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

COMMENTARY NUMBER 948

April Labor Data, Private Labor and Income Surveys, Trade Deficit, Construction Spending

May 9, 2018

New Private and Public Surveys Raise Serious Doubts as to the Quality and Significance of the Headline Economic Boom, Given Weakening Labor Conditions and Negligible Growth in Real Household Income

Intensifying Labor-Market Stress in April 2018 Was More Consistent with Headline U.3 Unemployment at 10.4%, Instead of the New 17-Year Low of 3.9%

April U.3 Eased to 3.93% from 4.07% in March, U.6 Declined to 7.79% from 8.00%, ShadowStats-Alternate Dropped to 21.5% from 21.7%, on Top of U.6 and U.3

Headline Count of Employed in April Was Down from February by 34,000 (-34,000); Gaining Only 3,000 in the Month, Having Declined by 37,000 (-37,000) in March

April Payroll-Jobs Count Rose by 164,000 (up 194,000 Net of Revisions), with Annual Growth at 1.55%, Still in Recession-Signal Territory

First-Quarter Real Merchandise Trade Widened versus Fourth-Quarter, Contrary to Initial First-Quarter 2018 GDP Reporting

Real Construction Spending Held Shy of Its Pre-Recession Peak by 20.9% (-20.9%), Down by 2.4% (-2.4%) in March 2018, by 0.6% (-0.6%) Year-to-Year, Despite Large Upside Revisions to January and February Activity

Annual Money Supply Growth Weakened in April for All Measures, Along with a Contracting Monetary Base: Declining Real Liquidity Growth Threatens the Economy

Shadow Government Statistics — Commentary No. 948 May 9, 2018

PLEASE NOTE: The next regular Commentary, planned for Friday, May 11th, will cover the April 2018 Consumer and Producer Price Indices.

NOTE TO SUBSCRIBERS ON TODAY'S PUBLICATION AND THE WEEK AHEAD: The publication of this missive was delayed due to unanticipated new material, and related extensive analysis and new writing. I apologize for any inconvenience, but hope you find the new information of interest. Today's updated Consumer Liquidity Watch (CLW) is in a transitional phase. It will be revised fully to incorporate material from today's Opening Comments in Commentary No. 950, planned for May 17th.

Commentary No. 949, planned for Friday, May 11th, will cover today's release of the April PPI, tomorrow's release of the April CPI and the usual accompanying Hyperinflation Watch covering the U.S. Dollar and FOMC policy (see today's Hyperinflation Watch), but it will not include the usual CLW, which, again, is in transition. Please give me a call if you have questions or would like to talk.

Best wishes — John Williams (707) 763-5786

Today's (May 9th) *Opening Comments and Executive Summary.* The *Opening Comments* (page 3) review unfolding, purportedly-positive headline labor and economic trends, in the context of contradictory indications from both private and public economic surveys. Covered on the private side are Sentier Research's reintroduction of the monthly, real median household income (through March 2018) and the April 2018 Conference Board Help-Wanted Online Advertising® (HWOL). The *Executive Summary* (page 12) highlights reporting of April Employment and Unemployment, the March Trade Deficit and March Construction Spending.

The *Reporting Detail* (beginning on page 22) reviews in greater depth, the April labor numbers, with background labor-reporting issues covered in the *Supplemental Labor-Detail Background* (page 39); the full monthly reporting of the March Trade Deficit (page 47) and March Construction Spending (page 49).

The *Hyperinflation Watch* updates current Monetary Conditions, including the initial estimate of the slowing year-to-year growth in the April 2018 ShadowStats Ongoing Money Supply M3, the Fed's M2 and M1 measures and the latest detail on the Saint Louis Federal Reserve's Monetary Base (page 59).

The *Consumer Liquidity Watch* (page 64) updates current liquidity conditions for Sentier Research's March 2018 monthly Real Median Household Income measure, and for March Real Consumer Credit Outstanding.

The *Week, Month and Year Ahead* (page 78) provides background on recent *Commentaries* and previews this week's April 2018 Consumer and Produce Price Indices.

OPENING COMMENTS

Not So Fast There! Household Income Growth Does Not Support the Purported GDP Boom; Background Labor Detail Does Not Support 3.9% Headline Unemployment. This regular monthly review of headline Labor, Trade Deficit and Construction Spending conditions, evolved rapidly into an updated assessment of some recent, strong headline-economic numbers out of the U.S. government's statistical bureaus, including from the Census Bureau (Census), Bureau of Economic Analysis (BLS) and the Bureau of Labor Statistics (BLS).

A confluence of new information from recent private surveying of labor conditions, household income and the ShadowStats Ongoing M3 Money Supply estimate, along with unusual numbers in the BLS's reporting of April labor details, provided successive new data twists. In combination, the new numbers reinforce ShadowStats observations that the current "strong" broad employment and economic (GDP) conditions are not as advertised, both in terms of current headline detail and of prospective activity. U.S. economic activity already is sinking anew, never having recovered fully from the last headline recession.

In sequence of the coverage in these *Opening Comments*, areas reviewed generally have some related analysis elsewhere in this *Commentary*, often in greater detail:

- Monthly Real Median Household Income. In theory, real median household income is the basic driver of broad economic activity. Yet, annual growth in real median household income has not been strong enough in the last several decades to support the headlined real annual growth in the GDP. Our friends at Sentier Research have reinstituted publication of their regular monthly estimate of inflation-adjusted Real Median Household Income, through March 2018 (www.SentierResearch.com). This monthly series and the related, laggard annual survey published by the Census Bureau have been discussed and covered regularly in the Consumer Liquidity Watch, see page 64. The new details are reviewed here.
- Real Money Supply Growth. In theory, the amount of money in circulation, in cash or in near cash instruments—the money supply—drives domestic liquidity, inflation and interest rates. Adjusted for inflation, annual growth in Money Supply M3 also signals shifts in broad economic activity. A "new" recession signal has begun to unfold. ShadowStats publishes detail on the Federal Reserve's money supply estimates of the narrower M1 and M2 measures, along with regular calculations of the ShadowStats Ongoing M3 Money Supply estimate (M3 was the broadest money measure, before the Fed discontinued it in February 2006). Detail is discussed in the Hyperinflation Watch on page 59 (see also the Pending Releases CPI section in the Week, Month and Year Ahead on page 78, Graph 5 and comments on page 18 of Commentary No. 945, along with a related updated in the pending April CPI coverage of Commentary No. 949).

- Household Survey Employment Details. In theory, Employment and Unemployment numbers directly reflect economic activity, but unusual reporting gimmicks and biases have distorted underlying reality. Nonetheless, headline April 2018 Household Survey details showed unusually negative and contradictory features, suggestive of an underlying downshift in headline employment and unemployment conditions, despite the new 17-year low 3.9% unemployment rate. Published monthly by the BLS, the Household Survey of employment conditions for April 2018 is discussed in both the Executive Summary (page 12), and the Reporting Detail, including the Supplemental Labor-Detail Background (pages 22 and 39). The detail is estimated from the Census Bureau's Current Population Survey (CPS) and is published monthly along with details from the monthly Establishment or Payroll-Employment Survey
- The Conference Board Help-Wanted Online Advertising® (HWOL). For the last century, help-wanted advertising has been the best leading indicator of employment and broad economic activity. Amidst shifting technology, surveying in recent years has shifted from newspaper to online advertising. The series has indicated a double-dip Great Recession, with no recovery or new economic expansion in play. Regularly covered in the Opening Comments of the Commentary immediately preceding, or including, headline reporting of the monthly labor conditions by the BLS, April 2018 details from The Conference Board Help Wanted OnLine® follow in these Opening Comments (page 9), along with an experimental, alternative Graph OC-6, which contrasts annual growth in newspaper and online ads (page 10).

Any discussion in this general area of the reporting quality of headline economic series always is in the context of <u>Special Commentary No. 885</u>, Numbers Games that Statistical Bureaus, Central Banks and Politicians Play.

Consumer Weakness Began to Surface in the Initial Reporting of First-Quarter 2018 GDP. Discussed in today's Consumer Liquidity Watch (page 64) and in prior Commentary No. 947, faltering income, credit and optimism—tightening consumer liquidity conditions—already have started to take a toll on consumer activity, as reflected in First-Quarter 2018 Gross Domestic Product (GDP).

Where annualized real quarterly GDP growth slowed to 2.3% in first-quarter 2018, from 2.9% in fourth-quarter 2017, that partially reflected an annualized contraction of 1.1% (-1.1%) in Personal Consumption Expenditures in Goods and an 0.0% increase in Residential Investment. The consumer dominates broad economic activity, such as measured by the GDP, accounting for 72.9% of aggregate first-quarter GDP activity, but that was down from 73.1% of fourth-quarter activity. Weakening consumer liquidity and demand will tend to drawn down annualized real growth in other areas of the economy, as well as in the aggregate GDP measure.

