which follow here, show plots of the comparative construction series both before and after adjustment for headline inflation.

[Graphs 10 to 13 begin on the next page.]

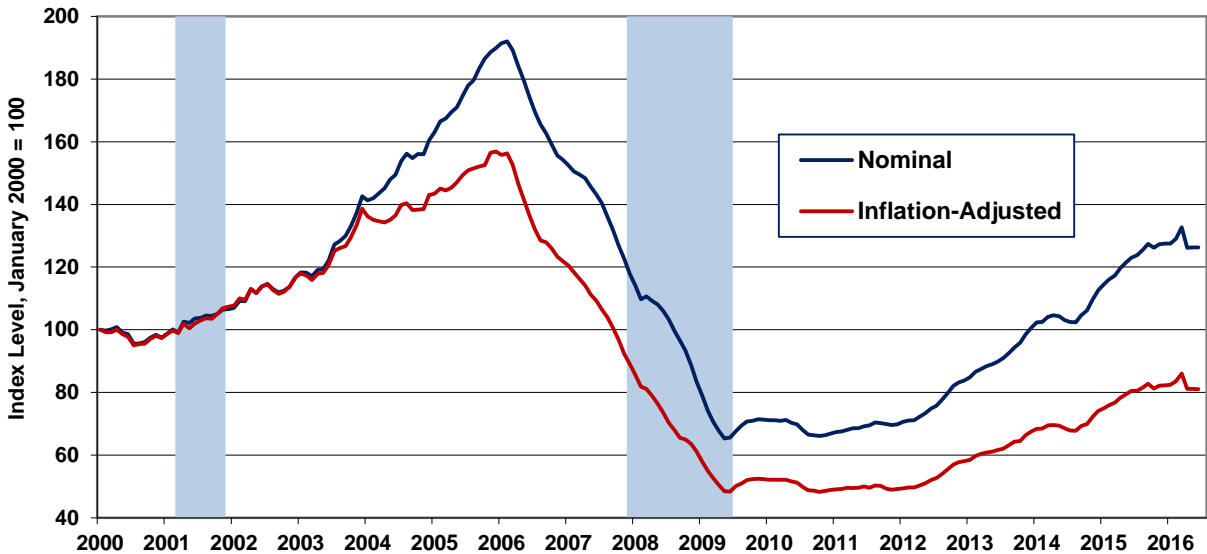
Graph 10: Index, Nominal versus Real Value of Total Construction

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

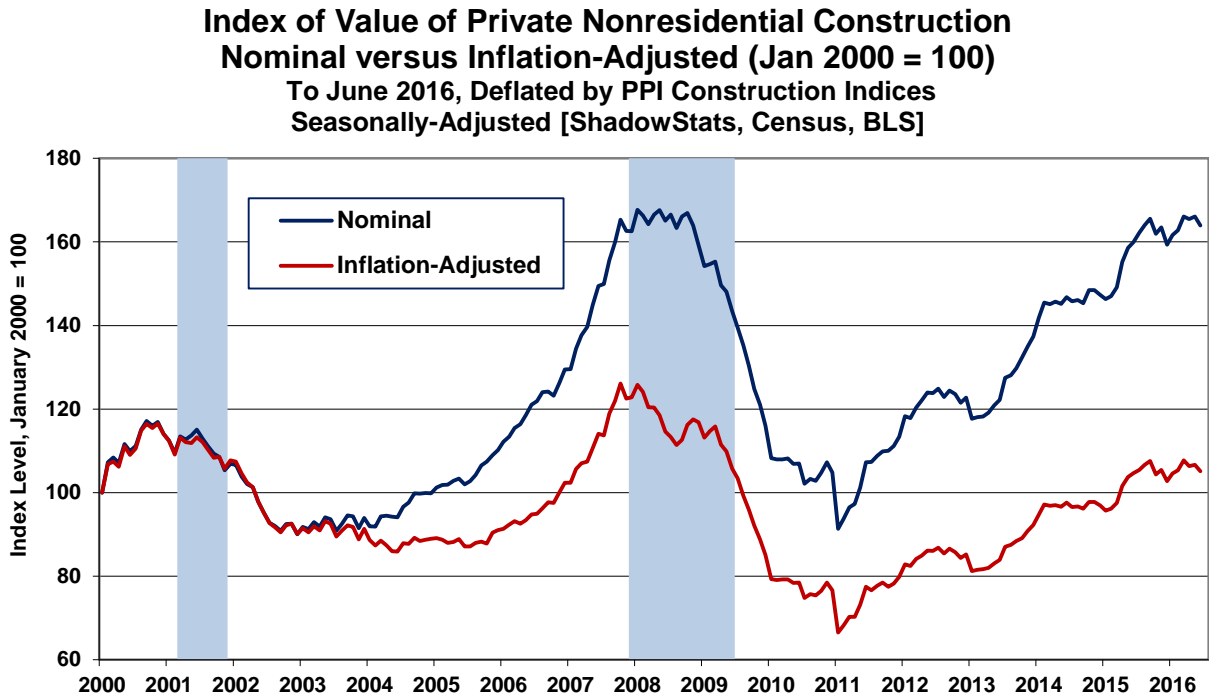


Graph 11: Index, Nominal versus Real Value of Private Residential Construction

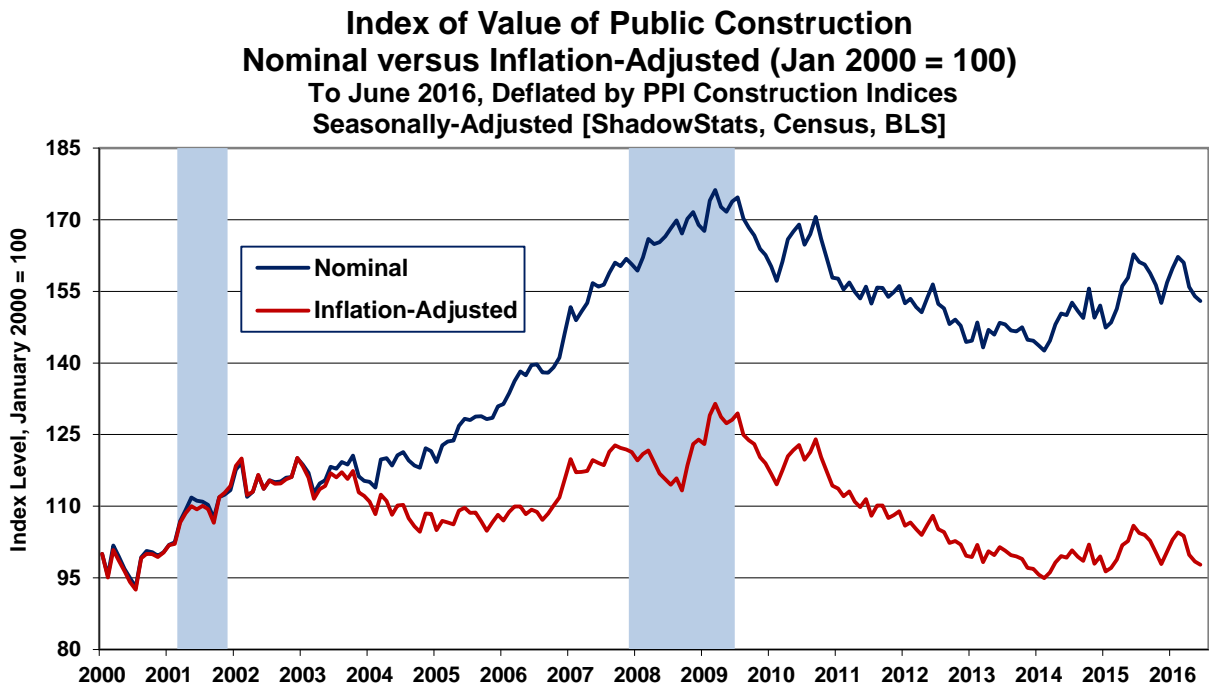
**Index of Value of Private Residential Construction
Nominal versus Inflation-Adjusted (Jan 2000 = 100)
To June 2016, Deflated by PPI Construction Indices
Seasonally-Adjusted [ShadowStats, Census, BLS]**



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



Graph 13: Index, Nominal versus Real Value of Public Construction



[The Reporting Detail section contains significant additional analysis and graphs.]

HYPERINFLATION WATCH

UPDATED MONETARY CONDITIONS

The Velocity of Money Declined in Second-Quarter 2016. Reflecting higher nominal growth in M1, M2 and M3 in second-quarter 2016, against slowing nominal growth in the GDP, the velocity of money slowed in second-quarter 2016. That detail was reviewed in the *Hyperinflation Watch* section of prior [Commentary No. 823](#), through second-quarter 2016, in the context of the annual GDP benchmark revisions and the latest money supply detail.

July 2016 Annual M3 Growth Eased to 4.1% from 4.5% in June. ShadowStats Ongoing M3 Money Supply annual growth fell back to 4.1% in July 2016, from an unrevised 4.5% in June 2016, and still against a two-year low of 3.7% in February 2016. M1 and M2 annual growth rates were mixed in July 2016, with M2 rising at a 7.1% year-to-year pace, versus an unrevised 7.0% annual gain in June, and with M1 annual growth slowing to 7.1% in July, versus downwardly-revised annual growth rates of 7.2% in June and 7.9% in May.

Headline Details. In the context of regular revisions to underlying headline data published by the Federal Reserve Board (FRB), the preliminary estimate of the year-to-year change in the ShadowStats Ongoing M3 Money Supply Measure was 4.1% in July 2016, versus an unrevised 4.5% annual gain in June. Such was against a revised 4.2% [previously 4.3%] in May 2016, annual gains of 4.0% in April 2016, 3.9% in March 2016 and a two-year low of annual gain of 3.7% in February 2016. The annual change had been in continual month-to-month slowing into February 2016, since the near-term peak annual growth of a revised 5.8% [previously 5.9%] in August 2015, as seen in *Graph 14*. Note in particular the relative surge of M1 annual growth in *Graph 14*, albeit a downtick in July, where M1 basically is cash-in-hand and checking accounts.

On a seasonally-adjusted, month-to-month basis, July 2016 M3 rose by 0.3%, versus monthly gains of 0.6% in June, 0.4% in May, 0.3% in April and 0.7% in March.

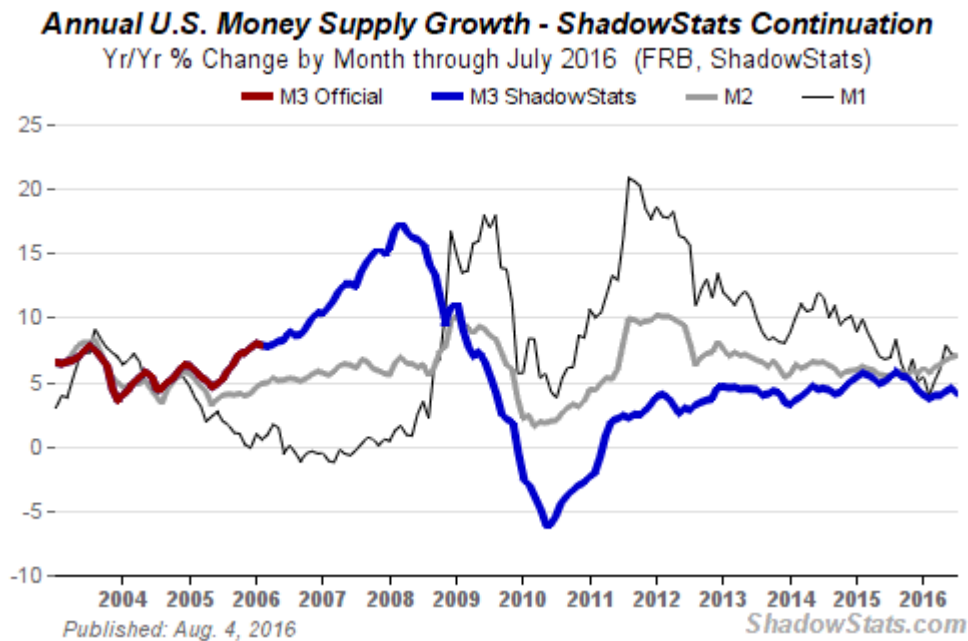
The relative weakness in annual M3 growth versus M2 and M1 (also in M2) reflects the shift over time in funds from accounts included just in M3, such as large time deposits and institutional money funds, into accounts in M2, as was seen again in the headline July 2016 detail.

Following are initial estimates of July 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. The latest estimates of level and annual growth for July 2016 M3, M2 and M1, and for earlier periods are available on the [Alternate Data](#) tab of www.ShadowStats.com.

Annual M2 growth in July 2016 rose to 7.1%, from 7.0% in June 2016, 6.8% in May 2016, and 6.4% in April 2016, with a month-to-month increases of 0.6% in each of the months of July 2016, June, May and April.

For M1, year-to-year growth eased back slightly to 7.1% in July 2016, from a revised 7.2% [previously 7.5%] in June 2016. Such was against a revised 7.9% [previously 8.2%, initially 8.7%] in May 2016 and a revised 6.1% [previously 6.3%] in April 2016, with a month-to-month 0.5% increase in July 2016, an unrevised 0.2% increase in June, a revised 1.5% [previously 1.6%, initially 2.1%] increase in May and a revised 1.0% [previously 1.1%] in April.

