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

COMMENTARY NUMBER 969-B

2017 Annual Real Median Household Income and Income Dispersion, August 2018 Labor Detail

September 16, 2018

Extreme Income Variance Signaled Record Levels of Financial Stress in 2017, Ultimately Foreshadowing Severe Economic and Stock-Market Turmoil

Headline All-Time High in Real 2017 Household Income Was Nonsense

Consistently Surveyed and Reported, Real Annual Median Household Income Has Yet to Recover Its High Levels of 1999 and 2000

Still, July 2018 Monthly Real Median Household Income Showed Its Fourth Consecutive Monthly Gain

August Household-Survey Employed Dropped by 423,000 (-423,000), while the Headline August Payroll Gain of 201,000 Was 151,000, Net of Revisions

August U.3 Unemployment Edged Lower to 3.85%, from 3.87% in July; Broader U.6 Unemployment Fell to 7.39% from 7.54%. On Top of U.6, ShadowStats-Alternate Unemployment Declined to 21.2% from 21.3%

Sharply Intensifying Labor-Market Stresses Remained Consistent with Headline Unemployment Closer to a Record High than Just Off a Record Low

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PLEASE NOTE: *Commentary No. 970*, planned for Wednesday, September 19th, will cover the already-released August Consumer and Producer Price Indices (CPI and PPI), Retail Sales and Industrial Production (early headline details are covered in the ***Daily Update***, on the ShadowStats home page).

The regular *Commentary No. 971*, planned for Thursday, September 20th will review August 2018 New Residential Construction (Housing Starts and Building Permits), due for release on September 19th, and August 2018 Existing Home Sales, due for release on September 20th. Early headline details will be available shortly after the respective news releases in the ***Daily Update*** on the ShadowStats home page.

DAILY UPDATE Coverage. Summary headlines of the CPI, PPI, Retail Sales and Industrial Production series, were covered when released September 12th to the 14th; and they remain available in the now fully-formatted and functional, new ***Daily Update*** section found in the top left-hand column of the *www.ShadowStats.com* home page,

When major economic releases are published, brief, summary headline details usually are posted in the ***Daily Update*** within an hour of the release. Those details remain posted there, until they are covered separately in a subsequent *Commentary*.

The planned ShadowStats Publication Schedule, Schedule Revisions and Notes to Subscribers also are posted regularly in that column.

Hyperinflation and Consumer Liquidity Watches. Both of the most-recent *Watches, Hyperinflation Watch – No. 3* of August 12th and *Consumer Liquidity Watch – No. 4* of August 10th will be updated fully in the week ahead.

Your comments and suggestions always are invited.

Best wishes to all, John Williams (707) 763-5786

Today's (September 16th) ***Opening Comments*** reviews consumer liquidity issues reflected in, and related to, the just-released 2017 Real Annual Median Household Income Survey.

The ***Reporting Detail*** provides extended coverage of August 2018 employment and unemployment, including an updated Supplemental Labor-Detail Background (see *Flash Commentary No. 969-Advance* of September 7th).

The ***Week, Month and Year Ahead*** provides background on recent *Commentaries* and discusses/previews pending economic releases.

Commentary No. 969-B contents, including graphs and tables, are indexed and linked on following page.

Contents – Commentary No. 969-B Major Sections and Graphs

OPENING COMMENTS

2017 Real Median Annual Household Income

Household Income Peaked in 1999

Extreme Income Inequality Indicators Forewarn of Systemic Instabilities

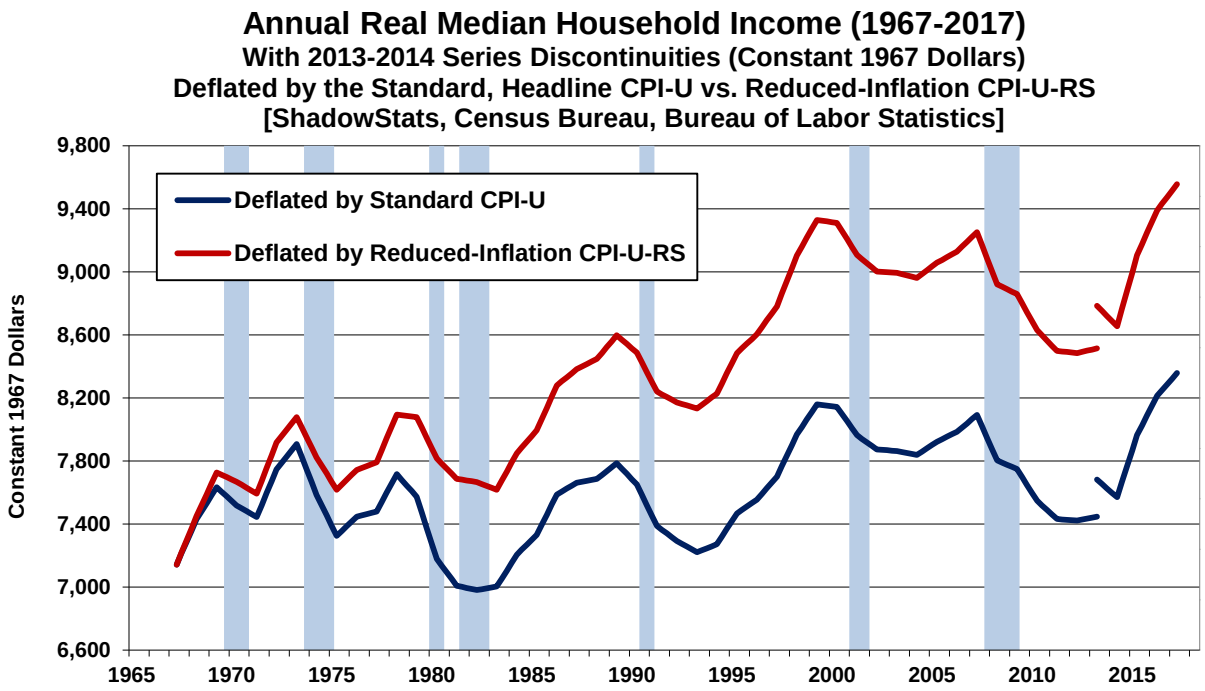
The Minimal Headline Gain in 2017 Real Annual Median Household Income Continued in the Context of the Upside Series Redefinitions of 2015; Consistent Income Levels Still Held Below 2000. The September 12th headlines in the new ***Daily Update*** feature of the www.ShadowStats.com home page ran: "Consistently reported, 2017 Real Annual Median Household Income held below 1999 high. Record levels of income dispersion signal stock-market and economic turmoil." Those followed that morning's Census Bureau release of its *Income and Poverty in the United States: 2017*. Those headline issues tied to intensifying consumer liquidity stresses, dominated the meaningful substance of the report, not the headline poverty numbers

Poverty Survey. Changes in the reporting methodology for household income artificially boosted income levels in recent years, contributing to the understatement of the 2017 headline poverty rate at 12.31% of the population, its lowest level since 12.30% in 2006. That 2017 rate reflected 39.7 million people living in poverty. Separately, the regular use of gimmicked, understated inflation in deflating the income levels further boosted the resulting inflation-adjusted numbers. Beyond those issues, the Poverty Survey's design and somewhat arbitrary definitions are so heavily gimmicked and massaged, politically, as to be of negligible substance. Accordingly, ShadowStats does not regularly review it.

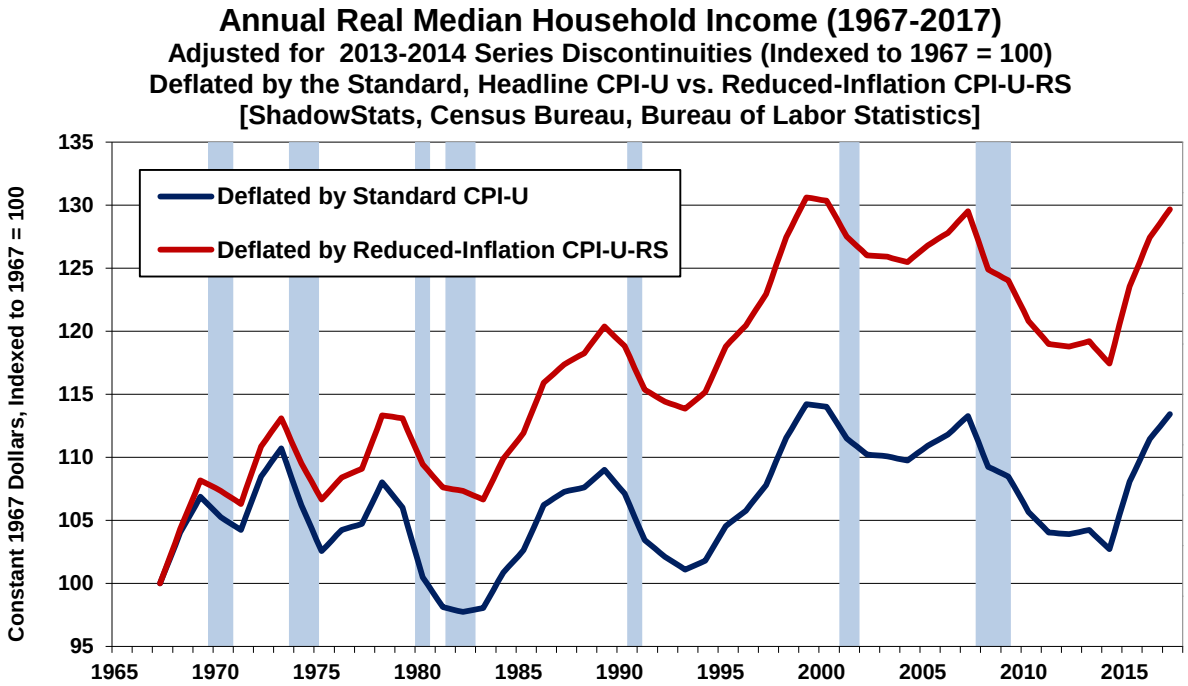
Real Annual Median Household Income. The reporting of Real Annual Median Household Income is of more substance, however, where the headline detail can be assessed both in the context of inflation-reporting distortions and of the recent series redefinitions. Again, despite the happy press headlines, underlying details continued to show a liquidity-distressed consumer, who has yet to recover meaningfully from deteriorating economic conditions in the last two decades.

Boosted by series redefinitions two years ago, with the Census Bureau now estimating, for example, what households "should be earning," headline inflation-adjusted "real" annual median household income technically was at an all-time high in 2017, as reflected in the discontinuities of the plot in *Graph OC-1*. Yet, the headline 2017-income level remained below levels seen in 1999 and 2000, with those reporting discontinuities removed, as reflected in *Graph OC-2*, which plots the current headline detail adjusted to an historically consistent reporting basis.

Graph OC-1: Annual Real Median Household, CPI-U versus CPI-U-RS, with the 2013-2014 Discontinuities



Graph OC-2: Annual Real Median Household Income through 2017, with the Discontinuities Removed Using Deflation with Both the Standard CPI-U and the Reduced-Inflation CPI-U-RS Measure Preferred by the Census Bureau for Purposes of Exaggerating Real or Inflation-Adjusted Growth.



Statistical-definition conventions:

- "Nominal" or "Current" dollar numbers are reported as experienced, not adjusted for inflation.
- "Real" or "Constant" dollar numbers are adjusted so as to be net of the headline inflation rate over whatever time period is involved.
- "Median" income is the middle reading among all the households surveyed.
- "Average" or "Mean" income is total income of all households, divided by the number of households.

Expressed in both nominal and real dollars in 2017 (2017 was the headline base year for inflation in real terms, U.S. Median Household Income was $61,372, versus the Average or Mean Household Income of $86,220. In terms of measuring the financial health of the regular household, the median or middle number generally is used, where the average can be skewed heavily to the upside by some extremely large individual numbers.

Deflation by the CPI-U-RS (Research Series) versus the CPI-U. Post-2000) comparative patterns of annual real growth in (not level of) median household income were about the same, irrespective of whether the income series was deflated by the "special" CPI-U-RS (Research Series) Consumer Price Index used here by the Census Bureau (red line in the accompanying graphs), or by the headline Consumer Price Index (CPI-U), used most broadly by the economics and financial communities (blue line in the graphs) in deflating consumer-related economic series.

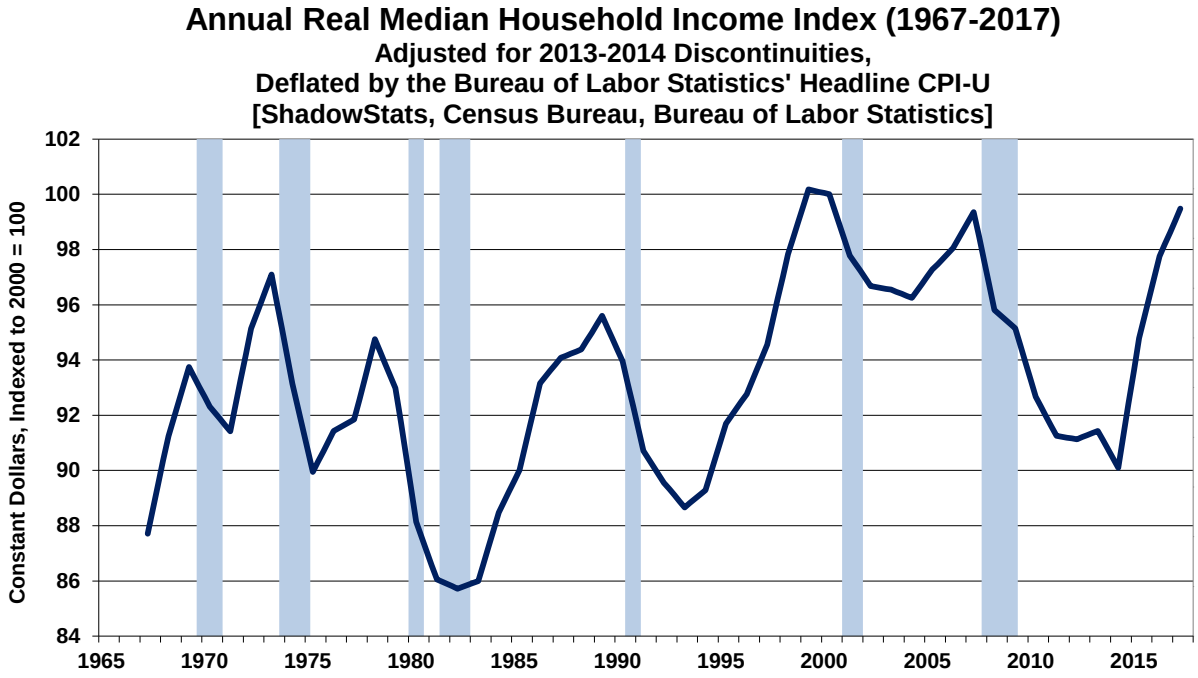
Where the CPI-U-RS was constructed to show much weaker, long-term historical headline inflation than the headline CPI-U, use of the RS series in deflating numbers exaggerates the understatement of headline inflation. That has the effect of boosting the inflation-adjusted income numbers artificially, as used in both the Real Median Household Income reporting and, again, in the Poverty Report (reducing headline poverty levels), relative to simple CPI-U deflation. Separately, the current, headline CPI-U understates inflation against common experience. That is due to a variety of inflation-reducing redefinitions applied to the headline series over the decades. While discussed briefly here, those inflation issues are reviewed more fully in the *Public Commentary on Inflation Measurement*.

The CPI-U-RS series restates historical CPI-U inflation as though all the current reporting methods, again, as redefined in the last 30-plus years so as to reduce headline inflation, always have been in place. In turn, the ShadowStats Alternate Inflation estimates largely are based on reverse-engineering the CPI-U-RS series, to remove the effects of those inflation-depressing methodologies that have moved headline inflation reporting so far from common experience. The ShadowStats Alternate Series were designed to reflect current headline CPI-U inflation as though none of the inflation-dampening methodological changes had been made.

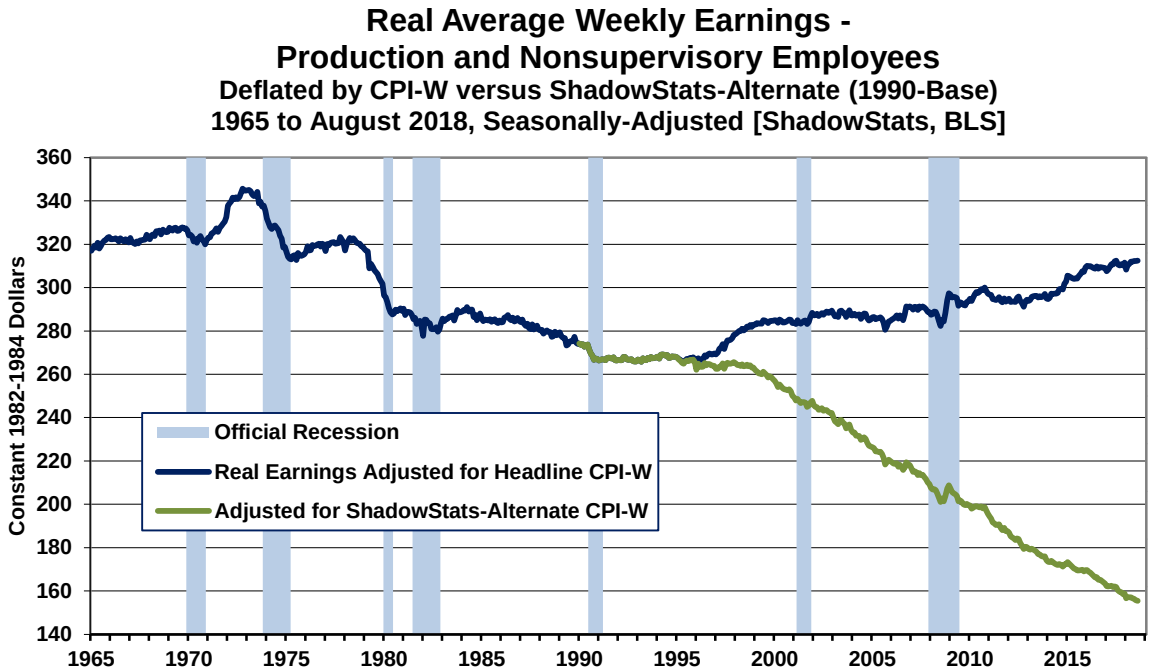
Since the bulk of the methodological changes that reduced headline inflation reporting going forward in time were in place by 2000, the impact on comparative year-to-year real change using the CPI-U-RS versus the CPI-U has been minimal in the headline numbers since 2000. That is why the red (CPI-U-RS deflated) and blue (CPI-U deflated) lines appear to move in tandem after 2000, albeit at different levels. The cumulative impact of the CPI-U-RS introduction can be seen between the plots of the series back into the latter 1960s. Without the cumulative dampening effect of the changes in methodology over time, headline annual CPI-U growth would be much higher and the headline annual growth in real median income much lower (actually in contraction). With the exception of *Graph OC-4*, accompanying graphs *OC-1* to *OC-9* show the CPI-U-RS-deflated series as red lines, with the headline CPI-U or CPI-W series

as blue lines. *Graph OC-4* of real earnings, discussed later, is the only plot that reflects a green line, deflated using the ShadowStats-Alternate Inflation (1990-Base).