Real Monthly Median Household Income Growth Does Not Support Real Headline GDP Activity. Sentier Research's estimate (www.SentierResearch.com) of their inflation-adjusted Real Median Household Income Index (HII) for March 2018 was 101.8 (January 200 =100.0), unchanged from February 2018, but up by 2.0% year-to-year (see Graph OC-1). In turn, the February 2018 HII had gained 0.2% month-to-month and 2.1% year-to-year. Against January 2001, however, March 2018 was up by just 1.8%, reflecting average annual growth of 0.1% per year. That is far shy of enough to support the purported real growth of the GDP over the same timeframe.

Graph OC-1: Monthly Real Median Household Income (2000 to March 2018) Index, January 2000 = 100 (See Graph CLW-5 in Today's Consumer Liquidity Watch)

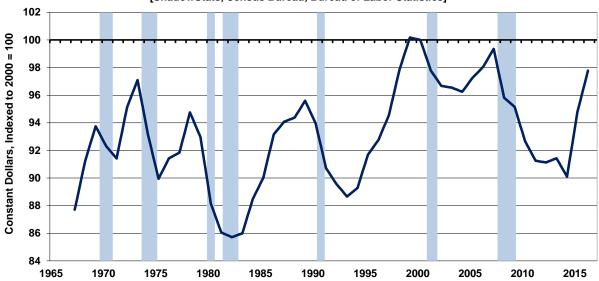
Monthly Real Median Household Income Index Deflated by Headline CPI-U, January 2000 to March 2018 Seasonally-Adjusted [ShadowStats, www.SentierResearch.com]



Graph OC-2: Annual Real Median U.S. Household Income to 2016, 2013-2014 Discontinuities Removed (See Graph OC-1 in Commentary No. 909)

Annual Real Median Household Income Index (1967-2016)

Adjusted for 2013-2014 Discontinuities,
Deflated by the Bureau of Labor Statistics' Headline CPI-U
[ShadowStats, Census Bureau, Bureau of Labor Statistics]



The CPI-U is used for deflating the median-income estimate, but Sentier has remarked how recent weakness in CPI inflation, tied to gasoline prices, had become somewhat of a distorting (boosting) factor there. Separately, understatement of the headline CPI-U versus common experience (and as so orchestrated by the Bureau of Labor Statistics in recent decades, see the <u>Public Commentary on Inflation Measurement</u>) overstates the inflation-adjusted growth rate. The HHI clearly would be in more-regular, net monthly and annual decline, given more-realistic inflation.

Nonetheless, the headline real median household income series does not come close to supporting the headline GDP, as will be discussed shortly.

Some Background. Reporting here is based on the monthly results of the Census Bureau's Current Population Survey (CPS) of the U.S. Public. Former senior Census Bureau officials Gordon Green and John Coder (Sentier) pull out carefully-vetted detail from the CPS, as related to Household Income, providing timely reporting of monthly Real Median Household Income. The reporting of these numbers is as honest as it comes, although, again, it is deflated by Consumer Price Index (CPI-U) inflation. Unlike the annual detail from Census, it is consistent in its detail, not gimmicked with favorable redefinitions of inflation or favorably redesigned special survey questions.

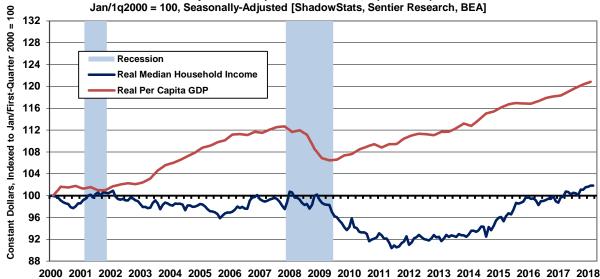
What Census publishes regularly from its own resources and initiative is an annual real median household income estimate, albeit with significant delay. For example, most recently, detail for 2016 was published in September 2017 (see *Graph OC-2*). Headline Census detail for 2017 is due for publication in September 2018. Sentier Research just published its estimate for March 2018, which Census will get around to on only an annual basis in September 2019. Discussed in the ShadowStats coverage (*Commentary No. 909*) of the Census estimates for 2016 real annual median household income, general conclusions as to the carefully surveyed Real Median Household Income not Supporting the Purported Real GDP activity remain in place.

Real Median Household Income versus GDP. Where Real Median Household Income is the middle measure of income for households, not a measure of aggregate national household income, it is more appropriate to compare the headline HII versus per capita real GDP and is dominant per capita real Personal Consumption Expenditures component, than is to compare the HHI versus the aggregate GDP-related numbers. Those comparative plots versus the per capita measures are shown in *Graphs OC-3* and OC-4, with all series set to January 2000 = 100. What is plotted is not comparative dollar levels, but respective relative-growth levels.

Annual Income Growth of 0.1% Drives GDP Growth of 1.1% and Personal Consumption Growth of 1.4%? Consider that the average annual growth rate in real (using the headline CPI-U) median household income is 0.1% is far shy of being able to support GDP-related growth. That real annual HHI growth rate of 0.1% purportedly has driven real (using the respective GDP Implicit Price Deflator) average annual growth in per capita GDP of 1.1% and average real annual growth of 1.4% in Personal Consumption Expenditure? The shortfall headline Household Median Income growth rate versus GDP growth rate differential cannot be made up with debt expansion, at present, because aggregate (not per capita, which is weaker) real growth in Consumer Credit Outstanding is downtrending, never having recovered its pre-recession levels, shown in *Graphs CLW-9*, 19, 12 and 13 in the *Consumer Liquidity Watch* (page 64).

Graph OC-3: Real Median Household Income Index (HII) vs. Per Capita GDP (2000-2018)

Real Median Household Income Index vs. Real Per Capita GDP HII Deflated by CPI-U, January 2000 to March 2018 GDP Deflated by Chained Implicit Price Deflator, 1q2000 to 1q2018 lan/1q2000 = 100. Seasonally-Adjusted IShadowStats. Sentiar Research, REAL

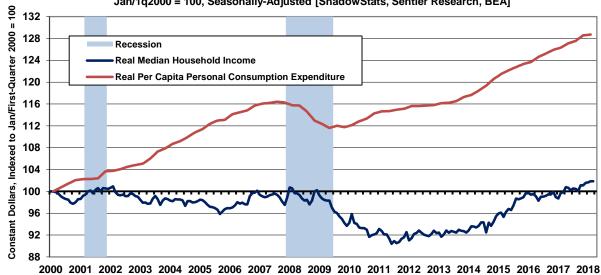


Graph OC-4: Real Median Household Income Index (HII) vs. Personal Consumption Expenditure (2000-2018)

Real Median Household Income vs. Real Per Capita Personal Consumption HII Deflated by CPI-U, January 2000 to March 2018

PCE Deflated by Implicit Price Deflator, 1q2000 to 1q2018

Jan/1q2000 = 100, Seasonally-Adjusted [ShadowStats, Sentier Research, BEA]



Fed Policy Has Moved Towards Restraining Headline Economic Activity. With annual growth in Money Supply M3 now slowing in tandem with M1 and M2, and with headline annual year-to-year CPI-U inflation on the rise in February, March and likely in April 2018, the patterns are suggestive of real annual M3 growth soon turning negative year-to-year. Such usually is a leading indicator to a downturn in broad real economic activity, as discussed in the Hyperinflation Watch (see also Graph 5 of Commentary No. 945).

FOMC activity to raise rates almost always causes real economic growth to slow or to turn down. The problem remains that the broad economy never has fully recovered, never has entered into a normal economic expansion, since the banking-crisis-induced economic plunge of 2008. Non-expansion still plagues major sectors of the economy, such as manufacturing and construction (see *Commentary No. 947* and today's *Reporting Detail*). Where Fed efforts to save the banking system in the panic of 2008 led to the Quantitative Easing programs, the Fed never has gotten the system back under full control. For example, commercial banks have not resumed normal functioning, such as providing adequate liquidity to consumers.

Now the Fed is using the excuse of the economy being at full-employment of 3.9% to raise rates, but that 3.9% is nonsense (see the next section). Dangerous actions by the Fed now run the risk of completing the ultimate economic and systemic collapses that the Fed and the U.S. Treasury had delayed from 2008. The extraordinary bailouts and efforts in 2008 to save the financial system, at any and all costs, bought time but did not resolve a number of major festering issues, ranging from underlying structural-economic-imbalances to long-term sovereign-solvency concerns facing the U.S. Treasury.