Graph 14: Comparative Money Supply M1, M2 and M3 Year-to-Year Changes through July 2016

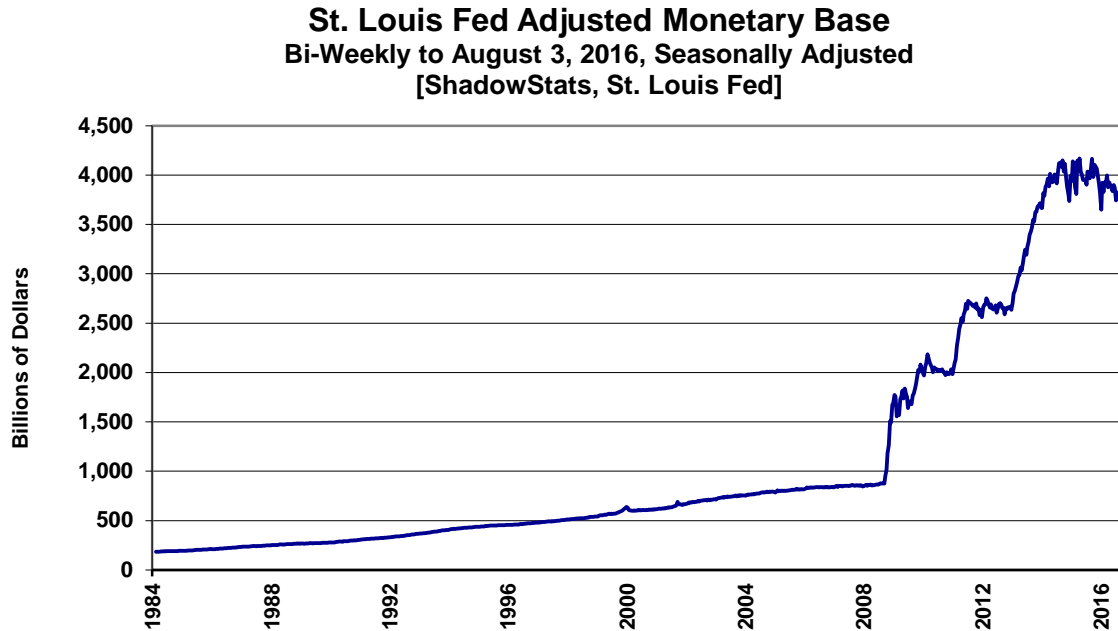


Monetary Base Has Bounced of Recent Lows, in the Context of Continued Fed Rate-Hike Waffling. In continuing follow-up to earlier [Commentary No. 819](#), [No. 810](#), [No. 805](#), [No. 800](#), [No. 796](#), [No. 790](#), [No. 783](#), [No. 779](#), [No. 779-A](#), and [No. 784](#), the St. Louis Fed's monetary base has been relatively stable, although annual change and level have shifted clearly to the negative side. That has been the case since what appears now to have been a one-time rate-hike in December 2015. Subsequently, the Fed did not increase interest rates as planned, with no further action likely now until after the November election. With the U.S. economy turning down anew, some form of expanded quantitative easing could be seen, as discussed in [Commentary No. 818](#), and as shall be expanded upon in the upcoming *Special Commentary*.

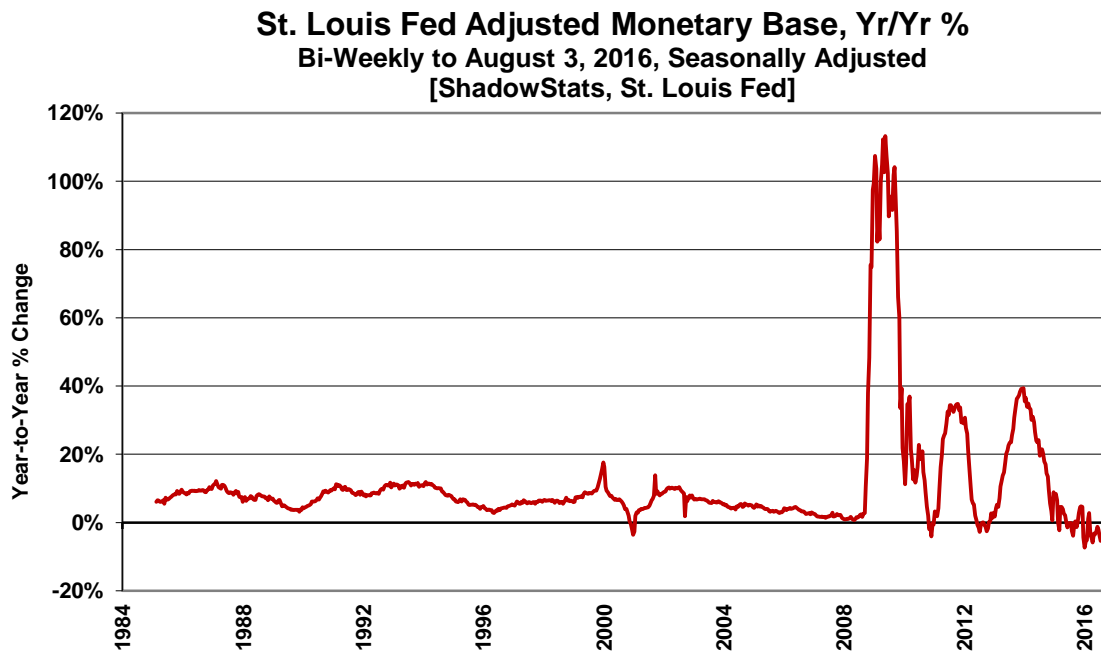
Graphs 15 and 16 show reporting of the St. Louis Fed's Monetary Base through the two-week period ended August 3rd, with a level of \$3.823 trillion, versus \$3.821 trillion as of July 20th. Year-to-year change showed a decline of 4.9% (-4.9%) in the latest period, versus an annual decline of 5.3% (-5.3%) in the prior period. That annual decline has narrowed from the record 7.4% (-7.4%) drop seen in the January

6th period, which encompassed the Fed’s rate hike in December. Nonetheless, the most recent measure continued on the negatively-deep side of normal volatility in annual change.

Graph 15: Monetary Base Level, Bi-Weekly through August 3, 2016



Graph 16: Monetary Base, Year-to-Year Percent Change, through August 3, 2016



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 has been broken twice, and on the downside. The first was in the immediate post-FOMC period ended January 6th. Such was due largely to related New York Fed activities establishing the newly boosted federal funds rate. Those lower limits were broken recently, again, in the July 6th headline reporting, suggestive, again, of market interventions required by the New York Fed.

REPORTING DETAIL

EMPLOYMENT AND UNEMPLOYMENT (July 2016)

In Continued Misreporting, Payroll Activity Remained Massively Overstated; Monthly Unemployment Details Remained Not Comparable. *[Note: This section, through the PAYROLL SURVEY DETAIL, largely is repeated from the Opening Comments.]* Underlying reality for July 2016 U.S. labor conditions was in the realm of a 23.0% broad unemployment rate, with the actual monthly payroll-employment change likely on the downside of flat.

The “unchanged” headline U.3 unemployment at 4.9% in July was continued nonsense, simply reflecting not-comparable and meaningless month-to-month changes in the Household Survey data, as discussed in the opening paragraphs of [Commentary No. 819](#) and in *Headline Distortions from Shifting Concurrent-Seasonal Factors* in the *Reporting Detail*. Consider that headline Household Survey detail showed the number of employed increasing by 420,000 in July 2016, while the number of unemployed declined by only 13,000 (-13,000)? This pattern is repeated from earlier in the year. Normally, large swings in the count of the employed have some meaningful offset in the count of the unemployed. That did not happen here, simply because the seasonally-adjusted June and July data were not reported on a consistent basis and were not comparable month-to-month.

The gimmicked, headline payroll gain of 255,000 in July more realistically should have come in below zero, net of built-in upside biases. Discussed in the *Birth-Death/Bias-Factor Adjustment* section in this *Reporting Detail*, subsequent to the downside payroll-benchmark revisions of February 2016, the usual, excessive monthly biases added into the headline monthly payroll detail by the Bureau of Labor Statistics (BLS) were revised to the upside. This less-obvious use by the BLS of the Birth-Death Model (BDM) artificially inflated headline month-to-month payroll gains with meaningless add-factors that currently are well in excess of 200,000 jobs per month. Such is separate from the constantly shifting seasonal-adjustment patterns that can boost headline data in a given month, with no prior-period offset accounting. Again, see the *Headline Distortions from Shifting Concurrent-Seasonal Factors*.

PAYROLL SURVEY DETAIL. This morning, August 5th, the Bureau of Labor Statistics (BLS) published the headline payroll-employment detail for July 2016. In the context of heavily-distorted, bloating, seasonal adjustments, and minimal upside revisions to May and June activity, the seasonally-adjusted, headline payroll gain for July 2016 was 255,000 +/- 129,000 [more appropriately +/- 300,000] at the 95% confidence interval (all confidence intervals used are at the 95% level). That followed an upwardly-revised 292,000 [previously 287,000] gain June, and an upwardly-revised, but demonstrably false, not-comparable 24,000 [previously an 11,000, initially a 38,000] gain in May 2016. Consistent headline detail shows the May 2016 gain to have been 20,000; the now formal headline gain of 144,000 in April 2016 really was 127,000 (see *Headline Distortions from Shifting Concurrent-Seasonal Factors*). Net of prior-period revisions, July 2016 payrolls rose by 273,000, instead of the headline 255,000.

Except for the revised 28-month low for May 2016, the not-seasonally-adjusted, year-to-year growth in July 2016 nonfarm payrolls hit a twenty-nine month low of 1.70%. Such followed revised annual growth of 1.75% [previously 1.77%] in June 2016 and 1.63% [previously 1.68%] in May 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 Continued Down and Flattened Out. Construction Payroll Employment growth gained minimally in July 2016 versus June 2016, in the context of prior-period downside revisions to June and May, July remained below the April 2016 level. 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). Detail is plotted in *Graph 27* in the *Construction Spending* section. The general pattern of downturn or flattening out is reasonably consistent with the intensifying weakness seen in real contraction spending through June 2016

Headline month-to-month growth in construction employment rose by 0.21% in July 2016, having contracted month-to-month by 0.05% [previously unchanged “unchanged” at 0.00%] in June 2016, down by a revised 0.27% (-0.27%) [previously down by 0.24% (-0.24%), initially down by 0.23% (-0.23%)] in May 2016, following an unrevised decline of 0.09% (-0.09%) in April 2016. Again, the pace of monthly construction jobs growth has turned down, increasingly consistent with most headline-construction activity and real-construction spending that also have been turning lower or stagnating, despite recent upside annual revisions.

The July 2016 construction-payroll level of 6.652 million still was down from 6.659 million in April and 6.665 million in March.

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).

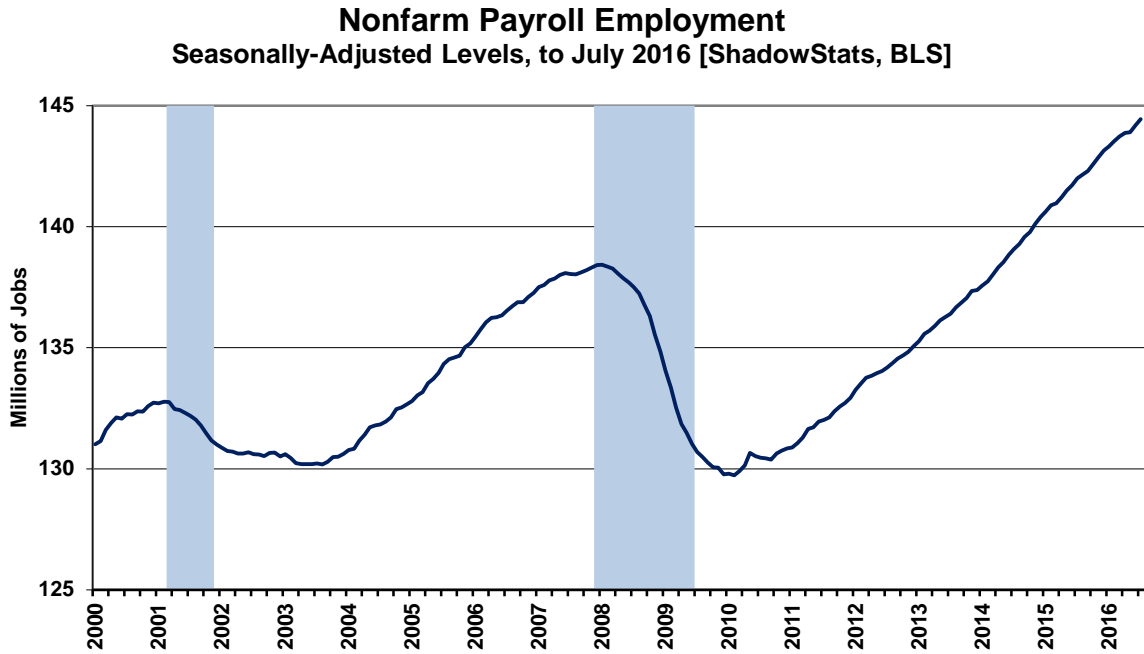
Nonetheless, total July 2016 construction jobs remained down by 13.90% (-13.90%) from the April 2006 pre-recession series peak, but it was up by an unadjusted 3.12% from July 2015. Annual growth has

slowed versus 3.40% [previously 3.46%] in June 2015, and versus a near-term peak in annual growth of 5.02% in March 2016.

