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

SPECIAL COMMENTARY NUMBER 885: Numbers Games that Statistical Bureaus, Central Banks and Politicians Play

April 2017 Employment and Unemployment, Money Supply M3

May 8, 2017

Headline Employment/Unemployment Numbers Were Too Good Jobs Gain Boosted by Heavily-Distorted Seasonals and Unusually-Large Upside Biases

Unadjusted Year-to-Year Payroll Growth Dropped to a 68-Month Low

Last Time Annual Payroll Growth Declined to that Level, the Economy Had Started Its Collapse into the 2007 Recession

Household Survey Showed Shift from Part-Time to Full-Time Employment

April Unemployment of 4.40% Was a 1-in-1,000 Shot; Could It Have Been Targeted?

That Said, April Unemployment: U.3 Declined to 4.4% from 4.5%, U.6 Fell to 8.6% from 8.9% and the ShadowStats-Alternate Fell to 22.1% from 22.5%

Those Were the Lowest, Headline Unemployment Rates for U.3 since May 2007, for U.6 since November 2007 and for ShadowStats since October 2010

Nominal Money Supply M3 Annual Growth Rebounded to 3.3% in April, Versus 3.1% February and March, Otherwise at a 39-Month Low

PLEASE NOTE: The next regular Commentary will cover the April 2017 CPI, PPI, Retail Sales, Real Earnings, an updated review of U.S. dollar and gold markets and prospective FOMC policy. Although scheduled for Friday May 12th, publication likely will roll over to the weekend, given the large amount of new material. Best wishes to all — John Williams

Today's *Special Commentary* (May 8th). The headline details of the April 2017 Employment and Unemployment numbers on May 5th had enough unusual features to trigger this accompanying *Special Commentary* on data quality, which delayed publication of the details to May 8th. The *Opening Special Comments* first review the broad nature of the reporting quality of U.S. economic data, specifically looking at headline details, changes and gimmicks built into the labor-numbers reporting methodologies over time. Reviewed are areas with particular relevance to the headline reporting of the April 2017 statistics, ranging from the less-obvious area of the targeting of specific numbers, to the more-common open usage of shifting bias factors and inconsistent seasonal adjustments in regular headline employment and unemployment detail reporting.

In the context of the reporting gimmicks and games discussed in the *Opening Special Comments*, the *Executive Summary* (page 7) provides headline summary detail and of the May 5th initial estimates of the April Employment and Unemployment reporting.

The *Reporting Detail* (beginning page 20) provides more-extensive analysis and graphics on related employment and unemployment detail.

The *Hyperinflation Watch* (beginning page 16) reviews current monetary conditions, providing the initial estimate of monthly annual change for ShadowStats Ongoing Money Supply M3 Estimate and updated detail on the monetary base.

The *Week, Month and Year Ahead* (beginning page 38) reviews the outlook for Thursday's April PPI, and Friday's CPI and Retail Sales reporting.

OPENING SPECIAL COMMENTS

Numbers Games that Statistical Bureaus, Central Banks and Politicians Play. These *Opening Special Comments* borrow some material from, encompass by reference and supplement the August 24, 2004 <u>Introduction to ShadowStats</u>: Government Economic Reports: Things You've Suspected but Were Afraid to Ask, along with the related *Primers*.

Ranked by political sensitivity, employment and employment reporting probably outrank the inflation numbers and the GDP, but not by much. The current discussion concentrates on the labor front, given an unusual shift in reporting patterns seen at the onset of a new Administration.

In 1996, the Kaiser Foundation conducted a survey of the American public that purported to show how out of touch the electorate was with economic reality. Most Americans thought inflation and unemployment were much higher, and economic growth was much weaker, than reported by the government. The *Washington Post* bemoaned the economic ignorance of the public. The same results likely would be found today, suggested by the continuing common experience of Main Street U.S.A., which was a major factor in Donald Trump's upset victory in the 2016 presidential race.

Neither the Kaiser Foundation nor the *Post* understood then that there was good reason for the gap between common perceptions and government reporting: government data had been biased in politically-corrected directions and increasingly had diverged from common experience and reality since the mid-1980s. Inflation and unemployment reporting are understated, while employment and other economic

data are overstated, deliberately. The gap between common experience and headline economic reporting never has been greater than it is today.

Many politicians and consumer pollsters do not appreciate fully that it is underlying economic reality—actual pocketbook conditions on Main Street U.S.A.—that drive the voter, not the heavily gimmicked and overly-positive headline economic data.

As Clinton Labor Secretary Bob Reich explained in his memoirs, the Clinton Administration found in its public polling that if the government inflated economic reporting, enough people would believe it to swing a close election. That said, severe-enough negative real income circumstances consistently have cost incumbent parties the White House in U.S. presidential elections (see *Commentary No. 846*).

What follows is brief background focused particularly on reporting tied to employment and unemployment and related changes made to that system over the decades. Regular modern reporting of the employment and unemployment detail began in the decade following World War II. Political manipulation of the government's economic data began as soon as practicable thereafter, with revisions to methodology often incorporating positive-reporting biases. As a result, investors and many economists, relying on the government's headline data, often miss underlying economic reality. Consider:

- During the Kennedy Administration, unemployment was redefined with the concept of "discouraged workers" so as to reduce the popularly followed unemployment rate. That concept was redefined in the 1994 overhaul of the unemployment reporting system, during the Clinton Administration (see the *ShadowStats-Alternate Unemployment Rate Measure* discussion on page 35).
- If Lyndon Johnson did not like the growth that was going to be reported in the GNP, he sent it back to the Commerce Department, and he kept doing so until Commerce got it right. Purportedly, he also did the same with unemployment data and the Department of Labor. Further, the Johnson Administration was responsible for gimmicking the accounting that hides much of the federal deficit. The GNP story came from a former client of mine who had worked at the Commerce Department at the time; the unemployment story from a Johnson-family acquaintance.
- Richard Nixon had a highly publicized war with the Bureau of Labor Statistics on the unemployment data. Nixon wanted to report the unemployment rate as either the lower of the seasonally adjusted or unadjusted number, at any given time, but not specify same to the public. While that approach was unconscionable at the time and never used, basically the same methodology was introduced in 2004 as "state-of-the-art" by the second Bush administration (see *Headline Distortions from Shifting Concurrent-Seasonal Factors* on page 28).
- During the Reagan Administration, the Bureau of Labor Statistics (BLS) underestimated employment growth, coming out of the 1983 recession. That "political embarrassment" for the BLS resulted in the introduction of monthly, upside-bias factors to payroll-employment reporting. Those biases evolved into the current Birth-Death modeling for the payroll series (see *Birth-Death/Bias-Factor Adjustment* section on page 31).
- In the context of the previously-noted memoirs of the former Clinton Administration Labor Secretary, whatever integrity had survived in the economic reporting system disappeared during the Clinton years. Unemployment was redefined to eliminate a large number of discouraged workers at the onset of the

North American Free Trade Agreement (NAFTA), effectively lowering the level of broadest unemployment reporting, which reflected displaced workers. In the same general timeframe, methodologies also were introduced to redefine and reduce headline CPI inflation, and to inflate headline GNP/GDP growth rates.

- At one point, the Clinton Administration appeared to be targeting payroll jobs creation at 250,000 per month, 3,000,000 per year. The detail in revised headline reporting began showing exact differences of 250,000 per month, or an exact 500,000 for two months. Odds of such reporting being random were about 1-in-100,000. A query to the BLS on the matter generated a nervous laugh, along with a statement to the effect "Oh, we wouldn't do that." Publication of even 250,000 increments ceased thereafter.
- Later, formally tied to healthcare surveying for the Census Bureau's Current Population Survey (CPS)—the base survey conducted for the BLS's Household Survey—monthly sampling was reduced from 60,000 to about 50,000 households, eliminating significant surveying in the inner cities. Despite claims of corrective statistical adjustments, reported unemployment among people of color declined sharply, and the piggybacked poverty survey showed a remarkable reversal in decades of worsening poverty trends. Again, tied to healthcare surveying, the Clinton administration successfully set into motion reestablishing the full 60,000-households survey for the benefit of the second Bush administration's monthly household survey. That action helped to shift the headline start of the 2001 recession from 2000, during the Clinton Administration, to 2001 at the beginning of the Bush Administration.
- Further, current issues with the CPS are discussed in the *Note on Reporting-Quality Issues and Systemic-Reporting Biases* on page 40.

Unusual April Labor Numbers Were Suggestive of Major Headline Distortions. In the context of April 2017 help-wanted advertising signaling declining employment prospects (see the *Opening Comments* of the prior regular <u>Commentary No. 884</u>), as well as a number of other slowing or non-expanding economic indicators (see the *Executive Summary*) and broadly based, anecdotal evidence suggestive of a renewed downturn in economic and employment circumstances, the happy headline employment and unemployment data for April 2017 simply were not believable.

Some of the institutionalized problems such as the monthly reporting biases and inconsistently-reported concurrent seasonal-adjustment issues are standard. Yet, there also is an indication that the rapidly declining, headline U.3 unemployment might have been targeted. With a new Administration, there always is a chance of a change in how the headline unemployment/employment details are managed.

The Rounding Can Be Telling. Most recently, it looks as though there may have been an unemployment reporting change that targeted specific, one-decimal-point unemployment rates. If the data were adjusted to generate such a result, that would tend to have the effect of bringing in the second decimal point of the headline U.3 unemployment rate at zero, while previously the second decimal point effectively had been random, with some exceptions.

Standardly the Bureau of Labor Statistics (BLS) reports the headline unemployment with just one decimal point, but it calculates its error margins to the second decimal point, and although the second decimal point, let alone the first decimal point, is not statistically meaningful, the second decimal point easily is

calculated by anyone, as the number of unemployed as a percent of the number of people in the labor force, as ShadowStats standardly does each month.

Consider, though, that the headline U.3 unemployment rate dropped from 4.78% in January 2017, to 4.70% in February, to a pre-recession low of 4.50% in March and to 4.40% in April.

The following is purely speculative, based on the odds of three consecutive monthly unemployment rates showing zero at the second decimal point being one-in-one thousand (1/10 x 1/10 x 1/10), with odds of two consecutive rates like that at one-in-one hundred. In the 269 months since the current unemployment-reporting system was established in January 1994, there have been two occurrences of two consecutive, seasonally-adjusted monthly unemployment rates, with the digit 0 at the second decimal point, prior to the current circumstance. That is within the bounds of what would be expected, given the odds.

There have been no occurrences, prior to this, of the three-consecutive-months circumstance, although the 1-in-1000 shot always remains a random possibility. This detail is based on a review of the existing headline historical detail back to 1994. Where the seasonally-adjusted detail is revised every year, for the prior five years, I have checked only the current headline detail since January 1994 for such occurrences, not all prior historical reporting or all subsequent revisions.

Pre-Election Massaging? Checking for all numbers 0 to 9, there have been no triple sequences at the second decimal point seen in the period, except for the digit 5, which happened twice, once in 1997 and once in 2016. A number with five in the second decimal spot, however, is a special circumstance and will round the first decimal point higher or lower, depending on the third decimal point, which should be a 50-50 shot.