Watch real M3! A monetary trigger is in play in the next several months to intensify negative pressures on an already highly-vulnerable and never-fully recovered U.S. economy.

Household Survey Employment and Unemployment Details Show Mounting Labor-Market Stresses and Faltering Headline Details. The seasonally-adjusted headline U.3 unemployment rate dropped to a new 17-year of 3.9% in April 2018, yet that was in the context of nonsense Household Survey reporting, as reviewed in today's Executive Summary and Reporting Detail. The headline numbers reflected an environment where employment grew by only 3,000 in the month, having declined month-to-month in March by 37,000 (-37,000). At the same time, the headline count of the unemployed dropped by 239,000 (-239,000), while, and the number of people wanting a job increased by 24,000?

In the context of these inconsistent data shifts, the Participation Rate (the ratio of the labor force to the working-age population) notched lower, still a little above its historic low. That indicated mounting labor-market stress, not a sudden surge in retirements among prospective retirees. Many have found they still have to work to make ends meet. The level of stress in the labor force, indicated by the current Participation Rate, is more consistent with headline U.3 unemployment of 10.4% than 3.9%.

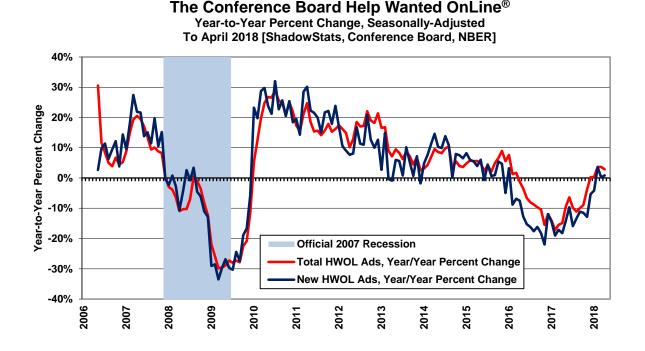
Lack of monthly growth in the April 2018 headline employed in the Household Survey was consistent with declining monthly growth in headline Help-Wanted Advertising, discussed in the next section. In contrast, Payroll Employment growth continued to increase, thanks to built-in upside biases, with weak annual growth still holding levels consistent with falling into a recession. Further details are found in today's *Executive Summary* and *Reporting Detail*, including the *Supplemental Labor-Detail Background*.

April 2018 Help-Wanted Advertising Declined in the Month, Rose Year-to-Year but Continued in Economic Non-Expansion. The Conference Board Help-Wanted Online Advertising[®] (HWOL) for April 2018 declined month-to-month by 1.4% (-1.4%), having gained 2.2% in March and declined by 3.8% (-3.8%) in February, while the "New Ads" subcomponent declined by 1.0% (-1.0%) month-to-month in April, having gained 0.4% in March and declined by 6.1% (-6.1%) in February. The monthly patterns continued to be irregular, with monthly gains and losses split evenly for both series in the last twelve months. Where the regular plot of this series is shown in *Graph OC-5*, you might also find of interest the subsequent, experimental/alternative historical *Graph OC-6* on the next page.

Where "Total Ads" reflected a year-to-year gain of 2.9% in April 2018, down from 3.7% in March and February 2018, and versus annual gains of 0.4% in January 2018 and 0.3% in December 2017, such followed 20-consecutive months of year-to-year decline. "New Ads" annual growth increased to 0.9% in April 2018, versus 0.2%, in March 2018 and 3.6% year-to-year in February 2018, after having declined by 4.1% (-4.1%) year-to-year in January 2018, its 24th consecutive month of annual decline. Although still plus for the year in April, the protracted year-to-year deterioration in labor-market demand reflected in "New Ads" remains a meaningfully-negative, leading indicator to broad economic activity. Against the November 2015 series peaks, April 2018 "Total Ads" were down by 17.1% (-17.1%), with "New Ads" down year-to-year by 26.3% (-26.3%).

Annual growth began to slow in 2010 and turned negative year-to-year in late-2015 and early-2016. The shaded area in *Graph OC-5* reflects the formal bounds of the 2007 to 2009 recession. While the HWOL held in negative annual growth territory into early-2010, beyond the formal economic trough in June 2009, keep in mind that payroll employment—traditionally a coincident economic indicator to the general economy—did not hit its cycle trough until February 2010.

Graph OC-5: The Conference Board Help Wanted OnLine® to April 2018



Many thanks to The Conference Board for permission to publish the preceding graph of year-to-year change in its *Help Wanted OnLine*[®] data. The annual percentage change is plotted for two series: Total Ads (red line) and New Ads (blue line). Where, "Total ads are all unduplicated [online] ads appearing during the reference period. This figure includes ads from the previous months that have been reposted as well as new ads." While, "New ads are all unduplicated ads which did not appear during the previous reference period. An online help wanted ad is counted as 'New' only in the month it first appears." Related background details and reporting are found here: <u>The Conference Board Help Wanted OnLine</u>®.

While much of this text is repetitive of prior discussions in <u>Commentary No. 944</u>, <u>No. 852</u> and <u>No. 820</u>, the detail here has been updated for the latest information. These comments and analysis remain those of ShadowStats alone, not those of The Conference Board, including the experimental *Graph OC-6*.

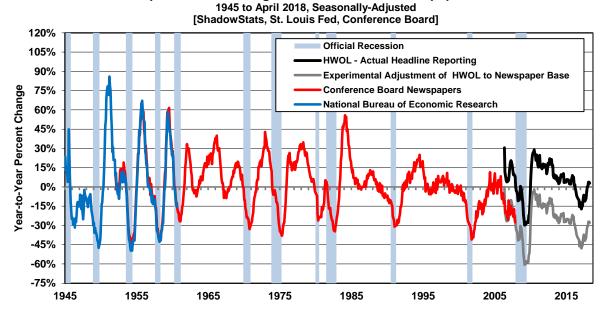
ShadowStats follows a number of business indicators—both conventional and not—looking for reliable reporting of real-world economic activity and for indications of shifting patterns in same. The HWOL is one of the best, private leading-indicator measures. Before the natural-disaster (hurricanes and wildfires) economic disruptions and the related recovery boosts in the last five months of 2017, a number of major government economic indicators, including production, employment and housing and construction measures, had been showing "unexpected" weakness, or continued non-recovery/non-expansion and renewed downturn in the post-2007 economic collapse period.

The disaster-recovery boost appeared to peak in November 2017, with many elements of broad economic activity beginning to turn down anew. Those trends should continue in play, with positive odds in place for downside revisions to, and a still possible outright contraction in first-quarter 2018 GDP, net of the short-lived, natural-disaster reporting disruptions, and the current, beginning unwinding of same.

Graph OC-6: Historical Comparisons of Help-Wanted Advertising versus Economic Activity, Post World War II

Help-Wanted Advertising (Newspapers and HWOL), Yr-to-Yr % Change

Experimental Shifting of Actual HWOL to Newspaper Base



The Conference Board Help Wanted OnLine Advertising, Historical Background. [Please note: this section been updated from prior reporting, with the inclusion of the preceding experimental, comparative Graph OC-6.] The HWOL basic concept has proven itself over the last century, in the context of the closely-paralleled tallying of help-wanted advertising in newspapers. As had been noted previously, annual growth in the current on-line series tracked the economic collapse into 2009, parallel with the last of the series based on newspaper help-wanted advertising (see *Graph OC-6*).

Although the new series tracked the newspapers with parallel shifts in annual growth, the new series relative changes were at more-positive year-to-year change levels, presumably related to the change in the nature (or cost) of the advertising technology. As to what the new series would look like, if it were shifted visually to match the highly correlated, prior and coincident newspaper series, consider today's experimental *Graph OC-6*. The current plot would be underwater, where the black line reflects the headline HWOL series and related annual growth rates for the actual series, the gray line shows that series fit to overlay the annual growth in the newspaper series. Again, this plot is an experiment of ShadowStats, not the Conference Board.

The beauty and benefit of a good leading indicator is that it provides a meaningful "advance" signal of a shift in economic activity, before that shift may become obvious in other series. Such is a particularly valuable commodity, when headline data out of the federal government increasingly are politicized and unreliable (see <u>Special Commentary No. 885</u>, Numbers Games that Statistical Bureaus, Central Banks and Politicians Play).

With the preceding ShadowStats comments in mind, the following caution, posted on the Conference Board's web site, speaks for itself:

NOTE: Recently, the HWOL Data Series has experienced a declining trend in the number of online job ads that may not reflect broader trends in the U.S. labor market. Based on changes in how job postings appear online, The Conference Board is reviewing its HWOL methodology to ensure accuracy and alignment with market trends.