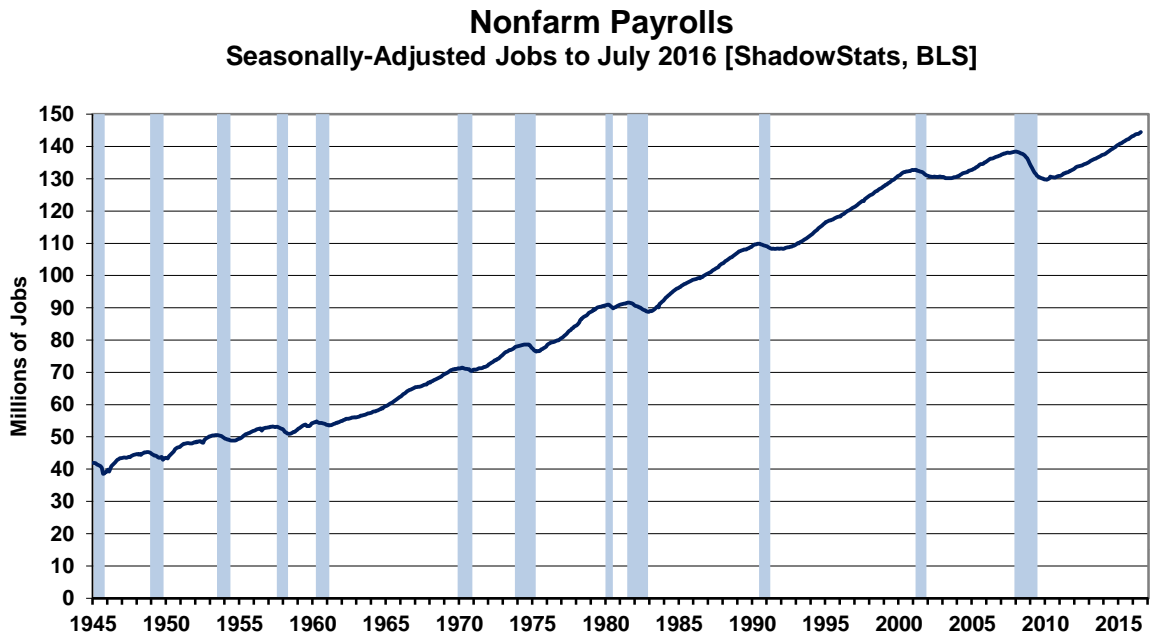
Historical Payroll Levels. Payroll employment (Payroll Survey) is a coincident indicator of economic activity, and irrespective of all the reporting issues with the series, payroll employment formally regained its pre-recession high in 2014, despite the GDP purportedly having done the same somewhat shy 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, although it faltered in May. Including the latest headline monthly gains through July 2016, headline payroll employment was 6.02-million jobs above its pre-recession peak.

[Graphs 17 and 18 follow on the next page.]

Graph 17: Nonfarm Payroll Employment to July 2016



Graph 18: Nonfarm Payroll Employment 1945 to July 2016



Graphs 17 and 18 show the headline payroll series, both on a shorter-term basis, since 2000, and on a longer-term historical basis, from 1945. In perspective, the longer-term graph of the headline payroll-

employment levels shows the extreme duration of what had been the official non-recovery in payrolls, the worst such circumstance of the post-Great Depression era.

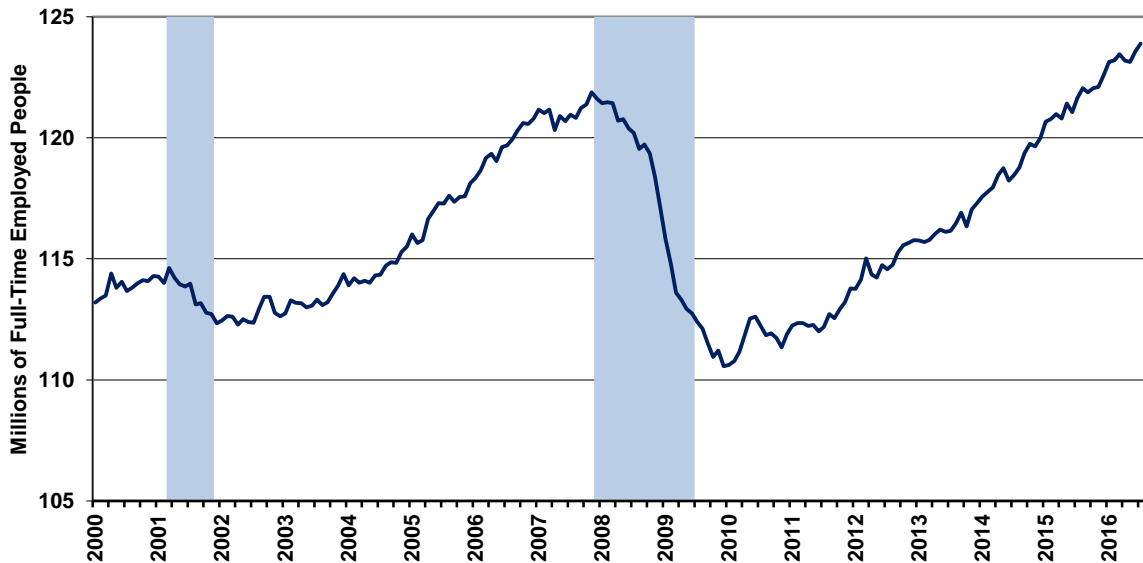
Beyond excessive upside add-factor biases built into the monthly calculations (again, see the *Birth-Death Model* section), the problem remains that payroll employment counts the number of jobs, not the number of people who are employed. Much of that payroll “jobs” growth has been in multiple part-time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

Full-Time Employment versus Part-Time Payroll Jobs. Shown in *Graph 19*, the level of full-time employment (Household Survey) recovered its pre-recession high in August 2015, at least temporarily. Headline July 2016 full-time employment gained 253,000, following a gain of 451,000 in June, and having declined by 59,000 (-59,000) in May and by 253,000 (-253,000) in April, with the detail now standing at 2.01-million above that pre-recession high for the series. That is due in particular to irregularly-volatile monthly gains in the seasonally-adjusted data of July and in earlier months of 2016. The series will gyrate further in the next several months, likely to drop again from the current headline level.

Such compares with the headline payroll-employment level that is 6.02-million above its pre-recession high, regained some 26-months ago. Again, the payroll count is of jobs, not people, where much of that payroll “jobs” growth has been in part-time, and in multiple part-time jobs, many taken on for economic reasons, where full-time employment was desired but could not be found.

Graph 19: Full-Time Employment (Household Survey) to July 2016

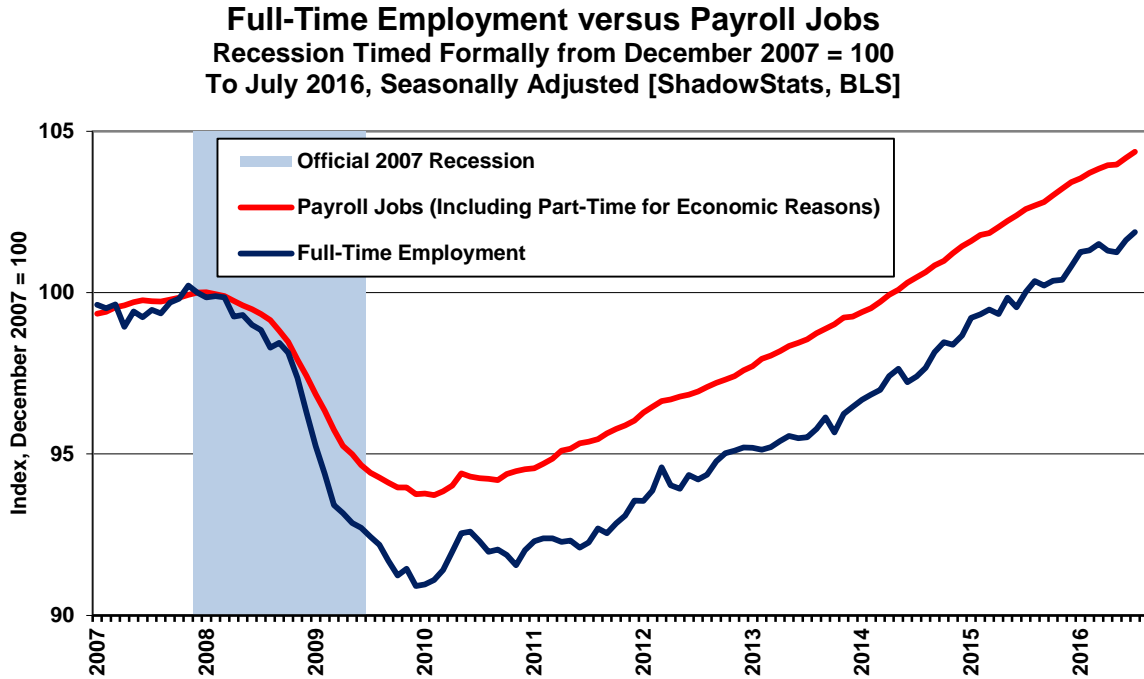
Civilian Full-Time Employment Level - (Household Survey)
Counts Number of People Who Are Employed (Not Number of Jobs Held)
Seasonally-Adjusted Levels, to July 2016 [ShadowStats, BLS]



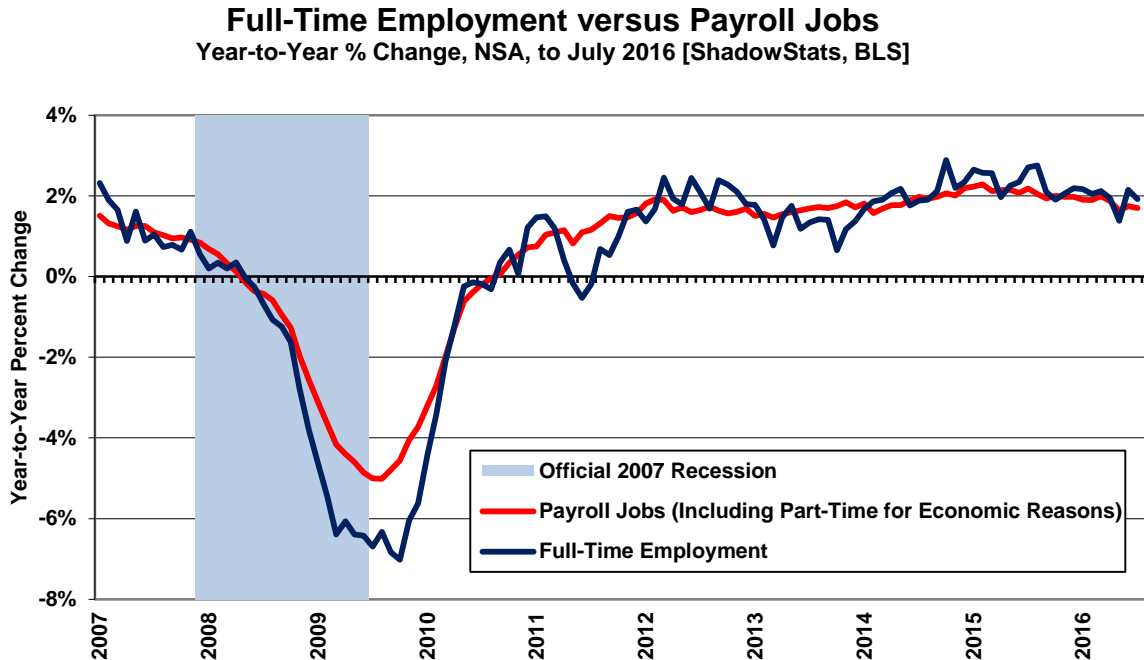
As a separate consideration and an indication of the level of nonsensical GDP reporting, employment traditionally is a coincident indicator of broad economic activity, again the GDP purportedly recovered its

pre-recession high some four years ago, more than two years before similar payroll activity, and more than four years before the likely temporary, lesser recovery in full-time employment.

Graph 20: Full-Time Employment (Household Survey) versus Jobs Count (Payroll Survey)



Graph 21: Full-Time Employment (Household Survey) versus Jobs Count (Payroll Survey), Year-to-Year



Graphs 20 and 21 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 opening paragraphs of the *Opening Comments*).

The graph of full-time employment excludes the count of those employed with only part-time jobs, one or more. Total employment, including those employed with part-time work, has recovered its pre-recession high, but it is not close to the payroll reporting and has been irregular in pattern. Once more, the Household-Survey numbers count the number of people who have at least one job. The Payroll Survey simply counts the number of jobs (see [Commentary No. 686](#) for further detail).