Graph OC-3: Annual Real Median U.S. Household Income through 2017, 2013-2014 Discontinuities Removed



Graph OC-4: Real Average Weekly Earnings (1965 to July 2018) Index, January 2000 = 100



The Census Bureau is the primary user of the CPI-U-RS, since that shows a stronger pattern of historical, inflation-adjusted income growth and lower poverty rates (weaker headline historical inflation means stronger historical inflation-adjusted growth), than does the traditional CPI-U. The Bureau of Labor Statistics (BLS), however, usually deflates its income measures using the headline CPI-U or CPI-W, such as seen in *Graph OC-4*, which again is the headline *Real Average Weekly Earnings* through August 2018, plotted against the same data deflated by the ShadowStats Alternate CPI Measure (1990-Based). As an aside, consider that BLS headline real earnings numbers in *Graph OC-4* show that current real earnings are below where they were in the mid-1970s, not too different from the plot shown here in *Graph OC-3*.

Growth in Annual Real Median Household Income Slowed to 1.8% in 2017 from 3.1% in 2016. Headline annual real median household income grew at an annual pace of 1.76% in 2017, versus 3.13% [previously 3.15%] in 2016. The headline gain of 5.15% [previous 5.21%] in 2015 was not comparable or meaningful, given the significant series redefinitions of 2014/2015 (see detailed discussion in *Commentary No. 833*, see *Commentary No. 909* for the 2016 detail). The minor 2017 revisions in the headline growth for 2015 and 2016 reflected small revisions to the headline CPI-U-RS deflator.

Viewed on a consistent-reporting basis (discontinuities removed, as in *Graph OC-2*), the 2017 headline level of real median household income just broke above its 2007 pre-recession peak for the first time. Yet, the real income level in 2017 remained below the peak income levels of 1999 and 2000, going into the 2001 recession. Using headline CPI inflation as the Bureau of Labor Statistics (BLS) uses it to deflate its real income numbers, the 2017 detail effectively also was minimally above the real median income level going into the 1975 recession. Such is consistent with the latest plot of Real Earnings, *Graph OC-4*, which continues to indicate the long-term nature of the evolution of the major structural changes and stresses constraining consumer liquidity and impairing the current economy (see *No. 859 Special Commentary* and *Consumer Liquidity Watch – No. 4* or its most recent update).

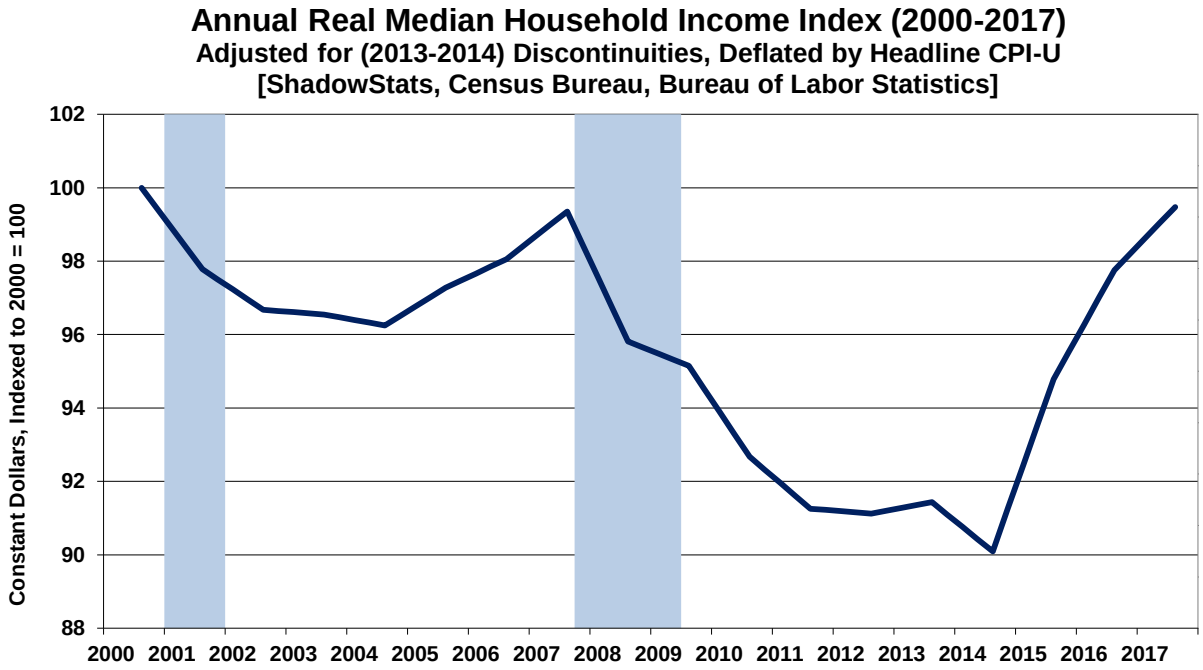
Based on March 2018 Census Bureau surveying of household income estimates for 2017, the underlying 2017 reporting detail reflected data older than what already had been published on a coincident basis by Sentier Research (www.SentierResearch.com), as regularly covered in the *CLW*: see *Consumer Liquidity Watch – No. 4*, and as will be updated for today's material in *CLW-No. 5*. Shown here for comparison are *Graphs OC-5* and *OC-6*. *Graph OC-5* shows the headline annual real median household income (Census) for 2000 to 2017, as surveyed in March of the following calendar year and as deflated by the CPI-U. *Graph OC-6* shows the Sentier 2016 and 2017 details (surveyed monthly by the Census Bureau, but not published in headline form, also deflated by the headline CPI-U). The Sentier numbers largely confirmed and predicted the direction of the just-published annual Census numbers.

Considering that the numbers were generated by separate surveying, Sentier in regular, coincident and consistent monthly surveying, and Census in a special annual survey conducted in March following the involved year, as recently defined so as to help boost reported income levels. Looking at the monthly median numbers out of Sentier, the annual median of those monthly numbers showed a real annual increase of 2.6% in 2016, slowing to 1.1% in 2017. The headline annual median numbers out of the Census Bureau, showed real annual median income growth of 3.1% in 2016 slowing to 1.8% in 2017. Both approaches suggested a slowing of 1.5% in annual growth-rate levels from 2016 to 2017. The higher level of the Census aggregate growth rate partially may be due to the recent series redefinitions.

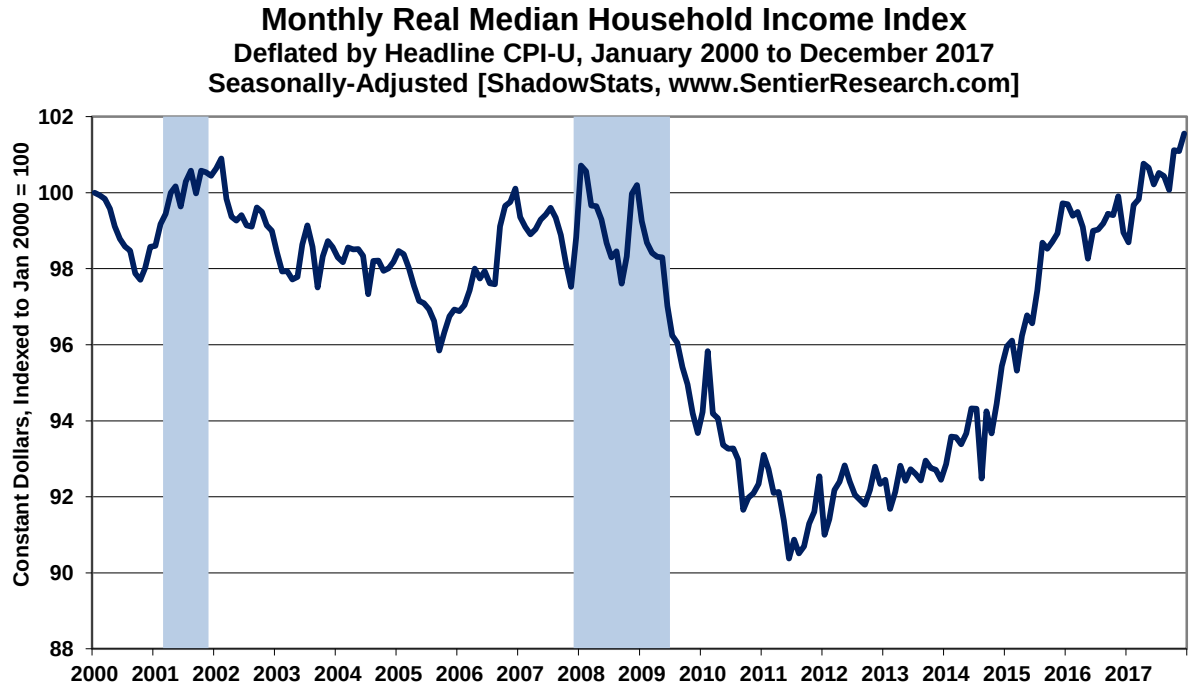
Sentier was founded by two former senior officials at the Bureau of the Census, who knew the inside workings of the various Census surveys. Sentier's monthly survey results are deflated by the headline

CPI-U, not by the gimmicked CPI-U-RS otherwise used by the Census Bureau, as previously discussed. Again, the headline annual inflation differences between those two series primarily are before 2000.

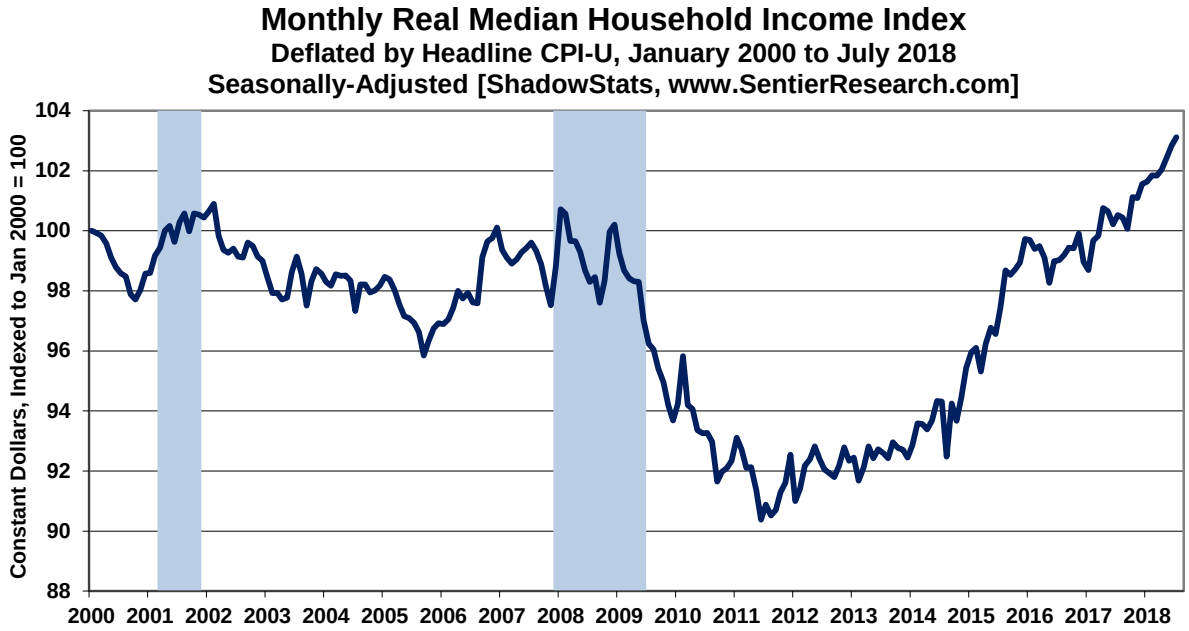
Graph OC-5: Annual Real Median U.S. Household Income through 2017, 2013-2014 Discontinuities Removed



Graph OC-6: Sentier Monthly Real Median Household Income (2000 to 2017) Index, January 2000 = 100



Graph OC-7: Sentier Monthly Real Median Household Income (2000 to July 2018) Index, January 2000 = 100



Gimmicked Economic Data Do Not Fool Main Street U.S.A. The headline 1.8% increase in 2017 real annual median household income (detailed, again, in *Income and Poverty in the United States: 2017*) and the minimally revised 3.1% (detailed in *Income and Poverty in the United States: 2016*), both were boosted by recent survey changes designed to inflate income artificially. The redefinition surge of 5.2% in 2015 income and the was detailed in *Income and Poverty in the United States: 2015*. The recent survey changes were designed specifically to inflate headline income growth artificially. The changes reflected rising IRA withdrawals (income previously counted by Census) and imputed interest-income gains and other income simply guesstimated by the government as to what households "should be earning." Again, those income-boosting reporting redefinitions, gimmicks and the restructuring of this politically-sensitive series for release in the 2016 election year were discussed in *Commentary No. 833*.

Census Did Provide Some Basis for Estimating a Consistent Historical Series. In fairness, along with the 2015 redefined numbers, the Census Bureau estimated and published the impact of its "improved" surveying methodology, which added about 3.0% to each year's level of real median household income, from what it would have been with historically-consistent surveying. ShadowStats has used that detail to plot the Real Annual Median Household Income series on something of an historically-consistent basis, through 2017—with the 2013-2014 discontinuity removed—as reflected in *Graph OC-2*. That is in contrast to *Graph OC-1*, which reflects the discontinuities. Those discontinuities (unique to the headline Census series) have continued in the official 2017 graphs. Separately, the definitional changes to the surveying also have had the negative effect of exacerbating income inequality, as discussed shortly (*Graphs OC-8* and *OC-9*). *Graphs OC-2*, *OC-3* and *OC-5* are plotted with discontinuities removed.

Increasing Income Variance. Updated estimates of income dispersion, variance or inequality are shown through 2017 in *Graphs OC-8* and *OC-9*. Measures of income dispersion, or variance, indicate the distribution of income within a population. A low level of income dispersion indicates that income tends to be concentrated in the middle, while a high level of dispersion indicates heavier income concentrations in the extremes of low and high income, with less in the middle. The higher the variance of income, the greater is the income dispersion. Generally, economies with income concentrated in the middle tend to enjoy stronger and broader economic growth, where, for example a greater portion of the population might be able to buy a new automobile.

The Census survey changes and redefinitions published in 2015 shifted household incomes more into the "upper" categories, resulting in increased income inequality. *Graphs OC-8* and *OC-9* reflect those discontinuities, where these series now have been broken, in terms of internal, historical comparison. Restating the current numbers to be consistent with prior reporting simply is not feasible.

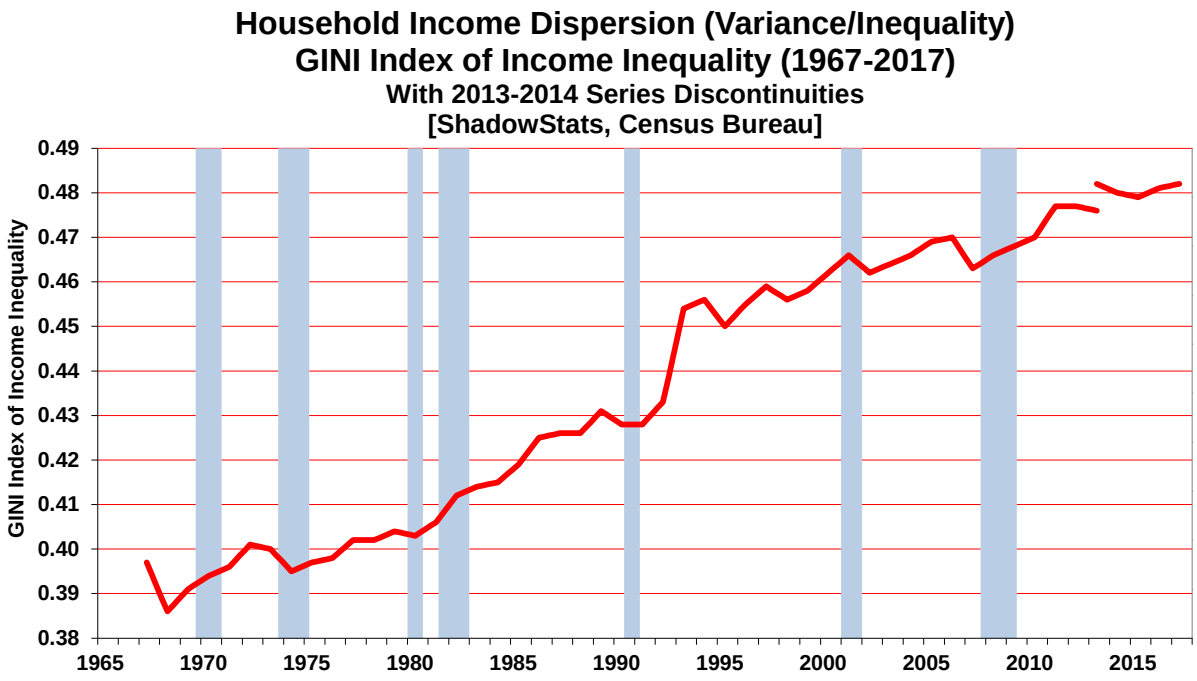
Rising and near-record income dispersion levels usually foreshadow economic and financial-market turmoil (see discussion in *Consumer Liquidity Watch – No. 4*). Despite—or perhaps due to—the ongoing nature of the economic and systemic-solvency crises, and continuing impact effects of the 2008 financial panic (see *Hyperinflation Watch – No. 3*), income dispersion—the movement of income away from the middle towards both high- and low-level extremes—held near record highs in 2013, instead of moderating, as often seen during periods of financial distress, and it is suggested to have moved to even greater extremes in 2014, 2015, 2016 and particularly 2017.

Conditions surrounding extremes in income variance usually help to fuel financial-market bubbles, which frequently are followed by financial panics and economic depressions. The sequence of those factors tends to redistribute income in a manner that usually lowers income variance, helping broad economic recovery. Other than for a brief dip following the 1987 stock-market crash, U.S. income variance since 1987 has been higher than has been estimated for the economy going into the 1929 stock-market crash and the Great Depression, and its current reading remains nearly double that of any other "advanced" economy. Instead of being tempered by the 2008 financial panic and the ongoing economic and systemic-solvency crises, variance increased to new record levels subsequent to 2011. That suggests the greatest negative impact of the systemic turmoil, so far, has been on those in the middle-income area. It also is suggestive of even greater financial and economic crises still ahead.