First fully covered by ShadowStats in <u>Commentary No. 820</u> of July 16, 2016, the HWOL is updated here through April 2018 (released May 2nd). As a leading economic indicator, help-wanted advertising had its roots as far back in time as the initial reporting of Industrial Production, post-World War I. The Conference Board has adapted the concept to reflect the fundamental shift of help-wanted advertising from printed newspapers to online advertising. The prior newspaper-based series simply was the best leading indicator of its day.

Back in the days when help-wanted advertising was the primary source of classified-advertising revenue for the physically-printed, folding newspapers, the Conference Board's Help-Wanted Advertising Index (newspapers) simply was the most reliable leading indicator available of broad economic activity. It was a component of the Commerce Department's Index of Leading Economic Indicators. It led activity in employment as well as the Gross National Product (GNP) and the now-headline Gross Domestic Product (GDP), which is a subcomponent of the GNP (ex-trade flows in factor income such as interest and dividend payments).

The National Bureau of Economic Research (NBER) has published detail with the St. Louis Federal Reserve on help-wanted advertising indices constructed back to 1919. From the post-World War I era into the 2000s, year-to-year change in the various historical help-wanted series always signaled what

would become recognized eventually as a formal recession, when the annual change in the index contracted by 15% (-15%) or more, which has happened here. Again, see *Graph OC-6* for the post-World War II era.

Since formal tracking switched to help-wanted advertising on the Internet (HWOL®), around 2005, seen with The Conference Board Help Wanted OnLine®, that series has been through only one, formally-confirmed down-cycle in the economy. The year-to-year growth plots in the accompanying graph begin with the first annual-growth rate availability in May 2006. Again, even with a limited initial history, the new series tracked that headline downturn into 2009, directly in tandem with the final several years of surveys of newspaper help-wanted online advertising (again see *Graph OC-6*), and the HWOL® has broadly tracked to the downside in the an environment of what appears to be a "new," still-unfolding recession (see *Special Commentary No. 935*).

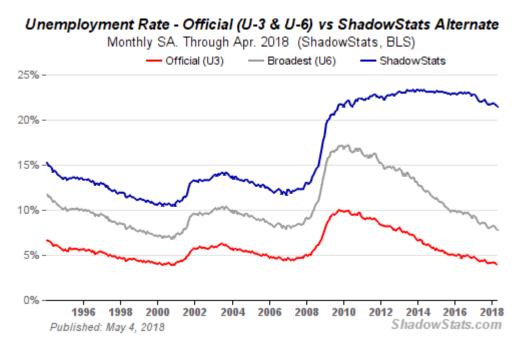
Considering the apparent recession signal generated by the HWOL[®], there appears to be a formal recession missing from the headline accounting by the NBER (formal arbiter of recessions), starting at the end of 2014, as indicated also by the better-quality government or Federal Reserve economic series, specifically Industrial Production (see *Commentary No. 942-B*), and which very easily could show up in the pending the comprehensive GDP benchmark revisions back to 1929 on July 27th (see the *Executive Summary* of *Commentary No. 943*). Again, comparing the HWOL versus the prior newspaper series suggests a downside shift in the HWOL annual-change plot to put it on a consistent basis with the prior newspaper advertising growth rates, which, again, has been published on an experimental basis, this month only, in *Graph OC-6*.

Time will establish new annual growth parameters that would signal a formal recession. My betting remains that they will look much like the earlier series, and much like the pattern seen in the present series in terms of year-to-year contraction. Those looking for independent confirmation of underlying economic conditions should find this series to be highly valuable. As for the BLS employment and unemployment series, they still need to begin catching up with the Conference Board's higher-quality, independent leading indicator, despite the ongoing, heavy upside reporting biases deliberately structured into the BLS series and expanded anew into the initial 2017 payroll-survey benchmarking. See the discussions in *Special Commentary No.* 885, *Commentary No.* 864 and in the *Birth-Death/Bias-Factor Adjustment* (BDM) section of today's *Supplemental Labor-Detail Background* on page 39.

EXECUTIVE SUMMARY: Employment and Unemployment—April 2018—Employed Remain Below February Levels; Labor-Market Stress Suggested a More-Negative Unemployment Reality. Per the Bureau of Labor Statistics (BLS), the seasonally-adjusted Household Survey numbers showed the April 2018 headline unemployment rate (U.3) dropping to a new cycle low and a new 17-year low of 3.9% (3.93% at the second decimal point), a rate last seen in December 2000, including the same second decimal point.

Built upon the U.3 rate, but including those marginally attached to the labor force, and those working part-time for economic reasons (unable to find full-time employment), the seasonally-adjusted, broader U.6 unemployment rate declined to 7.79% in April 2018, from 8.00% in March 2018. That April U.6 rate was the lowest since 7.49% in May 2001.

Built upon the U.6 rate (and U.3), and accounting for estimates of long-term "discouraged" and displaced workers no longer tallied by government surveying, the still-broader ShadowStats-Alternate unemployment rate declined to 21.5% in April 2018, versus 21.7% in March 2018, with the April 2018 rate the lowest rate since 21.5% in June 2010, all as reflected in accompanying *Graph 1*.



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

Discussed in the *Opening Comments* and *Reporting Detail*, the headline decline in the underlying U.3 unemployment rate to 3.9% was nonsense, but it drove the parallel monthly declines in the headline U.6 and the ShadowStats measures, which are built upon the U.3 rate.

Even so, despite ongoing political-, FOMC- and stock-market-hyped speculation of the U.S. economy being at full employment, the U.6 and ShadowStats measures show that not to be the case, although by their structure, they tend to move in tandem with the headline U.3 unemployment rate. Such is confirmed in the expanded *Reporting Detail* discussions tied to the employment-population ratio and the participation rate (*Graphs 13* to 15), as well as to the low level of headline annual growth in payroll employment (see *Graphs 3*, 24 and 25). Discussed there, the current level of labor-market stress (such as the low participation rate) suggests the U.3 unemployment should be headlined closer to 10.4% than to the current headline 3.9%. The difference largely is in the definitions of being counted as unemployed. The popular story is the low participation rate is due to a large number of people now being retired. While increased numbers of retired individuals is a partial factor, many people who had expected to retire by this point in their lives now find that they still have to work in order to make ends meet (see the discussion in the *Opening Comments*).

The Household Survey counts an employed person only once, irrespective of how many jobs or part-time jobs he or she may hold. In contrast, the Payroll Employment 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 Household Survey estimated that a

seasonally-adjusted 7.667 million individuals held multiple jobs in April 2018, up by 58,000 from March 2018.

Headline April 2018 Household Count of Employed Individuals Still Was Down from February. Counting each individual only once, the Household Survey showed the headline aggregate count of employed individuals to have gained by 3,000 in April 2018, after declining by 37,000 (-37,000) in March 2018, with the count of full-time employed down up by 319,000 in April [having declined in March by 311,000 (-311,000)] and part-time employed declining by 350,000 (-350,000) in April [having increased by 310,000 in March]. Those numbers never total exactly due to variations in the seasonal adjustment processes of the Bureau of Labor Statistics (BLS).

Graph 2: Nonfarm Payroll Employment 2000 to Date



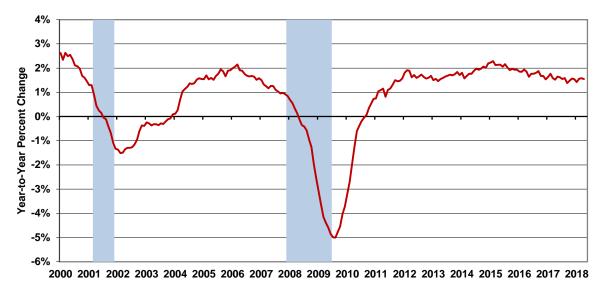
Nonfarm Payroll Employment Seasonally-Adjusted Levels to April 2018 [ShadowStats, BLS]

April 2018 payrolls rose month-to-month by weaker-than-expected 164,000 versus a revised monthly gain of 135,000 in March [previously 103,000]. Net of prior-period revisions, the April gain was 194,000, close to the consensus outlook. Although no longer consistent with the unrevised, previous January 2018 reporting, the revised headline gain in February was 324,000 [previously 326,000, initially 313,000]. As usual, the headline monthly gains and the March revision all reflected inconsistent seasonal-factor games played by the Bureau of Labor Statistics (BLS), as discussed in the *Reporting Detail* and the *Supplemental Labor-Detail Background* there on page 39.