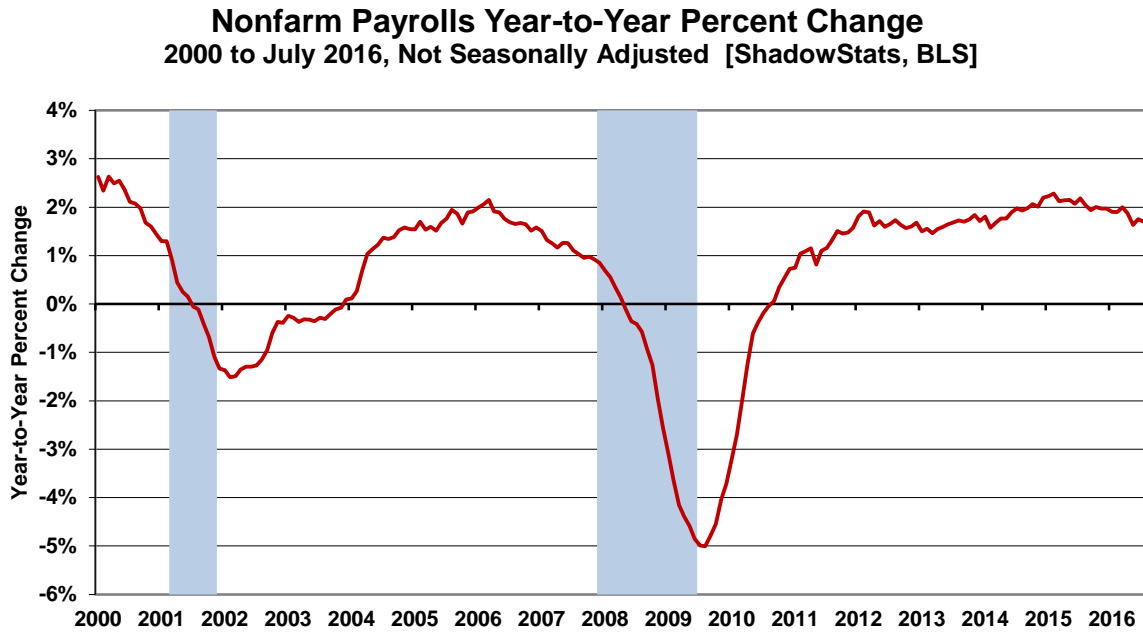
Annual Percent Changes in Headline Payrolls. Not-seasonally-adjusted, year-to-year change in payroll employment is untouched by the concurrent-seasonal-adjustment issues, so the monthly comparisons of year-to-year change at least are reported on a consistent basis.

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 22 and 23*. Such remains the strongest annual growth since June 2000 (another recession), but subsequent annual growth has slowed sharply. Year-to-year nonfarm payroll growth in July 2016 was 1.70%, down a revised 1.75% [previously 1.77%] in June 2016, versus an unrevised twenty-eight month low of 1.63% in May 2015.

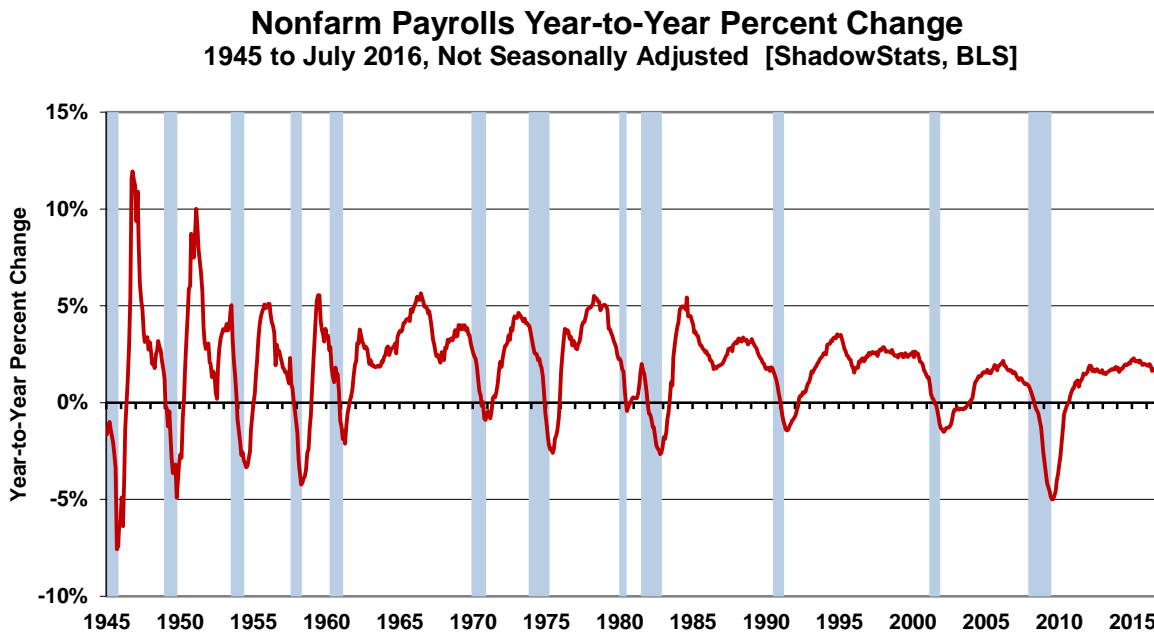
With bottom-bouncing patterns of recent years, current headline annual growth has recovered from the post-World War II record benchmarked decline of 5.01% (-5.01%) seen in August 2009, as shown in the accompanying graphs. That decline remains the most severe annual contraction since the production shutdown 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 22 and 23 follow on the next page.]

Graph 22: Payroll Employment, Year-to-Year Percent Change, 2000 to July 2016



Graph 23: Payroll Employment, Year-to-Year Percent Change, 1945 to July 2016



Headline Distortions from Shifting Concurrent-Seasonal Factors Help to Mask a Sharp Contraction in May 2016 Payrolls. Discussed and graphed here, with extended commentary and the latest detail available from ShadowStats affiliate [ExpliStats](http://ExpliStats.com), there are serious and deliberate flaws with the

government's seasonally-adjusted, monthly reporting of both employment and unemployment. Each month, the BLS uses a concurrent-seasonal-adjustment process to adjust both the payroll and unemployment data for the latest seasonal patterns. As new headline data are seasonally-adjusted for each series, the re-adjustment process also revises the monthly history of each series. A new seasonally-adjusted history is recalculated for every month, going back five years, so as to be consistent with the new seasonal patterns generated for the current headline number.

Effective Reporting Fraud. As discussed in opening paragraphs of the *Opening Comments*, 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, as seen in the headline July 2016 detail. 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, again, 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.

Consider *Graph 24*, where data are available from the BLS to calculate the month-to-month seasonal-adjustment variability in the Payroll Survey. Similar detail is not available for the Household Survey, yet the month-to-month instability likely is of similar magnitude. At least with the Payroll Survey, headline July 2016 payroll level was prepared on a consistent basis with the levels of June 2016 and May 2016, but not with April 2016, with the headline monthly gains consistent only for July and June. With the Household Survey, however, the July 2016 detail is not comparable with June 2016 or any other published month, so seasonally-adjusted, month-to-month comparisons have no meaning.

Payroll or Establishment Survey. In the case of the published Payroll Survey data (payroll-employment change and related detail), the current monthly changes in the seasonally-adjusted headline data are comparable only with the prior month's month-to-month reporting, not before. Due to the BLS modeling process, the historical data never are published on a consistent basis, even with publication of the annual benchmark revision (see the comments on *Graph 24*).

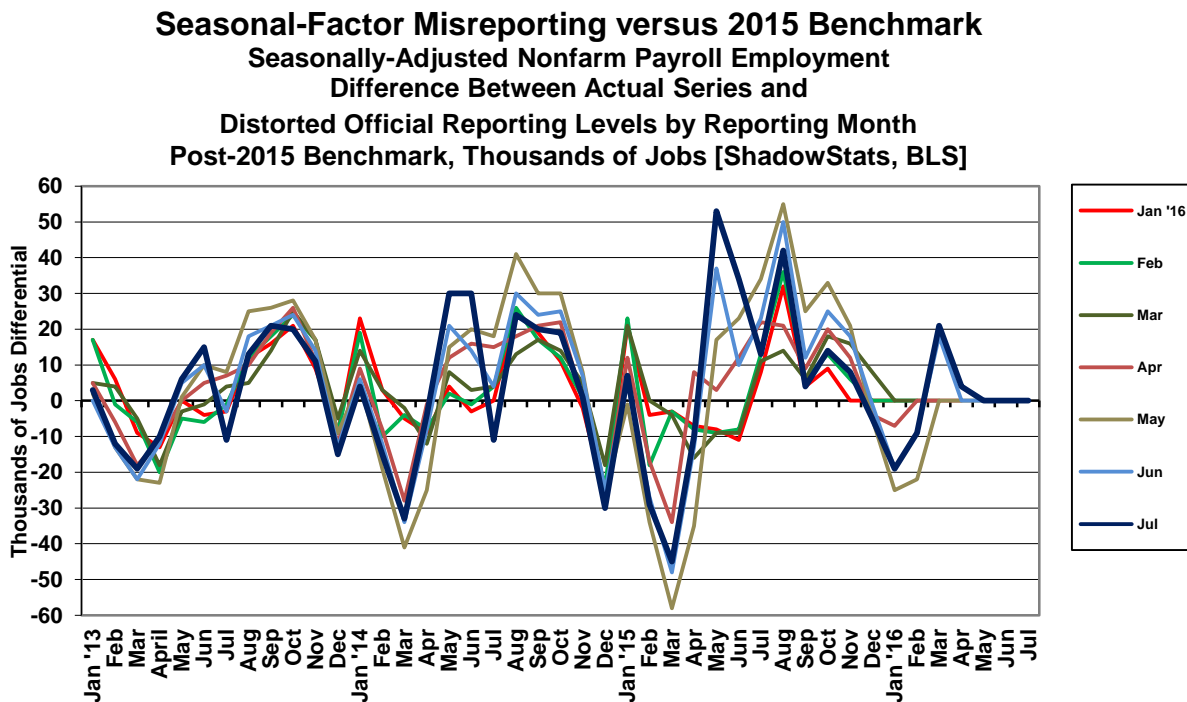
Where the BLS does provide modeling detail for the Payroll Survey, allowing for third-party calculations, no such accommodation has been made for the Household Survey. Again, ShadowStats affiliate ExpliStats does such third-party calculations for the payroll series, and the resulting detail of the differences between the current headline reporting and the constantly-shifting, consistent and comparable history are reflected here in *Graph 24*.

Consider in the latest headline payroll detail that the July 2016 monthly changes were comparable only with the headline changes in the June 2016 numbers, not with May 2016 or any earlier months. Per BLS headline reporting, seasonally-adjusted July 2016 payrolls rose month-to-month by 255,000 from June, while June payrolls rose by 24,000 from May, and May payrolls rose by 144,000 from April. That Neither the headline May or April monthly gains nor any prior-period monthly changes were accurate or comparable with the headline details for July and June, because the published, headline April 2016 and earlier month's payroll levels were not adjusted for the new July 2016-based seasonal adjustments.

Had the BLS published the headline April reporting on a consistent basis with July 2016, the April-to-May and March-to-April changes would have shown respective a comparable monthly gains of 20,000 127,000, instead of the purported headline monthly increase of 24,000 and 144,000.

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

Graph 24: Concurrent-Seasonal-Factor Irregularities - Headline Detail in July 2016 versus 2015 Benchmark



Graph 24 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; July makes that nine. 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 (June 2016) and dark-blue (July 2016) lines, indicates extreme shifting seasonal patterns between just this month's headline detail and last month's headline detail. Where shifts were massive, boosting May and June 2015 activity, there are implied parallel shifts in the May 2016 and June 2016 detail. The implied extraordinarily-extreme shifts for the May 2016 and June 2016 seasonals were enough to prevent a sharp, outright payroll contraction in May 2016 and artificially boosted the headline June 2016 gain. Similar factors likely affected the July 2016 detail, but such should show up in next month's shifts. This seasonality warping would not happen if the headline data were left intact for the year—on a consistent basis—rather than being recalculated just for July 2016 seasonals.

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, 2012 and 2014 excepted). Even with the published downside revision of 206,000 (-206,000) to March 2015 payrolls in the latest 2015 benchmarking (see [Commentary No. 784](#) and [Commentary No. 784-A](#)), the BLS has upped its annual upside-bias factors since then by 102,000 jobs. Such discrepancies, however, are not unusual for the BLS.

The BLS announced this morning, August 5th, that the preliminary estimate level of the level of the 2016 benchmark revision would be released on September 7, 2016.

Considering related actions of recent years, discussed in the benchmark detail of [Commentary No. 598](#), the benchmark revision to March 2013 payroll employment was to the downside by 119,000 (-119,000), where the BLS had overestimated standard payroll employment growth.

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

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

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

July 2016 Add-Factor Bias. The not-seasonally-adjusted July 2016 bias was a positive add-factor of 112,000, following a positive add-factor of 92,000 in June 2016, versus a positive add-factor of 115,000 in July 2015.

The revamped, aggregate upside bias for the trailing twelve months through July 2016 was 881,000, up by 100,000 or 12.8% from 781,000 in December 2015. That is a monthly average of 73,417, in July 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.

Problems with the Model. The aggregated upside annual reporting bias in the BDM reflects an ongoing assumption of a net positive jobs creation by new companies versus those going out of business. Such becomes a self-fulfilling system, as the upside biases boost reporting for financial-market and political needs, with relatively good headline data, while often also setting up downside benchmark revisions for the next year, which traditionally are ignored by the media and the politicians. The BLS cannot measure meaningfully the impact of jobs loss and jobs creation from employers starting up or going out of business, on a timely basis (within at least five years, if ever), or by changes in household employment that were incorporated into the 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 73,417 jobs per month for the current year. As a result, in current reporting, the aggregate average overstatement of employment change easily exceeds 200,000 jobs per month (the underlying positive base-assumption upside bias, plus the monthly Birth-Death Model add-factor).