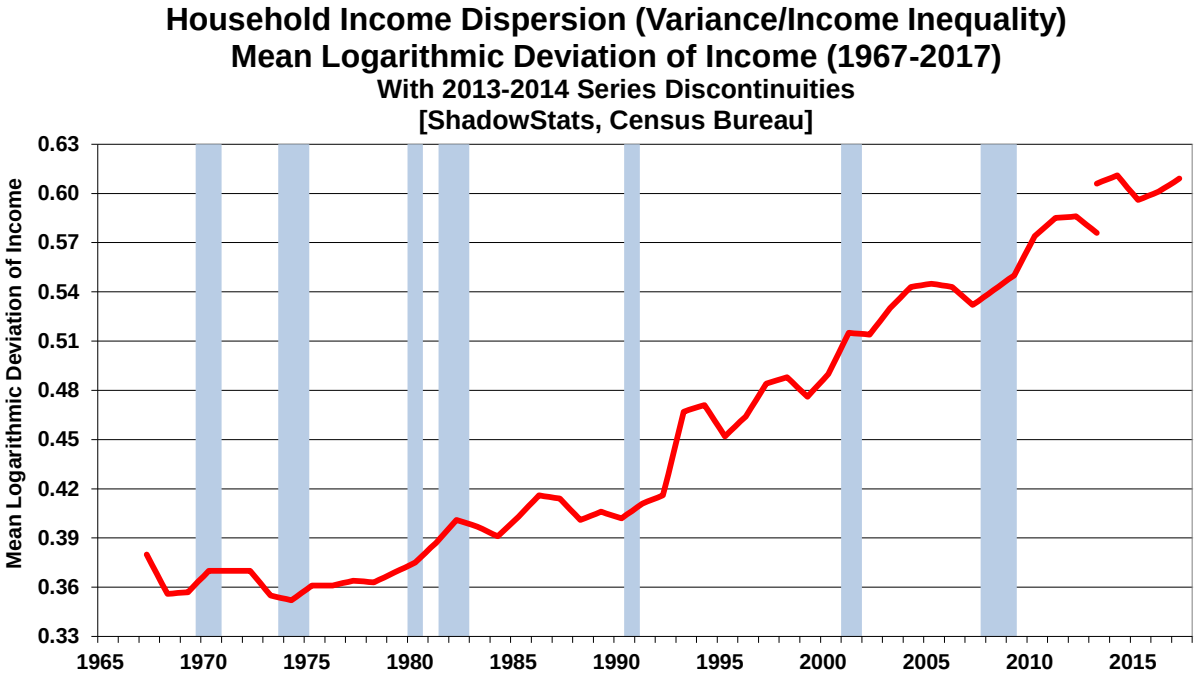
Again, shown in *Graphs OC-8* and *OC-9*, the current circumstance is at a record extreme, well above levels estimated to have prevailed before the 1929 stock-market crash and the Great Depression. Increasingly difficult times remain likely for at least the next several years.

[Graphs OC-8 and OC-9 of Income Inequality, Variance, Dispersion follow on the next page.]

Graph OC-8: Annual GINI Index of Income Inequality through 2017, with Discontinuities



Graph OC-9: Annual Mean Logarithmic Deviation of Income through 2017, with Discontinuities



REPORTING DETAIL

August 2018 Unemployment and Employment Extended Coverage

Abundant Inconsistencies and Contradictions, Plunging Employed vs. Overstated Payrolls

Contrary to Intensifying, Highly Negative Stress Levels in the U.S. Labor Market, 3.85% August U.3 Unemployment Was Just Off Its Historic-Low Reading. [Portions of the following text are repeated from *Flash Commentary No. 969-Advance*.] The Bureau of Labor Statistics (BLS), reported September 7th that headline August 2018 U.3 unemployment rate held effectively "unchanged" at 3.9%, against consensus expectations of it dropping a notch to 3.8%, while headline August 2018 Payroll Employment gained a near-consensus 201,000, but that happened only because July Payrolls were revised lower by 50,000.

At the second decimal point, the headline August unemployment rate of 3.85% was the third lowest in the history of the current unemployment series, which dates back to the series redefinition of 1994. That was when long-term "discouraged workers" were eliminated from all tracking or calculations in any unemployment measure, headline or otherwise. Second lowest was 3.84% in April of 2000, while the absolute lowest was 3.75% in May 2018.

Discussed and analyzed in *Commentary No. 953-B* of the time, the historic-low U.3 unemployment rate was in the context of contradictory near-record levels of stress in employment conditions. Both the Employment-to-Population Ratio and the Labor-Force Participation Rate (Employment plus Unemployment as a Percent of Working Age Population) were near or just off historic low levels usually seen at the depths of a recession, not at a peak of economic expansion.

Where the headline unemployment rate in May 2018 was at a low 3.8%, the labor market stresses of the same time were more consistent with a headline unemployment rate of over 10.0%. Now, in August 2018, with unemployment at 3.9%, employment-stress levels are even more intense than they were in May (see *Graphs 1* to *4*). As explained in *Section IV* of today's updated *Supplemental Labor-Detail Background* page , the apparent statistical distortion or inconsistencies in these headline numbers is tied

directly to the lack of government accounting for long-term discouraged workers. These issues are discussed in more detail with related, later graphs, specifically, the inverted-scale *Graph 2* for the ShadowStats Alternate Unemployment number.

Household Survey. Where the headline U.3 unemployment rate had dropped to an 18-year (or a 49-year) low in May 2018, depending on the historical base used for comparison (*Commentary No. 953-A*), the headline unemployment rate jumped by 0.30% at the second decimal point, with 3.75% unemployment in May 2018 rising to 4.05% in June 2018. U.3 fell back again, to 3.87% in July 2018 and notched back further to 3.85% (rounds to 3.9%) in August 2018.

On top of the calculation of the headline U.3 unemployment rate, there were declines in the counts of those working part-time for economic reasons and of "discouraged workers." The effect was that where the broadest headline BLS unemployment rate of U.6 had risen from 7.65% in May to 7.79% in June and fell back to 7.54% in July, it declined further to 7.39% in August 2018, the same level last seen in April 2001. Moving on top of U.6, the ShadowStats alternate unemployment rate had increased from 21.4% in May, to 21.5% in June, falling back to 21.3% in July and notching lower again to 21.2%, its lowest level since September 2009 (see *Commentary No. 959-B* for the latest *Supplemental Labor-Detail* ...).

Again, where headline August U.3 unemployment came in at 3.85%—historically still a very low unemployment rate—underlying reality was not so rosy. Meaningful discrepancies between the near-record-low unemployment rate and extremes of near-record-high levels of labor-market stress reflect impact of long-term discouraged and displaced workers, who no longer are counted in the headline government numbers, but still are included in the ShadowStats unemployment estimate. While the current headline unemployment likely qualifies as "full employment," such remains unconfirmed by historically-low Employment-to-Population and Labor Force-to-Population (Participation) Ratios, which dropped sharply, by roughly 0.2% (-0.2%) each, due to declining levels of employment and the labor force (employment plus unemployment). Increasingly near historically low levels, these readings indicate high labor-market stress, more consistent with a headline unemployment rate of about 10% instead of one below 4%.

The difference is the unusually large number of discouraged and displaced workers in this cycle, not counted in the headline U.3, as well as a goodly number not included in U.6 (again, see definitions and detail in *Commentary No. 959-B*, the *Supplemental Labor-Detail Background*).

The inverted scale of the ShadowStats Alternate Unemployment Rate (*Graph 2*) is a surrogate for the magnitude of discouraged and displaced workers, who also are reflected in the accompanying *Graphs 3* and *4* of the *Civilian Employment-to-Population Ratio* and the *Labor-Force Participation Rate*.

Payroll Survey. The heavily upside-biased, Payroll Employment series jumped by 201,000 in August 2018, effectively meeting consensus expectations. The problem is that those expectations were met only because the level of July payrolls was revised lower, on top of a downside revision to June levels. Net of revisions, August 2018 payrolls were only 151,000 above what had been the initial reporting of July 2018 activity. The headline gain was only marginally significant, given the headline volatility in the series. That said, annual growth in payrolls held at 1.65% in August 2018, versus a revised 1.64% [previously 1.65%] in July 2018 and a revised 1.67% [previously 1.68%] in June 2018, still within the low-range of annual growth that often leads into recession.

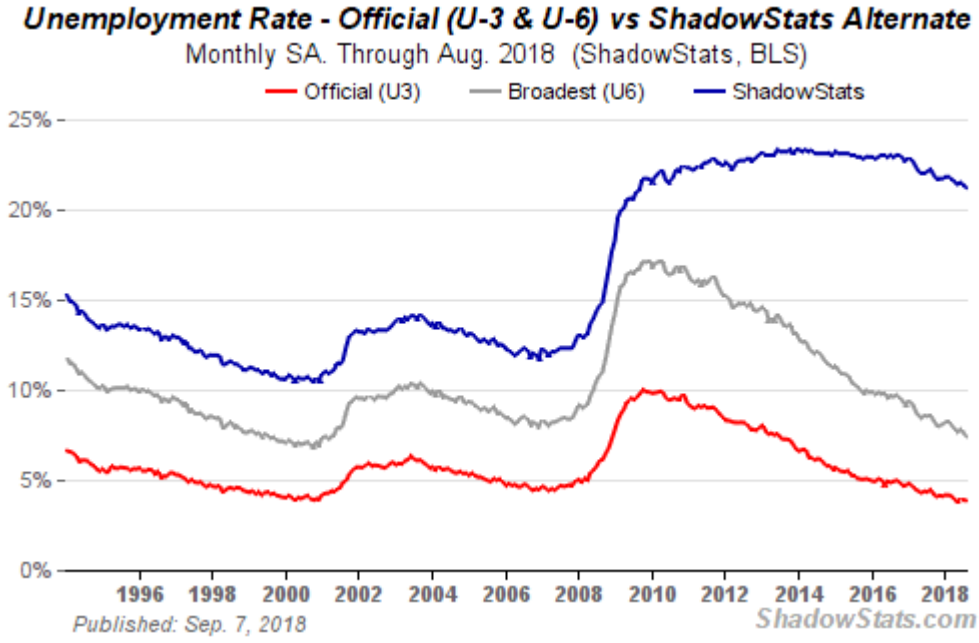
Keep in mind that where the Household Survey counts an employed person only once, irrespective of how many jobs or part-time jobs he or she may hold, the Payroll Survey counts only the number of jobs, irrespective of the number of people holding those jobs. In that circumstance, a person holding two or more part-time jobs is counted as employed with each job. Where multiple jobholders jumped by 453,000 indicated in the July Household Survey, they declined by 128,000 (-128,000) in August.

While there are a number of other differences between the Payroll and Household Surveys, such as the Payroll count excluding, and the Household count including Agriculture, the headline Payroll gain of 157,000 in July was against a Household Survey gain of 453,000 in full-time employed, yet the 201,000 gain in August Payrolls went against a headline monthly decline of 440,000 (-440,000) full-time employed plus a further decline of 79,000 (-79,000) with part-time employment.

Unfortunately, the seasonally-adjusted, headline month-to-month changes here usually are not reported on a consistent basis, where inconsistent monthly seasonal adjustments are used in eleven out of twelve months (again, see details in *Commentary No. 959-B*, the *Supplemental Labor-Detail Background*, also to be updated in *No. 969-B.*)

Underlying Reality. In terms of underlying reality, the seasonally-adjusted 201,000 monthly payroll jobs gain in August, likely was unchanged, plus-or-minus, again, given upside biases added into the series (see *Supplemental Labor Detail-Section II*, covering Birth-Death Modeling, beginning on page 32). In the context of the *ShadowStats-Alternate Unemployment Rate Measure* discussion (also in the *Supplemental Labor Detail-Section III*, page 34), headline August 2018 unemployment at 3.9% for the U.3 rate was much closer to 21.2%, accounting for all discouraged and displace workers as defined prior to the 1994 overhaul to the series, as viewed from the perspective of common experience. Extended assessment of labor-reporting distortions, again, is found separately in *No. 885* and in the *Supplemental Labor Detail-Section III*, accounting for displaced workers, which begins on page 34.

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



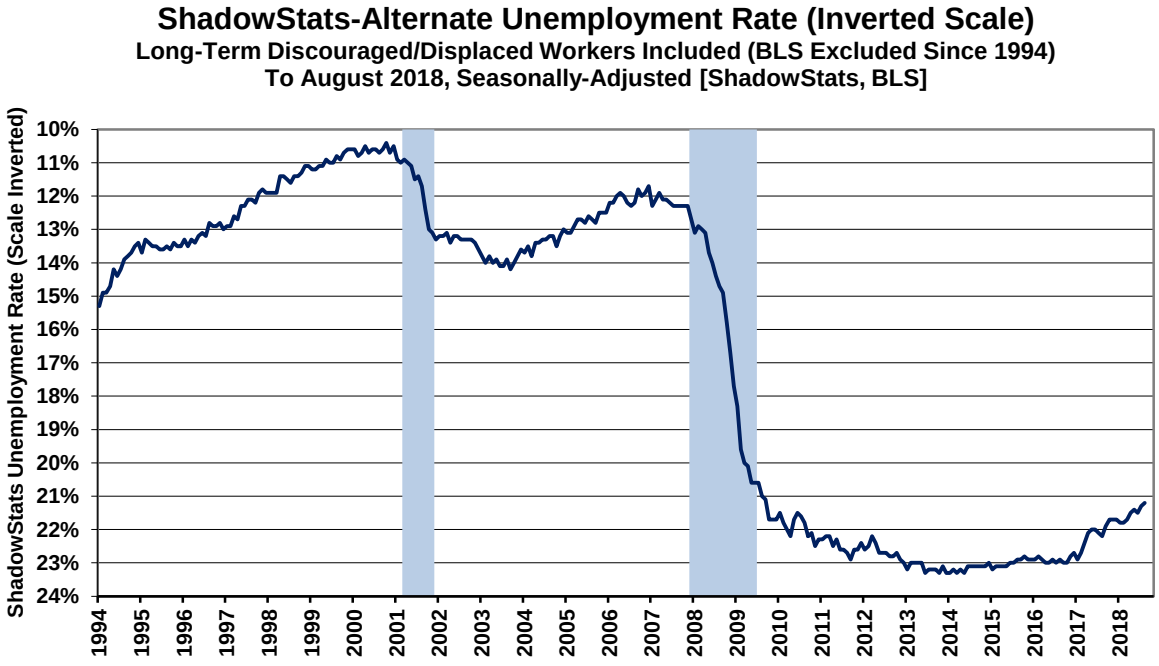
Household Survey: Counting All Discouraged and Displaced Workers, on Top of an Unchanged U.3 at 3.9%, and a Falling U.6 at 7.4%, August 2018 Unemployment Notched Lower to 21.2%. Only one of the unemployment rates plotted in *Graph 1* comes close to explaining the current employment circumstance versus high stress in the labor market, and that remains the ShadowStats-Alternate Unemployment measure.

At the same time that headline August 2018 U.3 employment came in at 3.85%—historically a near-record low unemployment rate—underlying reality was not so rosy. Discussed in *Supplemental Labor Detail-Section IV*, reconciling low unemployment with high labor-market stress, beginning on page 36, meaningful discrepancies between the near-record-low unemployment rate and extremes of near-record-high readings of labor-market stress are tied to population distortions in the headline detail, which were removed from consideration the 1994 overhaul and redefinitions of headline unemployment reporting.

Those stress measures reflect the impact of long-term discouraged and displaced workers, no longer counted in the headline government numbers, but they still are included in the ShadowStats unemployment estimate. While the current headline U.3 unemployment likely qualifies as "full employment," such remains unconfirmed by historically-low Employment-to-Population and Labor-Force-to-Employment (Participation) Ratios, both of which took downside hits in August, at levels more consistent with a headline unemployment rate of about 10% instead of 3.9%.

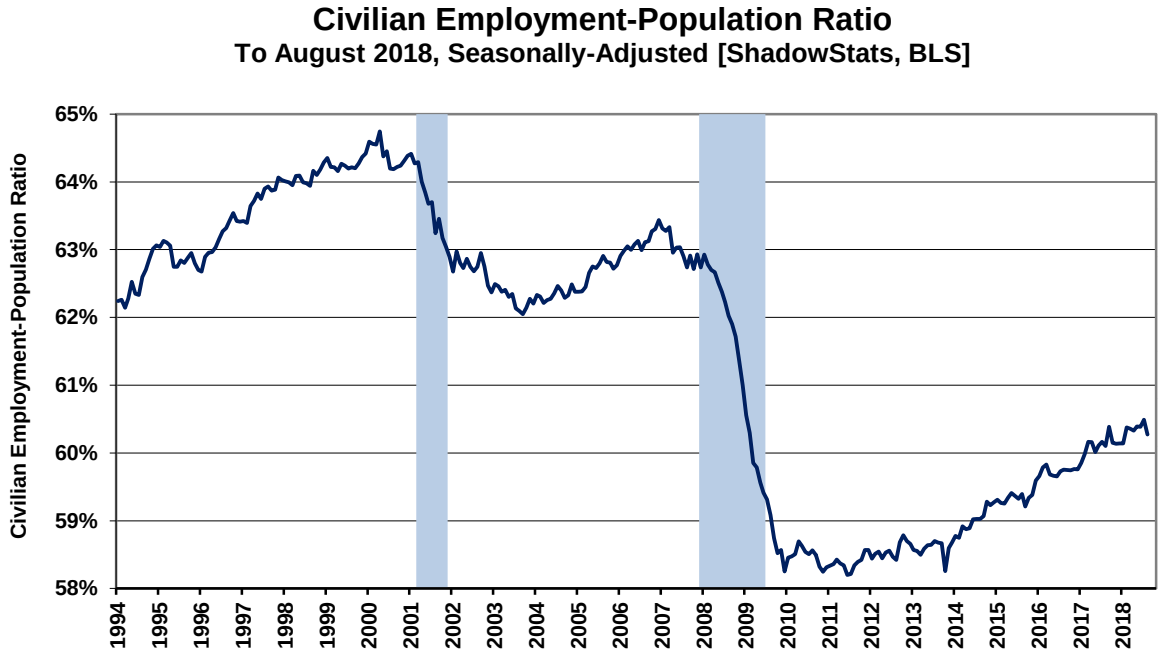
The difference is the unusually large number of discouraged and displaced workers in this cycle, not counted in the headline U.3, as well as a goodly number not included in U.6 (see definitions and detail, again in *Supplemental Labor Detail-Section IV* page 36, and in *Commentary No. 953-B*).