Consider, for example, an unemployment rate of 5.2% could have 5.25% underlying it at the second decimal point, with 5.249% underlying it at the third decimal point. If the number were just 0.002% stronger at 5.251%, that also would round to 5.25% at the second decimal point, but it would round to 5.3% at the first decimal point. ShadowStats frequently has noted fortuitous monthly downside rounding circumstances for such unemployment-rate numbers, where at random, they should occur 50% of the time, on average.

Looking at all headline occurrences of second digits of 5, in the period 1994 through the onset of the 2007 recession, the downside revisions to the next-lower first digit were seen in 8 out of 18 circumstances or 44% of the time (9 out 18 would be 50%). Since the onset of the 2007 recession, however, the politically-happier downside revisions to the next lower first digit were seen 10 out of 12 times or 83% of the time (6 out of 12 would be 50%). The rounding differences were mixed in the 1997 triple sequence, but all were to the downside in the September-to-November 2016 sequence of reporting, with two of those months published right before the election, under the auspices of the prior Administration.

Other Unusual Shifts in Unemployment/Employment Pattern. Throughout 2016, shifts in employed and unemployed counts broadly were not happy circumstances, which reflected either non-comparable month-to-month detail, given the inconsistent publication of concurrent-seasonal adjustments (again, see Headline Distortions from Shifting Concurrent-Seasonal Factors on page 28), or the unemployed count was shrinking, without the employed count rising, as discouraged workers were defined out of the headline labor force. February 2017-to-date, the headline details show the "employed" count rising, with

the "unemployed" count shrinking, coincident with the headline unemployment rate dropping to 4.40%. Separately, as discussed later with the headline data, full-time employment suddenly is surging, with partemployment shrinking. Rarely does the economy turn on a dime, or surge to the upside based largely on consumer optimism over a change in administrations, although such remains a possibility.

Bias Factor and Seasonal Distortions. Moving to consideration of the headline gain of 211,000 jobs in the April 2017 payroll employment survey, the more-overt reporting gimmicks tied to bias factors and seasonal adjustments came heavily into play. Underlying reality was nothing close to the headline, seasonally-adjusted monthly jobs gain of 211,000, which followed a revised monthly gain of 79,000 [previously 98,000] in March 2017. Only the headline March 2017 and April 2017 numbers were reported on a consistent basis, although the headline details were heavily distorted.

The BLS began using an "improved methodology to select models for annual seasonal adjustment processing," with January 2017 data. In that context, using broad seasonal adjustments in place the year before, which would leave the annual changes on a consistent basis both before and after seasonal adjustment, April jobs rose by 85,000, instead of the headline 211,000, with March jobs declining by 22,000 (-22,000) instead of gaining 79,000 (again, see *Headline Distortions from Shifting Concurrent-Seasonal Factors* on page 28).

In terms of the upside, monthly bias factor, the unadjusted April boost was 255,000, up from 233,000 in last year's calculation, and the highest upside bias for any month in the year. In contrast, the upside bias for March had been 32,000 (again, see *Birth-Death/Bias-Factor Adjustment* section on page 31).

As a Compliment to All the Happy, Headline Labor Data, the Federal Reserve Says that Weak Employment and Unemployment Numbers Are Not So Bad, After All. Noted in Commentary No. 879, the Federal recently has begun to alibi weak labor statistics as not so unhealthy for the economy. Where most economists would view a monthly payroll jobs gain below 100,000 as bad news for the economy—a likely real-world circumstance for April 2017—economists at the Fed redefined such an inevitability as "good news," back in October 2016. Discussed in the Fedspeak portion of the FED section of No. 859 Special Commentary:

"Fed Speak perhaps reached a new nadir in <u>Commentary No. 843</u> (see accompanying discussion there), where Fed economists went far beyond the argument that the economy was at full employment [see the accompanying discussion in the <u>Household Survey</u> section of this <u>Executive Summary</u>], trying to sell the concept that weak labor circumstances—seen usually only in recession-related circumstances—really represented normal healthy economic activity:

Such is amidst faux concerns of an "overheating" economy. Some Federal Reserve Board members have warned that recent headline U.3 unemployment readings around 5.0% show the economy to be near full employment (see *Commentary No. 838*); they know better. The latest nonsense, however, comes from research at Fed Chair Janet Yellen's home base of the San Francisco Federal Reserve Bank. The new story is that monthly jobs growth of 50,000 to 110,000 is adequate "to maintain a healthy labor market."

The implied annual growth rates for the levels proffered there, for healthy monthly jobs growth, historically have never been seen outside of a recession (either going into or coming out of), never in a sustainable, healthy economy." Those growth rates were seen in the April headline reporting, discussed later in the *Reporting Detail*.

Executive Summary: Employment and Unemployment—April 2017—Headline Unemployment and Employment Were Not as Good as They Looked. In the context of today's *Opening Special Comments*, the headline monthly payroll jobs gain of 211,000 in April 2017, likely was flat-to-minus in reality. Also in the context of the *Opening Special Comments*, and very specifically the *ShadowStats-Alternate Unemployment Rate Measure* discussion on page 35, the headline 4.40% April 2017 U.3 unemployment rate likely was much closer to 22.1%, as viewed from the context of common experience.

Payroll Survey: Heavily Bloated Month-to-Month Growth, Weakening Annual Growth. In the continuing context of heavily-distorted monthly bloating, unstable seasonal adjustments, and inconsistent benchmarking, the seasonally-adjusted, headline payroll gain for April 2017 was 211,000, which followed a downwardly revised monthly gain of 79,000 in March, and an upwardly revised gain of 232,000 in February 2017. The headline revised monthly gain in February of 232,000 was not reported on a comparable basis with the headline April 2017 and March 2017 details, as discussed in the Headline Distortions from Shifting Concurrent-Seasonal Factors. Net of prior-period revisions, April 2017 payrolls rose by 205,000, instead of the headline 211,000.

As noted in the *Opening Special Comments*, consistently used year-to-year change implied for the seasonally adjusted headline detail would have generated, seasonally-adjusted monthly payroll changes of a 22,000 (-22,000) jobs contraction in March 2017, and a jobs gain of 85,000 in April 2017, instead of the respective headline monthly gains of 79,000 and 211,000.

Collapsing Annual Growth Hit a Level Seen Only Going Into or Coming Out of Recession. The not-seasonally-adjusted, year-to-year growth in April 2017 nonfarm payrolls dropped to 1.45%, versus a revised 1.50% in March 2017 and a revised 1.67% in February 2017.

The annual growth of 1.45% in April 2017 hit a 68-month low, the weakest growth since August 2011, and at that time, the highest growth seen coming out of the economic collapse into 2009. That same growth rate was last seen, as annual growth slowed going into the 2007 recession. Contrary to claims by economists at the San Francisco Fed, far from being healthy or normal, such low-level annual growth rates are seen either coming out of recession, or going into recession, but never seen consistently in ongoing normal economic activity (see the *Opening Special Comments*). April 2017 annual growth just hit that threshold on the downside, headed into recession.

Household Survey: Counting All Discouraged Workers, April Unemployment Eased to 22.1%. The headline good news was that the unemployment rate declined from 4.5% to 4.4%, with the decline in the count of the unemployed dropping by 146,000 (-146,000) being more than offset by a gain of 156,000 in the employed. As seen for second straight month, although rarely seen recently with these headline monthly changes, such is the way an economic recovery should look. Ideally, those dropped from the unemployed count should be finding gainful employment, rather than being reclassified as "discouraged workers" and being redefined as no longer in the headline labor force.

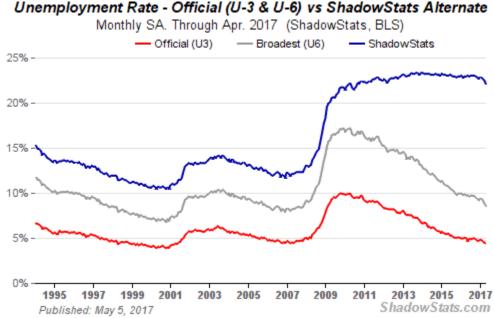
All that said, as usual, the seasonally-adjusted, month-to-month numbers reported with the household survey were neither directly comparable nor meaningful, including comparisons month-to-month of the levels of the unemployment rate and the counts of employed and unemployed. The problem remains that while the headline monthly data for April 2017 were calculated using new seasonally-adjustment patterns unique to April 2017, and the new seasonally-adjusted and comparable data for March 2017 and the months before also were re-calculated, but they were not published. Instead, the unique seasonal

adjustments based on prior March 2017 calculations were left in place for March, unrevised for April, and the unique seasonal adjustments based on February 2017 calculations were left in place for February, unrevised for April or May. Standardly, the month-to-month comparisons of the seasonally-adjusted, headline Household Survey data simply are not comparable.

Occasionally, at random, one sees a happy alignment of the month-to-month detail, as was seen in the April 2017 detail for the second month. Still, little, if any, real word activity can be read into those headline numbers (see *Headline Distortions from Shifting Concurrent-Seasonal Factors* in the *Reporting Detail*).

All that said, the latest seasonally-adjusted monthly readings were at multi-year lows. The primary headline unemployment rate of 4.40% for the headline U.3 hit its lowest reading since May 2007, before the formal recession. The headline unemployment rate of 8.15% for the government's broadest measure U.6 was the lowest since November 2007, and the headline unemployment rate of 22.1% for the ShadowStats Alternate unemployment rate, including long-term discouraged workers, and which is built upon the U.6 number, was at its lowest level since October 2010, still before the official full recovery in the GDP, and the onset of the official, new economic expansion (see *Commentary No. 876*).

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.



Graph 1: Comparative Unemployment Rates U.3, U.6 and ShadowStats
Unemployment Rate - Official (U-3 & U-6) vs ShadowStats Alternate

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

Graph 1 reflects headline April 2017 U.3 unemployment at 4.40%, versus in 4.50% in March and 4.70% in February; headline April 2017 U.6 unemployment at 8.57%, versus 8.87% in March and 9.24% in February; and the headline April 2017 ShadowStats unemployment estimate at 22.1%, versus 22.5% in March and 22.7% in February.

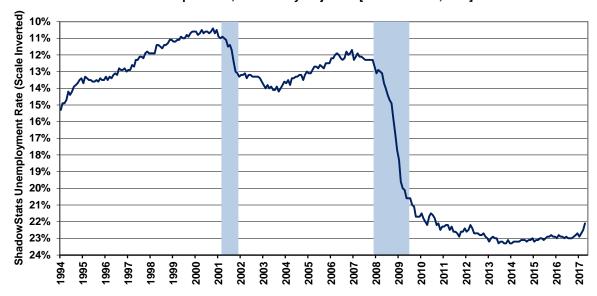
Graphs 2 to 4 reflect longer-term unemployment and discouraged-worker conditions. Graph 3 is of the ShadowStats unemployment measure, with an inverted scale. The higher the unemployment rate, the weaker will be the economy, so the inverted plot tends to move visually in tandem with plots of most economic statistics, where a lower number means a weaker economy.