HOUSEHOLD SURVEY DETAIL. Discussed in the opening paragraphs of the *Opening Comments* and below, the continued nonsensical headline details in the counts of the employed and unemployed, from the seasonally-adjusted, month-to-month Household-Survey detail, are particularly egregious examples of the BLS misreporting practices, in its use of concurrent seasonal factors, as detailed in the *Headline Distortions from Shifting Concurrent-Seasonal Factors*.

Separately detailed in [Commentary No. 669](#), and discussed in the *Note on Reporting-Quality Issues and Systemic-Reporting Biases* in the *Week Ahead* section, significant issues as to falsification of the data gathered in the monthly Current Population Survey (CPS), conducted by the Census Bureau, have been

raised in the press and investigated by the House Committee on Oversight and Government Reform and the U.S. Congress Joint Economic Committee. The investigation continues. 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 July 2016 unemployment rate (U.3) held at 4.9%, the same level as in June 2016. At the second decimal point, the headline July 2016 U.3 was 4.88%, versus 4.90% in June. Formally, the decline in July U.3 of 0.02% (-0.02%) +/- 0.23% (95% confidence level) was statistically insignificant. All that is nonsense, though, given that the monthly numbers are reported on an inconsistent basis and are not comparable with each other (see the opening paragraphs in the *Opening Comments*).

On an unadjusted basis, the unemployment rates are not revised and are consistent in post-1994 reporting methodology. Unadjusted U.3 unemployment rate rose to 5.14% in July 2016, from 5.08% in June 2016.

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

The monthly count of short-term discouraged workers in June 2016 (never seasonally-adjusted) rose by 89,000 to 591,000, while the total, short-term marginally-attached discouraged workers rose by 171,000 to 1,950,000 in July. The latest, official “discouraged” number, again, reflected the flow of the headline unemployed—giving up looking for work—leaving the headline U.3 unemployment category and being rolled into the U.6 measure as short-term “marginally-attached discouraged workers,” net of the further increase in the number of those moving from short-term discouraged-worker status into the netherworld of long-term discouraged-worker status.

It is the displaced workers—the long-term discouraged-worker category—that defines the ShadowStats-Alternate Unemployment Measure. There is a continuing rollover from the short-term to the long-term category, with the ShadowStats measure encompassing U.6 and the short-term discouraged workers, plus the long-term discouraged workers. In 1994, “discouraged workers”—those who had given up looking for a job because there were no jobs to be had—were redefined so as to be counted only if they had been “discouraged” for less than a year. This time-qualification defined away a large number of long-term discouraged workers. The remaining redefined short-term discouraged and redefined marginally-attached workers were included in U.6.

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

On top of an unchanged, seasonally-adjusted U.3 unemployment rate, a jump in the count of marginally-attached workers and a 97,000 increase in the adjusted number of people working part-time for economic

reasons pushed the headline July 2016 U.6 unemployment to 9.71%, up from 9.56% in June. The unadjusted U.6 unemployment rate rose to 10.07% in July 2016, from 9.91% in June 2016.

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 notched higher 23.0% in July 2016, from 22.9% in June 2016.

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 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 were and would be considered displaced workers, due to circumstances of severely-negative economic conditions or other factors such as changing industrial activity resulting from shifting global trade patterns.

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

The post-1994 survey techniques also fell far shy of adequately measuring the long-term displacement of workers tied to the economic collapse into 2008 and 2009, and from the lack of subsequent economic recovery. In current headline reporting, the BLS has a category for those not in the labor force who currently want a job. Net of the currently-defined “marginally attached workers,” which includes the currently-defined and undercounted “discouraged workers” category used in the U.6 (1.950 million in July 2016), those not in the labor force currently wanting a job declined to a net 4.294 million in July 2016 (actually an increased total of 6.244 million), versus 4.322 million in June 2016 (a total of 6.101 million).

That net of 4.294 million in July also was against 4.736 million in May 2016, 3.956 million in April 2016, 3.726 million in March 2016, 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 extremely shy of underlying reality due to the changed survey methodology.

The ShadowStats number—a broad unemployment measure more in line with common experience—is my estimate. The approximation of the ShadowStats “long-term discouraged worker” category—those otherwise largely defined out of statistical existence in 1994—reflects proprietary modeling based on a variety of private and public surveying over the last two-plus decades. Beyond using the BLS U.6 estimate as an underlying monthly base, I have not found a way of accounting fully for the current unemployment circumstance and common experience using just the monthly headline data from the BLS.

Some broad systemic labor measures from the BLS, though, are consistent in pattern with the ShadowStats measure, even allowing for shifts tied to an aging population. Shown in the *Opening Comments*, the graph of the inverted ShadowStats unemployment measure has a strong correlation with the employment-to-population ratio, in conjunction with the labor-force participation rate, as well as with the ShadowStats-Alternate GDP Estimate and S&P 500 Real Revenues (see [No. 777 Year-End Special Commentary](#)), 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 July 2016 Detail. Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced workers, of long-term discouraged workers—a broad unemployment measure more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for July 2016 notched higher to 23.0%, from 22.9% in June 2016. The July 2016 reading was down by 30 basis points or 0.3% (-0.3%) from the 23.3% series high last seen in December 2013.

Again, in contrast, the July 2016 headline U.3 unemployment reading of 4.9% was down by a 510 basis points or 5.1% (-5.1%) from its peak of 10.0% in October 2009. The broader U.6 unemployment measure of 9.7% in July 2016, was down from its April 2010 peak of 17.2% by 750 basis points or 7.5% (-7.5%).

Seen in the usual graph of the various unemployment measures (*Graph 1* in the *Opening Comments*), there remains a noticeable divergence in the ShadowStats series versus U.6 and U.3, with the BLS headline U.3 unemployment measures generally headed lower against a down-trending U.6 and a higher-level, relatively stagnant ShadowStats number.

The reason for the longer-term divergence versus the ShadowStats measure, again, is that U.6 only includes discouraged and marginally-attached workers who have been “discouraged” for less than a year. As the discouraged-worker status ages, those that go beyond one year fall off the government counting, even as new workers enter “discouraged” status. A similar pattern of U.3 unemployed becoming “discouraged” or otherwise marginally attached, and moving into the U.6 category, also accounted for the early divergence between the U.6 and U.3 categories.

With the continual rollover, the flow of headline workers continues into the short-term discouraged workers category (U.6), and from U.6 into long-term discouraged worker or displaced-worker status (the ShadowStats measure). There was a lag in this happening as those having difficulty during the early months of the economic collapse, first moved into short-term discouraged status, and then, a year later they began moving increasingly into long-term discouraged status, hence the lack of earlier divergence between the series. The movement of the discouraged unemployed out of the headline labor force had been accelerating. While there is attrition in long-term discouraged numbers, there is no set cut off where the long-term discouraged workers cease to exist. See the [Alternate Data](#) tab for historical detail.

Generally, where the U.6 largely encompasses U.3, the ShadowStats measure encompasses U.6. To the extent that a decline in U.3 reflects unemployed moving into U.6, or a decline in U.6 reflects short-term discouraged workers moving into the ShadowStats number, the ShadowStats number continues to encompass all the unemployed, irrespective of the series from which they may have been ejected.

Great Depression Comparisons. Discussed in these regular *Commentaries* covering the monthly unemployment circumstance, an unemployment rate around 23% might raise questions in terms of a comparison with the purported peak unemployment in the Great Depression (1933) of 25%. Hard estimates of the ShadowStats series are difficult to generate on a regular monthly basis before 1994, given meaningful reporting inconsistencies created by the BLS when it revamped unemployment reporting at that time. Nonetheless, as best estimated, the current ShadowStats level likely is about as bad as the peak actual unemployment seen in the 1973-to-1975 recession and the double-dip recession of the early-1980s.

The Great Depression peak unemployment rate of 25% in 1933 was estimated well after the fact, with 27% of those employed then working on farms. Today, less than 2% of the employed work on farms. Accordingly, a better measure for comparison with the ShadowStats number might be the Great Depression peak in the nonfarm unemployment rate in 1933 of roughly 34% to 35%.

U.S. TRADE BALANCE (June 2016)

Nominal- and Real-Monthly and Quarterly Trade Deficits Deteriorated Sharply with the Headline June Detail. Shown in the *Opening Comments—Graph 9*, the second-quarter 2016 real merchandise trade deficit deepened to its worst reading since third-quarter 2007, reversing recent headline improvement and putting the lie to the otherwise useless “advance” trade deficit estimate of July 28th. That “advance” gimmick has been used repeatedly by the Bureau of Economic Analysis (BEA) to provide a little boost to what otherwise have been tepid growth estimates in “advance” GDP reporting. Accordingly, the second-quarter 2016 hard trade detail indicates a downside revision for the second estimate of second-quarter 2016 GDP, as discussed in the opening paragraphs of the *Opening Comments*.

Nominal (Not-Adjusted-for-Inflation) July 2016 Trade Deficit. The BEA and the Census Bureau reported this morning, August 5th, that the nominal, seasonally-adjusted monthly trade deficit in goods and services for June 2016, on a balance-of-payments basis, deteriorated by \$3.554 billion to \$44.510 billion, versus a revised \$40.956 [previously \$41.144] billion in May 2016. The June 2016 deficit also widened from the June 2015 trade shortfall of \$42.973 billion.

The \$3.554 billion deterioration in the headline monthly deficit reflected a gain of \$0.611 billion in monthly exports, more than offset by an increase of \$4.164 billion in imports (rounding difference). The surge in imports was dominated by higher oil imports, which were affected in nominal terms by rising oil prices.

Energy-Related Petroleum Products. From an import standpoint, declining oil prices had bottomed out in February 2016, inching higher by 0.7% in March, gaining 6.5% in April, 16.0% in May and another 15.2% in June, which was exacerbated by rising physical import volume. The not-seasonally-adjusted average price of imported oil increased to \$39.38 in June 2016 from \$34.19 in May 2016. That still was down from \$53.76 per barrel in June 2015. Separately, not-seasonally-adjusted physical oil-import

volume in June 2016 averaged 8.156 million barrels per day, up from 7.208 million in May 2016, and up from 7.446 million in June 2015.

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

Real (Inflation-Adjusted) June 2016 Trade Deficit. Seasonally-adjusted, and net of oil-price swings and other inflation (2009 chain-weighted dollars, as used in GDP deflation), the June 2016 merchandise trade deficit (no services) widened to \$64.692 billion, from a revised \$60.892 [previously \$61.104] billion in May 2016, versus a revised \$57.316 [previously \$57.479, initially \$57,618] billion in April 2016, versus revised deficits of \$56.033 [benchmarked at \$56.109] billion in March 2016, \$63.607 [benchmarked \$63.601] billion in February 2016 and \$61.668 [benchmarked \$62.663] billion in January 2016. The June 2016 real shortfall also widened versus a revised \$60.306 billion deficit in June 2015.

Reflected in *Graph 9* of the *Opening Comments*, the annualized quarterly real merchandise trade deficit was \$623.1 billion for fourth-quarter 2014, \$700.0 billion for first-quarter 2015, \$709.1 billion for second-quarter 2015, \$708.4 billion for third-quarter 2015, \$728.6 billion for fourth-quarter 2015 and \$725.2 [previously \$725.5] billion for first-quarter 2016.

Based on full reporting, the second-quarter 2016 real trade shortfall was at an annualized quarterly pace of \$731.6 billion. Much deeper than earlier trends, this was the worst quarterly showing since third-quarter 2007, and should turn the trade-deficit contribution for second-quarter 2016 GDP growth from its initial positive-contribution reading, to a negative-contribution reading. Headline deficits likely will get even deeper in the months and quarters ahead, intensifying the ongoing negative impact on headline GDP.

CONSTRUCTION SPENDING (June 2016)

Second-Quarter 2016 Real Annual and Quarterly Growth Sank to Levels Seen Last at 2011-Trough of the Construction Spending Collapse. In the context of downside revisions back into April, inflation-adjusted real activity in the construction spending series turned sharply negative, on a monthly, quarterly and annual basis. Real monthly spending fell by 0.7% (-0.7%) in June 2016, and second quarter 2016 real spending showed an annualized quarter-to-quarter contraction of 9.5% (-9.5%). Year-to-year growth in real spending turned negative for the first time since the 2011 trough in activity, down year-to-year by 1.7% (-1.7%) in June 2016, with year-to-year real growth dropping to 0.5% in second-quarter 2016, again the weakest growth since the 2011 series trough.

Real construction spending generally continued in down-trending, low-level, stagnating non-recovery, with June 2016 real spending still shy of its June 2006 pre-recession peak by 26.0% (-26.0%).

While this series remains highly volatile and subject to large monthly revisions, the headline year-to-year growth in real inflation-adjusted terms was tumbling sharply as of June 2016, continuing to follow a pattern as though the series were falling rapidly into a recessionary contraction.