Reflected in *Graph 3*, unadjusted annual payroll growth of 1.55% in April 2018, versus an upwardly revised 1.58% [previously 1.55%] in March 2018 and an upwardly revised annual growth of 1.56% [previously 1.55%, initially 1.57%] in February 2018, still broadly remained in a downtrend that has reached a level and pattern of growth that usually precedes and signals the onset of a recession (again, see the *Reporting Detail*).

Graph 3: Payroll Employment, Year-to-Year Percent Change, 2000 to Date

Nonfarm Payrolls Year-to-Year Percent Change 2000 to April 2018, Not Seasonally Adjusted [ShadowStats, BLS]



Separately, discussed in the *Opening Comments*, the April 2018 Conference Board Help-Wanted Online Advertising[®] survey showed declining monthly activity. Some variation on the regular historical comparisons is shown there in *Graph OC-6*. The series remains in a state of continued economic non-expansion.

Extended coverage on the April 2018 details of both the Household and Payroll Surveys follows in the *Reporting Detail* (see page 22).

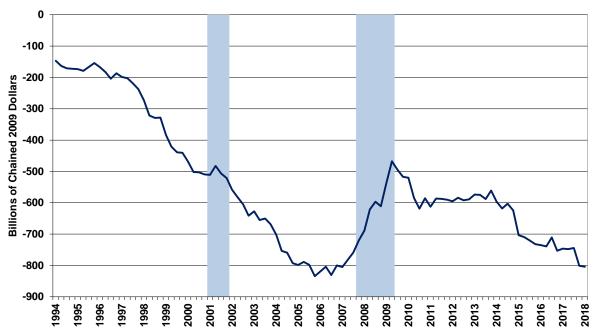
Trade Deficit—March 2018—Although Narrowed in the Month, the Real Merchandise Deficit Still Deteriorated in First-Quarter 2018, Contrary to the GDP Reporting. The first-quarter 2018 real merchandise trade deficit backed off from showing the worst-ever deficit that had been the trend, based on initial February detail. In the context of a sharp narrowing of both the nominal and real trade deficits in March 2018 versus February 2018, the headline real-merchandise trade deficit for first-quarter 2018, still widened versus fourth-quarter 2017 and showed the deepest quarterly contraction since first-quarter 2007. As reviewed in the *Reporting Detail*, the quarterly deterioration in first-quarter 2018 trade activity ran counter to the initial headline reporting of the first-quarter real GDP.

Nominal Deficit Narrowed in March. The March 2018 nominal goods and services trade deficit sharply backed off its nine-year high in February. At its least-negative reading since September 2017, the March balance-of-payments trade deficit narrowed by \$8.787 (-\$8.787) billion, or by 15.2% (-15.2%), to \$48.956 billion, versus a revised \$57.743 billion in February 2018. The narrowing in the monthly March deficit reflected a nearly-even split between a gain of \$4.175 billion in exports, complemented by a decline in imports of \$4.612 (-\$4.612) billion.

Separately, the headline March 2018 deficit widened by \$4.227 billion, or by 9.5%, versus the year-ago \$44.729 billion trade shortfall for March 2017.

Graph 4: Real Quarterly Merchandise Trade Deficit (1994-2018)





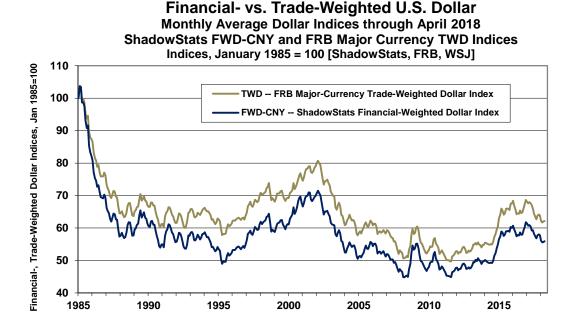
Annual and Quarterly Real Deficits Remain at Economic-Crisis Levels. Detailed in the Real Trade Deficit section in the Reporting Detail, adjusted for inflation, the annual real merchandise trade deficit in 2016 widened for the year to \$734.5 billion, versus \$716.4 billion in 2015. The 2016 annual trade shortfall then was the worst since 2008. On an annual basis, the 2017 real merchandise trade deficit widened to \$760.0 billion, versus \$734.5 billion in 2016. The 2017 deficit was the worst since 2007.

As reflected in *Graph 4*, the initial estimate of annualized first-quarter 2018 real merchandise deficit was \$804.0 billion, which widened from \$801.2 in fourth-quarter 2017. Such was the worst quarterly deficit in eleven years, since first-quarter 2007. Also on an inflation-adjusted basis, in the context of minimal prior-period revisions, the headline March 2018 monthly deficit narrowed sharply to \$62.1 billion, versus \$69.0 billion in February and \$69.9 billion in January.

U.S. Dollar. Traditionally, mounting trade deficits tend to pummel the domestic currency's foreign exchange rate. While the headline deficit narrowed month-to-month in March, general deterioration remains likely in the months and quarters ahead. A deteriorating trade deficit also can encourage the affected nation to attempt a competitive devaluation of its currency. *Graphs 5* and 6, plot the Federal Reserve Board's (FRB) Major-Market Trade-Weighted Dollar (TWD), which reflects the U.S. dollar exchange rate, weighted versus the Euro, Yen, Pound Sterling, Australian Dollar, Swiss Franc and the Canadian Dollar based on trade volume; and the ShadowStats Financial-Weighted Dollar (FWD), which

initially reflected the U.S. dollar exchange rate weighted versus the same currencies based of respective currency trading volume in the markets, instead of merchandise trade. The latest estimates of level and annual changes for April 2018 Financial- and Trade-Weighted U.S. Dollar are detailed in the <u>Alternate Data</u> tab of <u>www.ShadowStats.com</u>. These graphs also are repeated in the usual mid-month *Hyperinflation Watch* (pending in *Commentary No. 949*) accompanying the monthly reporting of the Consumer and Producer Price Indices (CPI and PPI)

Graph 5: Financial- versus Trade-Weighted U.S. Dollar to April 2018



Graph 6: Financial- versus Trade-Weighted U.S. Dollar, Year-to-Year Change to April 2018



ShadowStats reconstituted and restated the FWD to add the Chinese Yuan (CNY), when the CNY gained recognition as a global reserve currency by the Bank for International Settlements in 2015. Yet, there had been no resulting visual difference in the ShadowStats measure, until the volatility of recent months (slightly greater FWD weakness), given the still relatively low weighting of the CNY, at present (China is working on expanding that with its petro-yuan, for example), and what had been the closely tied movement of the CNY to USD over time. Nonetheless, the plots of the FWD versus the TWD both show recent weakness in the U.S. dollar, with the declining year-to-year change intensifying.

Irrespective of any officially desired or designed direction for the U.S. dollar, it generally has been weakening in the last year, although the dollar strengthened recent weeks, as will be discussed in Friday's planned *Commentary No. 949*.

Construction Spending—March 2018—Nominal Spending Revised Sharply Higher in January and February, but Plunged in March; with Real Annual Growth Following Similar Patterns. In the context of regularly unstable, although unusually large upside revisions to January and February 2018 activity, reflecting surging monthly and annual growth rates, March 2018 construction spending declined sharply month-to-month, both before and after inflation adjustment, but gained year-to-year before, and declined year-to-year after inflation adjustment. The nominal upside revisions reflected much stronger private construction, versus minimally-changed public construction spending (see the *Reporting Detail*).

While the upside nominal monthly revisions of 1.72% to the level of January 2018 and 2.01% to February 2018 activity were enough to push real year-to-year change positive for the third-straight month through February, year-to-year change nonetheless sank anew with the March 2018 detail. Headline real March 2018 construction spending was down by 20.9% (-20.9%) from recovering its pre-recession peak of February 2006. In contrast, March and April 2018 Construction Employment levels were down respectively by 7.4% (-7.4%) and 7.2% (-7.2%) from recovering their pre-recession April 2006 peak.

Negative, annual real growth by quarter remained intact for third- and fourth-quarter 2017, as reflected in *Graph 7*, but the strong upside revisions to January and February 2018 pushed first-quarter 2018 real activity to the upside, despite the renewed annual contraction seen with the March 2018 real detail

The signal here still remains for an intensifying downturn, as last seen in the housing collapse of 2005/2006. Despite the monthly blips, real year-to-year change continued broadly in annual contraction, in onset and scope, again, in a manner last seen leading into the 2007 recession. The broad housing and related construction sectors remain severely constrained by consumer liquidity issues, discussed in the *Consumer Liquidity Watch*.

March Spending. The seasonally-adjusted, annualized nominal March 2018 Value of Construction Put in Place in the United States was \$1,284.7 billion, versus an upwardly-revised \$1,306.4 billion in February 2018 and \$1,294.0 billion in January 2018.