The inverted-scale of the ShadowStats unemployment measure also tends to move with the employment-to-population ratio, which had turned slightly weaker in second-half 2016, but recently has been in an uptrend in 2017, along with monthly jumps and month-to-month inconsistencies in headline employment and the recently rejiggered population numbers (see *Commentary No. 864*). Nonetheless, that ratio remains somewhat off its post-1994 record low, the historic low and bottom subsequent to the economic collapse (only the period following the series redefinition in 1994 reflects consistent reporting), as shown in *Graph 4*.

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

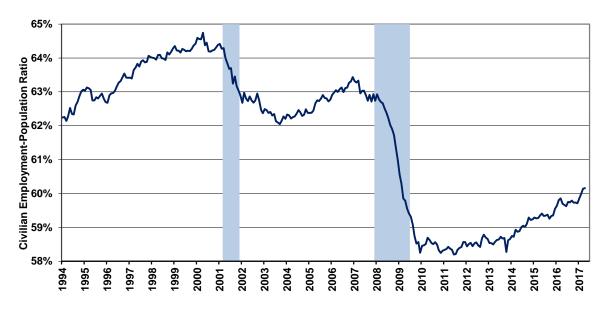
Graph 2: Inverted-Scale ShadowStats Alternate Unemployment Measure

ShadowStats-Alternate Unemployment Rate (Inverted Scale) Long-Term Discouraged/Displaced Workers Included (BLS Excluded Since 1994) To April 2017, Seasonally-Adjusted [ShadowStats, BLS]



Graph 3: Civilian Employment-Population Ratio

Civilian Employment-Population Ratio To April 2017, Seasonally-Adjusted [ShadowStats, BLS]



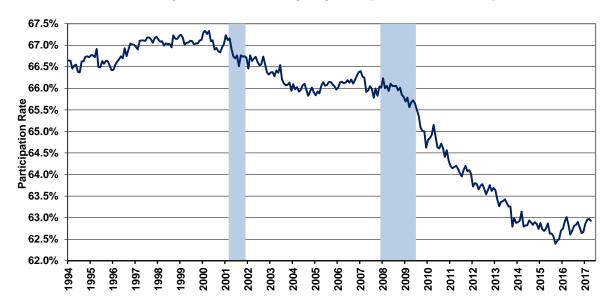
The labor force containing all unemployed (including total discouraged workers) plus the employed, however, tends to be correlated with the population, so the employment-to-population ratio remains something of a surrogate indicator of broad unemployment, and it has a strong correlation with the ShadowStats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

Shown in *Graph 4*, the April 2017 participation rate (the ratio of the headline labor force to the population) notched lower for the month to 62.9% from 63.0% in March and having been fluctuating shy of the 63% mark for the last year. Both the Employment-to-Population Ratio and the Participation Rate appear to have suffered near-term spikes and volatility from the population redefinitions in January 2016, but fell off again in the second half of 2016, only to spike again in the environment of the January 2017 population redefinitions.

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

Graph 4: Labor-Force Participation Rate





Graphs 1 through 4 reflect labor data available in consistent detail only back to the 1994 redefinitions of the Household Survey and the related employment and unemployment measures. Before 1994, employment and unemployment data consistent with the April 2017 Household-Survey reporting simply are not available, irrespective of any protestations to the contrary by the BLS.

The Economy Remains Far From Full-Employment. Discussed in the *Fedspeak* portion of the *FED* section of <u>No. 859 Special Commentary</u> (see also the *Opening Comments* of <u>Commentary No. 870</u>), certain members of the Federal Reserve Board (see <u>Commentary No. 827</u>) have suggested that an

unemployment rate near 5.0% (headline U.3 is at 4.4% at the moment) reflects full-employment conditions in the United States. As noted in, and updated from the earlier employment/unemployment *Commentary No. 845*, one would expect that "full employment" not only would be consistent with a certain headline unemployment rate, traditionally about 5.0%, but also with a coincident labor-force participation rate, traditionally of about 66%.

For example, at the formal onset of the recession in December 2007, the headline unemployment rate was 5.0%, with the participation rate at a 66.0% near-term peak (higher peaks in participation, in the early 2000's, were coincident with U.3 unemployment of about 4.0%). Full employment with unemployment at 5.0%, also minimally should be reflected at a near-term peak in the participation rate, not at a trough. The April 2017 headline unemployment rate of 4.4%, for example was in the context of a 62.9% participation rate. That participation rate, though, was more consistent with a headline unemployment rate (U.3) of 8.9% instead of the headline 4.4%. Where the count of Household Survey employed generally is not gimmicked, that 66% full-employment participation rate—consistent with the latest hyped "full-employment" economy—generally was consistent with a U.3 unemployment nearly 80% above the hyped 5.0% full-employment unemployment rate, more than double the current headline U.3 number. ¹

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

Other Major Indicators Do Not Show a Growing, Expanding—Let Alone Recovered— Economy.

Regularly plotted here are various graphs that mirror the patterns of Graphs 2 to 4 (1994-to-date where available), which do not confirm the purported headline recoveries in the GDP or relative employment. That detail was expanded upon and covered in No. 859 Special Commentary; see also Commentary No. 883. Some of those series are updated in this section.

Consider *Graph 5*, which shows the ShadowStats version of the GDP, also plotted from 1994 but through the April 28th first estimate of first-quarter 2017 GDP, where the GDP plot here has been corrected for the understatement of inflation used in deflating the headline GDP series (further detail and a description of the approach and related links, again, are found in *Commentary No. 883*).

Other graphs (again, see <u>No. 859</u>) range from the CASS Freight Index (*Graph 6*, see <u>Commentary No. 881</u>) to Real S&P 500 Revenues adjusted for share buybacks (*Graph 7*), and include U.S. Petroleum Consumption (*Graph 8*), the Consumer Goods sector out of March 2017 Industrial Production (*Graph 9*) and Housing Starts (*Graph 10*), both out of <u>Commentary No. 881</u>).

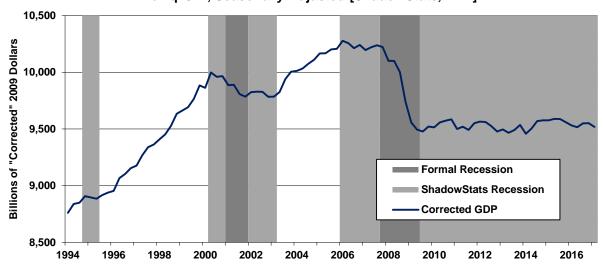
[Graphs 5 to 10 begin on the following page.]

¹ Consider with the April 2017 population of 254.588 million, that the implied labor force at the full-employment participation rate of 66.0% would be $0.66 \times 254.588 = 168.028$. That labor force less current headline employed, 168.028 - 153.156 = 14.872 million implied unemployed / labor force of 168.028 = 8.9% unemployment. The problem with the assumptions underlying these numbers and concept remains that the economy is not at full employment, as has been claimed.

Graph 5: Corrected Real GDP through 1q2017, First Estimate

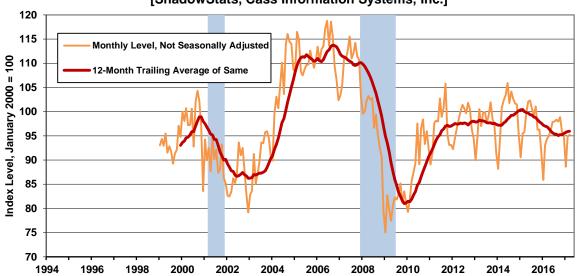
Corrected Real GDP

Nominal GDP Deflated by Implicit Price Deflator Adjusted for Understatement of Annual Inflation
To 1q2017, Seasonally-Adjusted [ShadowStats, BEA]



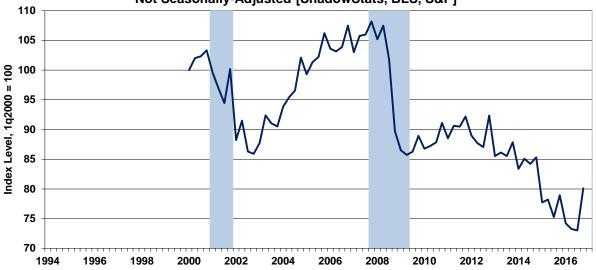
Graph 6: CASS Freight Index for North America (2000 - 2017), Indexed to January 2000 = 100

Cass Freight Index[™] (Jan 2000 = 100) To March 2017, Not Seasonally Adjusted [ShadowStats, Cass Information Systems, Inc.]



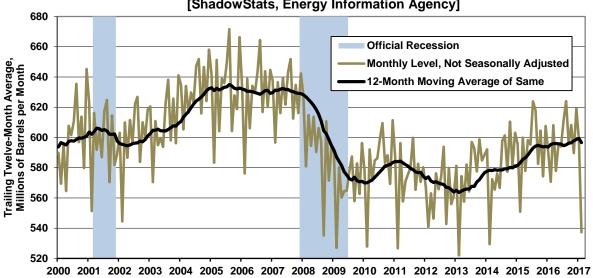
Graph 7: Real S&P 500 Sales Adjusted for Share Buybacks (2000 - 2016), Indexed to January 2000 = 100

Real S&P 500 Quarterly Revenues per Share Adjusted for Share Buybacks, Deflated by CPI-U, 2000 to 4q2016,Indexed to January 2000 = 100 Not Seasonally-Adjusted [ShadowStats, BLS, S&P]



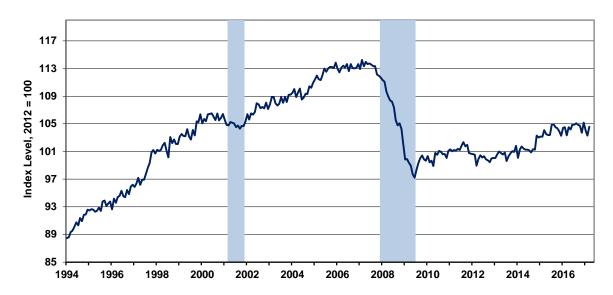
Graph 8: U.S. Petroleum Consumption to February 2017

U.S. Product Supplied of Crude Oil and Petroleum Product To February 2017, Not Seasonally Adjusted, Millions of Barrels per Month, Trailing Twelve-Month Average [ShadowStats, Energy Information Agency]



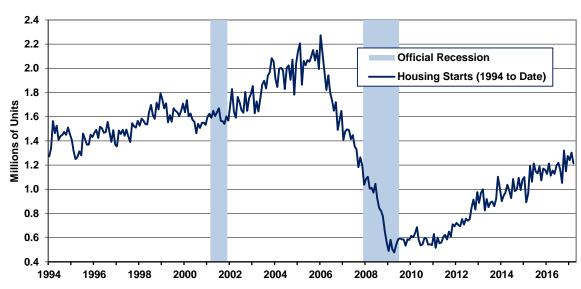
Graph 9: Industrial Production - Consumer Goods Sector (1994 - 2017)

Production - Consumer Goods (2012 = 100) Level 1994 to March 2017, Seasonally-Adjusted [ShadowStats, FRB]



Graph 10: Housing Starts, Annual Rate by Month (1994 - 2017)

Housing Starts (Annual Rate by Month) 1994 to March 2017 Seasonally-Adjusted [ShadowStats, Census]



Headline Unemployment Rates. Again, in the context of the non-comparability of month-to-month changes in seasonally-adjusted unemployment detail, the April 2017 unemployment rate (U.3) declined to 4.40%, versus 4.50% in March, 4.70% in February and 4.78% in January. On an unadjusted basis,

unemployment rates are not revised and, in theory, are consistent in post-1994 methodology. The unadjusted unemployment rate U.3 declined to 4.11% in April, versus 4.56% in March, 4.95% (rounds to 4.9%) in February and 5.14% in January.