The Data and Graphics Here Reflect Monthly Levels, Not Smoothed, Moving Averages. Unlike the housing-starts and home-sales series—where ShadowStats smooths the irregular and continually-revised monthly data with accompanying plots of smoothed, six-month moving averages—the construction spending series is shown here only on a monthly basis, as published. While the spending series is extremely volatile in its monthly revisions, it tends to be reasonably smooth in month-to-month movement. Note the comparative monthly volatility in *Graphs 30* and *31*. Unusual in the current headline construction-spending detail remains the sharp upside spike to March 2016 activity and the ensuing-more-than-offsetting plunge in the headline April, May and June 2016 detail, a pattern that appears as a near-term spike in at least the aggregate residential housing graphs and others.

Quarterly Trends. Reflecting headline June 2016 detail in the context of downside revisions to April and May 2016 data second-quarter 2016 real construction plunged quarter-to-quarter. As set by last month's annual revision, fourth-quarter 2015 real construction spending contracted at an annualized quarterly pace of 6.8% (-6.8%), following annualized quarterly real gains of 9.5% in third-quarter 2015, 25.8% in second-quarter 2015 and 4.2% in first-quarter 2015.

Post-benchmarking, first-quarter 2016 real construction spending rose at a revised annualized pace of 11.1% [benchmarked at 11.4%], reflecting minor inflation revisions. Based just on full reporting for second-quarter 2016, the quarter showed an annualized real contraction of 9.5% (-9.5%). Based on just reporting for April 2016 and May 2016, the trend for second-quarter 2016 activity had been a quarterly contraction of 7.2% (-7.2%).

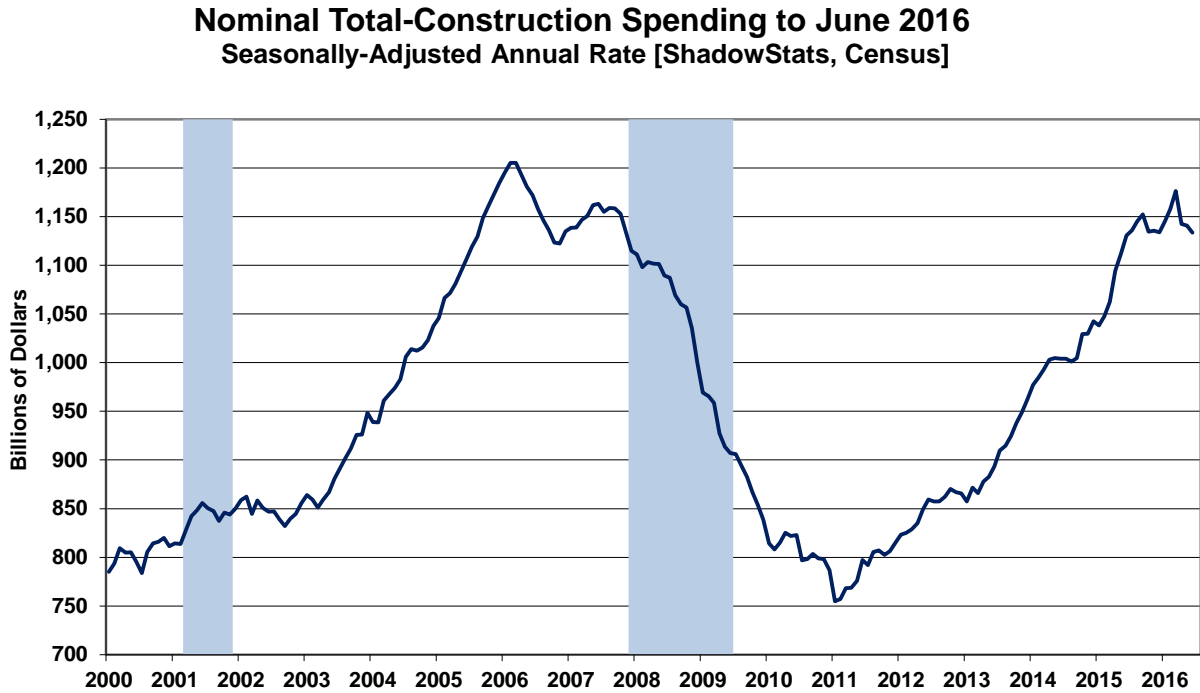
Graphs 10 to 13 in the *Opening Comments* show comparative nominal and real construction activity for the aggregate series as well as for private residential- and nonresidential-construction and public-construction. Again, seen after adjustment for inflation, the real aggregate series generally has remained in low-level stagnation, now down-trending into second-quarter 2016. Areas of recent relative real strength in all of the major subcomponents have flattened out, or turned down, after inflation adjustment.

The general pattern of real activity had been one of low-level, up-trending stagnation that now has turned lower. The aggregate nominal detail, before inflation adjustment, is shown in *Graph 25* of this *Reporting Detail*, with the real, inflation-adjusted activity plotted in *Graph 26*. *Graphs 28* and *29* show the relative patterns of nominal and real activity aggregated by sector.

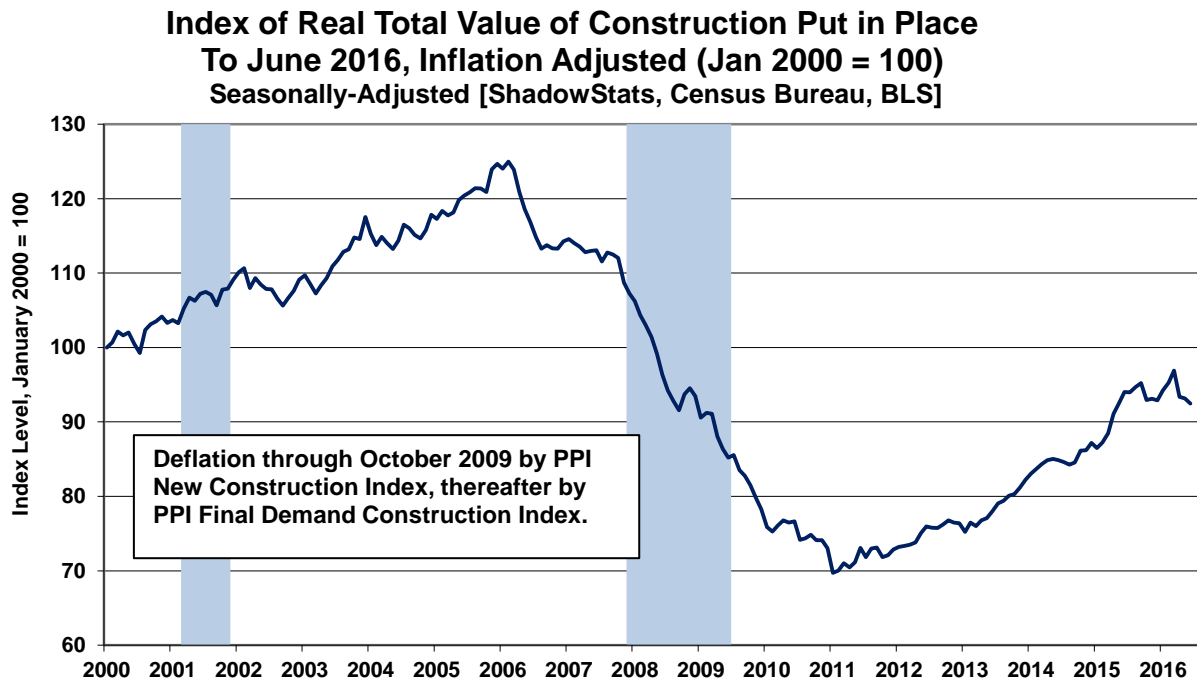
PPI Final Demand Construction Index (FDCI). ShadowStats uses the Final Demand Construction Index (FDCI) component of the Producer Price Index (PPI) for deflating the current aggregate activity in the construction-spending series. The subsidiary private- and public-construction PPI series are used in deflating the subsidiary series, again, all as shown in *Graphs 10 to 13* in the *Opening Comments*, and accompanying *Graphs 26* and *29*.

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.

Graph 25: Total Nominal Construction Spending



Graph 26: Index of Total Real Construction Spending



Where the current annual PPI construction-inflation measure briefly and recently had moved to about even with, if not somewhat higher than the private-sector measures, once again, it has fallen significantly below them in the most-recent detail, by a couple of hundred basis points.

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 June 2016 FDCI month-to-month inflation rose by 0.09% for the second month. That followed headline monthly gains of 0.79% in April 2016 and 0.09% in March 2016. In terms of year-to-year inflation, the June 2016 FDCI was up by 1.96%, versus 1.87% in May and April 2016, and up from 1.07% annual inflation in March 2016, on both a seasonally-adjusted and unadjusted basis.

June 2016 headline inflation for government-funded construction also rose by 0.09% for the month, having gained 0.17% in May, 0.62% in April and 0.09% in March, while it rose by 1.87% (both adjusted and unadjusted) year-to-year in June 2016, versus annual gains of 1.78% in May 2016, 1.87% in April 2016 and 1.34% in March 2016, seasonally adjusted. Unadjusted, April and March 2016 annual gains respectively were 1.78% and 1.43%.

Separately, inflation for privately-funded construction rose month-to-month by 0.09%, for the second month, in June 2016, versus a monthly gain of 0.88% in April 2016 and an “unchanged” reading at 0.00% in March 2016. Year-to-year inflation was a positive 1.98% in June 2016, 1.88% in May and April 2016, and 0.89% in March 2016, on both an adjusted and unadjusted basis.

Headline Reporting for June 2016. In the context of downside revisions to April and May activity, the Census Bureau reported August 1st that the headline, total value of construction put in place in the United States for June 2016 was \$1,133.5 billion, on a seasonally-adjusted, but not-inflation-adjusted, annual-rate basis. That estimate was down month-to-month by a statistically-insignificant 0.6% (-0.6%) +/- 1.5% (all confidence intervals are at the 95% level), versus a \$1,140.9 [previously \$1,143.3] billion in May 2016. In turn May was down by a revised 0.1% (-0.1%) from a downwardly revised level of \$1,142.5 [previously \$1,152.4] billion in April 2016. In turn, April was down by 2.9% (-2.9%) from the unrevised March 2016 level of \$1,176.4 billion.

Adjusted for FDCI inflation, total real month-to-month spending in June 2016 fell by 0.7% (-0.7%), versus real declines in May 2016 of 0.2% (-0.2%) and in April of 3.6% (-3.6%).

On a year-to-year annual-growth basis, June 2016 nominal construction spending rose by a statistically-insignificant 0.3% +/- 1.9%, versus annual gains of 2.6% in May 2016 and 4.4% in April 2016. Net of construction costs indicated by the FDCI, the year-to-year change in total real construction spending dropped to 56-month low of minus 1.7% (-1.7%) in June 2016, versus an annual gain of 0.7% in May 2016 and an annual gain of 2.5% in April. The headline annual real decline an annual activity was the weakest since the historical series troughed in its collapse into 2011.

The statistically-insignificant, headline month-to-month nominal decline of 0.6% (-0.6%) in aggregate June 2016 construction spending, versus a decline of 0.1% (-0.1%) in May 2016, included a headline monthly drop of 0.6% (-0.6%) in June public spending, versus a 1.2% (-1.2%) decline in May. Private spending fell by 0.6% (-0.6%) month-to-month in June, following a 0.2% gain in May. Within total private construction spending, residential-sector activity was unchanged at 0.0% in June, having gained just 0.1% in May, while the nonresidential sector fell by 1.3% (-1.3%) in June, following a gain of 0.4% in May. All major categories contracted month-to-month in June, after inflation adjustment.

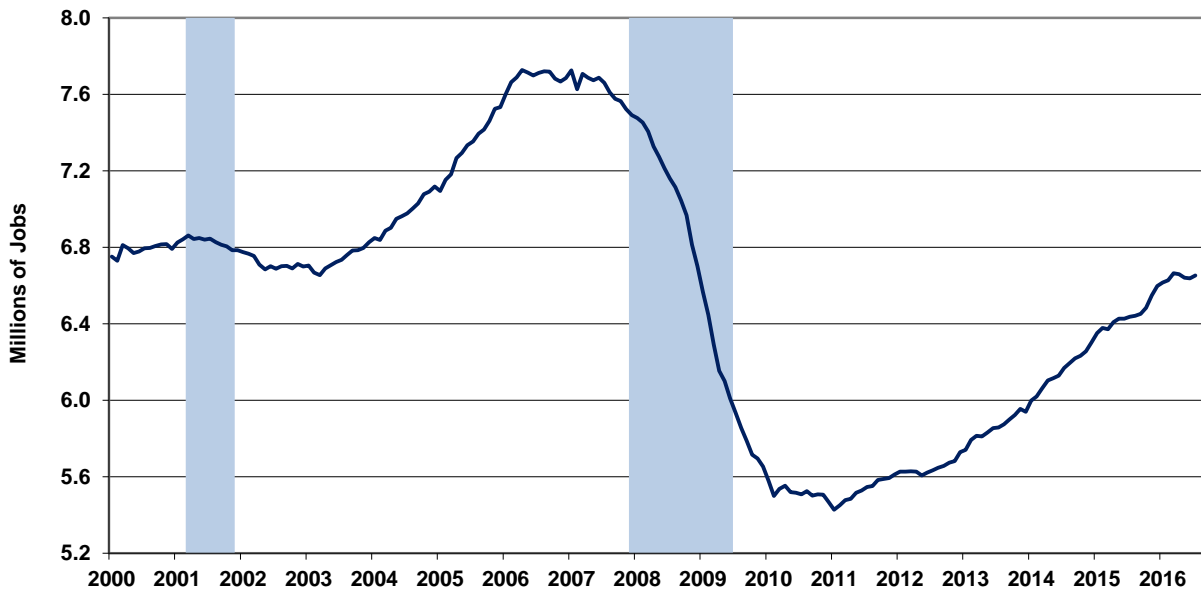
Construction and Related Graphs. Earlier *Graphs 25* and *26*, and later *Graphs 28* and *29* reflect total construction spending through June 2016, both in the headline nominal dollar terms, and in real terms, after inflation adjustment. *Graph 26* is on an index basis, with January 2000 = 100.0. Adjusted for the PPI's NCI measure through October 2009 and the PPI's Final Demand Construction Index (FDCI) 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 then some boost into early-2015. Activity declined in fourth-quarter 2015, with an early-2016 fluttering trend that lower, once again, in second-quarter 2016.