In the context of the upside revisions to January and February activity, the nominal month-to-month change in March 2018 construction spending was a statistically-insignificant contraction of 1.7% (-1.7%), versus a revised gains of 1.0% in February and 1.7% in January 2018. Net inflation (see the *Reporting Detail*), those were a real monthly decline of 2.4% (-2.4%) in March 2018 and gains of 0.4% in February 1.5% in January.

Headline annual nominal growth was a statistically-significant 3.6% in March 2018, versus revised annual gains of 5.7% in February 2018 and 5.8% in January 2018. Net of inflation, March 2018 was down year-to-year by 0.6% (-0.6%), following gains of 1.5% in February 2018 and 1.9% in January 2018. The preceding headline details are reflected in *Graph 8* and *Graphs 30* to *33* in the *Reporting Detail*.

Graph 7: Total Real Construction Spending, Year-to-Year Percent Change
(Same as Graph 29 in the Reporting Detail section)

Real Total Value of U.S. Construction Put in Place Year-to-Year Percent Change to March 2018 Seasonally-Adjusted [ShadowStats, Census Bureau]



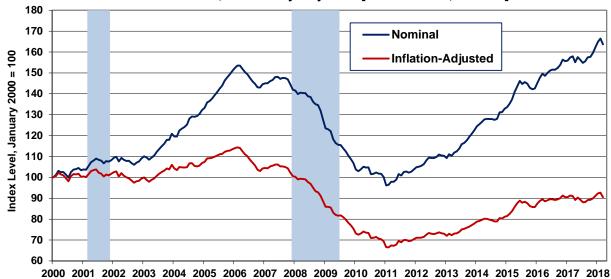
The statistically-insignificant, nominal decline of 1.7% (-1.7%) in aggregate monthly March 2018 spending, versus the 1.0% gain February 2018, included an unchanged monthly reading in March 2018 Public Construction Spending, versus a gain of 0.1% in February. Private Construction Spending declined by 2.1% (-2.1%) in March, having gained by 1.2% in February. Within total Private Construction Spending, Residential Construction fell by 3.5% (-3.5%), having gained by 1.2% in February, while the Nonresidential Construction declined by 0.4% (-0.4%) in March, also having gained by 1.2% in February.

The preceding headline details are reflected in accompanying *Graphs 8* to *11*, shown both before and after adjustment for inflation. Neither the aggregate inflation-adjusted real series (the red line in each graph), nor any of its major-subsidiary components, has recovered levels of pre-recession peak activity, with each element currently trending flat-to-lower, consistent with an unfolding new recession or re-intensifying downturn and patterns consistent otherwise with the housing industry.

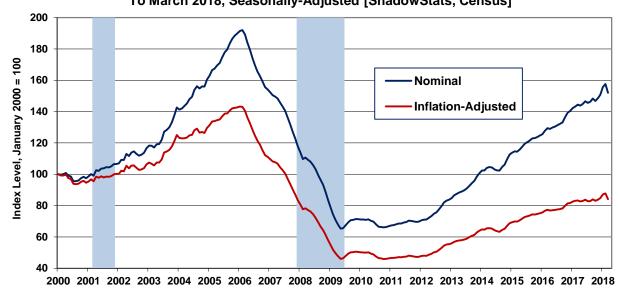
[Graphs 8 to 10 begin on the next page.]

Graph 8: Index, Nominal versus Real Value of Total Construction

Index of Total Value of Construction Put in Place Nominal versus Inflation-Adjusted (Jan 2000 = 100) Real Data Reflect ShadowStats Composite Construction Deflator To March 2018, Seasonally-Adjusted [ShadowStats, Census]



Graph 9: Index, Nominal versus Real Value of Private Residential Construction
Index of Value of Private Residential Construction
Nominal versus Inflation-Adjusted (Jan 2000 = 100)
Real Data Reflect ShadowStats Composite Construction Deflator
To March 2018, Seasonally-Adjusted [ShadowStats, Census]

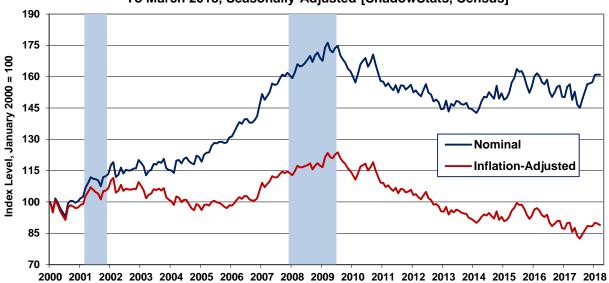


Graph 10: Index, Nominal versus Real Value of Private Nonresidential Construction
Index of Value of Private Nonresidential Construction
Nominal versus Inflation-Adjusted (Jan 2000 = 100)
Real Data Reflect ShadowStats Composite Construction Deflator
To March 2018, Seasonally-Adjusted [ShadowStats, Census]



Graph 11: Index, Nominal versus Real Value of Public Construction

Index of Value of Public Construction Nominal versus Inflation-Adjusted (Jan 2000 = 100) Real Data Reflect ShadowStats Composite Construction Deflator To March 2018, Seasonally-Adjusted [ShadowStats, Census]



[Extended analysis and graphs of Employment and Unemployment, the Trade Deficit and Construction Spending follow in the Reporting Detail, beginning on the next page.]

REPORTING DETAIL

EMPLOYMENT AND UNEMPLOYMENT (April 2018)

Absurd Household Survey Details Showed Seriously-Deteriorating April Labor Conditions, Despite a Large Drop in U.3 Unemployment to 3.9%, and Aggregate Payrolls Matching Weak Expectations. The Bureau of Labor Statistics (BLS) released the details of its April 2018 Household Survey (Unemployment Rate) and Payroll Survey (Payroll Employment) on Friday, May 4, 2018. In the context of regular reporting distortions discussed in *Special Commentary No. 885* as well as in the *Supplemental Labor-Detail Background* following on page 39, incorporated here by reference, broad labor circumstances generally have continued to weaken, showing recession-signal level annual payroll growth, and a nonsensically-low 3.9% headline unemployment rate in the context of intensify labor-market stress.

Household Survey. Household Survey details showed that despite headline U.3 unemployment dropping sharply, general employment circumstances were deteriorating. The inverted-scale plot of the ShadowStats Alternate Unemployment Rate measure is shown in *Graph 13*, for comparison with the *Graphs 14* and *15* of the Civilian Employment-to-Population Ratio and the Labor-Force Participation rate. Where the latter two series gyrated around recent hurricane disruptions, and had weakened anew in January, they bounced back minimally with an unusual surge in "other industries" employment in February, only to weaken anew in March and April. Nonetheless, the lower the reading of those ratios, the more-distressed are employment conditions, as correlated with the heavily negative impact of an estimated significant level of discouraged and displaced workers on the ShadowStats Alternate Unemployment Measure.

The April 2018 headline U.3 unemployment rate dropped to a new 17-year low (December 2007) of 3.9%, from 4.1% in March 2018. Yet that same Household Survey showed that the headline employed gained only 3,000, still down by 34,000 (-34,000) from the level of employed in February 2018, where the intervening March 2018 employed count had declined by 37,000 (-37,000) month-to-month. Simply put, 239,000 unemployed people just disappeared and U.3 dropped. The inconsistent monthly changes here most likely reflect shifting seasonal-adjustment factors that were not applied consistently month-to-month (that is the deliberate circumstance each month, as discussed in the *Supplemental Labor Detail* ...).

Payroll Survey. The headline April 2018 monthly payroll gain of 164,000 (194,000 net of prior-period revisions) was statistically significant, with the net-of-revisions number close to consensus. The payroll gains, however were heavily bloated as usual, both by upside bias factors and by counting multiple jobholders as multiple jobs (see the *Supplemental Labor-Detail...*).

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 Employment 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 Household Survey estimated that a seasonally-adjusted 7.667 million individuals held multiple jobs in April 2018, up by 58,000 from March 2018.

Seen in *Graph 24*, annual growth in unadjusted payroll employment continued to hold at low levels seen historically with economies either coming out of recession or, in the current circumstance of falling into recession, with the April 2018 annual growth rate still minimally above the near-term January 2018 low.

Underlying Reality. In terms of underlying reality, the seasonally-adjusted 164,000 monthly payroll jobs gain in April, likely was an outright monthly contraction, again, given upside biases added into the series (see *Supplemental Labor-Detail...*). In the context of the *ShadowStats-Alternate Unemployment Rate Measure* discussion (also in the *Supplemental Labor-Detail...*), headline April 2018 unemployment at 3.9% for the U.3 rate was much closer to 21.5%, when viewed from the perspective of common experience. Extended assessment of labor-reporting distortions, again, is found separately in *No.* 885.