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

On top of a decline in the seasonally-adjusted April 2017 U.3 unemployment rate, an unadjusted decline in the count of marginally-attached workers of 61,000 (-61,000) and a decline of 281,000 (-281,000) in the adjusted number of people working part-time for economic reasons, the adjusted April 2017 U.6 unemployment rate eased to 8.57%, versus 8.87% in March, versus 9.24% in February and 9.43% in January. The unadjusted U.6 unemployment rate was 8.15% (rounds to 8.1%) in April 2017, versus 8.94% in March, 9.54% in February and 10.08% in January.

ShadowStats Alternate Unemployment Estimate. Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced long-term discouraged workers—a broad measure of unemployment more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for April 2017 declined to 22.1%, versus 22.5% in March, 22.7% in February and 22.9% in January.

[The Reporting Detail contains extended analysis and graphs.]

HYPERINFLATION WATCH

MONETARY CONDITIONS

In the Context of Continuing, "Substantially Adverse" Economic Circumstances, Risks Remain High of a Dollar Collapse and Extreme Systemic Turmoil. Discussed in <u>Commentary No. 879</u>, beyond the quarter-point rate hike in the targeted federal funds rate on March 15th (there was no change in the targeted rate out of the April meeting), the possibility was raised in the <u>Minutes of the March 14-15, 2017</u> <u>FOMC Meeting</u> of starting to liquidate the assets acquired during the active phase of quantitative easing, perhaps by year-end 2017.

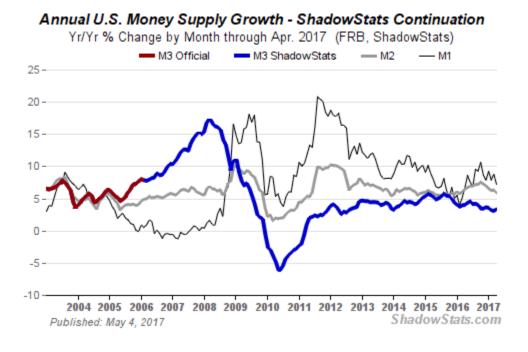
At the same time, the Minutes included repeated qualifications as to further raising of rates and later "balance sheet normalization," based on the risk of development of "substantially adverse economic circumstances." As frequently contended by ShadowStats, those "adverse circumstances" have been and

remain in play, with the FOMC well aware of same. The U.S. central bank remains mired in a policy quagmire of its own creation, a circumstance that evolved out of the Panic of 2008 and the resulting, panicked stopgap measures created by the Fed and the U.S. Treasury to buy time. Those measures bought some time for stabilizing the banking system, but never addressed the underlying, fundamental problems that led to the crisis.

Of the problems that triggered the Panic, ranging from collapsed economic activity, to abnormal banking-system operations and unstable credit creation, as well as to the long-term sovereign solvency issues facing the U.S. Treasury, not one was addressed adequately, if at all. Federal Reserve response focused almost exclusively on its primary function—keeping the banking system afloat—at the expense of addressing such issues as the underlying and intensifying economic disaster.

Discussed regularly here (see *No. 859 Special Commentary*), until underlying systemic stability can be restored to the broad U.S. economy and to the functioning of the U.S. banking system, and until long-term U.S. sovereign solvency issues can be addressed convincingly, the U.S. dollar and the domestic financial system will remain on the cusp of collapse. Those "adverse" circumstances should be enough not only to prevent the Fed from normalizing its balance sheet in the foreseeable future, despite intervening hype to the contrary, but also to force FOMC policy back into expanded quantitative easing, as the fundamentally-weakening U.S. economy increasingly stresses banking-system solvency.

Graph 11: Comparative Money Supply M1, M2 and M3 Yr-to-Yr Changes through April 2017



April 2017 Annual Growth Rate in M3 Bounced Back Minimally from its 5-Year Low in March. Based on three-plus weeks of reporting, and in the context of softened flight to cash, estimated April 2017 annual growth for the ShadowStats Ongoing M3 Money Supply rose to 3.3% from an unrevised 3.1% in March 2017. Where the March showing had been the weakest year-to-year change in fifty-five months, the April reading regained ground lost versus February and March of 2017, but otherwise still was at a 39-month low, the weakest since January 2014.

As had been noted in <u>Commentary No. 872</u> (see <u>Real Money Supply M3—Annual Growth Signaling Economic Downturn</u> on page 19), slowing annual real growth in M3 had pushed to levels that historically preceded recessions. A formal recession signal was in place, but some back off there now is likely with the near-term upside bounce in nominal, annual M3 growth, in combination with a likely continued near-term narrowing of annual CPI-U growth in April 2017, as will be updated in next weekend's <u>Commentary No. 886</u> (see the <u>Week, Month and Year Ahead</u> section).

Separately, nominal year-to-year growth for M2 notched lower to 6.0% in April 2017, versus 6.3% in March 2017 and 6.3% in February 2017. Annual nominal growth in April 2017 M1 also eased, declining to 7.3%, from 8.8% in March 2017 and against 8.0% in February 2017.

Where the trend towards relatively weaker M3 annual growth in recent months reflected a general shift from the large time deposits and institutional money funds in M3, into accounts in the subsidiary M2 and M1 series (M2 includes M1; M3 includes M2), with relatively stronger growth in M1 indicating an increased flight to cash or near-cash, those patterns reversed slightly in the headline April 2017 detail.

For those living in the headline money-supply world comprised of just the Fed's M1 and M2, money growth still has been relatively much stronger for both M1 and M2. Yet, that growth has not necessarily implied a pending inflation surge, since it generally has reflected a flow of funds down from the more-inclusive M3 category, not due to any apparent Fed effort to boost the basic money supply. The relative weakness in annual M3 growth through March 2017, versus M2 and M1 (again, M2 includes M1; M3 includes M2) reflected a shift over time in funds from accounts included just in M3, such as large time deposits and institutional money funds, into accounts in M2. Again, that pattern reversed slightly in the April 2017 headline detail.

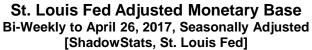
The latest estimates of level and annual changes for April 2017 M3, M2 and M1, and for earlier periods, are detailed in the <u>Alternate Data</u> tab of <u>www.ShadowStats.com</u>. See the <u>Money Supply Special Report</u> for full definitions of those measures. The latest prospects for the Federal Reserve Board's Federal Open Market Committee (FOMC) policy shifts, and prospects for U.S. dollar exchange rates and the price of gold will be reviewed updated in the next weekend's *Commentary No.* 886. First-quarter 2017 Velocity of Money (for M1, M2 and M3) was updated in the *Hyperinflation Watch* of <u>Commentary No.</u> 883.

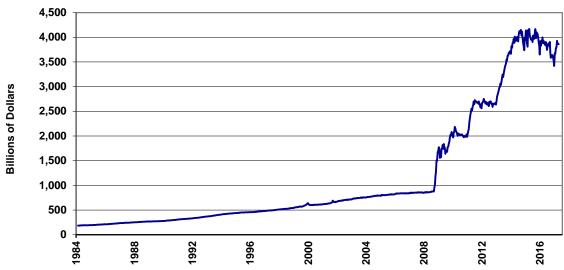
Monetary Base Has Moved Closer to Regaining Its Recent Peaks. In the wake of near-term volatility surrounding recent rate hikes by the FOMC, and the related market efforts by New York Fed to establish stable trading-range activity for the upwardly revised target rates for federal funds, the level of the monetary base has moved back towards its historic highs, with annual percentage change effectively at zero. Circumstances generally should stay there until the Fed moves meaningfully either to sell its excess Treasuries and Mortgage-Backed Securities as part of a planned, eventual "balance sheet normalization," or to embark upon expanded quantitative easing, amidst increasing liquidity stresses in the banking system from deteriorating economic conditions.

Before the Panic of 2008, adjustment to the level of the Monetary Base was the FOMC's primary tool for targeting growth in the money supply. The introduction of Quantitative Easing altered that approach, where the effects of massive purchases of U.S. Treasuries and Mortgage Backed Securities were neutralized in terms of money supply impact, where banks selling those securities generally had to deposit the resulting cash with the Fed as excess reserves, earning interest. That was instead of lending some

increased cash into the normal flow of commerce, which would have increased money supply growth, along with some badly-needed economic stimulus.

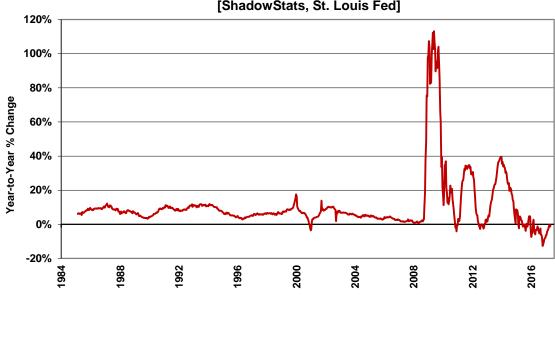
Graph 12: St. Louis Fed Monetary Base (1984-2007)





Graph 13: Year-to-Year Percent Change, St. Louis Fed Monetary Base (1985-2007)

St. Louis Fed Adjusted Monetary Base, Yr/Yr % Bi-Weekly to April 26, 2017, Seasonally Adjusted [ShadowStats, St. Louis Fed]



REPORTING DETAIL

EMPLOYMENT AND UNEMPLOYMENT (April 2017)

Underlying Recession Remained in Play; Headline Labor Conditions Continued to Overstate U.S. Economic Health. Today's *Opening Special Comments* and the opening paragraphs in the *Executive Summary* lay out the extraordinarily-weak background to the May 5th headline reporting of labor conditions for April 2017. The headline monthly payroll jobs gain of 211,000 in April 2017, likely was flat-to-minus in reality. Also in the context of the *Opening Special Comments*, and very specifically the *ShadowStats-Alternate Unemployment Rate Measure* discussion later on page 35, the headline 4.40% April 2017 U.3 unemployment rate like was much closer to 22.1%, when viewed from the context of common experience. The usual highlighting of headline distortions in the payroll-employment and household survey detail are covered in today's the *Opening Special Comments*.

PAYROLL SURVEY DETAIL. The Bureau of Labor Statistics (BLS) published the April 2017 headline payroll-employment detail on May 5th. In the context of downside prior-period revisions, and in the continuing context of heavily-distorted bloating, unstable seasonal adjustments, and inconsistent benchmarking, seasonally-adjusted, headline April 2017 payrolls showed a statistically-significant gain of 211,000+/- 135,000 [a confidence interval more appropriately in the range +/- 300,000] at the 95% confidence interval (all confidence intervals used are at the 95% level). That followed a downwardly-revised monthly gain of 79,000 [previously 98,000] in March, and an upwardly revised gain of 232,000 [previously 219,000, initially 235,000] in February. The headline revised monthly gain in February of 232,000, however, was not reported on a comparable basis with the headline April 2017 and March 2017 detail, as discussed in the *Headline Distortions from Shifting Concurrent-Seasonal Factors*.