Graph 2: Inverted-Scale — ShadowStats Alternate Unemployment Measure
(Same as Graph SLD-6 in the Supplemental Labor Detail)

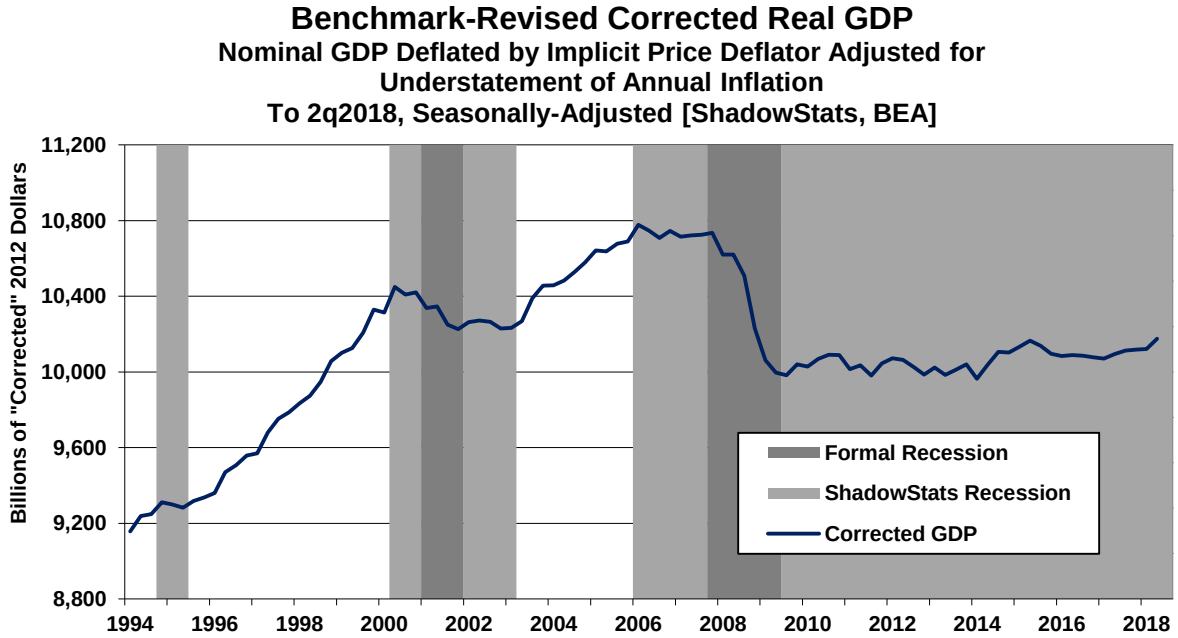


The inverted scale of the ShadowStats Alternate Unemployment Rate (*Graph 2*) is a surrogate for the magnitude of discouraged and displaced workers, who also are reflected in the *Graphs 3* and *SLD-3* of the *Civilian Employment-to-Population Ratio* and *Graph SLD-4* of the *Labor-Force Participation Rate* in the *Supplemental Labor Detail*.

Graph 3: Civilian Employment-to-Population Ratio
(Same as Graph SLD-3 in the Supplemental Labor Detail)



Graph 4: Corrected Real GDP through 2q2018, Second-Estimate



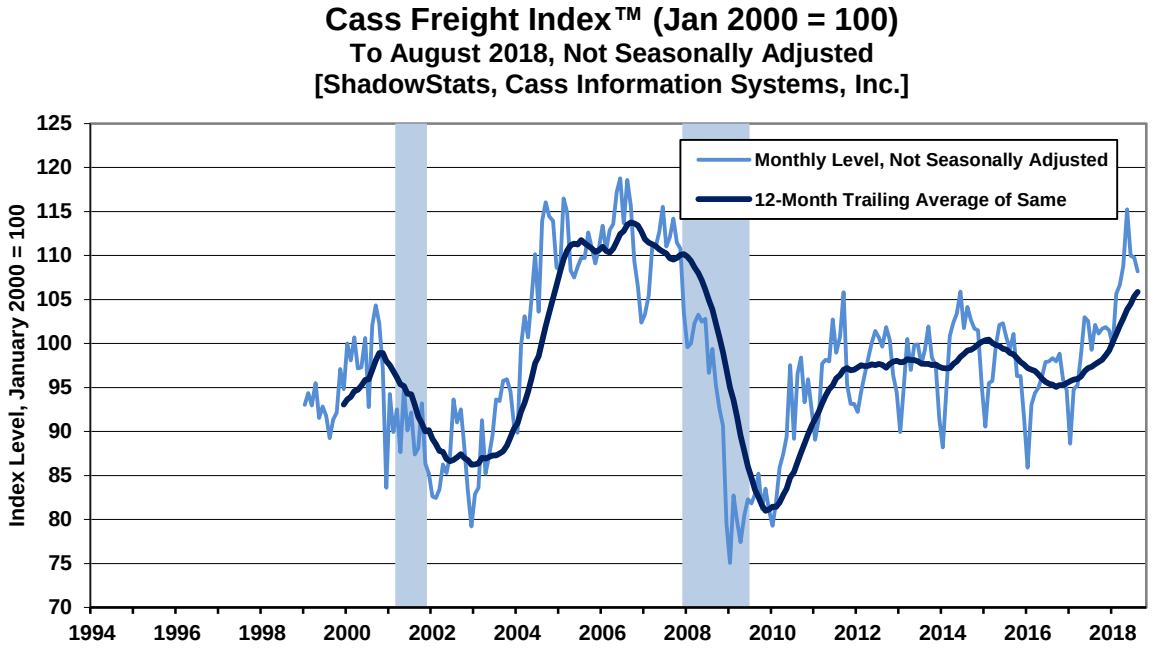
Other Major Indicators Do Not Show an Expanding—Let Alone Recovered—Economy. Regularly plotted here are various graphs that mirror the patterns of *Graphs 2* and *3*, and *Graph SLD-4*, 1994-to-date where available. These graphs do not confirm the purported headline recoveries in either the headline GDP or headline employment and unemployment. That detail was expanded most recently in *Section II* of *Special Commentary No. 968-Extended*, where some of those and related series are updated in this section.

Consider *Graph 4*, which shows the ShadowStats version of that GDP, also plotted from 1994, but now through the August 29th second-estimate of second-quarter 2018 GDP, where the plot has been corrected for the understatement of inflation used in deflating the headline GDP (estimated at about two-percentage points per year).

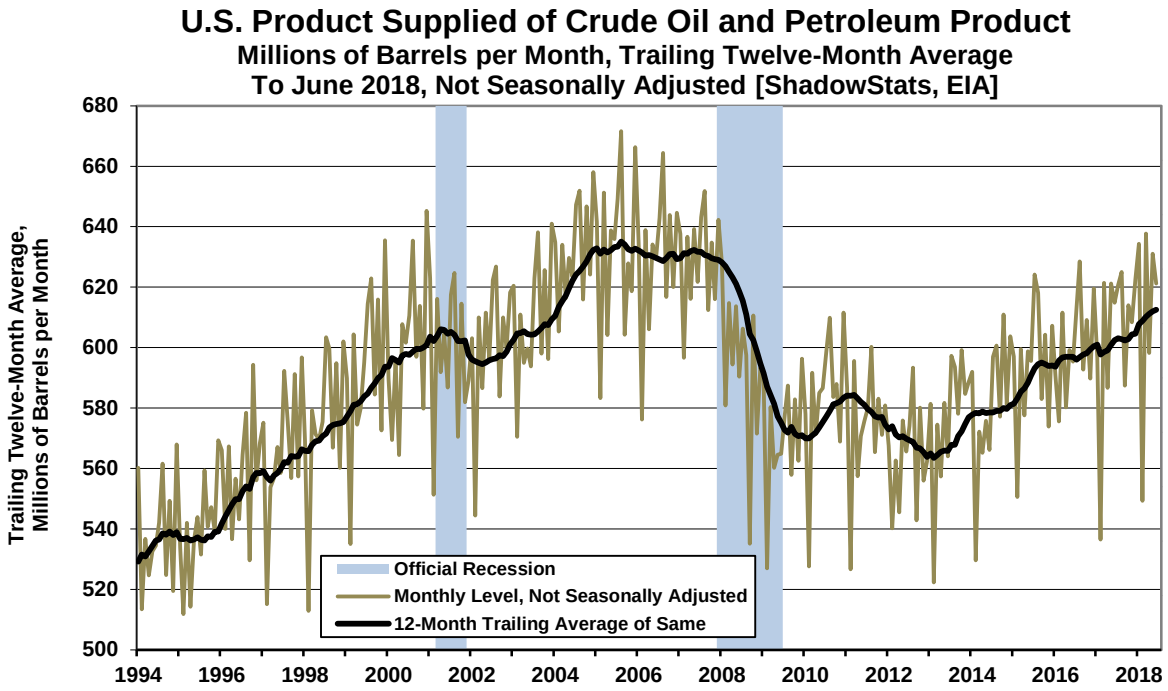
Other graphs range from the August 2018 Cass Freight Index (*Graph 5*) to June 2018 U.S. Petroleum Consumption (*Graph 6*), the August 2018 dominant Manufacturing Sector of U.S. Industrial Production (*Graph 7*), along with July Real Construction Spending (*Graph 8*) and July Housing Starts (*Graph 9).* Where these series generally are uptrending, they all show patterns of non-expansion. Economic "expansion" traditionally is defined as growth beyond the prior (pre-recession) peak in activity.

These economic plots, as well as plots of the labor-market stress measures of the Employment-Population Ratio and Participation-Rate (see *Graphs SLD-3* and *SLD-4*) tend to support the pattern of unemployment change seen in the ShadowStats Alternate Unemployment Measure, as discussed in the *Supplemental Labor Detail (Section IV)* beginning on page 36. They also tend to support the ShadowStats Alternate GDP estimate, as discussed in the *Opening Comments* and *Section II* of *Special Commentary No. 968-Extended*.

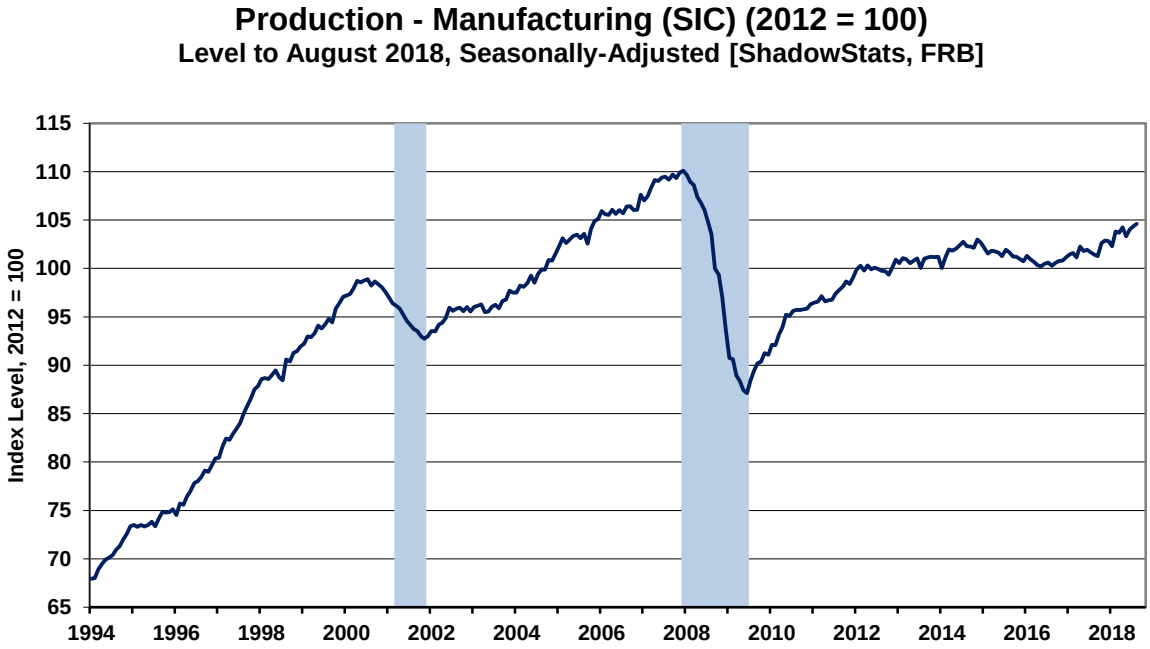
Graph 5: Cass Freight Index for North America (1994 to August 2018), Indexed to January 2000 = 100



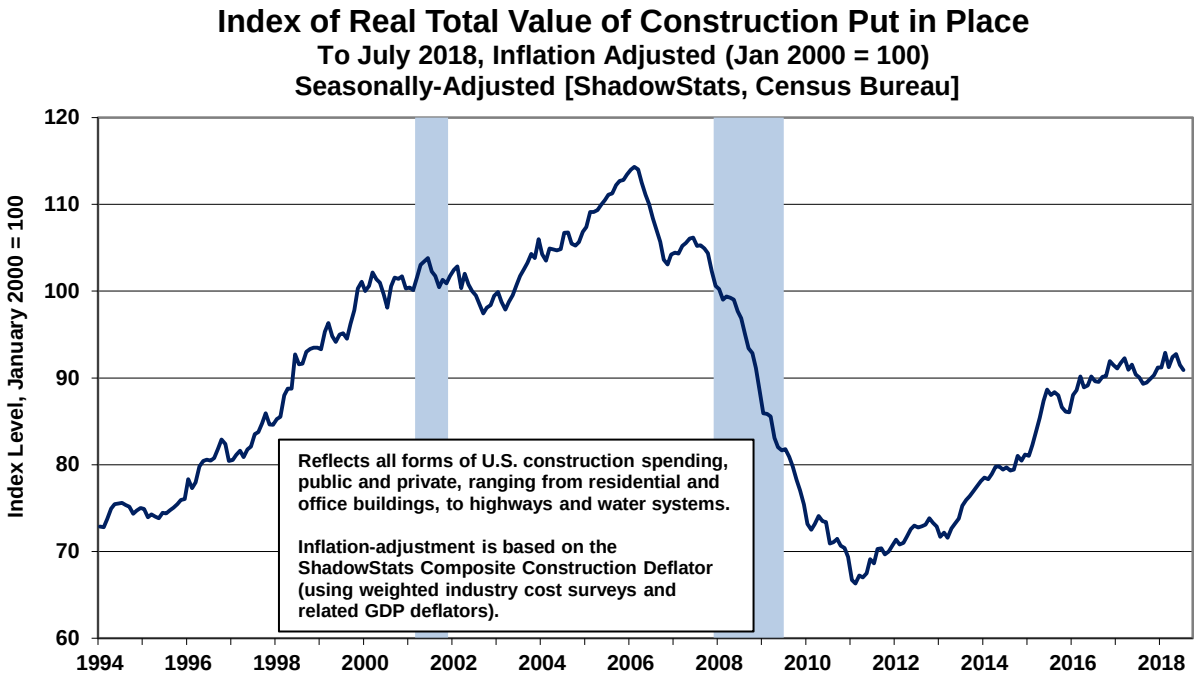
Graph 6: U.S. Petroleum Consumption 1994 to June 2018



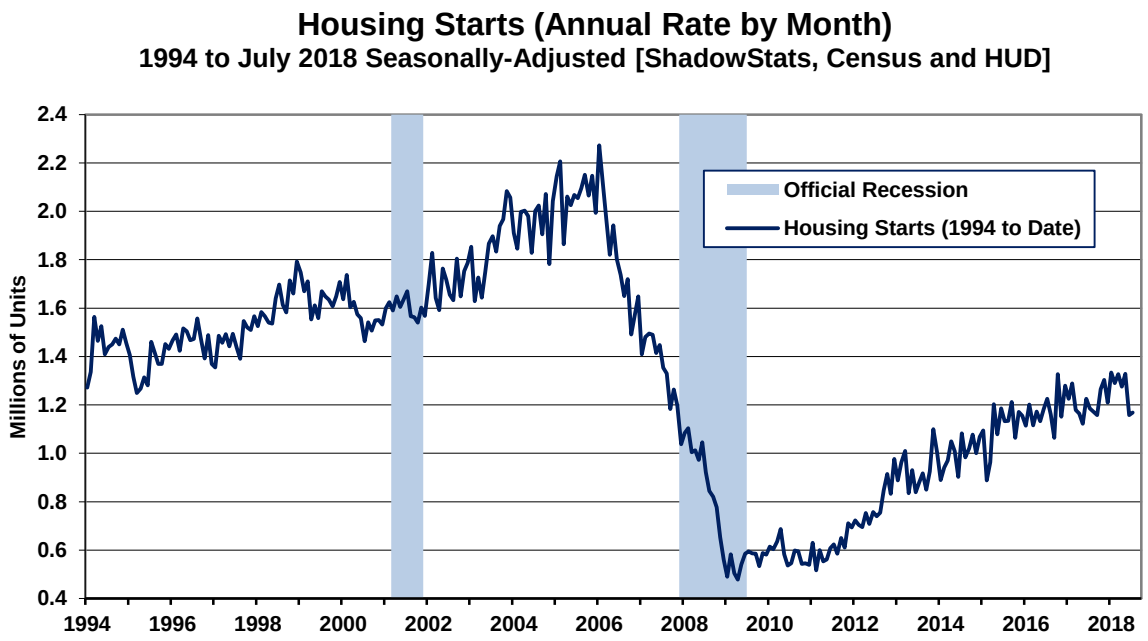
Graph 7: Manufacturing Sector of Industrial Production (1994 to August 2018)



Graph 8: Real Construction Spending (1994 to July 2018)



Graph 9: Housing Starts, Annual Rate by Month (1994 to July 2018)



Headline Unemployment Rates. The headline August 2018 U.3 unemployment rate of 3.9% [3.85% at the second decimal point, was about even with 3.9% [3.87%] in July but down from 4.0% [4.05%] in June, which was up from 3.8% [3.75%] in May. That May 2018 U.3 unemployment rate of 3.75%, at second decimal point, was the lowest level in the history of the U.3 modern series, as defined in 1994. That was against 3.9% [3.93%] in April, 4.1% [4.07 %] in March, 4.1% [4.14%] in February, and 4.1% [4.15%] January.

The month-to-month decline of 0.02% [-0.02%] in the headline August 2018 U.3 was statistically-significant (+/- 0.23% at the 95% confidence interval). Other than for the once-per-year December benchmarking, such consideration broadly is nonsense, given that the comparison of monthly numbers otherwise is on an inconsistent basis, a circumstance that resumed for the next eleven months beginning with the January 2018 headline detail (see the *Supplemental Labor-Detail Background – Section I*, beginning on page 28).