Household Survey: Counting All Discouraged and Displaced Workers, on Top of Declining U.3 and U.6 Unemployment Rates, April 2018 Unemployment Declined to 21.5%. The headline detail from the Household Survey continued nonsensically positive in April 2018, never having recovered from heavily-distorted hurricane impacts in September and October 2017, negligibly revised in December's annual benchmarking, boosted in terms of population in January 2018, and an unusually large surge of 608,000 in "other" private industry employed in February followed by a minimal, downside correction of 37,000 (-37,000) in March 2018. Unhappily, though, with only an employed gain of 3,000 in April, Household Survey employment in April 2018 remained down by 34,000 from February 2018.

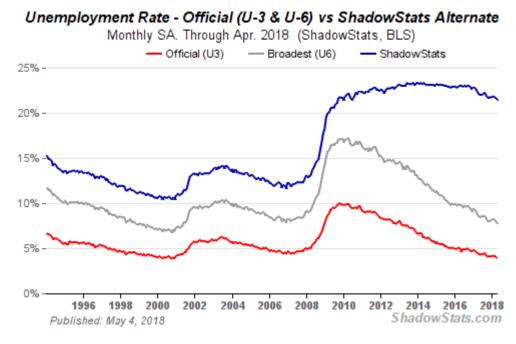
Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced long-term discouraged workers—a broad measure of unemployment more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for April 2018 eased to 21.5%, versus 21.7% in March and 21.8% in February. The broadest government unemployment measure U.6 eased to 7.8% in April from 8.0% in March and 8.2% in February, while the headline U.3 rate dropped to 3.9%, from six straight months at 4.1%. Both U.6 and the ShadowStats measure declined on top of the underlying drop in the headline U.3 number.

The ShadowStats estimate generally shows the toll of long-term unemployed leaving the headline labor force, effectively becoming long-term discouraged or displaced workers. That broad unemployment level is heavily dependent on the underlying level of U.6 unemployment, on top of which the ShadowStats measure is constructed (see a full description of the series in the *Supplemental Labor-Detail Background*, again on page 39).

Unemployment Circumstances Remained Heavily Distorted. Graphs 12 to *15* reflect various aspects of the Household Survey detail, which generates the unemployment rate. Moving beyond wild internal data gyrations of recent months (see *Commentary No. 915*, *Commentary No. 919-B* and *Commentary No. 924*) the headline unemployment rate U.3 at 3.93% in April 2018 followed 4.07% in March, 4.14% in February, 4.15% in January, 4.09% in December 2017, 4.12% in November and 4.07% in October (the lowest level since December 2000). The broader U.6 rate eased to 7.79% in April 2018, from 8.00% in March, from 8.24% in February, versus 8.19% in January, 8.08% in December 2017, 7.99% in November

and 7.99% in October. The ShadowStats-Alternate measure, built upon U.6, notched lower to 21,5% in April 2018, versus 21.7% in March, 21.8% in February, 21.8% in January and 21.7% in each of December, November and October 2017. Those headline rates are plotted here in *Graph 12* (*Graph 1* in the *Executive Summary*).

Graph 12: Comparative Unemployment Rates U.3, U.6 and ShadowStats
(Same as Graph 1 in the Executive Summary)



Graph 13 shows the inverted-scale plot of the ShadowStats Alternate Unemployment Rate measure, as usual, for comparison with the plots in *Graphs 14* and 15 of the Civilian Employment-to-Population Ratio and the Labor-Force Participation rate, where both those measures jumped sharply with September hurricane disruptions to the data, falling back sharply in recent months, with some pick-up in February and easing back in March and April 2018. The higher those ratios, the healthier are the employment conditions in the economy. Nonetheless, both measures currently are running counter to what should be very positive news. They are at low levels, consistent with severe recessions, despite the headline April 2018 U.3 unemployment rate of 3.9% setting a new 17-year low, in theory a strong economic positive. Discussed earlier, the headline U.3 unemployment largely remains a nonsense number.

Reflected in *Graph 12*, the headline U.3 was 3.93% in April 2018, versus 4.07% in March, 4.14% in February, 4.15% (rounding to 4.1%) in January and 4.09% in December. U.6 (U.3 plus those employed part-time for economic reasons, and those marginally attached to the labor force, including discouraged workers) declined to 7.79% in April 2018, from 8.00% in March, versus 8.24% in February, 8.19% in January and 8.08% in December, while the ShadowStats-Alternate measure (U.6 plus all estimated long-term discouraged and displaced workers) declined to 21.5% in April 2018, from 21.7% in March, versus 21.8% in February and January and 21.7% in December.

Dysfunctional, Seasonally-Adjusted Headline Detail from the Household Survey. Despite the headline U.3 unemployment holding at its lowest level since December 2000, employment circumstances remained heavily stressed and unstable, suggestive of an economy still deep in non-recovery and non-expansion,

instead of one purportedly expanding rapidly at full employment. Systemic imbalances and instabilities are indicated by the labor-force participation rate (labor force/population) and the employment-to-population ratio (headline employment/population) near historic lows. Still, with the headline unemployment rate so low, those ratios should be approaching historic highs, not holding near historic lows, as seen in *Graphs 14* and *15*.

Graphs 13 to 15 reflect longer-term unemployment and discouraged-worker conditions. Graph 13 is of the ShadowStats unemployment measure, with an inverted scale. The higher the unemployment rate, the weaker will be the economy, so the inverted plot tends to move visually in tandem with plots of most economic statistics, where a lower number means a weaker economy. Movement in the inverted-scale plot of the headline ShadowStats measure broadly has been in tandem with these broad indicators of relative stress in employment conditions.

The inverted-scale of the ShadowStats unemployment measure tends to move with the employment-to-population ratio over time, which narrowed minimally to 60.33% in April 2018, from 60.36% in March and 60.38% in February, against 60.14% in both January 2018 and December 2017, then down from higher, post-hurricane disruptions. That said, the ShadowStats unemployment measure declined in April 2018, on top of the headline decline in the U.6 rate. Nonetheless, that ratio remained off its post-1994 record low, the historic low and bottom subsequent to the 2007 economic collapse (only the period following the series redefinition in 1994 reflects consistent reporting), as shown in *Graph 14*.

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

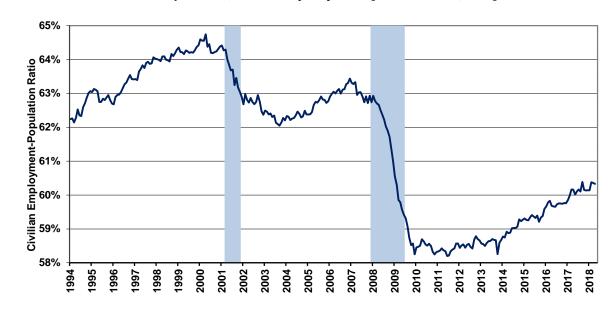
Graph 13: Inverted-Scale ShadowStats Alternate Unemployment Measure





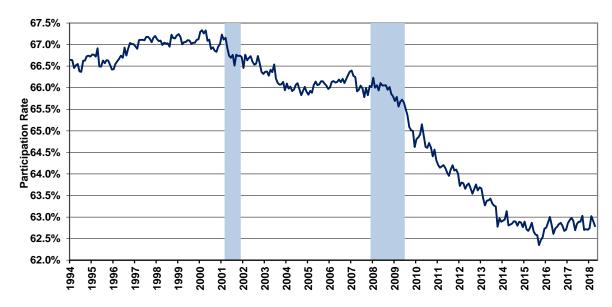
Graph 14: Civilian Employment-to-Population Ratio

Civilian Employment-Population Ratio To April 2018, Seasonally-Adjusted [ShadowStats, BLS]



Graph 15: Labor-Force Participation Rate

Participation Rate [Labor Force as a Percent of Population] To April 2018, Seasonally-Adjusted [ShadowStats, BLS]



Graph 15 shows the April 2018 participation rate (ratio of the headline labor force to the population) easing to 62.8% from 62.9% in March and from 63.0% in February, having held at a rounded 62.7% for the three months before that, after having jumped to a hurricane-distorted 63.0% in September 2017, from 62.9% in August. Suggestions that the low participation rate is due to the large number of people in

retirement (a partial factor), many people who had expected to retire by this point in their lives find that they still have to work in order to make ends meet (see the discussion in the *Opening Comments*).

Graphs 13 through *15* reflect labor data available in consistent detail only back to the 1994 redefinitions of the Household Survey and the related employment and unemployment measures. Before 1994, employment and unemployment data consistent with the April 2018 Household-Survey reporting simply are not available, irrespective of any protestations to the contrary by the BLS.