Net of prior-period revisions, April 2017 payrolls rose by 205,000, instead of the headline 211,000.

As noted in the *Opening Special Comments*, consistently used year-to-year change implied for the seasonally adjusted headline detail would have generated headline, seasonally-adjusted monthly payroll changes of a 22,000 (-22,000) jobs contraction in March 2017, and a jobs gain of 85,000 in April 2017, instead of the respective headline monthly gains of 79,000 and 211,000.

Collapsing Annual Growth Hit a Level Seen Only Going Into or Coming Out of Recession. The not-seasonally-adjusted, year-to-year growth in April 2017 nonfarm payrolls dropped to 1.45%, versus a revised 1.50% [previously 1.49%] in March 2017 and against a revised 1.67% [previously 1.66%, initially 1.61%] in February 2017.

The annual growth of 1.45% in April 2017 hit a 68-month low, the weakest growth since August 2011, and at that time, the highest growth seen coming out of the economic collapse into 2009. That same growth rate was last seen, as annual growth slowed going into the 2007 recession. Contrary to claims by economists at the San Francisco Fed, far from being healthy or normal, such low-level annual growth

rates are seen either coming out of recession, or going into recession, but never seen consistently in ongoing normal economic activity, as discussed in <u>Commentary No. 843</u>. April 2017 annual growth just hit that threshold on the downside, headed into recession.

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

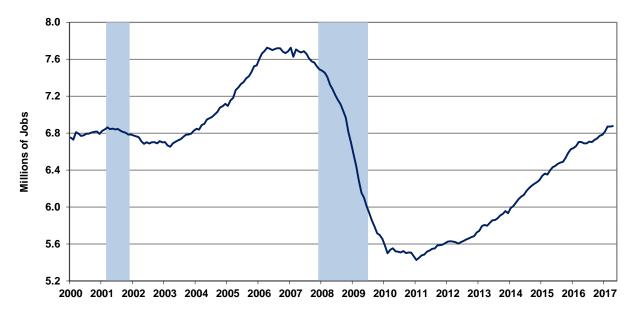
Construction-Payrolls Rose Minimally in April, Revised Lower in March. In the context of a downside revision to the prior month's reporting, April 2017 construction payroll employment rose by 5,000 to 6.877 million jobs. Revised lower to 6.872 million, March 2017 previously had been estimated at 6.882 million. The April 2017 gain was on top of a downwardly-revised monthly gain of 1,000 [previously up by 6,000] in March, following a downwardly-revised gain of 54,000 [previously 59,000, initially up by 58,000] in February. Net of prior-period revisions, the headline April monthly change would have been a contraction of 5,000 (-5,000), instead of a gain of 5,000.

In theory, construction payroll levels should move closely with the inflation-adjusted aggregate construction spending series and the Housing Starts series (the latter measured in units rather than dollars). April details are plotted in accompanying *Graph 14* (updating *Graph 10* in prior *Commentary No. 884*). The recent general pattern of activity has softened and flattened out, and remains shy of recovering its pre-recession high. That broadly is consistent with continuing weakness seen in real construction spending and other construction measures.

Graph 14: Construction Payroll Employment 2000 to Date

Construction Payroll Employment to April 2017

Seasonally-Adjusted [ShadowStats, BLS]



Headline month-to-month construction employment rose by 0.07% in April 2017, versus a revised 0.01% [previously 0.09%] gain in March and a revised 0.78% [previously 0.87%, initially 0.85%] gain in February. Unadjusted year-to-year growth gained 2.48% in April 2017, versus a revised 2.78% [previously 2.87%] in March 2017 and an unrevised annual gain of 3.56% in February 2017.

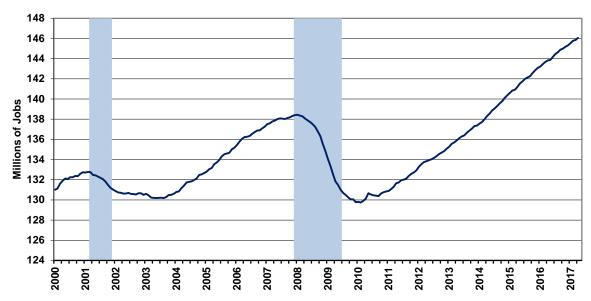
Headline construction-payroll numbers remain heavily biased to the upside (officially bloated by 7,600 jobs per month, unofficially at an order of magnitude of 21,000 jobs per month). Despite downside revisions to recent activity, the headline April level of construction jobs was the highest seen since October 2008, but it remained down from the April 2006 pre-recession series peak by 10.99% (-10.99%).

Historical Payroll Levels. Payroll employment (Payroll Survey) is a coincident indicator of economic activity, and irrespective of all the reporting issues with the series, payroll employment formally regained its pre-recession high in 2014, despite the GDP purportedly having done the same somewhat shy of three years earlier, back in 2011 (see quarterly detail *Commentary No. 876*). Reflected in the next two graphs, headline payroll employment moved to above its pre-recession high in May 2014, as of the 2015 and 2016 benchmarkings. Previously that had been April 2014, as of the 2014 benchmarking. Payroll employment generally has continued to rise since. April 2017, headline payroll employment was 7.63-million jobs above its pre-recession peak.

[Graphs 15 and 16 follow on the next page]

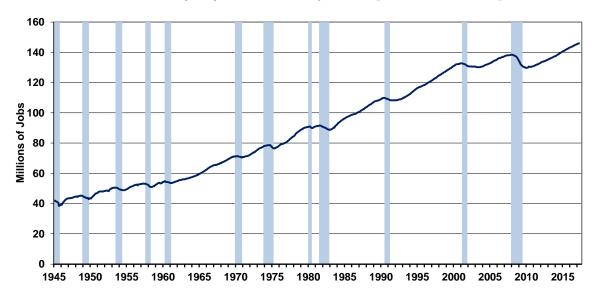
Graph 15: Nonfarm Payroll Employment 2000 to Date





Graph 16: Nonfarm Payroll Employment 1945 to Date

Nonfarm Payrolls Seasonally-Adjusted Jobs to April 2017 [ShadowStats, BLS]



Graphs 15 and *16* show the headline payroll series, both on a shorter-term basis, since 2000, and on a longer-term historical basis, from 1945. In perspective, the longer-term graph of the headline payroll-

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

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

The headline patterns appear to have shifted some, however, in April 2017. Consider that April 2017 payroll jobs, which count each part-time job as an employed individual, gained an aggregate 211,000 jobs in the month.

The Household Survey, which counts employed individuals only once, showed a gain of 156,000 in total employed. Such was in the context of a gain of 480,000 in full-time employed, versus a decline of 370,000 (-370,000) part-time employed. Separately, the number of employed holding multiple jobs declined by 277,000 (-277,000).

Further, and separately reported in the household survey, those working part-time for economic reasons declined by 281,000 (-281,000), while those working part-time for non-economic reasons declined by 23,000 (-23,000), for a total decline in part-time employment there of 304,000 (-304,000).

While those numbers do not add up—they rarely come close to adding up—and are not comparable on a seasonally-adjusted basis, month-to-month, there is nonetheless a fair suggestion of a net shift from part-time to full-time employment, in the headline detail.

Graph 17: Full-Time Employment (Household Survey) to Date

Civilian Full-Time Employment Level - (Household Survey)
Counts Number of People Who Are Employed (Not Number of Jobs Held)
Seasonally-Adjusted Levels, to April 2017 [ShadowStats, BLS]



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

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

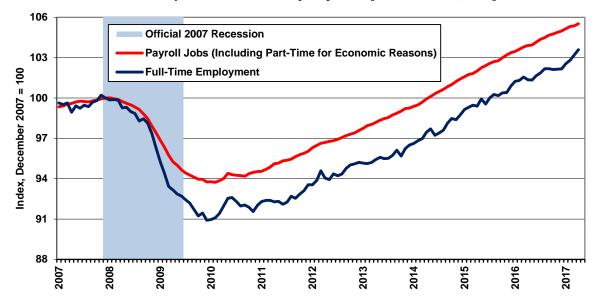
Full-Time Employment versus Part-Time Payroll Jobs. Shown in *Graph 16* (using a roughly-proportionate scale to *Graph 15*), the level of full-time employment (Household Survey) recovered its pre-recession high in August 2015 (see quarterly detail in *Commentary No. 876*). Headline April 2017 full-time employment rose by a further, not believable monthly gain of 480,000, on top of 476,000 in March and 326,000 in February and 457,000 [an implied nonsensical 865,000 if the population revisions were to be believed] gain January 2017, having gained 35,000 in December 2016, 23,000 in November, and having declined by 63,000 (-63,000) in October and by 3,000, (-3000) in September.

Nonetheless, as shown in *Graphs 18* and *19*, full-time employment suddenly is showing a pick-up in growth relative to payroll employment. Putting aside comparability and data-quality issues, those patterns otherwise are suggestive of shift from multiple part-time jobs to full-time employment.

[Graphs 18 and 19 follow on the next page.]

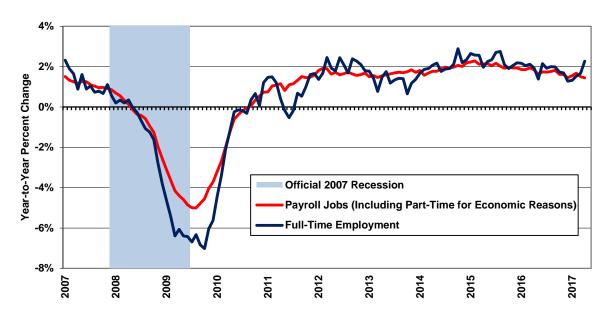
Graph 18: Full-Time Employment (Household Survey) versus Jobs Count (Payroll Survey)

Full-Time Employment versus Payroll Jobs Levels Recession Timed Formally from December 2007 = 100 To April 2017, Seasonally Adjusted [ShadowStats, BLS]



Graph 19: Full-Time Employment (Household Survey) versus Jobs Count (Payroll Survey), Year-to-Year

Full-Time Employment versus Payroll Jobs Year-to-Year % Change, NSA, to April 2017 [ShadowStats, BLS]



Headline full-time employment detail now stands at 4.38-million above that pre-recession high for the series. That gain is due in particular to irregularly-volatile monthly gains in the seasonally-adjusted data

of the last year or so, and with particularly strong growth the first four months of 2017. Again, month-to-month seasonally-adjusted details simply are not comparable.

Still the 4.38-million gain compares with the headline payroll-employment level that is 7.63-million above its pre-recession high, regained some 34-months ago. Again, the payroll count is of jobs, not people, where much of that payroll "jobs" growth has been in part-time, and in multiple part-time jobs, many still taken on for economic reasons, where full-time employment was desired but could not be found.

As a separate consideration and an indication of the level of nonsensical GDP reporting, where employment traditionally is a coincident indicator of broad economic activity, again the GDP purportedly recovered its pre-recession high some five years ago, more than two years before similar payroll activity, and more than four years before the likely temporary, lesser recovery in full-time employment. *Graphs 18* and *19* plot comparisons of activity in full-time employment versus payroll jobs, post-economic collapse. Full-time employment was hit hardest, with headline employment "recovery" coming largely from individuals having to settle for part-time work (again, see quarterly detail *Commentary No. 876*).