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 3.93% in August 2018 versus 4.11% in July, 4.17% in June, 3.56% in May, 3.68% in April, 4.13% in March, 4.39% in February and 4.49% 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 the seasonally-adjusted July 2018 U.3 unemployment rate, downside pressure on the unadjusted monthly count of marginally-attached workers (including discouraged workers) and a decline in the adjusted number of people working part-time for economic reasons, the adjusted August 2018 U.6 unemployment rate declined to 7.39% from 7.54% in July and 7.79% in June, versus 7.65% (rounds to 7.6%) in May. May 2018 was down from 7.79% in April, 8.00% in March, 8.24% in February and 8.19% in January.

The unadjusted U.6 unemployment rate was 7.43% in August 2018, versus 7.43% in July, 8.07% in June, 7.31% in May, 7.40% in April, 8.10% in March, 8.60% in February and 8.85% in January.

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 and not otherwise re-entering the labor force still are counted in the ShadowStats-Alternate Unemployment Estimate, which has remained relatively stable, although also pulled lower by the underlying other series.

Monthly counts in August 2018 showed an decreased level of 1.443 million marginally attached workers (never seasonally adjusted), of which 434,000 were discouraged workers, down from 1.498 million aggregate marginally attached and 512,000 in discouraged workers in July.

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. Those numbers are net of those who re-enter the labor force.

It is the displaced worker—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 and displaced workers who otherwise were building as a portion of the U.S. population. 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 August 2018 was 21.2%, versus 21.3% in July, 21.5% in June, 21.4% in May, 21.5% in April, 21.7% in March and 21.8% in February and January. The ShadowStats estimate generally shows the toll of long-term unemployed leaving the headline labor force—effectively becoming long-term discouraged/displaced workers— discussed in the *Supplemental Labor-Detail Background – Sections III and IV* beginning on page 36.

Payroll Survey: Headline June Payroll Jobs Gain of 201,000 Was 151,000 Net of Revisions, With Annual Growth of 1.65% Holding in Recession-Signal Territory. In the context of heavily distorted headline reporting and inconsistent and non-comparable seasonal-adjustments, the headline month-to-month payroll employment gain in August 2018 was 201,000, effectively matching expectations of 190,000 to 200,000. Yet, that was on top of unexpected, sharp downside revisions to activity in both July and June, and only marginally significant, given the headline volatility in the series. Net of prior-period revisions, the headline monthly gain was 151,000 instead of the headline 201,000. Annual growth in payrolls held at 1.65%, little changed from the revised July level of 1.64% [previously 1.65%] and the revised June level of 1.67% [previously 1.68%], still holding within the low-range of annual growth that often leads into recession.

Keep in mind that where the Household Survey counts an employed person only once, irrespective of how many jobs or part-time jobs he or she may hold, the Payroll Survey counts only the number of jobs, irrespective of the number of people holding those jobs. In that circumstance, a person holding two or more part-time jobs is counted as employed with each job. The August 2018 indication of multiple job holders in the Household Survey declined by 128,000 [-128,000], but these unusually poor-quality data often are inconsistent and not comparable.

While there are a number of other differences between the Payroll and Household Surveys, such as the Payroll count excluding, and the Household count including Agriculture, the headline, seasonally-adjusted Payroll gain of 201,000 was against a seasonally-adjusted Household Survey decline of 444,000 (-444,000) in full-time employed plus a decline of 79,000 (-79.000) part-time employed.

Non-Comparable and Inconsistent Seasonally-Adjusted Monthly Changes. The adjusted August payroll gain detail was stated on a consistent basis only with the September and July headline details, but not with prior periods, from which recent headline growth has likely was borrowed (see the *Supplemental Labor-Detail Background -Section I*, beginning page 28, for discussion on the various reporting distortions and gimmicks).

Headline Payroll Detail. The headline August 2018 payroll gain of 201,000 formally was statistically-significant +/- 135,000 (but that 95% confidence interval more appropriately should be closer to the range +/- 300,000) at the 95% confidence interval (all confidence intervals used are at the 95% level). That followed revised monthly gains of 147,000 [previously 157,000] in July and 208,000 [previously 248,000, initially 213,000] in June (see *Graphs 10* and *11*).

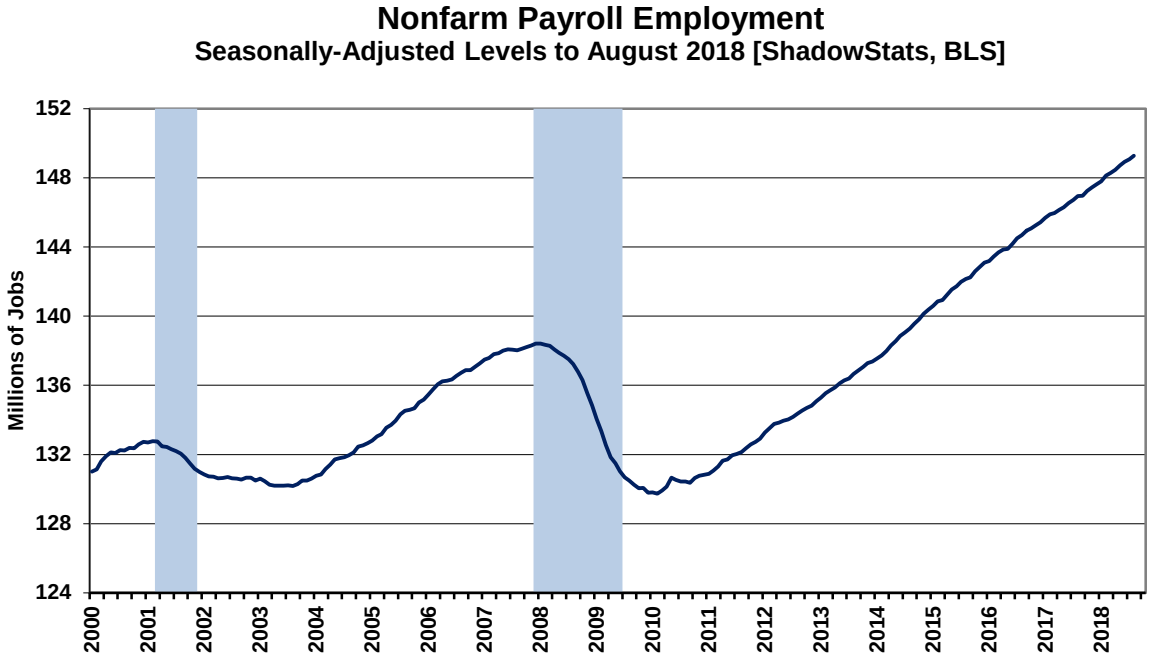
Annual percentage change in payroll employment picked up minimally, but it remained in recession-signal territory with a 1.65% year-to-year increase in August 2018, versus a revised 1.64% [previously 1.65%] in July 2018 and a revised 1.67% [previously 1.68, initially 1.63%] year-to-year increase in June 2018, versus an unrevised 1.64% annual increase in May 2018, 1.55% in April 2018, 1.59% in March 2018, 1.56% in February 2018 and 1.42% in unadjusted January 2018 payrolls. The January 2018 annual gain was the weakest standard level of annual growth since coming out of the headline 2007 recession in August 2011, other than for a benchmark-revised, hurricane-induced trough of 1.38% in September 2017, (see *Graphs 12* and *13*).

Contrary to claims by economists at the San Francisco Fed, such low-level annual growth rates are far from being healthy or normal. They are seen either coming out of recession, or going into recession, but never seen consistently in the regular variability of ongoing, sustainable, normal economic activity, as discussed in *Commentary No. 843*. Current levels of annual growth in unadjusted payrolls likely are near the downside threshold of heading into recession.

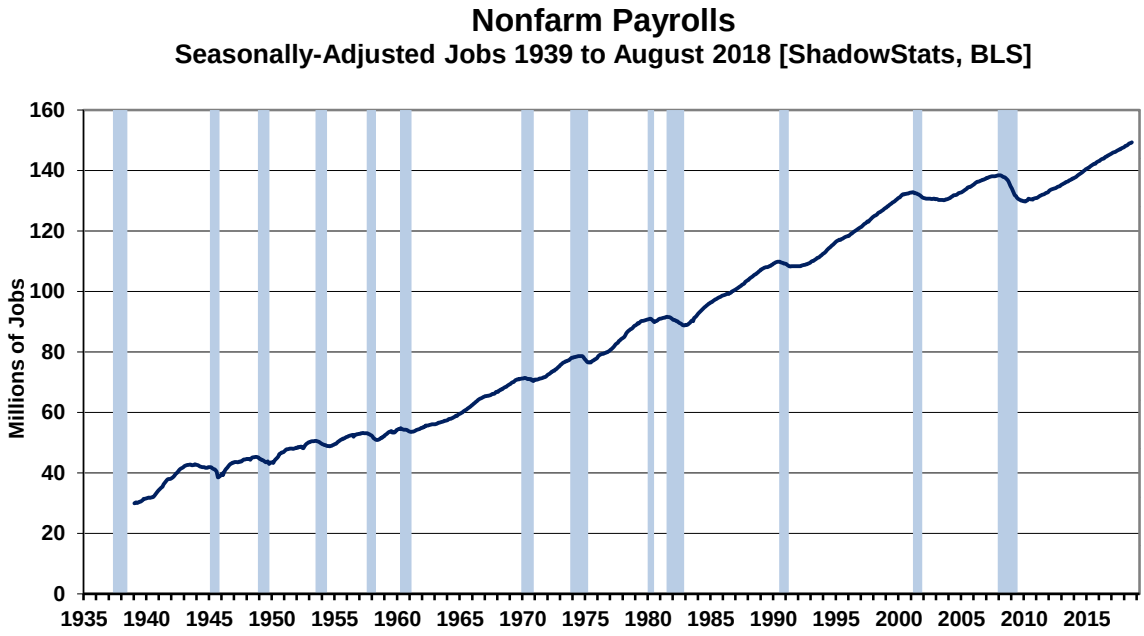
Graphs 10 to *13* show the headline payroll series, level and annual change, both on a shorter-term basis, since 2000, and on a longer-term historical basis, from the onset of the series in 1939. In perspective, the longer-term graph of the headline payroll-employment levels shows the extreme duration of what had been the official non-recovery in payrolls, the worst such circumstance of the post-Great Depression era.

[Graphs 10 to 15 begin on the next page.]

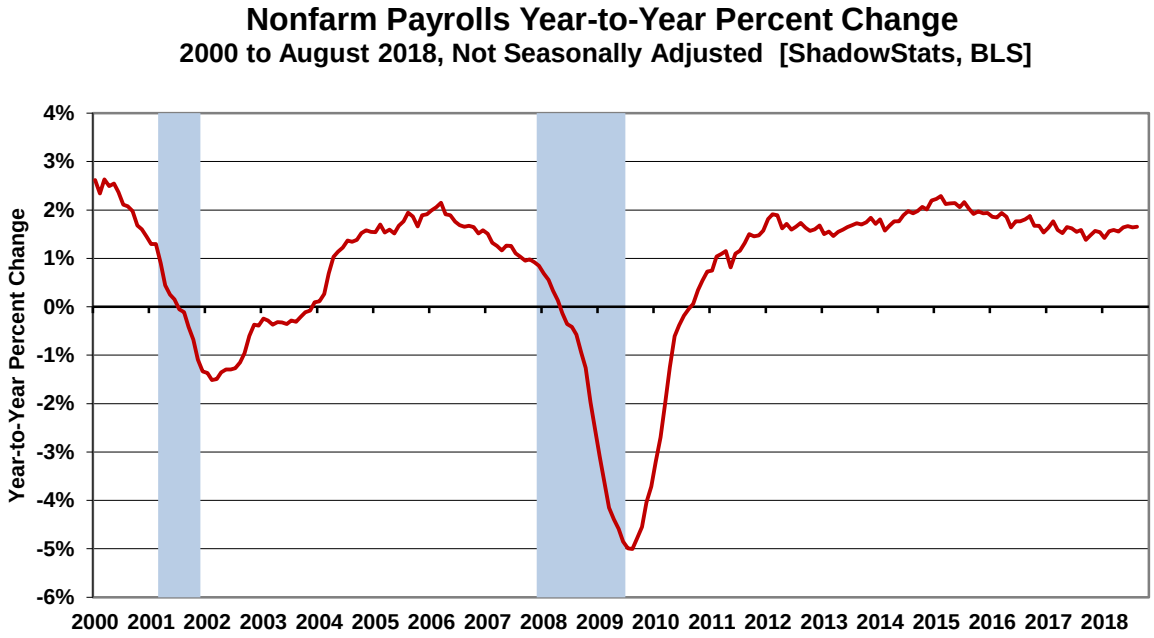
Graph 10: Nonfarm Payroll Employment, 2000 to Date



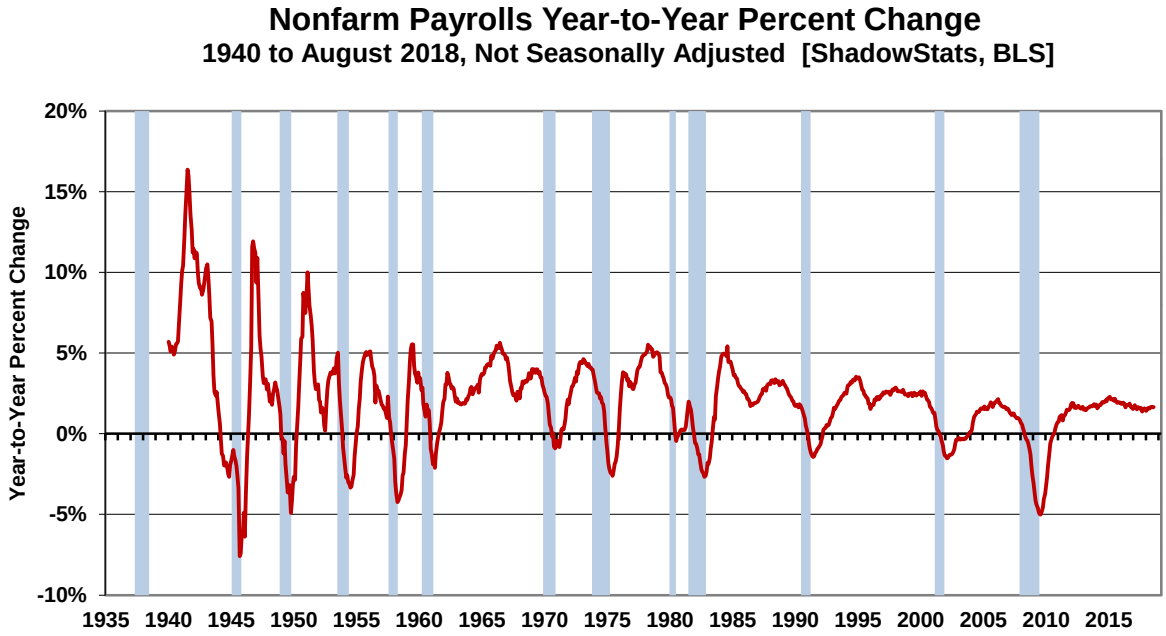
Graph 11: Nonfarm Payroll Employment, 1939 to Date



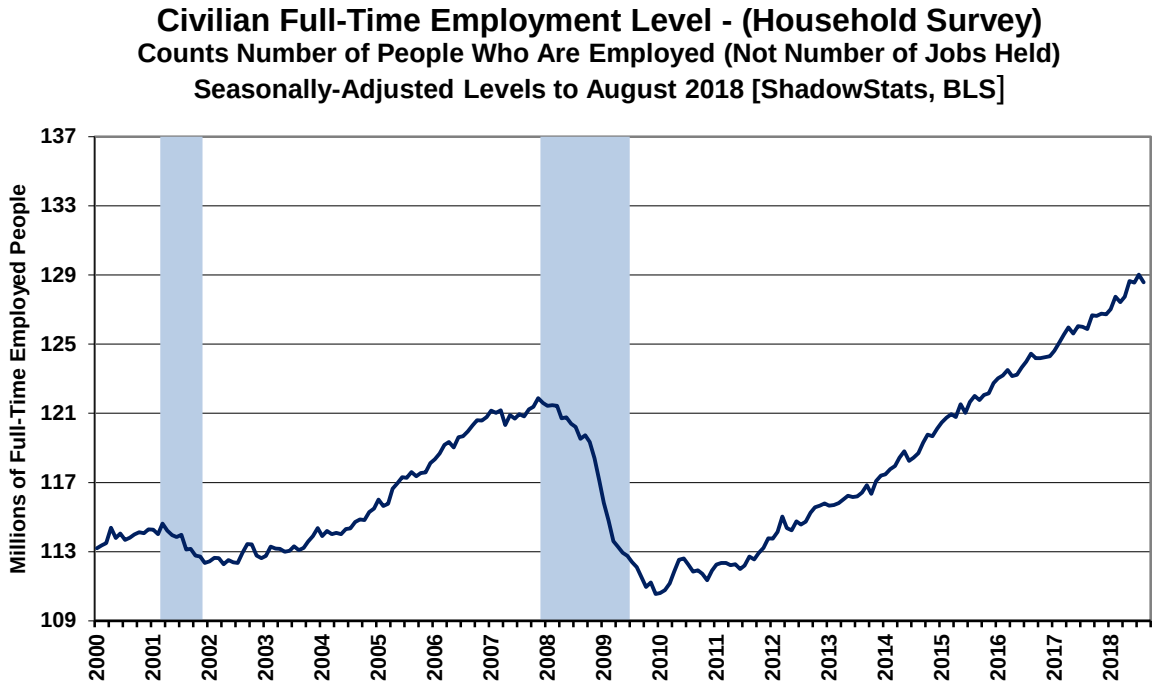
Graph 12: Payroll Employment, Year-to-Year Percent Change, 2000 to Date



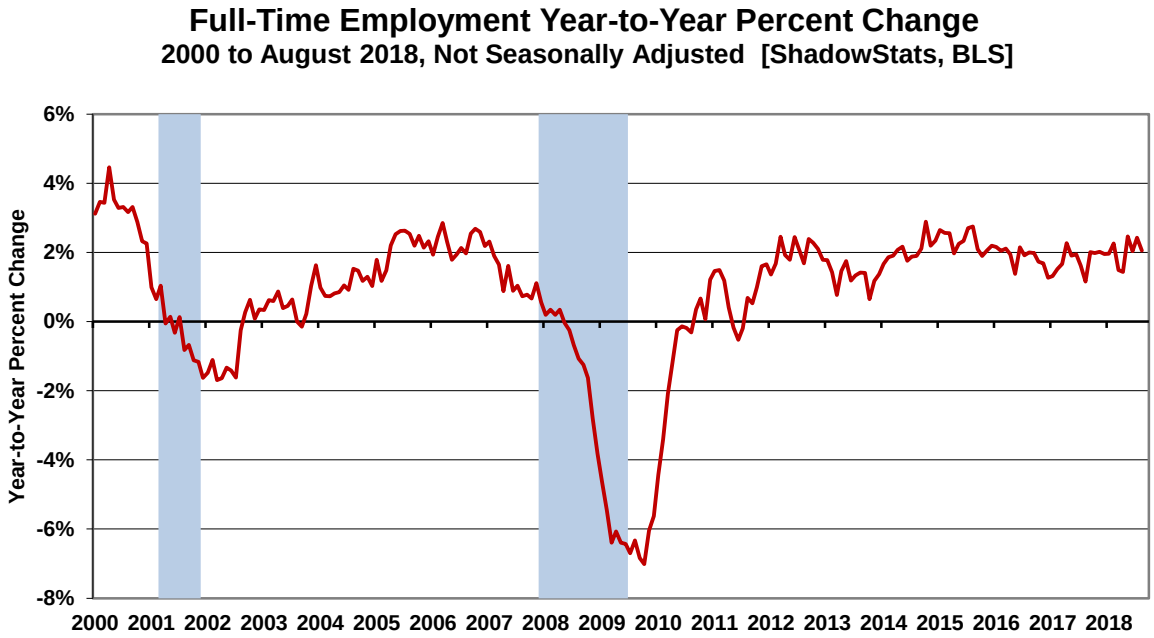
Graph 13: Payroll Employment, Year-to-Year Percent Change, 1940 to Date



Graph 14: Full-Time Employment (Household Survey), 2000 to Date



Graph 15: Full-Time Employment (Household Survey), Year-to-Year Percent Change, 2000 to Date



[The Supplemental Labor-Detail Background begins on the next page.]