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 [Commentary No. 823](#)), the unemployment detail graphed in the *Opening Comments* or in [No. 777 Year-End Special Commentary](#)). To the contrary, the benchmark-revised broad construction reporting, both before (nominal) and after (real) inflation adjustment, generally still shows a pattern of low-level activity, where aggregate activity never recovered pre-recession highs and has flattened-out anew, turning lower in fourth-quarter 2015, higher in first-quarter 2016, but sharply lower in second-quarter 2016.

Liquidity Conditions Continue Constraining the Consumer and Related Construction Activity. Fully updated in [Commentary No. 822](#), with more-extensive background detail available in [No. 777 Year-End Special Commentary](#), and due to be fully updated again in *Commentary No. 825* of August 12th, consumer conditions continue to constrain activity in residential construction.

Graph 27: Construction Payroll Employment to July 2016

Construction Payroll Employment to July 2016
Seasonally-Adjusted [ShadowStats, BLS]



Underlying fundamental drivers of consumer economic activity, such as liquidity, have not supported, and do not support a turnaround in broad economic activity. Never truly recovering in the post-Panic era, limited growth in household income and credit, and a still broadly faltering consumer outlook, have

eviscerated and continue to impair the personal consumption and residential real estate sectors, which feed off the financial health and liquidity of consumers and account for more than 70% of total GDP activity in the United States.

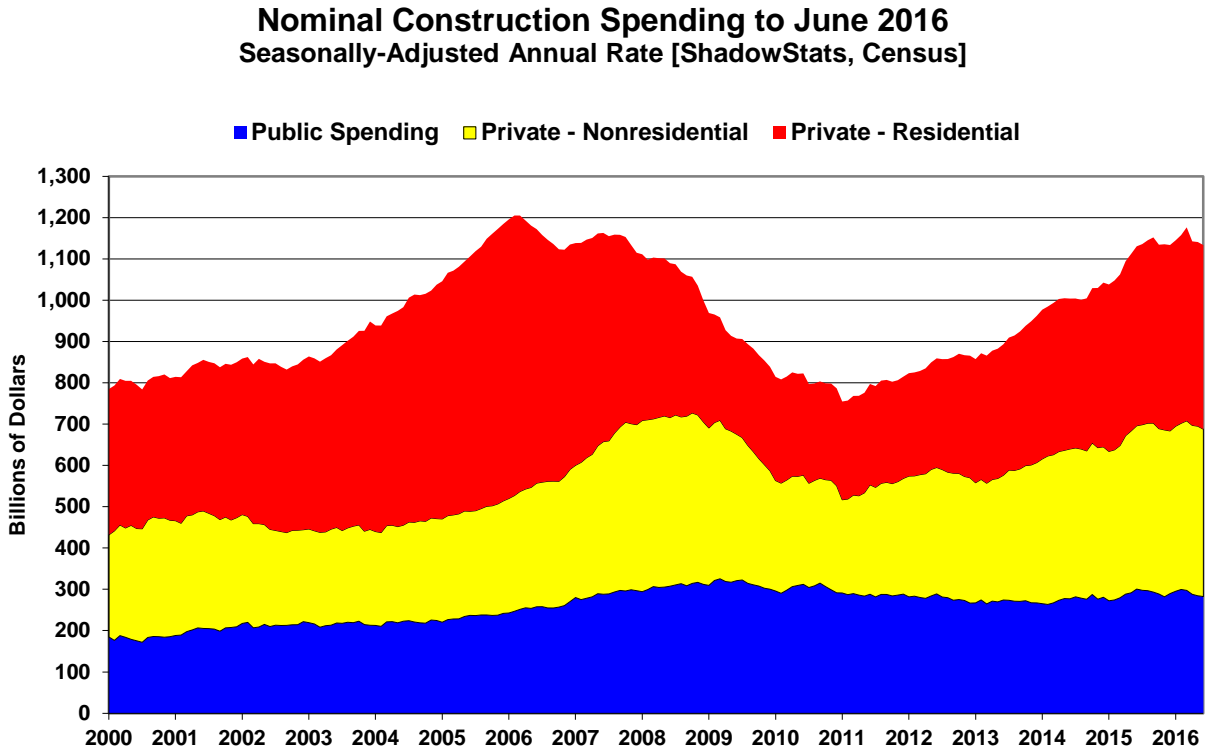
With the economy never having recovered fully from the collapse into 2009, consumers again are pulling back on consumption, as evidenced by a renewed slowdown in broad economic activity. There has been no economic recovery, and there remains no chance of meaningful, broad economic growth, without a meaningful,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

Construction Employment Not Recovering. *Graph 27* shows July 2016 construction employment, as discussed and detailed in the *Payroll Employment* section. In theory, payroll levels should move more closely with the inflation-adjusted aggregate series, where the nominal series reflects the impact of costs and pricing, as well as a measure of the level of physical activity. Where construction payrolls have gone flat or turned down, such is consistent now with the contracting quarterly and collapsing annual growth here in headline real construction spending.

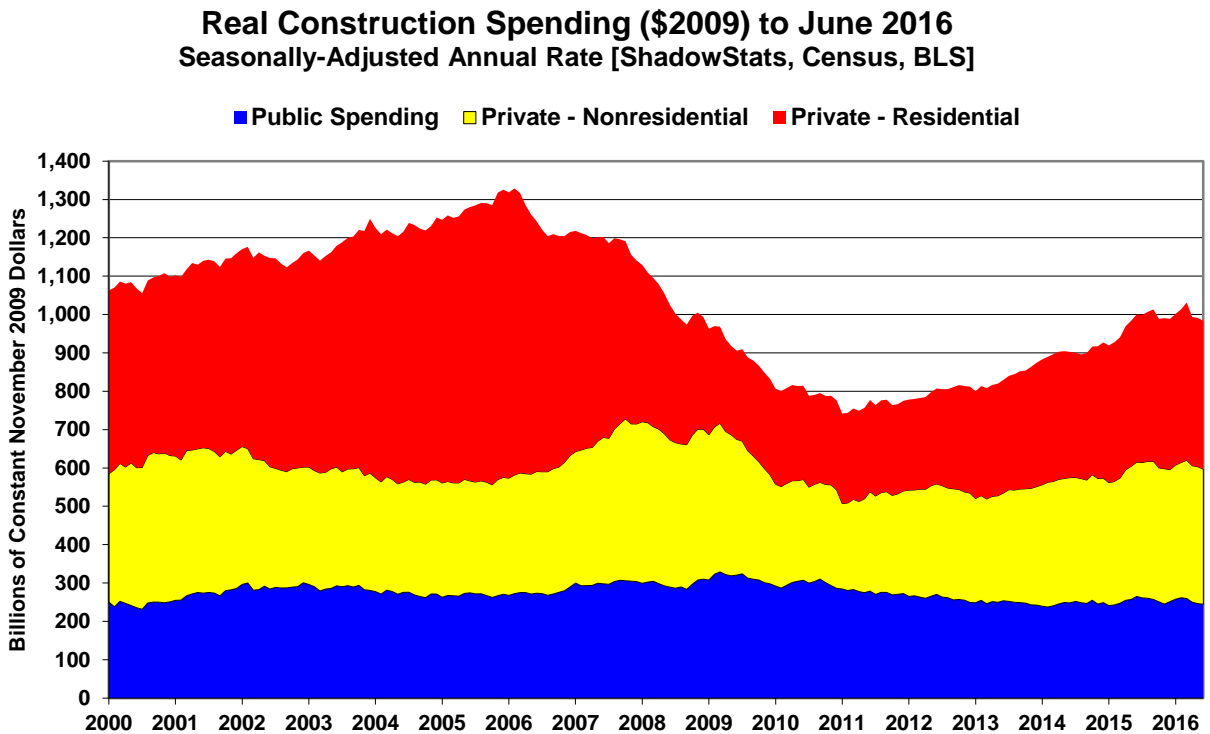
Graphs of Construction Activity. *Graph 28* shows total nominal construction spending, broken out by the contributions from total-public (blue), private-nonresidential (yellow) and private-residential (red) spending. *Graph 29* shows the same breakout by sector as in *Graph 28*, but the detail is in 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 28 to 33 begin on the next page.]

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

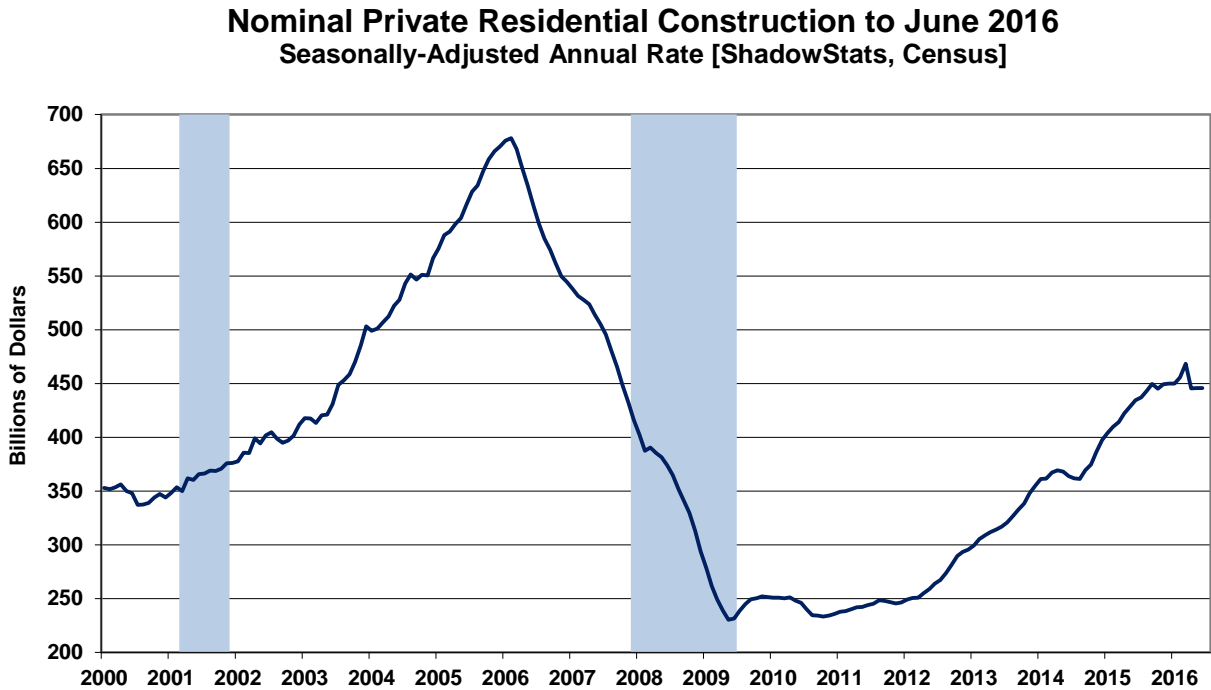


Graph 29: Aggregate Real Construction Spending by Major Category (Billions of November 2009 Dollars)

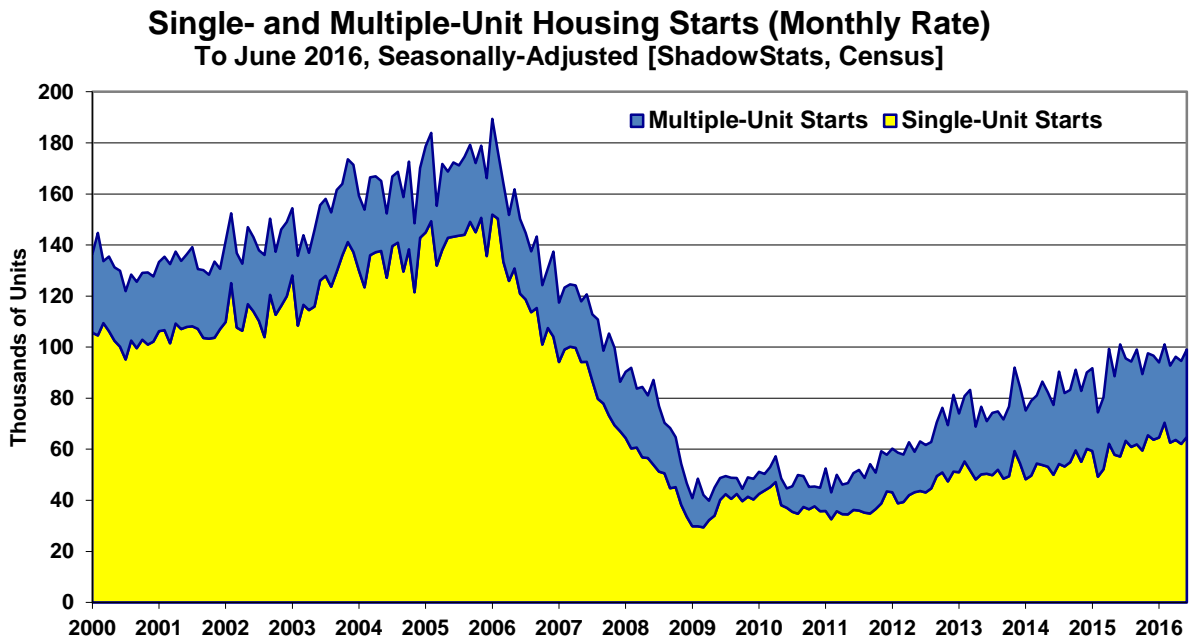


The next two graphs (*Graphs 30 and 31*) cover private residential construction spending, along with housing starts (combined single- and multiple-unit starts) for June 2016 (see [Commentary No. 821](#)).