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

The 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).

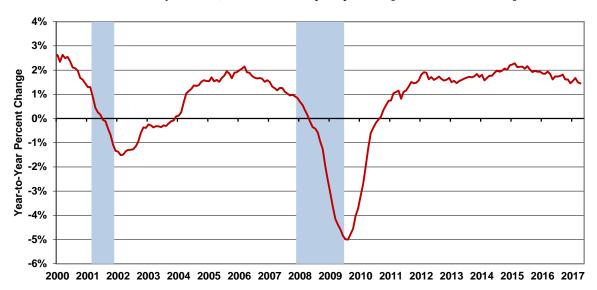
Annual Percent Changes in Headline Payroll Employment. Not-seasonally-adjusted, year-to-year change in payroll employment is untouched by the concurrent-seasonal-adjustment issues, so the monthly comparisons of year-to-year change at least are reported on a consistent basis, although they are, in theory,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

Year-to-year growth in unadjusted payrolls hit a post-recession peak of 2.29% in February 2015, reflected in the headline detail of *Graphs 20* and *21*. Such remains the strongest annual growth since June 2000 (another recession), but subsequent annual growth has slowed sharply. Year-to-year nonfarm payroll growth in January and February 2017 notched higher respectively to 1.55% and 1.66%, then dropped back to 1.50% in March 2017 and to a 68-month low of 1.45% in April 2017. That level of growth was last hit on the downside going into the 2007 recession, and on the upside, coming out of the recession, as discussed earlier, again see recent discussions of "healthy" annual payroll growth in *Commentary No. 843* and the FOMC discussion in *Commentary No. 870*.

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

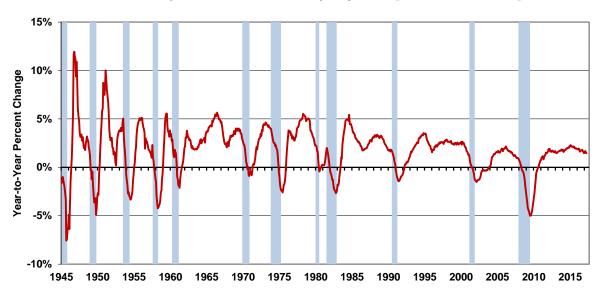
Graph 20: Payroll Employment, Year-to-Year Percent Change, 2000 to Date

Nonfarm Payrolls Year-to-Year Percent Change 2000 to April 2017, Not Seasonally Adjusted [ShadowStats, BLS]



Graph 21: Payroll Employment, Year-to-Year Percent Change, 1945 to Date

Nonfarm Payrolls Year-to-Year Percent Change 1945 to April 2017, Not Seasonally Adjusted [ShadowStats, BLS]



Headline Distortions from Shifting Concurrent-Seasonal Factors. There remain serious and deliberate flaws with the government's seasonally-adjusted, monthly reporting of both employment and unemployment. Each month, the BLS uses a concurrent-seasonal-adjustment process to adjust both the

payroll and unemployment data for the latest seasonal patterns. As new headline data are seasonally-adjusted for each series, the re-adjustment process also revises the monthly history of each series. A new seasonally-adjusted history is recalculated for every month, going back five years, so as to be consistent with the new seasonal patterns generated for the current headline number. The problem remains that the historically-comparable revised data are not published along with the new headline detail.

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

For both the household [unemployment] and establishment [payroll] surveys, a concurrent seasonal adjustment methodology is used in which new seasonal factors are calculated each month using all relevant data, up to and including the data for the current month. In the household survey, new seasonal factors are used to adjust only the current month's data. In the establishment [payroll] survey, however, new seasonal factors are used each month to adjust the three most recent monthly estimates. The prior 2 months are routinely revised to incorporate additional sample reports and recalculated seasonal adjustment factors. In both surveys, 5-year revisions to historical data are made once a year.

Discussed in the following paragraphs, the historical data never are published on a consistent basis for the payroll survey, again, even with the headline benchmark revision. The household survey is published only once per year on a consistent basis, in December, but the numbers become inconsistent, once again, with the ensuing January reporting. Headline month-to-month inconsistencies in the household survey are highly variable every month, but that detail never is published and is not knowable by the public.

<u>Effective Reporting Fraud.</u> The problem remains that the BLS does not publish the monthly historical revisions along with the new headline data.

As a result, current headline reporting is neither consistent nor comparable with published historical data, including the most-recent months, and the unreported actual monthly variations versus headline detail can be meaningful. The deliberately-misleading reporting effectively is a fraud. The problem is not with the BLS using concurrent-seasonal-adjustment factors; it is with the BLS not publishing the consistent data, where those data are calculated each month and are available internally to the Bureau. The BLS expressed reasons for not publishing the revised monthly numbers on a consistent basis: "Numerous revisions during the year, however, should be avoided, because they tend to confuse data users and to increase publication costs substantially."

Household Survey. In the case of the published Household Survey (unemployment rate and related data), the seasonally-adjusted headline numbers usually are not comparable with the prior monthly data or any month before. Accordingly, the published headline detail as to whether the unemployment rate was up, down or unchanged in a given month is not meaningful, and what actually happened is not knowable by the public. Month-to-month comparisons of these popular numbers are of no substance, other than for market hyping or political propaganda. The headline month-to-month reporting in the Household Survey is made consistent only in the once-per-year reporting of December data, with annual revisions back for five years. Again, though, all historical comparability disappears, though, again, with the ensuing headline January reporting, and with each monthly estimate thereafter.

Consider *Graphs 22* and *23*, where data are available from the BLS to calculate the month-to-month seasonal-adjustment variability in the Payroll Survey. Similar detail is not available for the Household Survey, yet the month-to-month instability likely is of similar magnitude. At least with the Payroll Survey, the headline January 2017 payroll level was prepared on a consistent basis with the levels of

December 2016 and November 2016, but not with October 2016, with the result the headline monthly gains are consistent only for January and December. With the Household Survey, except for December, the seasonally-adjusted monthly detail is not comparable with any other month, so seasonally-adjusted, month-to-month comparisons have no meaning in the Household Survey, even for the headline month.

<u>Payroll or Establishment Survey.</u> In the case of the published Payroll Survey data (payroll-employment change and related detail), again, the current monthly changes in the seasonally-adjusted headline data are comparable only with the prior month's month-to-month reporting, not before. Due to the BLS modeling process, the historical data never are published on a consistent basis, even with publication of the annual benchmark revision (see the comments on *Graphs 22* and *23*).

Where the BLS does provide modeling detail for the Payroll Survey, allowing for third-party calculations, no such accommodation has been made for the Household Survey. Again, ShadowStats affiliate ExpliStats has done such third-party calculations for the payroll series, and the resulting detail of the differences between the current headline reporting and the constantly-shifting, consistent and comparable history are reflected here in *Graph 22*, showing the full monthly variability in the 2016 historical seasonal adjustments in the period since the 2015 payroll benchmark revision. As seen here, consistent data never are published. The benchmark-revised system is run in the background for three months before the headline January publication, which allows the initial headline publishing to stray from the initial benchmarking. *Graph 22* shows how far the system strayed from the initial 2016 benchmarking, in its formal benchmark reporting of January 2017.

Where the red line reflected seasonal-factor straying through December 2016 from the 2015 benchmarking, the blue line indicates the straying in January 2017 versus the initial 2016 benchmarking. The January 2017 detail suggested a reversal of seasonal factors, consistent with the benchmarking detail and the new "selective" seasonal adjustment processes. Such variability in seasonal factors, though, rarely is seen in a stable economic series. These data again suggest heavily-gamed headline reporting.

As seen in the recent detail, the differences go both ways and often are much larger. Such was the case for November 2014, coming out of the 2014 benchmark revision, as detailed and discussed in the *Opening Comments* of *Commentary No. 784*. Subscribers interested in the modeling of specific industry payroll components on a consistent month-to-month basis—not otherwise available—should contact johnwilliams@shadowstats.com or at (707) 763-5786.

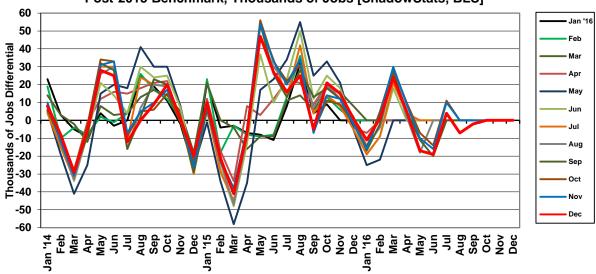
[Graphs 22 and 23 are shown on the next page]

Graph 22: Concurrent-Seasonal-Factor Irregularities - December 2016 Detail versus 2015 Benchmarking

Seasonal-Factor Misreporting versus 2015 Benchmark

Seasonally-Adjusted Nonfarm Payroll Employment
Difference Between Actual Series and

Distorted Official Reporting Levels by Reporting Month Post-2015 Benchmark, Thousands of Jobs [ShadowStats, BLS]

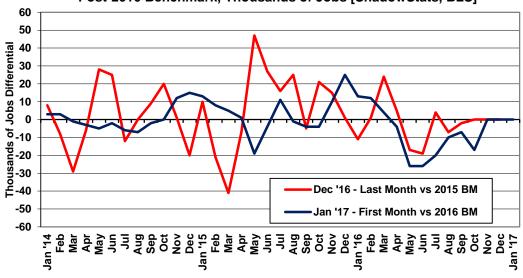


Graph 23: Concurrent-Seasonal-Factor Irregularities - January '17 Detail versus 2016 Benchmarking

Seasonal-Factor Misreporting versus 2016 Benchmark

Seasonally-Adjusted Nonfarm Payroll Employment Difference Between Actual Series and

Distorted Official Reporting Levels by Reporting Month Post-2016 Benchmark, Thousands of Jobs [ShadowStats, BLS]



Birth-Death/Bias-Factor Adjustment (BDM). Despite the ongoing, general overstatement of monthly payroll employment, the BLS adds in upside monthly biases to the payroll employment numbers. The

continual overstatement is evidenced usually by regular and massive, annual downward benchmark revisions (2011 and 2012 excepted), although increasingly the downside revisions, when formalized are more than offset by upside revisions to the monthly bias factors, going forward, as was the case in 2016 (see *Commentary No. 864*).

The initial estimate (summary number) for the 2016 benchmarking was for a downside revision in total payrolls for March of 2016 by 150,000 (-150,000), down by 224,000 (-224,000) in just private-sector employment (see *Commentary No. 830*). Those changes, however, were massaged and recast to an aggregate downside revision of 81,000 (-81,000) jobs. That change then was used to impute adjustments back to April 2015, and it should have been carried forward to December 2016, but that did not happen, again, as discussed in the *Opening Comments* of *No. 864*.

Despite the published downside revision of 206,000 (-206,000) to March 2015 payrolls in the 2015 benchmarking (see <u>Commentary No. 784</u> and <u>Commentary No. 784-A</u>), the BLS upped its annual upside-bias factors since then by 65,000. Such discrepancies, however, are not unusual for the BLS.