Supplemental Labor-Detail Background

Reasons Why Headline Employment and Unemployment Numbers Usually Fail to Match Common Experience. The accompanying material provides background detail on reporting biases, reporting gimmicks, Pollyannaish redefinitions of methodology ("Pollyanna Creep" in the ShadowStats lexicon, as discussed recently in the *Opening Comments* of *Special Commentary No. 968-Extended*), surveying and reporting inconsistencies and other issues with the monthly headline labor data from the Bureau of Labor Statistics (BLS) surveys: the Establishment Survey (nonfarm payrolls) and the Household Survey (unemployment and employment detail). The text here usually is not revised much each month from its prior version, other than for updated monthly numbers through the latest headline detail (currently August of 2018).

The current headline numbers also are referenced and discussed separately in the standard employment and unemployment text of the *Reporting Detail.* Note: Accompanying Household (December 2017) and Payroll-Survey (January 2018) comments reflect the indicated, most-recent annual benchmarkings.

SECTIONS

(I.) Headline Distortions from Shifting Concurrent Seasonal-Adjustment Factors

There remain serious and deliberate flaws with the government's seasonally-adjusted, monthly reporting of both employment and unemployment (there are parallel issues with the Retail Sales, New Orders for Durable Goods and Trade Deficit series). Each month, the BLS uses what is known as a "concurrent-seasonal-adjustment process" to adjust both the payroll and unemployment data for the latest seasonal patterns. The new headline numbers are used each month as the new base month for monthly seasonally-adjustments going back in time. 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. While the procedure is unnecessarily complex, there is no problem with the basic concept. The problem is that historically-comparable revised data are not published along with the new headline detail by the Bureau of Labor Statistics (BLS), Department of Commerce (Commerce) or the Bureau of Economic Analysis (BEA).

For example, 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 month-to-month consistent basis for the Payroll Survey, even with accompanying headline benchmark revisions. The Household Survey is published only once per year on a consistent basis, in December (see the opening note above), but the numbers become inconsistent, once again, with the ensuing January reporting. Headline month-to-month inconsistencies in the seasonally-adjusted Household Survey are highly variable every month, but that detail never is published and is not knowable by the public.

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

If that indeed were the reason for not publishing consistent monthly data, then the BLS would do itself and the public a favor by using its prior annual or semi-annual revisions to the seasonal factors, where the data at least were published in a manner where monthly changes were consistent on a month-to-month basis.

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 in terms of statistical significance, 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. In theory, 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, with the ensuing headline January reporting, and with each monthly estimate thereafter, until the next December's benchmarking.

Consider *Graphs SLD-1* and *SLD-2*, 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 monthly instability likely is of similar magnitude. Shown here as an example 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 were consistent only for January and December. With the Household Survey, except for December, seasonally-adjusted monthly detail is not comparable with any other month, so seasonally-

adjusted, month-to-month Household Survey comparisons have no meaning, even for the headline month, except temporarily for the one month of December.

Payroll or Establishment Survey. In the case of the published Payroll Survey data (payroll-employment change and related detail), again, the current monthly changes in the seasonally-adjusted headline data are comparable only with the prior month's month-to-month reporting, not before. Due to the BLS modeling process, the historical data never are published on a consistent basis, even with publication of the annual benchmark revisions (see the comments with *Graphs SLD-1* and *SLD-2*).

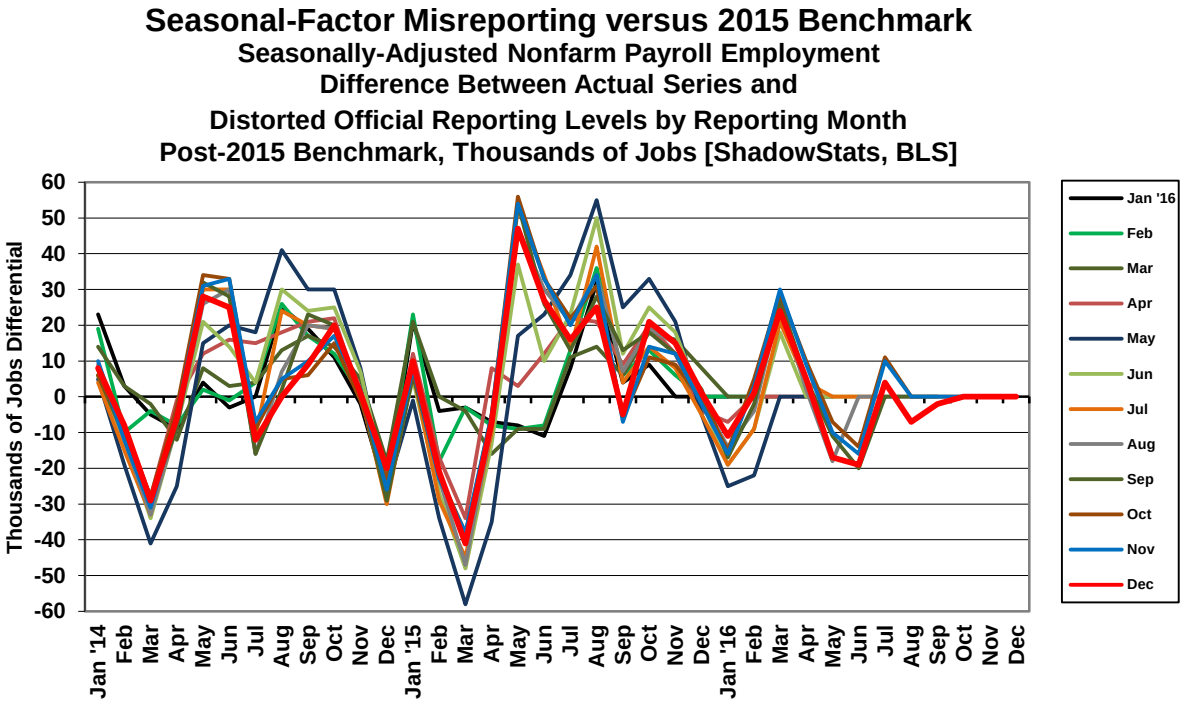
Where the BLS does provide modeling detail for the Payroll Survey, allowing for third-party calculations, no such accommodation has been made for the Household Survey. ShadowStats affiliate ExpliStats has done such third-party calculations for the payroll series, and the resulting detail of the differences between the current headline reporting and the constantly-shifting, consistent and comparable history are reflected here in *Graph SLD-1*, 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 (benchmarking) publication, which allows the initial headline publishing to stray from the actual initial benchmarking. *Graph SLD-1* 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.

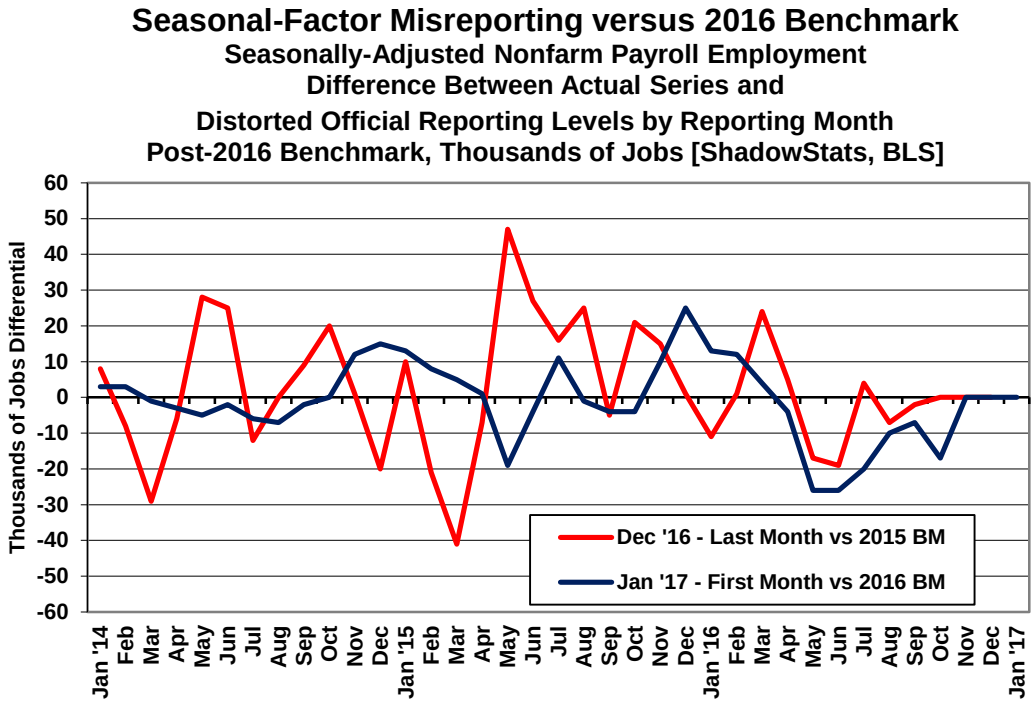
Seen in the detail, the differences go both ways and often are much larger. Such was the case for example in November 2014, coming out of the 2014 benchmark revision, as detailed and discussed in the *Opening Comments* of *Commentary No. 784*. Subscribers interested in the modeling of specific industry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

[Graphs SLD-1 and SLD-2 follow on the next page.]

Graph SLD-1: Concurrent-Seasonal-Factor Irregularities – December 2016 Detail versus 2015 Benchmarking



Graph SLD-2: Concurrent-Seasonal-Factor Irregularities – January '17 Detail versus 2016 Benchmarking



(II.) Payroll-Employment Monthly Bias Factors (Birth-Death Modeling: BDM)

In the ongoing, general overstatement of monthly payroll employment (see *Special Commentary No. 885*, entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*), the BLS adds in upside monthly biases to the payroll employment numbers. The continual overstatement is evidenced usually by regular and massive, annual downward benchmark revisions (2011, 2012, 2017 and preliminary 2018 excepted). The preliminary estimate of 2018 payroll benchmark revision was minimal, a positive 43,000 payroll jobs (see *Commentary No. 967*), with the 2017 benchmark revision of February 2, 2018 on the upside by 138,000 (initially by 95,000).

Noted in *No. 885*, "During the Reagan Administration, the Bureau of Labor Statistics (BLS) underestimated employment growth, coming out of the 1983 recession. [As expressed by a spokesperson for the BLS] 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."

Recent History. As a separate matter, though, formalized, corrective downside revisions to prior history increasingly have been 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 for March 2016 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, see *Opening Comments* of *No. 864*.

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

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

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

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

Historically, the upside-bias process was created simply by adding in a monthly "bias factor," so as to prevent the otherwise potential political embarrassment to the BLS of understating monthly jobs growth. The creation of "bias factor" process resulted from such an actual embarrassment, with the underestimation of jobs growth coming out of the 1983 recession. That process eventually was recast as

the now infamous Birth-Death Model (BDM), which purportedly models the relative effects on payroll employment of jobs creation due to new businesses starting up, versus jobs lost due to bankruptcies or closings of existing businesses.

August 2018 Add-Factor Bias. In context of the 2017 benchmarking (see the *Opening Comments* of *Commentary No. 934-B*) and the initial estimate for the 2018 benchmarking (see *Commentary No. 967*), the not-seasonally-adjusted monthly add-factor bias in August 2018 was 104,000, previously up by 103,000. The revamped, aggregate upside annual bias for the trailing twelve months through August 2018 is estimated from the current headline bias reporting at 1,012,000, up by 120,000 or 13.5% from the last prior count of 892,000 in December 2017. That is a monthly average now of 84,333, versus 74,333 in December 2017, 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. Put another way, that upside bias of 1,012,000 in unadjusted payrolls in the twelve months through August 2018 accounted for 43.4% of the headline unadjusted 2,330,000 payroll jobs gain the same period On a seasonally adjusted basis, that twelve-month payroll gain was 2,425,000.

Problems with the Model. The aggregated upside annual reporting bias in the BDM reflects an ongoing assumption of a net-positive jobs creation by new companies versus those going out of business. Such becomes a self-fulfilling system, as the upside biases boost reporting for financial-market and political needs, with relatively good headline data, while often also setting up downside benchmark revisions for the next year, which traditionally are ignored by the media and the politicians. The BLS cannot measure meaningfully the impact of jobs loss and jobs creation from employers starting up or going out of business, on a timely basis (within at least five years, if ever), or by changes in household employment that were incorporated into the 2017 redefined payroll series. Such information simply is guesstimated by the BLS, along with the addition of a bias-factor generated by the BDM. Private surveying runs counter to the BLS contentions.

Positive assumptions—commonly built into government statistical reporting and modeling—tend to overstate official estimates of general economic growth. Along with 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 84,333 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).

(III.) ShadowStats Alternate-Unemployment Rate – Accounting for Displaced Workers

At the same time, as reviewed in *Section IV: Reconciling Record "Low" Unemployment with Record-High Labor-Market Stress***,** the recent historic low in headline unemployment (and current near-record low) was despite continued signals of extreme stress in labor-market conditions. The dominant issue with that dichotomy remains that the headline unemployment numbers out of the BLS have not counted the aggregation of long-term discouraged or displaced workers, since the 1994 redefinitions of the unemployment reporting. Those issues have become a factor here in the context of the severity of the economic collapse from 2007 into 2009.

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 (John Williams) had close ties with an old-line consumer pollster and his 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. Including the currently-defined level of "marginally attached workers," which incorporates the currently-defined and undercounted "discouraged workers" category used in the U.6 calculation, those not in the labor force currently wanting a job was a seasonally-adjusted 5.389 million in August 2018 (5.534 million not seasonally adjusted). The seasonally-adjusted August detail was the highest level this year (prior years' data simply are not comparable given the lack of comparability in these data). While some contend that that number includes all those otherwise-uncounted discouraged workers, such is extremely shy of underlying reality due to changes in survey methodology since 1994.

The ShadowStats Alternate Unemployment 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. Other than using the BLS's U.6 estimate as an underlying monthly base with my modeled adjustments, I have not found a way of accounting adequately 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." Again, discussed the following *Section IV: Reconciling Record "Low" Unemployment with Record-High Labor-Market Stress*, and shown in the *Reporting Detail*, 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* and *3* there and *Graph SLD-4* in the next section). Other measures, such as the ShadowStats-Alternate GDP Estimate, the Cass Freight Index, U.S. Petroleum Consumption, Manufacturing, Construction Spending and Housing Starts are highlighted in subsequent *Graphs 4* to *9* in today's *Reporting Detail* and in the *Opening Comments* and *Section II* of *Special Commentary No. 968-Extended*.

Headline August 2018 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 August 2018 was 21.2%, versus 21.3% in July, 21.5% in June 2018, 21.4% in May, 21.5% in April, 21.7% in March, 21.8% in February, 21.8% in January. That was against 21.7% in December 2017, 21.7% in November, 21.7% in October, 21.9% in September, 22.2% in August, 22.1% in July, 22.0% in June, 22.0% in May, 22.1% in April, 22.4% in March 2017, 22.7% in February, and 22.9% in January. Built upon the headline U.3 and U.6 estimates, the August 2018 ShadowStats reading was down by 210 (-210) basis points or 2.1% (-2.1%) from the 23.3% series high seen in May 2014.

In contrast, the August 2018 headline U.3 unemployment rate of 3.9% was down by 610 (-610) basis points or by 6.1% (-6.1%) from its peak of 10.0% in October 2009. The broader U.6 unemployment measure of 7.4% in August 2018, was down by 980 (-980) basis points or 9.8% (-9.8%) from its peak of 17.2% April 2010.

A subscriber raised the question once as to why the ShadowStats Alternate Unemployment Estimate had been holding around 23%, at the time. 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 *Reporting Detail*), there indeed is a noticeable divergence in the ShadowStats series versus U.6 and U.3, with the BLS headline U.3 unemployment measure broadly flat-to-minus at low levels recently, against higher level, albeit softening U.6 and a still-higher level, more slowly softening ShadowStats number, which had been flat for some months, all have notched lower with the headline August 2018 detail, for the second month.

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 in the 21% to 23% range 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%.

(IV.) Reconciling Record "Low" Unemployment with Record-High Levels of Labor-Market Stress

It All Is in the Gimmicked Unemployment Definitions. From the *Opening Comments* of *Commentary No. 953-B*: *Graphs SLD-3* and *SLD-4* (updated through August 2018) plot measures of broad labor-market health. *Graph SLD-3* shows the ratio of headline employment to the working age population, the *Employment-Population Ratio*. *Graph SLD-4* shows labor-force participation (the total of the headline employed plus headline unemployed) as a percent of the working age population, the *Participation Rate*. The higher those ratios, the healthier is the economy. Correspondingly, the weaker those ratios the more intense is the labor-market stress. Also consider *Graph SLD-5*, which plots the updated headline U.3 Unemployment Rate, but with an inverted scale, since the 1994 onset of the current unemployment series.