Graph 30: Nominal Private Residential Construction Spending to Date



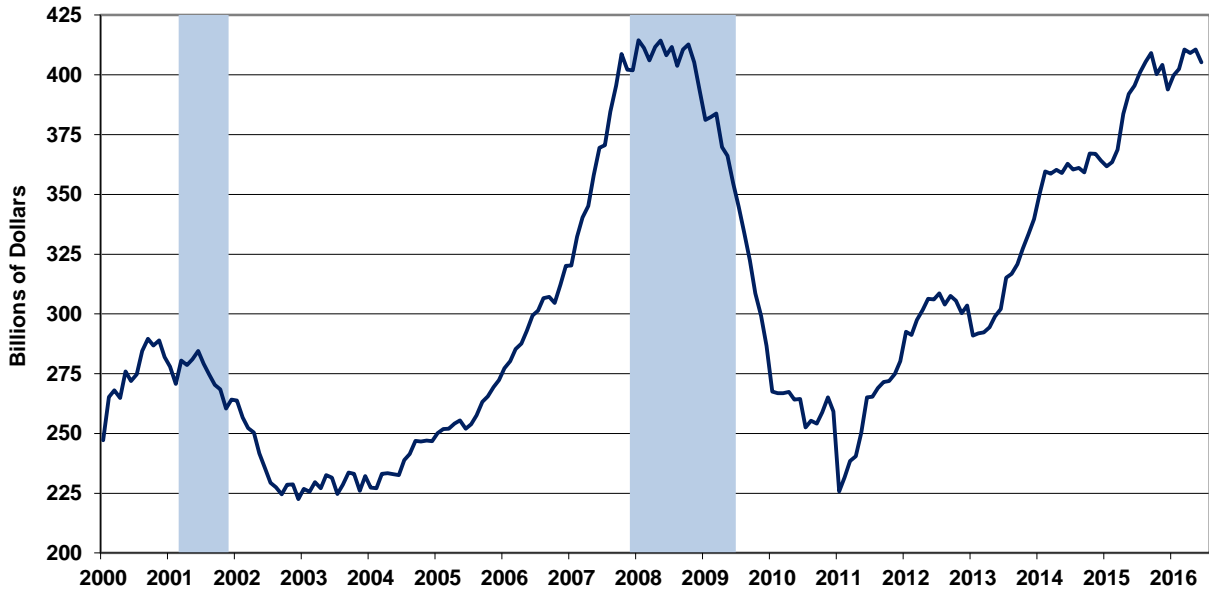
Graph 31: Single- and Multiple-Unit Housing Starts to Date



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 11* of the *Opening Comments* section, *Graph 29* and presumably with the headline construction-payroll data in *Graph 27*.

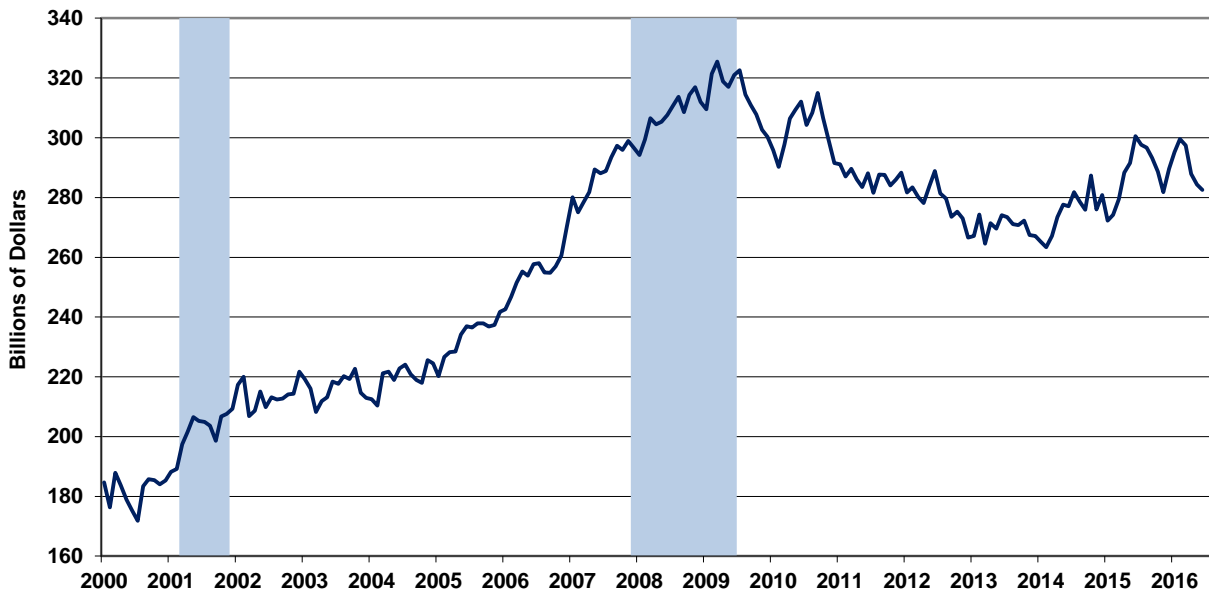
Graph 32: Nominal Private Nonresidential Construction Spending to Date

Nominal Private Nonresidential Construction to June 2016
 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Graph 33: Nominal Public Construction Spending to Date

Nominal Public Construction to June 2016
 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



The final two graphs (*Graphs 32 and 33*) show the patterns of the monthly level of activity in private nonresidential-construction spending and in public-construction spending.

Private non-residential construction spending appears to be topping out near-its pre-recession nominal high. Public Construction spending, which is 98% nonresidential, had continued in a broad downtrend into 2014, with intermittent bouts of fluttering stagnation and then some upturn in 2015. In 2016, the series still appears to be fluttering in something of a volatile topping-out process, turning lower in its latest reporting, shy of its pre-recession peak. Viewed net of inflation, in *Graphs 12, 13 and 29*, indeed, both series appear stalled shy of their pre-recession peaks.

WEEK AND MONTH AHEAD

Headline Economic Deterioration Should Intensify in the Weeks and Month Ahead, Increasingly Pummeling the U.S. Dollar and Boosting Gold, Silver and Eventually Oil Prices. Market expectations for business activity should continue to deteriorate at an accelerating pace, amidst intensifying, negative headline economic reporting and continued Fed-policy retrenchment, with likely movement towards renewed quantitative easing in the months ahead. The general trend in weakening expectations for business activity and movement towards looming recession recognition, reflect a broad spectrum of market-disappointing headline data. Unfolding circumstances are discussed in today's *Opening Comments* and [Commentary No. 823](#), [Commentary No. 822](#), [Commentary No. 821](#), [Commentary No. 820](#), [Commentary No. 819](#), [Commentary No. 818](#), [Commentary No. 817](#), [General Commentary No. 811](#), [Supplemental Commentary No. 807-A](#), [Commentary No. 800](#), [Commentary No. 799](#), [Commentary No. 796-A](#), [Commentary No. 796](#) and [No. 777 Year-End Special Commentary](#).

Negative market reactions surfaced in trading of the U.S. dollar and in related financial markets, with some upside pressure on gold, silver and oil prices, subsequent to the weaker-than-expected headline and annualized real growth in second-quarter 2016 GDP and downside GDP revisions to recent quarters, as discussed in [No. 823](#). Such reflects short-lived waning of systemic disruptions from global political circumstances, as well perpetual U.S. economic non-recovery and a renewed, intensifying downturn.

Market activity in oil has been mixed, due partially to some irregular U.S. dollar strength, as discussed in [No. 818](#). These market reactions reflect an intensifying sense of Federal Reserve impotence, with bleak longer-term implications for the U.S. dollar. Further tightening by the Fed prior to the election is unlikely, while renewed quantitative easing could become a target of intensified market speculation, as the deepening recession unfolds and becomes increasingly obvious in the next month or two (see [No. 820](#)).

Rapidly weakening, regular monthly economic reporting should be accompanied by much worse-than-expected—increasingly negative—reporting for at least the next several quarters of GDP (and GDI and GNP). That was seen minimally with a small first-quarter 2016 contraction in the Gross National Product (GNP)—the broadest measure of U.S. economic activity reflected in the recent GDP benchmarking.

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. Headline monthly March to June 2016 detail moved into positive headline territory, in tandem with rising gasoline prices. CPI inflation is on track for a minimal monthly again in July (with a switch to positive seasonal adjustments to gasoline prices in July offsetting partially an unadjusted monthly drop in gasoline prices). Going forward, inflation broadly still should be boosted by a weakening U.S. dollar, with a generally-related upturn in oil prices, gasoline and other commodities. Fundamental reporting issues with the headline CPI 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 was discussed and explored in the labor-numbers related [Supplemental Commentary No. 784-A](#) and [Commentary No. 695](#).

Further, discussed in [Commentary No. 778](#), a heretofore unheard of spate of “processing errors” surfaced in 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. That construction spending issue now appears to have been structured as a gimmick to help boost the recently-published 2016 GDP benchmark revisions, aimed at smoothing the headline reporting of the GDP business cycle, instead of reflecting broad economic trends accurately, as discussed in [Commentary No. 823](#).

Combined with ongoing allegations in the last year or two of Census Bureau falsification of data in its monthly Current Population Survey (the source for the BLS Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular economic series (see [Commentary No. 669](#)). John Crudele of the *New York Post* continues his investigations in reporting irregularities: [Crudele Investigation](#). In the 1990s, the BLS played political-reporting games with the nature of statistical sampling size for the Census Bureau surveying. Such may be in the works, again, at present.

PENDING RELEASES:

Nominal and Real Retail Sales (July 2016). The Census Bureau has scheduled release of July 2016 nominal (not-adjusted-for-inflation) Retail Sales for Friday, August 12th, which will be covered in

Commentary No. 825 of that date. Detail on the real (adjusted-for-inflation) Retail Sales will be covered in *Commentary No. 826* of August 16th, coincident with the release by the BLS on that date of the July 2016 Consumer Price Index (CPI-U).

With a good chance of a minimal monthly increase in the CPI, there is a parallel chance for real sales growth in July to be somewhat more-negative or weaker than the headline nominal sales activity. Despite declining gasoline prices in July, seasonal-factor swings to the upside will offset some of the negative inflation contribution there from energy, along with some offsetting non-energy inflation. The pace of annual CPI-U inflation should remain positive, helping to generate a deepening recession signal in historically low-level, annual Real Retail Sales growth.

Market expectations likely will be on the plus-side of flat for the monthly change in the headline nominal July Retail Sales, with temporarily-bloated auto sales expected to offset somewhat the continuing and intensifying weakness in retail-store activity. An outright nominal sales contraction and downside revisions to May and June 2016 activity generally are fair bets.

Fully updated in [Commentary No. 822](#), with more-extensive background detail available in [No. 777 Year-End Special Commentary](#), and due to be updated fully again in *Commentary No. 825* of August 12th, the extreme liquidity bind besetting consumers continues to constrain activity in personal-consumption expenditures and retail sales. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for an income shortfall, the U.S. consumer is unable to sustain positive growth in domestic personal consumption, including retail sales, real or otherwise.

Producer Price Index—PPI (July 2016). The Bureau of Labor Statistics (BLS) will release the July 2016 PPI on Friday, August 12th. The detail will be covered in *Commentary No. 825* of that date. Odds favor a flat-to-minus headline showing in wholesale inflation, at least on the goods side of the reporting, due to a decline in oil prices and related products.

Unadjusted oil prices fell in July 2016, along with a continued downturn in gasoline prices. Based on the two most-widely-followed oil contracts, not-seasonally-adjusted, monthly-average oil prices declined by 5.5% (-5.5%) and by 7.7% (-7.7%), in conjunction with some mixed pressures on the U.S. dollar. That was accompanied by a 4.9% (-4.9%) decline in unadjusted, monthly-average retail gasoline prices (Department of Energy). Where PPI seasonal adjustments for energy costs in July turn positive, they still should leave the adjusted Final Demand Goods component of the PPI flat-to-minus.

The oil price reversal could be hit by some offsetting, more-positive and counterintuitive “inflation” in the dominant services sector, from “rising margins” along with faltering oil and gasoline prices. That conceivably could put the aggregate headline PPI up somewhat for the month. Guesstimation in that services sector, however, remains highly problematic.

The counterintuitive pricing pressures from shrinking profit margins with the sharply rising oil prices are discussed in *Inflation that Is More Theoretical than Real World?* on page 13 of [Commentary No. 820](#).