Considering related actions of recent years, discussed in the benchmark detail of <u>Commentary No. 598</u>, 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 <u>Commentary No. 694</u> and <u>Commentary No. 695</u>. With the headline benchmark revision for March 2014 showing understated payrolls of 67,000 (-67,000), the BLS upped its annual add-factor bias by 161,000 for the year ahead.

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

April 2017 Add-Factor Bias. The not-seasonally-adjusted April 2017 add-factor bias was an upwardly-revised, positive 255,000, following a positive 32,000 in March, versus a positive 233,000 add-factor in April 2016 reporting. The revamped, aggregate upside annual bias for the trailing twelve months through April 2017 is estimated from current headline bias reporting at 952,000 up by 111,000 or 13.2% from 841,000 in the December 2016 pre-benchmarking level and up 171,000 or 21.9% from 781,000 in December 2015, the year before. That is a monthly average of 79,333, in April 2017 (versus 70,083 pre-2016 benchmarking) jobs created out of thin air, on top of some indeterminable amount of other jobs that

are lost in the economy from business closings. Those losses simply are assumed away by the BLS in the BDM, as discussed below.

<u>Problems with the Model.</u> The aggregated upside annual reporting bias in the BDM reflects an ongoing assumption of a net-positive jobs creation by new companies versus those going out of business. Such becomes a self-fulfilling system, as the upside biases boost reporting for financial-market and political needs, with relatively good headline data, while often also setting up downside benchmark revisions for the next year, which traditionally are ignored by the media and the politicians. The BLS cannot measure meaningfully the impact of jobs loss and jobs creation from employers starting up or going out of business, on a timely basis (within at least five years, if ever), or by changes in household employment that were incorporated into the 2016 redefined payroll series. Such information simply is guesstimated by the BLS, along with the addition of a bias-factor generated by the BDM.

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

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

The presumed net additional "surplus" jobs created by start-up firms are added on to the payroll estimates each month as a special add-factor. On top of that, the monthly BDM add-factors have been increased now to an average of 79,333 jobs per month for the current year. As a result, in current reporting, the aggregate average overstatement of employment change easily exceeds 200,000 jobs per month (the underlying positive base-assumption upside bias, plus the monthly Birth-Death Model add-factor).

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

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

Headline Unemployment Rates. Again, in the context of the non-comparability of month-to-month changes in seasonally-adjusted unemployment detail, the April 2017 unemployment rate (U.3) declined to 4.4% [4.40%], versus 4.5% [4.50%] in March and 4.7% [4.70%] in February (see the *Opening Special Comments*). Formally, the decline of 0.10% (-0.10%) in the April U.3 was shy of being statistically-significant (+/- 0.23% at the at the 95% confidence interval). Such consideration is nonsense, however, given that the monthly numbers are reported on an inconsistent basis and are not even comparable with each other, except once per year, in December, which disappears with the ensuing January reporting.

On an unadjusted basis, unemployment rates are not revised and, in theory, are consistent in post-1994 methodology. The unadjusted unemployment rate U.3 declined to 4.11% in April 2017, versus 4.56% in March and 4.95% (rounds to 4.9%) in February.

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

On top of a decline in the seasonally-adjusted U.3 unemployment rate, an unadjusted decline in the count of marginally-attached workers of 61,000 (-61,000) and a decline of 281,000 (-281,000) in the adjusted number of people working part-time for economic reasons, the adjusted April 2017 U.6 unemployment rate declined to 8.57%, versus 8.87% in March and 9.24% in February. The unadjusted U.6 unemployment rate was 8.15% (rounds to 8.1%) in April 2017, versus 8.94% in March and 9.54% in February.

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 April 2017 (never seasonally-adjusted) declined by 5,000 to 455,00, having declined by 62,000 (-62,000) to 460,000 in March and having dropped 10,000 (-10,000) to 522,000 in February, with total marginally-attached workers declining by 61,000 (-61,000) in April 2017, following drops of 128,000 (-128,000) to 1,595,000 in March and 9,000 (-9,000) in February.

That latest, official "discouraged" number, again, reflected the flow of the headline unemployed—giving up looking for work—leaving the headline U.3 unemployment category and being rolled into the U.6 measure as short-term "marginally-attached discouraged workers," net of the further increase in the

number of those moving from short-term discouraged-worker status into the netherworld of long-term discouraged-worker status.

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

ShadowStats Alternate Unemployment Estimate. Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced long-term discouraged workers—a broad measure of unemployment more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for April 2017 declined to 22.1%, versus 22.5% in March and versus 22.7% in February. The ShadowStats estimate generally shows the toll of long-term unemployed leaving the headline labor force—effectively becoming long-term discouraged or displaced workers—as discussed in detail in the following section.

SHADOWSTATS-ALTERNATE UNEMPLOYMENT RATE MEASURE. In 1994, the Bureau of Labor Statistics (BLS) overhauled its system for estimating unemployment, including changing survey questions and unemployment definitions. In the new system, measurement of the previously-defined discouraged or displaced workers disappeared. These were individuals who had given up looking for work, because there was no work to be had. These people, who considered themselves unemployed, had been counted in the old survey, irrespective of how long they had not been looking actively for work. These were individuals who were and would be considered displaced workers, due to circumstances of severely-negative economic conditions or other factors such as changing industrial activity resulting from shifting global trade patterns.

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

The post-1994 survey techniques also fell far shy of adequately measuring the long-term displacement of workers tied to the economic collapse into 2008 and 2009, and from the lack of subsequent economic recovery. In current headline reporting, the BLS has a category for those not in the labor force who currently want a job. Net of the currently-defined level of "marginally attached workers," which includes the currently-defined and undercounted "discouraged workers" category used in the U.6, which declined to 1.534 million in April 2017, those not in the labor force currently wanting a job, exclusive of the marginally attached 4.036 million in April 2017, versus 3.912 million in March (a total of 5.560 million in

April 2017, versus 5.507 million in March). Seasonally adjusted the aggregate April 2017 number was 5.707 million, versus 5.781 million in March.

While some contend that that number includes all those otherwise-uncounted discouraged workers, such is extremely shy of underlying reality due to the changed survey methodology.

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

Some broad systemic labor measures from the BLS, though, are consistent in pattern with the ShadowStats measure, even allowing for the shifts tied to an aging population with retiring "baby boomers." Shown in the *Executive Summary*, the graph of the inverted ShadowStats unemployment measure has a strong correlation with the employment-to-population ratio, in conjunction with the labor-force participation rate (see *Graphs 2* to 4). Other measures, such as the ShadowStats-Alternate GDP Estimate, S&P 500 Real Revenues, the CASS Freight Index, U.S. Petroleum Consumption, etc. are highlighted in subsequent *Graphs 5* to *10* there and in the *ECONOMY* section of *No. 859 Special Commentary*.

Headline April 2017 Detail. Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced workers, of long-term discouraged workers—a broad unemployment measure more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for April 2017 declined to 22.1%, from 22.5% in March 2017, from 22.7% in February, and 22.9% in January. Built upon the headline U.3 estimate, the April 2017 ShadowStats reading was at its lowest reading since October 2010, down by 120 basis points or 1.2% (-1.2%) from the 23.3% series high last seen in December 2013.

In contrast, the April 2017 headline U.3 unemployment rate of 4.40% was down by 560 basis points or by 5.6% (-5.6%) from its peak of 10.0% in October 2009, back to pre-recession levels. The broader U.6 unemployment measure of 8.6% in April 2017, was down by 860 basis points or 8.6% (-8.6%) from its peak of 17.2% April 2010, also back to pre-recession levels.

A subscriber recently raised the question as to why the ShadowStats Alternate Unemployment Estimate has been holding around 23%. Recalculated each and every month, the ShadowStats estimate generally picks up the net flows of headline "discouraged" workers, who have been redefined out of existence after having been inventoried in the BLS accounting of the U.6 rate for about eleven months (where individuals have not looked actively for a job in one year). In turn, U.6 picks up as "discouraged workers" those in U.3 who have not actively looked for work in the last four weeks. It is the resulting reduction in the U.3 and U.6 "unemployed" and the related labor forces used in calculating those respective headline unemployment rates that has accounted for the bulk of the reduction in those headline rates, with much of the difference flowing into and holding reasonably steady in the ShadowStats alternate measure.

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

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

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

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

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

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

WEEK, MONTH AND YEAR AHEAD

Downturn in the Economy Should Intensify in Headline Reporting, Compromising Fed Policies, Pummeling the U.S. Dollar and Boosting the Price of Gold. In the context of the *Opening Special Comments* and as discussed the *Opening Comments* of *Commentary No. 883*, the developing downshift in economic expectations increasingly should move market expectations for Federal Reserve policy away from rate hikes and the normalization of the Fed's balance sheet, towards renewed quantitative easing. The problem for the U.S. central bank remains that faltering domestic economic activity stresses banking-system solvency. Aside from formal obligations of the Fed to maintain healthy domestic economic and inflation conditions, the central bank's primary function, in practice, always has been to keep the banking system afloat. The near-absolute failure of that function in 2008 remains the primary ongoing and unresolved problem for the Fed, and it is one of the ongoing primary issues preventing the return of U.S. economic activity to normal functioning.

The outlook for future FOMC activity will be updated in next week's *Commentary No.* 886, and remains otherwise as reviewed in the *Opening Comments* and *Hyperinflation Watch* of *Commentary No.* 880 and as previously reviewed in *Commentary No.* 873. The circumstances and outlook remain as broadly outlined in *No.* 859 Special Commentary.

Otherwise, the following discussion has changed little from other recent comments. As reflected in common experience, actual U.S. economic activity generally continues in stagnation or downturn, never having recovered fully its level of pre-economic-collapse (its pre-2007-recession peak). While the latest headline GDP shows economic expansion of 12.3% since that series purportedly recovered its 2007-pre-recession high in 2011, no other "recovered" economic series has come close to showing that expansion either in terms of magnitude or in the purported brevity of the depression. Most of the better-quality series have remained in continuing, not-recovered status, in a period of protracted downturn that now rivals that of the Great Depression (see *Commentary No. 869*). With new signals in hand of intensifying, near-term economic woes, the FOMC soon should shift policies, once again, reverting to some form of quantitative easing, in an effort to address related, intensifying solvency risks in the domestic banking system.

Discussed in <u>No. 859 Special Commentary</u>, the Trump Administration continues to face extraordinarily difficult times, but has a chance to turn the tide on factors savaging the U.S. economy and on prospects for long-range U.S. Treasury solvency and for stability and strength in the U.S. dollar. Any forthcoming economic stimulus faces a nine-month to one-year lead-time—now moved well into 2018—before it meaningfully affects the broad economy. Needed at the same time are a credible plan for bringing the U.S. long-term budget deficit (sovereign solvency issues) under control, and action to bring the Federal Reserve under control and/or to reorganize the banking system. These actions broadly are necessary to restore domestic-economic and financial-system tranquility (again, see *No. 859*).

Prior General Background. No. 859 Special Commentary updated near-term economic and inflation conditions, and the outlook for same, including the general economic, inflation and systemic distortions

evolving out of the Panic of 2008 that have continued in play, and which, again, need to be addressed by the new Administration in the immediate future (see also the *Hyperinflation Watch* of <u>Commentary No.</u> 862 and <u>Commentary No.</u> 869).