August 2018 U.3 unemployment eased back to 3.85% (rounds to 3.9%), having hit a near-term peak in June 2018 of 4.05% (rounds to 4.0%), from 3.75% (3.8%) in May 2018. At the second decimal point, that May unemployment rate was the historic low for the current series, which was defined in 1994. At the first decimal point, May 2018 unemployment tied the record low of 3.8% of April 2000 (the low April unemployment is the early high point with the inverted scale of *Graph SLD-5*), April 2000 also is the happy high point for the *Employment-Population Ratio* and the *Participation Rate*. That is as it should be. The problem comes with the May 2018 "low" unemployment rate (the recent high point in *SLD-5*)

going against relatively low points (severe levels of labor-market stress) in *Graphs SLD-3* and *SLD-4*, which have deteriorated further in the latest reporting

Those three graphs move pretty much in unison (particularly *SLD-3* and *SLD-5*) until they pass the second blue recession bar, when the unemployment rate turns lower (rises in with the inverted-scale in *SLD-5*), while the measures of labor-market stress begin to bottom-bounce. Now consider *Graph SLD-6* of the inverted-scale ShadowStats Alternate Unemployment rate (same as *Graph 2* in the *Reporting Detail*, which includes long-term discouraged or displaced workers.

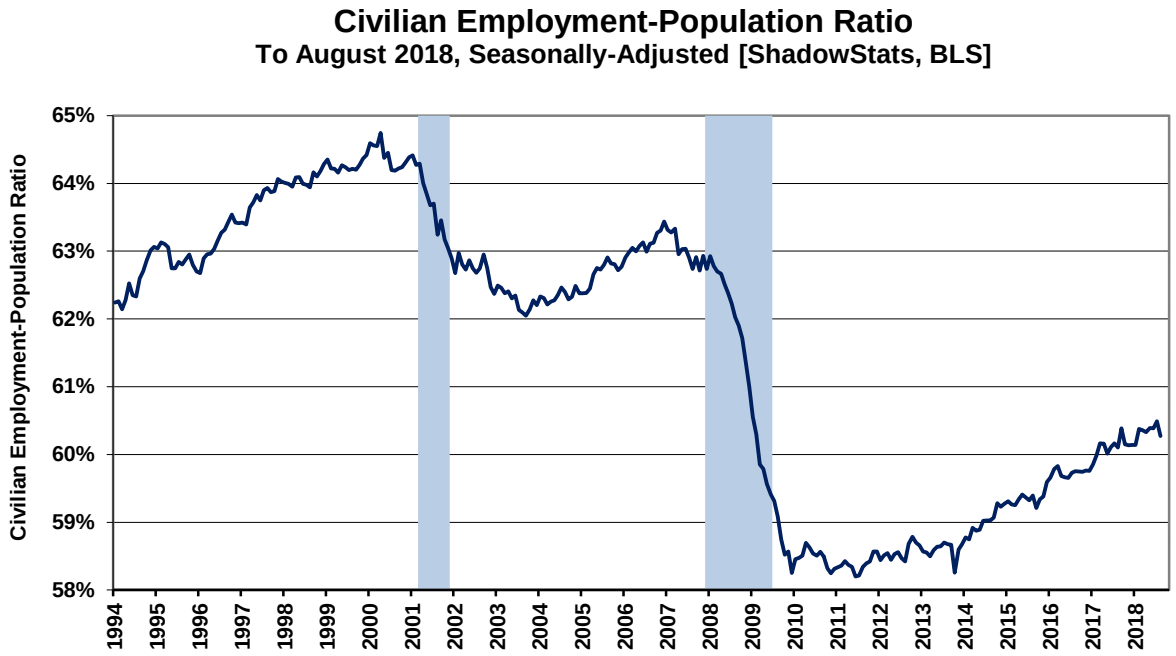
The problem and the conflict with the headline numbers out of the Bureau of Labor Statistics is that the current unemployment series was redefined in 1994 (at the onset of NAFTA) so as not to count "discouraged workers" for more than one year. Otherwise, that population (and share of the total population) would aggregate, rather than be retired after twelve months (see prior *Section III: ShadowStats Alternate-Unemployment Rate (Accounting for Displaced Workers*).

Subsequent to the redefined series, the U.S. economy collapsed into its most severe downturn since the Great Depression, and as the headline unemployment rate dropped (rose on the inverted scale) the ShadowStats measure (also on an inverted scale) continued to track the accumulating discouraged workers. The ratio differences here reflect issues with population. Some argue the difference here is due to an increased portion of the population entering retirement. While that is a partial factor, many who had planned to retire are finding that they cannot afford to do so, at present, as had been planned originally.

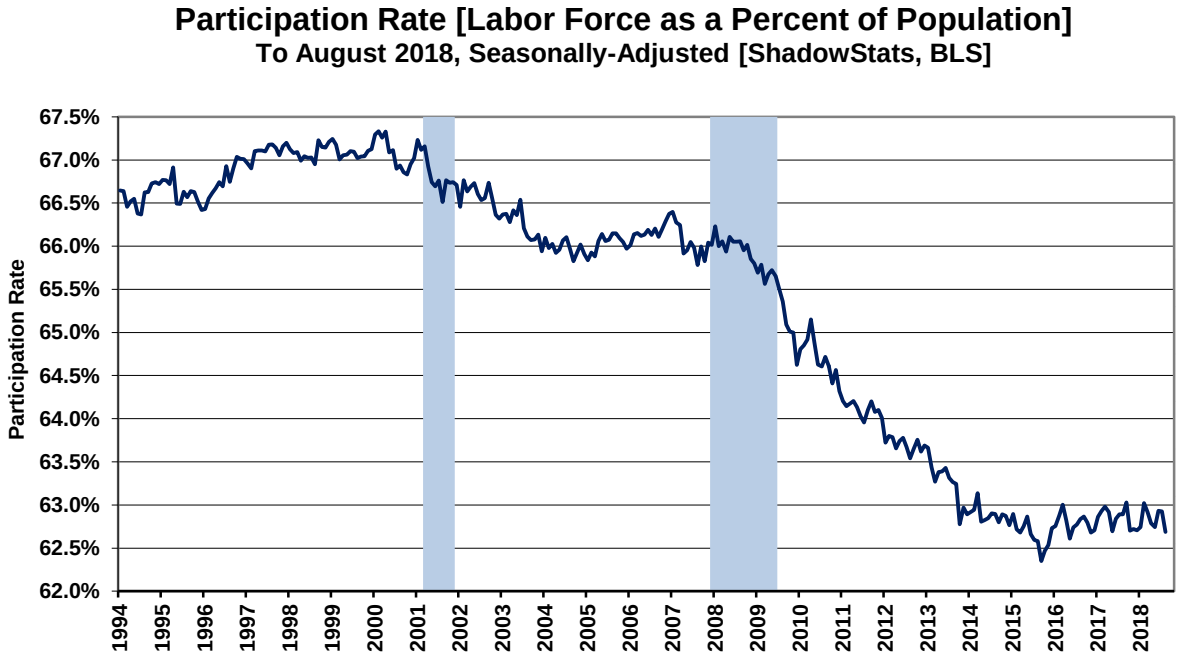
Allowing for the build-up of the discouraged/displaced worker population allows for some non-conventional employment/unemployment estimates. With calculations shown in the footnotes, the current *Employment-Population Ratio* and *Participation-Rate* suggest that a realistic unemployment rate, as the public might sense it, would be closer to 10% in instead of 3.8% (currently 3.9%) [the calculations here are based on the recent historic low in U.3]. With the *Participation-Rate* suggesting room for another 11.1 million employed. Separately, despite the near-record-low U.3 in August 2018, the headline count of those not counted in the headline labor force "wanting a job" increased in the August 2018 survey.

[Graphs SLD-3 to SLD-6 begin on the next page.]

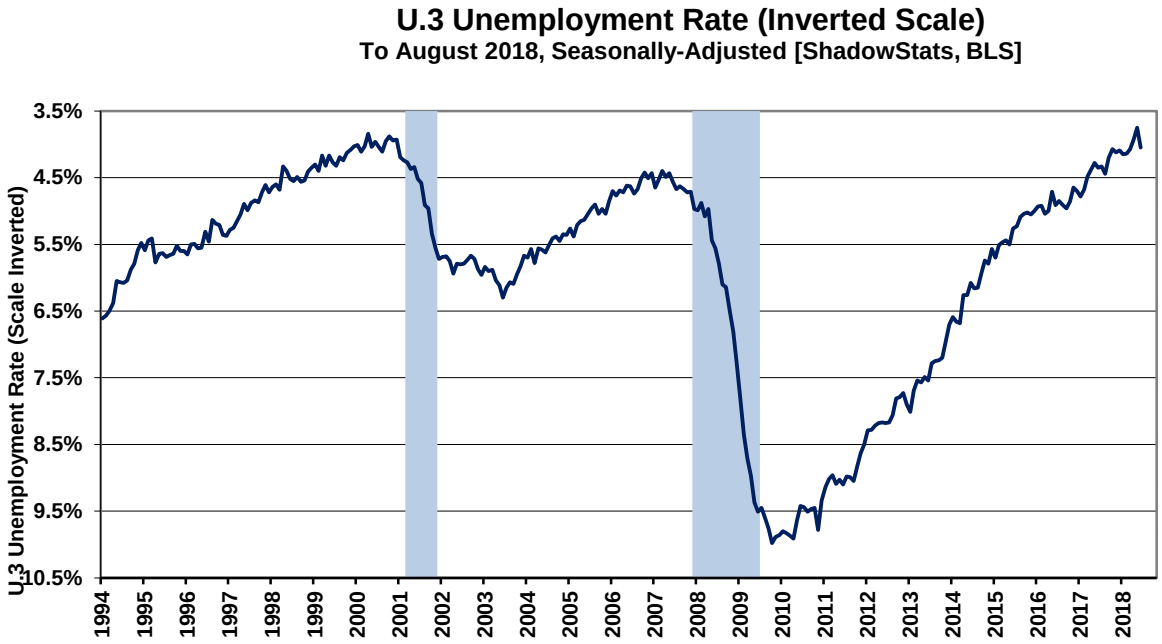
Graph SLD-3: Civilian Employment to Population Ratio
(Same as Graph 3 in the Reporting Detail)



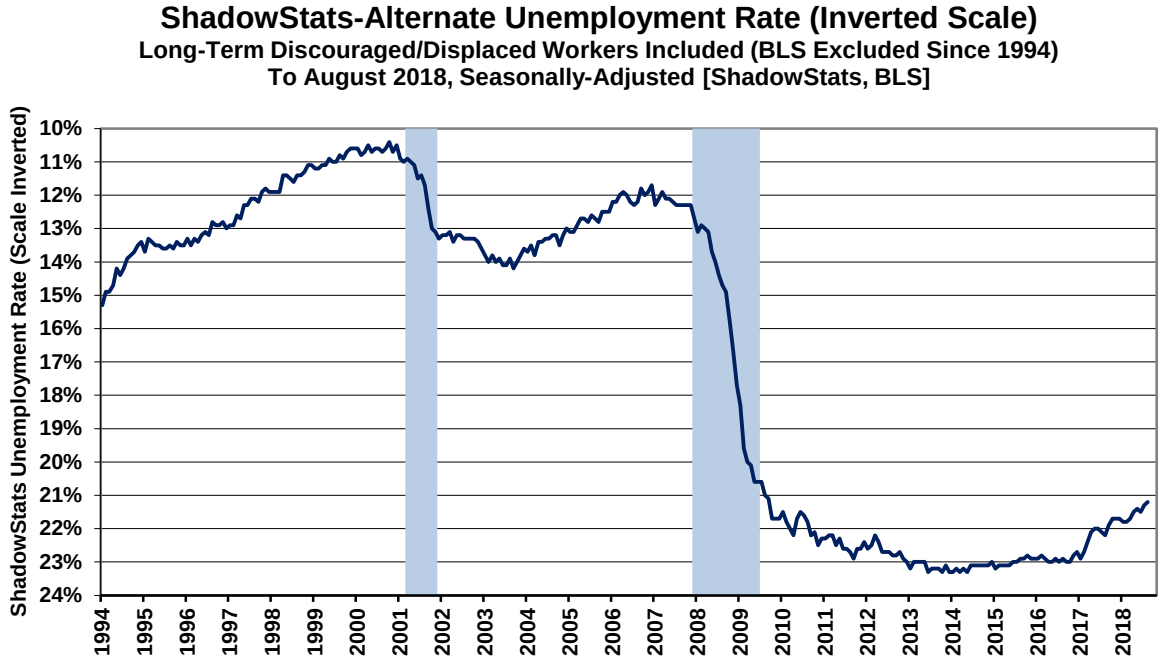
Graph SLD-4: Labor-Force Participation Rate



Graph SLD-5: Inverted-Scale of the Headline U.3 Unemployment Measure



Graph SLD-6: Inverted-Scale of ShadowStats Alternate Unemployment Measure
(Same as Graph 2 in the Reporting Detail)



Economy Remains Far From Full-Employment (Part 1); 3.8% U.3 Unemployment Historically Is Consistent with 67.3% Participation Rate, Not the Current 62.7%, Which is Consistent with a 10.3% U.3. [The following calculations are based on the historic-low 3.75% of May 2018 and related stress numbers of that time. While headline U.3 is back near that historic low, the stress numbers have deteriorated further. Accompanying graphs have been updated through the headline August 2018 detail. Argued here for many months, the U.S. economy is not at, or close to, full employment. As with much-earlier comments from former Fed Chair Janet Yellen, Treasury Secretary Steven Mnuchin (*Treasury Secretary Mnuchin: Economy is not really at full employment yet*) recently noted, "My comment is we're not really at full employment because of the participation rate." The near-historically-low level of the headline participation rate (labor force/working-age population) is despite the series-low 3.8% headline U.3 unemployment rate. The headline participation rate should be at an all-time high. In like manner, the employment-to-population ratio, also near its historic low, also should be at an historic high. Something very much is amiss in the government's headline Household Survey detail.

Discussed in the *Fedspeak* portion of the *Fed* section of *No. 859 Special Commentary* and the *Opening Comments* of *Commentary No. 870*, certain members of the Federal Reserve Board (*Commentary No. 827*) had suggested that an unemployment rate near 5.0% (U.3 now is at 3.8%) reflected full-employment conditions in the United States. Noted in *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%). The last time the U.3 rate was at 3.8% [3.84%] was in April 2000, versus the May 2018 reading of 3.8% [3.75%]—certainly a more-realistic full-employment rate—the participation rate then was the series-high of 67.33%.

Full employment with unemployment at 5.0% or the record-low 3.8% in May 2018, also minimally should be reflected at a relative near-term peak in the participation rate, not close to its historic trough. The May 2018 headline unemployment rate of 3.8%, for example was in the context of a 62.7% participation rate. Yet, that historically-consistent participation rate, in the current circumstance (where the count of Household Survey employed generally is not gimmicked), would generate a consistent, current headline unemployment rate (U.3) of 10.3%, instead of the headline 3.8%.[1]

The calculations used here are for May 2018, as the series-low U.3 unemployment rate. New calculations will be provided, if the 3.8% (3.75%) is breached anew on the downside.

Far From Full-Employment (Part 2): Historic Low 3.8% May 2018 Unemployment Was Consistent a Record-High 64.7% Employment to-Population Ratio, Not the Current Near-Historic Low. The historic-low 3.8% U.3 unemployment of May 2018 U.3 (currently 3.9% in August 2018) also should have

[1] Consider with the May 2018 working-age population of 257.454 million, the implied labor force at a full-employment participation rate of 67.3% (last seen when headline unemployment was 3.8% in April 2000) would show 0.673 x 257.454 = 173.267. That labor force less current headline employed, 173.267 – 155.474 = 17.793 million implied unemployed, which divided by the labor force of 173.267 = 10.3% unemployment. The problem with the assumptions underlying these numbers and concept, again, remains that the economy is not at full employment, as would be suggested normally by a headline 3.8% U.3; there are serious flaws in the surveying and/or definitional concept of U.3.

reflected an historic high Employment-to-Population Ratio, not the near-record low indicated for both May and August 2018. In turn, the May headline 60.4% (60.3% in August) Employment-to-Population Ratio was suggestive of a 9.9% U.3 unemployment rate and a missing 11.1 million employed.

The last time[2] U.3 unemployment rate dropped to 3.8% was in April 2000, with the Employment-to-Population Ratio also hitting an historic high of 64.7%. Detailed in the accompanying footnote, historical consistency would suggest a parallel headline unemployment rate for May 2018 at 9.9%, instead of the headline 3.8%, otherwise with a missing 11.1 million "employed" individuals.

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

[Week, Month and Year Ahead Section begins on the next page.]

[2] Consider with the May 2018 working-age population of 257.454 million, the implied level of employment, given an historically consistent employment-to-population ratio of 64.7% (last seen when headline unemployment was 3.8% in April 2000) would show 0.647 x 257.454 = 166.573 million employed. Yet, the current headline employed count of 155.474 – 166.573 implied employed = a current shortfall of 11.099 million employed, based on historical norms with a headline unemployment rate U.3 of 3.8%.

To the extent one could count those implied missing employed as unemployed, such would suggest a consistent headline U.3 unemployment rate in May 2018 of 9.9% (Unemployed of 17.164 million = headline 6.065 unemployed + the missing 11.099 employed) / (Labor Force of 172.638 = 155.474 headline employed + the headline unemployed of 6.065 + the missing 11.099 employed). The problem with the assumptions underlying these numbers and concept, again, remains that the economy is not at full employment, as would be suggested normally by a headline 3.8% U.3; there are serious flaws in the surveying and/or definitional concept of U.3.

WEEK, MONTH AND YEAR AHEAD

Risks of U.S. Dollar and Financial-Market Turmoil Remain Intense, Amidst Mounting Fiscal, Liquidity and Political Concerns, Along With Increasingly Faltering Headline Economic Activity. In the context of continued weakening in consumer-liquidity trends (see today's *Opening Comments* and those of *Special Commentary No. 968-Extended*, *Commentary No. 967* and *Commentary No. 966*, *Hyperinflation Watch – No. 3*, *Consumer Liquidity Watch – No. 4* and *Commentary No. 959-B*), the headline economic outlook likely will continue to dim rapidly as seen in the recent, intensifying downturn in the housing and construction markets, despite the headline ShadowStats "Corrected" GDP being off bottom and growing quarter-to-quarter (again, see *Special Commentary No. 968-Extended*). Both *Watches* should be updated in week ahead, their postings and links advised by e-mail, along with links on the www.ShadowStats.com home page.