Contrary to the official reporting of an economy that collapsed from 2007 into 2009 and then recovered strongly into ongoing expansion, underlying domestic reality remains that the U.S. economy started to turn down somewhat before 2007, collapsed into 2009 but never recovered fully. While the economy bounced off its 2009 trough, it entered a period of low-level stagnation and then began to turn down anew in December 2014, a month that eventually should mark the beginning of a "new" formal recession (see *General Commentary No. 867*).

Coincident with and tied to the economic crash and the Panic of 2008, the U.S. banking system moved to the brink of collapse, a circumstance from which U.S. and global central-bank policies never have recovered. Unwilling to admit its loss of systemic control, the Federal Reserve had been making loud noises of continuing to raise interest rates, in order to contain an overheating economy, but that "overheating" activity has started to fade. As this ongoing crisis evolves towards its unhappy end, the U.S. dollar ultimately should face unprecedented debasement with a resulting runaway domestic inflation.

Broad economic and systemic conditions are reviewed regularly, with the following *Commentaries* of particular note: <u>Commentary No. 869</u>, <u>No. 777 Year-End Special Commentary</u> (December 2015), <u>No. 742 Special Commentary: A World Increasingly Out of Balance</u> (August 2015) and <u>No. 692 Special Commentary: 2015 - A World Out of Balance</u> (February 2015). Those publications updated the long-standing hyperinflation and economic outlooks published in <u>2014 Hyperinflation Report—The End Game Begins</u> – First Installment Revised (April 2014) and <u>2014 Hyperinflation Report—Great Economic Tumble</u> – Second Installment (April 2014). The two Hyperinflation installments remain the primary background material for the hyperinflation circumstance. Other references on underlying economic reality are the <u>Public Commentary on Inflation Measurement</u> and the <u>Public Commentary on Unemployment Measurement</u>.

Recent Commentaries (Most-Recent Coverage of Specific Series or with Special Features):

<u>Commentary No. 884</u> reviewed the March 2017 details for the U.S. Trade Deficit and Construction Spending and the Conference Boards' reporting of April 2017 Help Wanted OnLine.

<u>Commentary No. 883</u> covered the headline detail for the "advance" or first-estimate of first-quarter GDP, along with an update to *Consumer Liquidity Conditions*.

<u>Commentary No. 882</u> summarized the annual benchmark revisions to Retail Sales and reviewed the March 2017 releases of New Orders for Durable Goods and for New- and Existing-Home Sales.

<u>Commentary No. 881</u> reviewed March 2017 Industrial Production, Housing Starts and the Cass Freight IndexTM, along with an economic update in advance of the initial first-quarter 2017 GDP estimate.

<u>Commentary No. 880</u> detailed the March 2017 headline reporting the of both Real and Nominal Retail Sales, Real Earnings, the CPI, the PPI and updated Consumer Liquidity, where mounting stresses on consumer income and credit are signaling major economic issues ahead.

<u>Commentary No. 879</u> covered March 2007 Employment and Unemployment, Help-Wanted Advertising and an update on monetary policy and Money Supply M3 (the ShadowStats Ongoing Measure).

<u>Commentary No. 878</u> reviewed detail on the February 2007 Trade Deficit and Construction Spending, along with the latest update on Consumer Liquidity conditions.

<u>Commentary No. 877</u> outlined the nature of the downside annual benchmark revisions to industrial production, along with implications for pending annual revisions to Retail Sales, Durable Goods Orders and the GDP.

<u>Commentary No. 876</u> current headline economic activity in the context of formal definitions of the business cycle (no other major series come close to the booming GDP, which is covered in its third revision to fourth-quarter activity. Also the February 2017 SentierResearch reading on real median household income was highlighted.

<u>Commentary No. 875</u> assessed and clarified formal definitions of the U.S. business cycle, which were expanded upon significantly, subsequently, in *No. 876*. It also provided the standard review of the headline February 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the Cass Freight IndexTM.

<u>Commentary No. 873</u> discussed prospects for future tightening and/or a return to quantitative easing by the FOMC, along with the prior review of the February 2017 Residential Construction reporting.

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

<u>Commentary No. 871</u> covered prior reporting of February Labor Conditions, updated Consumer Liquidity and the ShadowStats Ongoing M3 Measure for February 2017, and a revised FOMC outlook.

<u>Commentary No. 869</u> reviewed and assessed underlying economic reality and a broad variety of indicators in the context of the second-estimate of fourth-quarter 2016 GDP.

<u>General Commentary No. 867</u> assessed mixed signals for a second bottoming of the economic collapse into 2009, which otherwise never recovered its level of pre-recession activity. Such was in the context of contracting and faltering industrial production that now rivals the economic collapse in the Great Depression as to duration. Also covered were the prior January 2017 New- and Existing Home Sales.

<u>Commentary No. 864</u> analyzed January 2017 Employment and Unemployment detail, including benchmark and population revisions, and estimates of December Construction Spending, Household Income, along with the prior update to Consumer Liquidity.

<u>Commentary No. 861</u> covered the December 2016 nominal Retail Sales, the PPI, with a brief look at some summary GAAP reporting on the U.S. government's fiscal 2016 operations. The GAAP-detail will be reviewed in a *Special Commentary*.

No. 859 *Special Commentary* reviewed and previewed economic, financial and systemic developments of the year passed and the year or so ahead.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. Significant reporting-quality problems remain with most major economic series. Beyond the pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended to understate inflation and to overstate economic activity—as generally viewed in the common experience of Main Street, U.S.A.—ongoing headline reporting issues are tied largely to systemic distortions of monthly seasonal adjustments (see the *Opening Special Comments*).

Data instabilities—induced partially by the still-evolving economic turmoil of the last eleven years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn provide particularly unstable headline economic results, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). That issue is discussed and explored in the labor-numbers related <u>Supplemental</u> <u>Commentary No. 784-A</u> and <u>Commentary No. 695</u>.

Further, discussed in <u>Commentary No. 778</u>, a heretofore unheard of spate of "processing errors" surfaced in 2016 surveys of earnings (Bureau of Labor Statistics) and construction spending (Census Bureau). This is suggestive of deteriorating internal oversight and control of the U.S. government's headline economic reporting. That construction-spending issue now appears to have been structured as a gimmick to help boost the July 2016 GDP benchmark revisions, aimed at smoothing the headline reporting of the GDP business cycle, instead of detailing the business cycle and reflecting broad economic trends accurately, as discussed in <u>Commentary No. 823</u>.

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 <u>Commentary No. 669</u>). John Crudele of the <u>New York Post</u> has continued his investigations in reporting irregularities: <u>Crudele Investigation</u>, <u>Crudele on Census Bureau Fraud</u> and <u>John Crudele on Retail Sales</u> (worth a review in the context of the just-published 2017 benchmarking).

PENDING RELEASES: Producer Price Index—PPI (April 2017). The Bureau of Labor Statistics (BLS) will release the April 2017 PPI on Thursday, May 11th, with detail covered in *Commentary No.* 886 of the ensuing weekend. Odds favor positive wholesale inflation on the goods side of the reporting, perhaps up by 0.3%, plus-or-minus, due largely to negative seasonal-factor adjustments softening the unadjusted monthly-price gains of petroleum-related products. The dominant services sector, however, often provides a counter-move to the hard-inflation estimate on the goods side. Such comes from counterintuitive "deflation" or "inflation," reflecting falling or rising "margins," in turn reflecting rising or falling costs. Guesstimation in that services sector remains highly problematic, as discussed in *Inflation that Is More Theoretical than Real World?* in *Commentary No.* 880, where, again, the services component could offset any weakness in the headline goods inflation.

Unadjusted oil prices increased in April 2017, as did wholesale gasoline prices. Based on the two most-widely-followed oil contracts, monthly-average oil prices rose by 1.4% and 3.3%. That was accompanied by a 7.8% gain in unadjusted, monthly-average wholesale gasoline prices (Department of Energy). Where PPI seasonal adjustments for energy costs in March are negative, such still should leave some petroleum-related monthly gain in the adjusted Final Demand Goods component of the PPI.

Consumer Price Index—CPI (April 2017). The Bureau of Labor Statistics (BLS) will release the April 2017 CPI on Friday, May 12th, which will be covered in *Commentary No. 886* of that day or over the ensuing weekend. The headline April CPI-U likely will show a month-to-month increase of perhaps 0.2%, plus-or-minus, in the context of the month-to-month gain in gasoline prices largely being offset by

negative seasonal adjustments. Headline, unadjusted year-to-year annual inflation for April 2017 likely will notch lower to about 2.2%, versus 2.4% in March 2017.

Minimal Monthly Inflation Impact from Higher Gasoline Prices. Average gasoline prices rose in April 2017 by 3.73 % for the month on a not-seasonally-adjusted basis, per the Department of Energy. Where BLS seasonal adjustments to gasoline prices in April are negative, that largely should offsets the gain in unadjusted gasoline prices, with seasonally-adjusted numbers contributing negligibly on the positive side, to the headline monthly change in the CPI-U. Boosted, though, by higher food and "core" (net of food and energy) inflation, a headline monthly CPI-U reading of 0.2% is a reasonable estimate, plus-or-minus, which is where consensus estimates appear to have settled.

Annual Inflation Rate. Noted in Commentary No. 880, year-to-year, CPI-U inflation would increase or decrease in April 2017 reporting, dependent on the seasonally-adjusted month-to-month change, versus the adjusted, headline gain of 0.35% in April 2016 CPI-U. The adjusted change is used here, since that is how consensus expectations are expressed. To approximate the annual unadjusted inflation rate for April 2017, the difference in April's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the March 2017 annual inflation rate of 2.38%. Given an estimate of a seasonally-adjusted 0.2% gain in the monthly April 2017 CPI-U, that would leave the annual CPI-U inflation rate for April 2017 at about 2.2%, plus-or-minus, depending on rounding.

Nominal and Real Retail Sales (April 2017). In the context of annual benchmark revisions to the retail sales series on April 26th (see *Commentary No. 882*), the Census Bureau will release its "advance" estimate of April 2017 nominal (not-adjusted-for-inflation) Retail Sales on Friday, May 12th, coincident with the BLS's release of the April CPI. Accordingly, the detail on both the nominal and real (adjusted-for-inflation) Retail Sales both will be discussed in *Commentary No. 886* of that date or very likely over the ensuing weekend.

Where consensus expectations appear to have settled in around a monthly nominal gain of 0.6%, plus-orminus, a combination of negatively revised growth trends from the annual benchmarking, significant indications of weakening auto sales, faltering consumer credit and retail-store sales activity, the industry would be lucky to post a headline monthly gain that exceeded expected monthly CPI-U inflation of 0.2%. Headline nominal sales for the month should be weaker than expected, down net of inflation, and likely facing downside revisions to recent headline activity, despite the recent benchmarking.

Discussed most recently in <u>Commentary No. 883</u>, and in the <u>CONSUMER LIQUIDITY</u> section of <u>No. 859</u> <u>Special Commentary</u>, 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 liquidity-strapped U.S. consumer remains unable to sustain growth in broad economic activity, including personal-consumption expenditures and retail sales, real or otherwise.