Hyperinflation Watch – No. 3 reviewed the broad outlooks for the U.S. economy, the U.S. dollar, gold, silver and the financial markets (again, see the *Opening Comments* of *Commentary No. 967*). Such expanded upon the annual review in *Special Commentary No. 935*. The broad outlook on the economy has not changed. Weaker economic growth and renewed, faltering economic headlines should continue. The fundamental outlook for U.S. dollar and related market circumstances also broadly have not changed from the related vulnerabilities discussed in earlier missives, subject ultimately extraordinary financial-market turmoil (see today's *Opening Comments*).

The dollar and financial markets remain at extraordinarily-high risk of intense, panicked declines, possible at any time. Holdings of physical gold and silver remain the ultimate hedges—stores of wealth—for preserving the purchasing power of one's U.S. dollar assets, during times of high inflation and currency debasement, and/or political- and financial-system upheaval.

Please call (707) 763-5786, if you would like to discuss current circumstances, or otherwise.

Best wishes – John Williams

[Pending Economic Releases are covered on the next page.]

PENDING ECONOMIC RELEASES:

New Residential Construction—Building Permits and Housing Starts (August 2018). The Census Bureau and the Department of Housing and Urban Development release their August 2018 estimate of New Residential Construction, including Housing Starts and Building Permits, on Wednesday, September 19th, with coverage in *Commentary No. 971* planned for Thursday, September 20th.

> **Given a deepening downtrend and the below-consensus non-recovery in recent Housing Starts and Home Sales reporting, August Starts and Existing- and New-Home Sales trends likely will continue on the downside, disappointing market expectations for some rebound in the various measures in the August 2018 detail. That said, the reporting here usually is unstable and irregularly volatile for both Housing Starts and New Home Sales, where results could come in anywhere.**

The liquidity bind besetting consumers increasingly constrains consumer activity, including in residential real estate. Headline investment in residential real estate showed unusual, outright back-to-back quarterly contractions in first- and second-quarter 2018 GDP (see today's *Opening Comments*, *Special Commentary No. 968-Extended* and *Consumer Liquidity Watch – No. 4*). Without sustainable growth in real income, and without the ability or willingness to take on meaningful new debt in order to make up for an income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including residential real estate sales and related demand for residential construction. That circumstance—in the last twelve-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity.

Where the private housing sector never recovered from the business collapse of 2006 into 2009, there remains no chance of a near-term, sustainable turnaround in home-sales activity, without a fundamental upturn in consumer and banking-liquidity conditions. That does not appear to be in the offing. Smoothed for month-to-month variability, patterns of low-level downtrending stagnation should continue in play for both the Home Sales series, with reporting risks on the downside of consensus for both series.

Existing- and New-Home Sales (August 2018). Reporting of August 2018 Existing-Home Sales is due for release on Thursday, September 20th, from the National Association of Realtors (NAR), with coverage planned for *Commentary No. 971* of that same date. August 2018 New-Home Sales from the Census Bureau is scheduled for release on Wednesday, September 26th, to be covered in *Commentary No. 972*, planned for Friday, September 8th.

The outlook for the home sales series, including impediments from deteriorating consumer liquidity issues are discussed along with the outlook for August Housing Starts, discussed in the previous section.

[Links to Prior Commentaries, etc. begin on the next page.]

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LINKS TO PRIOR COMMENTARIES, SPECIAL REPORTS AND OTHER WRITINGS

Most Recent Watches:

The ***Consumer Liquidity Watch*** of August 10th: *Consumer Liquidity Watch – No. 4*.

The ***Hyperinflation Watch*** of August 12th: *Hyperinflation Watch – No. 3*.

The latest Watches always are available on www.ShadowStats.com and by link from the current *Commentary*. This next week's pending updates will be advised by e-mail when they are posted.

Prior Writings Underlying the Regular and *Special Commentaries*: Underlying the recent *Special Commentary No. 935 (Part One)* and the pending *Special Commentaries (Part Two)* on Inflation, and *(Part III)* on the Federal Reserve and U.S. banking system, are *Commentary No. 899* and *General Commentary No. 894*, along with general background from regular *Commentaries* throughout 2017.

These missives also are built upon writings of prior years, including *No. 777 Year-End Special Commentary* (December 2015), *No. 742 Special Commentary: A World Increasingly Out of Balance* (August 2015) and *No. 692 Special Commentary: 2015 - A World Out of Balance* (February 2015). In turn, they updated the long-standing hyperinflation and economic outlooks published in *2014 Hyperinflation Report—The End Game Begins* – *First Installment Revised* (April 2014) and *2014 Hyperinflation Report—Great Economic Tumble* – *Second Installment* (April 2014).

The two *Hyperinflation* installments remain the primary background material for the hyperinflation circumstance. Other references on underlying economic reality are the *Public Commentary on Inflation Measurement* and the *Public Commentary on Unemployment Measurement*.

Recent Regular Commentaries: *[Listed here are* Commentaries *of the last several months or so, plus recent* Special Commentaries *and a sampling of others covering a variety of non-monthly issues, including annual benchmark revisions, dating back to the beginning of 2017. Please Note: Complete ShadowStats archives back to 2004 are found at www.ShadowStats.com (left-hand column of home page).]*

These regular *Commentaries* should be published at least weekly, with *Consumer Liquidity* and *Hyperinflation Watches* updated every several weeks or so, updating general economic, consumer-liquidity and financial-market circumstances as they develop.

Flash Commentary No. 969-Advance (September 7th) Covered initial headline employment and unemployment detail for August 2018 (expanded upon in today's *No 969-B*), July Construction Spending, the July Trade Deficit and a review of August Monetary Conditions.

Special Commentary No. 968-Extended (September 6th) Reviewed underlying economic reality, in the context of statistical deception used in boosting headline GDP activity, and against the background of extended analysis of the 2010 Comprehensive GDP Benchmarking. Separately covered was extended coverage of the second estimate of second-quarter 2018 (see *Flash Commentary No. 968-Advance*).

Flash Commentary No. 968-Advance (August 29th) provided a summary review of the headline first revision, second estimate of Second-Quarter 2018 GDP and initial estimates of GDI and GNP. Also updated early indications from the latest Consumer Liquidity measures.

Commentary No. 967 (August 24th) discuused the annual squirrely season and reviewed July 2018 New Orders for Durable Goods and New- and Existing-Home Sales and the preliminary benchmark revision to 2018 payroll employment.

Commentary No. 966 (August 17th) reviewed July 2018 Retail Sales, Industrial Production, New Residential Construction and the CASS Freight Index™.

Commentary No. 965 (August 12th) covered the July 2018 Consumer and Producer Price Indices (CPI and PPI), and Real Average Weekly Earnings and deteriorating consumer liquidity conditions.

Commentary No. 964-A (August 3rd) preliminary coverage of July 2018 Employment/Unemployment, Conference Board Help Wanted OnLine® Advertising, M3 and the June Trade Deficit and Construction Spending.

Commentary No. 963 (July 31st) reviewed June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index, all in the context of the GDP revisions and unfolding, underlying economic reality.

Commentary No. 962 (July 27th) provided initial coverage of the first or "advance" estimate of Second-Quarter 2018 Gross Domestic Product (GDP) and the Comprehensive Benchmark Revisions to the series back to 1929. A full update and extended coverage are in today's (September 4th) *Special Commentary*.

Commentary No. 961 (July 26th) provided full coverage on New Residential Investment (Housing Starts, Building Permits and New- and Existing-Home Sales. Preliminary coverage was provided on June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index™, all of which were expanded upon in *Commentary No. 963*.

Commentary No. 960 (July 15th) reviewed the June Consumer and Producer Price Indices (CPI and PPI), Real Earnings and related implications for consumer and systemic liquidity

Commentary No. 959-B (July 11th) provided extended detail on June 2018 Employment and Unemployment, the May 2018 Trade Deficit and updated economic outlook, along with expanded discussion on issues affecting the credibility of the headline employment and unemployment data.

Commentary No. 959-A (July 6th) provided flash headlines and summary details of the June 2018 Employment and Unemployment and the May 2018 Trade Deficit, expanded upon in *Commentary No. 959-B* and headline coverage of June 2018 Conference Board Help Wanted OnLine® Advertising.

Commentary No. 958 (July 3rd) covered May 2018 Construction Spending and the accompanying annual benchmarking to that series.

Commentary No. 957 (July 1st) covered May 2018 New Orders for Durable Goods and the third estimate of First-Quarter 2018 Gross Domestic Product (GDP) and the coincident second estimates of Gross National Product (GNP) and Gross Domestic Income (GDI).

Commentary No. 956 (June 27th) reviewed May 2018 Retail Sales, Industrial Production, New Residential Construction (Housing Starts and Building Permits), New- and Existing-Home Sales, along with detail on the May 2018 Cass Freight Index™ and some potential twists to the pending July 27th Comprehensive Benchmark Revision to the GDP.

Commentary No. 955 (June 18th) analyzed May 2018 inflation as reported with the May 2018 Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* covering FOMC policy, the U.S. dollar and financial markets. Summary headline details also were provided for May Retail Sales, Industrial Production and the Cass Freight Index™.

Commentary No. 954 (June 8th) reviewed the comprehensive annual benchmark revisions to the Trade Deficit, in the context of recent benchmark revisions to other major economic series and implications for the pending GDP benchmark revisions. Such also covered the headline reporting of the April 2018 headline Trade Deficit detail and an updated Consumer Liquidity Watch.

Commentary No. 953-B (June 5th) analyzed the discrepancies between the record-low headline unemployment rate and near-record-high readings of labor-market stress, in the context of extended coverage the May 2018 Employment and Unemployment and April 2018 Construction Spending, previously headlined in *No. 953-A.*

Commentary No. 953-A (June 1st) provided flash headlines and summary details of the May 2018 Employment and Unemployment and April 2018 Construction Spending, expanded upon in the supplemental coverage of *Commentary No. 953-B.* Current monetary conditions were reviewed, along with the initial estimate of annual growth in the May 2018 ShadowStats Ongoing Estimate of Money Supply M3.

Commentary No. 952 (May 30th) reviewed the second estimate of First-Quarter 2018 GDP, initial estimates of first-quarter GNP and GDI, extended detail on the annual benchmarking of the Retail Sales series, and headline coverage of the May 2018 Conference Board Help Wanted OnLine® Advertising.

Commentary No. 951 (May 25th) reviewed April 2018 New Orders of Durable Goods, in the context of the annual revisions (see prior *No. 950*), New- and Existing-Home Sales and brief coverage of the annual benchmarking of the Retail Sales series.

Commentary No. 950 (May 20th) reviewed April Retail Sales, Industrial Production, New Residential Construction (Housing Starts, Building Permits and annual revisions), the Cass Freight Index™ and annual benchmark revisions to Manufacturers' Shipments, including New Orders for Durable Goods.

Commentary No. 949 (May 11th) reviewed inflation as reported with the April 2018 Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* on the U.S. dollar and financial markets.

Commentary No. 948 (May 9th) explored unusual circumstances with April 2018 Employment and Unemployment numbers, along with the April Conference Board Help Wanted OnLine® Advertising, April Monetary Conditions, the March Trade Deficit and Construction Spending, along with the reintroduction of Sentier Research's monthly Real Median Household Income to March 2018.

Commentary No. 947 (April 27th) detailed the first estimate of First-Quarter 2018 GDP and the related Velocity of Money, March New Orders for Durable Goods, New- and Existing-Home Sales and the "advance" estimate of the March 2018 merchandise goods deficit.

Commentary No. 946 (April 22nd) covered March 2018 Retail Sales, Industrial Production, New Residential Construction (Housing Starts and Building Permits), the Cass Freight Index™ and a review of the current state of the GDP reporting and an outlook for first-quarter 2018 activity.

Commentary No. 945 (April 11th) reviewed the March 2018 Consumer and Producer Prices Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* on the U.S. dollar and financial markets.

Commentary No. 944 (April 8th) covered March 2018 Employment and Unemployment, the March Conference Board Help Wanted OnLine® Advertising, March Monetary Conditions and the full February Trade Deficit and Construction Spending.

Commentary No. 943 (March 29th) covered the third-estimate of, second-revision to Fourth-Quarter 2017 GDP and the only estimates to be made in current reporting of the GDI and GDP, as well as the "advance" estimate of the February merchandise trade deficit.

Commentary No. 942-B (March 27th) reviewed the Industrial Production annual benchmark revisions, general reporting-quality issues, February 2018 New Orders for Durable Good, New- and Existing-Home Sales and the Cass Freight Index™.

Commentary No. 942-A (March 23rd) provided a very brief summary of the much more extensive details covered in *Commentary 942-B.*

Commentary No. 941 (March 19th) covered February Industrial Production and New Construction Spending (Housing Starts and Building Permits), along with a general discussion in the *Opening Comments* on economic conditions and a preview of the Industrial Production benchmark revisions.

Commentary No. 940 (March 15th) covered February 2018 Retail Sales, CPI, PPI and related Real Average Weekly Earnings, real Annual Growth in M3 and updated financial market prospects.

Commentary No. 939 (March 9th) covered the February 2018 Employment and Unemployment details, the full reporting of the January 2018 Trade Deficit, February Conference Board Help Wanted OnLine® Advertising and February Monetary Conditions.

Commentary No. 938 (March 1st) reviewed January 2018 Construction Spending and the second estimate of Fourth-Quarter 2017 GDP.

Commentary No. 937 (February 27th) covered January 2018, New Orders for Durable, New- and Existing-Home Sales, the "advance" estimate of the January 2018 Merchandise Trade Deficit and the Cass Freight Index™.

Commentary No. 936 (February 19th) covered the January 2018 CPI and PPI, Retail Sales, Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Special Commentary No. 935 (February 12th) was the first part of a three part-series reviewing economic and financial conditions of 2017 and the year-ahead, inflation and the U.S. government's balance sheet and conditions in the U.S. banking system and Federal Reserve options.

Commentary No. 934-B (February 6, 2018) provided extended coverage on the January 2018 Employment and Unemployment details, the 2017 benchmark revisions to Payroll Employment and the January annual recasting of population, along with coverage of the December 2017 Trade Deficit.

Commentary No. 934-A (February 2, 2018) provided initial detail on the January 2018 Employment and Unemployment details and the 2017 benchmark revisions to Payroll Employment, along with coverage of January Conference Board Help Wanted OnLine® Advertising, January Monetary Conditions and December 2017 Construction Spending.

Commentary No. 933 (January 26, 2018) covered December New Orders for Durable Goods, the Cass Freight Index™ and the first estimate of Fourth-Quarter 2017 GDP.

Commentary No. 932 (January 18, 2018) covered December Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Commentary No. 931 (January 15, 2018) reviewed December 2017 Retail Sales and the CPI and PPI, along with an update on the U.S. dollar, the financial markets and gold graphs.

Commentary No. 930-B (January 8th) expanded upon the December 2017 Employment and Unemployment numbers and Household Survey benchmarking, Conference Board Help Wanted OnLine® Advertising, December Monetary Conditions and the November 2017 Trade Deficit and Construction Spending, otherwise headlined in *No. 930-A*.

Advance Commentary No. 930-A (January 5, 2018) provided a brief summary and/or comments (all expanded in *Commentary No. 930-B*) on December 2017 Employment and Unemployment numbers, Household Survey benchmarking, Conference Board Help Wanted OnLine® Advertising, December Monetary Conditions and the November 2017 Trade Deficit and Construction Spending.

General Commentary No. 929 (December 28, 2017) reviewed current economic and market conditions at year-end 2017.

Commentary No. 926 (December 15, 2017) reviewed the headline November 2017 numbers for Retail Sales (both real and nominal), and Industrial Production, along a discussion on the dampening economic impact of business and consumer "uncertainty."

Commentary No. 909 (September 14, 2017) assessed the annual release of 2016 Real Median Household Income, along with a review of August Consumer Price Index (CPI) and the Producer Price Index (PPI) and an updated *Alert* on the financial markets.

Special Commentary No. 904 (August 14, 2017) issued an "Alert" on the financial markets (including U.S. equities, the U.S. dollar gold and silver, as well as FOMC policy), in the context of historical activity and unfolding circumstances of deteriorating economic and political conditions. Separately, headline details were reviewed for the July Consumer Price Index (CPI) and the Producer Price Index (PPI).

Commentary No. 902-B (July 31, 2017) reviewed the 2017 annual benchmark revisions of GDP and related series, along with the "advance" estimate of second-quarter 2017 GDP.

Commentary No. 900 (July 19, 2017) reviewed June 2017 New Residential Investment (Housing Starts and Building Permits), and previewed the upcoming annual GDP benchmark revisions and the coincident "advance" estimate of second-quarter 2017 GDP.

Commentary No. 897 (July 6, 2017) reviewed the headline May 2017 Construction Spending and the annual revisions to same, along the May Trade Deficit, and June The Conference Board Help Wanted OnLine® Advertising and the May Cass Freight Index™.

General Commentary No. 894 (June 23, 2017) reviewed unfolding economic, financial and political circumstances in the context of market expectations shifting towards an "unexpected" headline downturn in broad economic activity, along with headline details on May 2017 Real Median Household Income (Sentier Research) and New- and Existing-Home Sales.

Commentary No. 890 (June 5, 2017) covered the negative-downside annual benchmark revisions to the trade deficit, the May 2017 estimates of labor conditions, ShadowStats Ongoing Money Supply M3, The Conference Board Help Wanted OnLine® Advertising and April 2017 estimates of the Cass Freight Index™, and the monthly trade deficit and construction spending.

Special Commentary No. 888 (May 22, 2017) discussed evolving political circumstances that could impact the markets and the economy, reviewed the annual benchmark revisions to Manufacturers' Shipments and New Orders for Durable Goods and updated Consumer Liquidity Conditions.

Commentary No. 887 (May 18, 2017) reported on the April 2017 detail for Industrial Production and Residential Construction (Housing Starts), with some particular attention to historic, protracted periods of economic non-expansion, of which the current non-recovery is the most severe.

Special Commentary No. 885, entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*, (May 8, 2017) reviewed the unusual nature of the headline reporting of the April 2017 employment and unemployment details.

Commentary No. 882 (April 27, 2017) summarized the annual benchmark revisions to Retail Sales and reviewed the March 2017 releases of New Orders for Durable Goods and New- and Existing-Home Sales.

Commentary No. 877 (April 2, 2017) 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.

Commentary No. 876 (March 30, 2017) 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.

Commentary No. 875 (March 24, 2017) 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 Index™.

General Commentary No. 867 (February 24, 2017) 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.

Commentary No. 864 (February 8, 2017) 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.

Commentary No. 861 (January 13, 2017) 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.

No. 859 Special Commentary (January 8, 2017) reviewed and previewed economic, financial and systemic developments of the year passed and the post-election year ahead.