Economy Is Far From Full-Employment; 3.9% Unemployment Historically Is Consistent with a 67.3% Participation Rate, Not the Current 62.8%, Which Is Consistent With Unemployment at 10.4%.

Argued here for many months, the U.S. economy is not at, or close to full employment. As with muchearlier 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 an 18-year low in the headline U.3 unemployment rate.

Discussed in the *Fedspeak* portion of the *Fed* section of <u>No. 859 Special Commentary</u> and the *Opening Comments* of <u>Commentary No. 870</u>, certain members of the Federal Reserve Board (<u>Commentary No. 827</u>) had suggested that an unemployment rate near 5.0% (U.3 now is at 3.9%) reflected full-employment conditions in the United States. Noted in <u>Commentary No. 845</u>, 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%). In December 2000, the last time the U.3 rate was at 3.9%—a more-realistic full-employment rate—the participation rate was 67.3%

Full employment with unemployment at 5.0% or the current 3.9%, also minimally should be reflected at a relative near-term peak in the participation rate, not close to its historic trough. The April 2018 headline unemployment rate of 3.9%, for example was in the context of a 62.8% 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 10.4%, instead of the headline 3.9%.

As calculated in the past, using the prior Fed estimates of 5.0% full employment, with a consistent 66.0% participation, would suggest a consistent U.3 rate of 8.5% and with the current headline 62.8%. 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

¹ Consider with the April 2018 working-age population of 257.272 million, the implied labor force at a full-employment participation rate of 67.3% (last seen when headline unemployment was 3.9% in December 2000) would show 0.673 x 257.272 = 173.144. That labor force less current headline employed, 173.144 – 155.181 = 17.963 million implied unemployed, which divided by the labor force of 173.144 = 10.4% 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 3.9% U.3; there are serious flaws in the surveying and/or definitional concept of U.3.

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.

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

Regularly plotted here are various graphs that mirror the patterns of Graphs 13 to 15 (1994-to-date where available), which do not confirm the purported headline recoveries in either the GDP or relative unemployment. That detail was expanded upon and covered in <u>Special Commentary No. 935</u>; see also prior <u>Commentary No. 947</u> covering the GDP. Some of those series are updated in this section.

Consider *Graph 16*, which shows the ShadowStats version of that GDP, also plotted from 1994, but now through the April 27th first-estimate of first-quarter 2018 GDP, where the plot has been corrected for the understatement of inflation used in deflating the headline GDP.

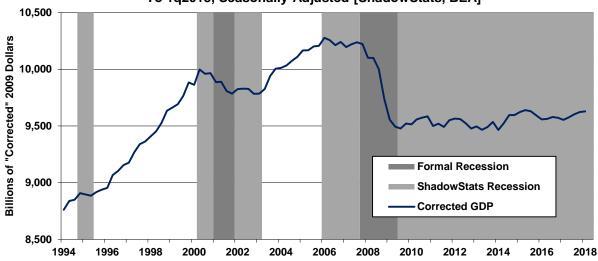
Other graphs range from the March 2018 Cass Freight Index (*Graph 17*) to February 2018 U.S. Petroleum Consumption (*Graph 18*), March 2018 U.S. Industrial Production Components of Manufacturing (*Graph 19*) and related Consumer Goods Production (*Graph 20*), which are show with the downside 2018 benchmarking detail, along with March Housing Starts (*Graph 21*) [Consider also *Graph 31* of Real Construction Spending in the *Reporting Detail* on page 53. All but the Petroleum Consumption graph are from *Commentary No. 946*.

[Graphs 16 to 21 begin on the next page.]

Graph 16: Corrected Real GDP through 1q2018, First-Estimate

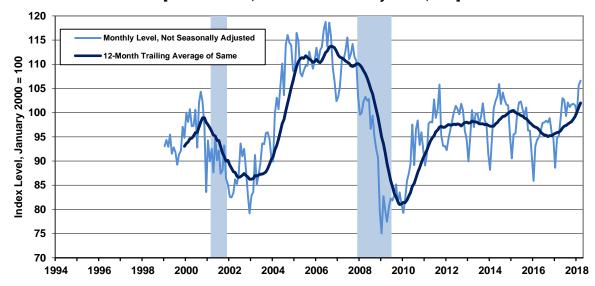
Corrected Real GDP

Nominal GDP Deflated by Implicit Price Deflator Adjusted for Understatement of Annual Inflation
To 1q2018, Seasonally-Adjusted [ShadowStats, BEA]



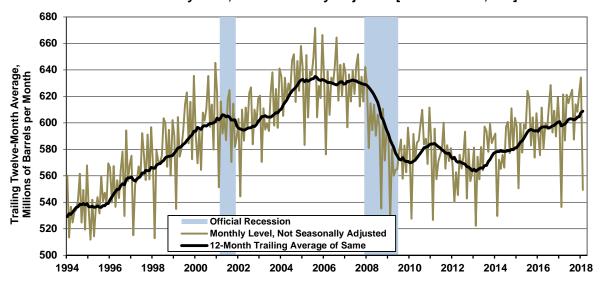
Graph 17: Cass Freight Index for North America (2000 – March 2018), Indexed to January 2000 = 100

Cass Freight Index[™] (Jan 2000 = 100)
To March 2018, Not Seasonally Adjusted
[ShadowStats, Cass Information Systems, Inc.]



Graph 18: U.S. Petroleum Consumption to February 2018

U.S. Product Supplied of Crude Oil and Petroleum Product Millions of Barrels per Month, Trailing Twelve-Month Average To February 2018, Not Seasonally Adjusted [ShadowStats, EIA]



Graph 19: Benchmarked Manufacturing Sector of Industrial Production (1994 to March 2018)

Production - Manufacturing (SIC) (2012 = 100) Current Series versus Pre-Benchmarking

Prior Series Set Equal to Revised Series at December 2007 Level to March 2018, Seasonally-Adjusted [ShadowStats, FRB] Index Level, 2012 = 100 Official Recession Pre-Benchmarking **Current Series**

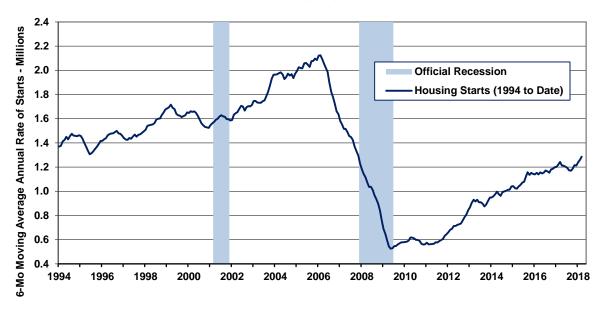
Graph 20: Industrial Production – Consumer Goods Sector (1994 – March 2018)

Production - Consumer Goods (2012 = 100) Current Series versus Pre-Benchmarking

Prior Series Set Equal to Revised Series at December 2007 Level 1994 to March 2018, Seasonally-Adjusted [ShadowStats, FRB] 117 113 109 WANTED WANTED Official Recession Pre-Benchmarking 89 **Current Series** 85 1998 2012 1996 2000 2002 2004 2006 2008 2010 2014 2016 2018 1994

Graph 21: Housing Starts, Annual Rate by Month (1994 – March 2018)

Housing Starts (Six-Month Moving Average of Annual Rate by Month) 1994 to March 2018, Seasonally-Adjusted [ShadowStats, Census]



Headline Unemployment Rates. The headline April 2018 U.3 unemployment rate of 3.9% [3.93% at the second decimal point] followed 4.1% [4.07 %] in March, 4.1% [4.14%] in February, 4.1% [4.15%] in January, 4.1% [4.09%] in December 2017, 4.1% [4.12%] in November, and 4.1% [4.07%] in October,

which followed 4.2% [4.20%] in September, 4.4% [4.44%] in August, 4.3% [4.33%] in July, 4.3% [4.35%] in June, 4.3% [4.28%] in May, 4.4% [4.38%] in April, 4.5% [4.48%] in March, 4.7% [4.68%] in February and 4.8% [4.78%] in January 2017.

Formally, the month-to-month decline of 0.14% (-0.14%) in the March 2018 U.3 was shy of being statistically-significant (+/- 0.23% at the 95% confidence interval). Other than for the once-per-year December benchmarking, however, 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 with the January 2018 headline detail (again, see the following *Supplemental Labor-Detail Background*).

On an unadjusted basis, unemployment rates are not revised and, in theory, are consistent in post-1994 methodology. The unadjusted unemployment rate U.3 eased to 3.68% in April 2018, from 4.13% in March, 4.39% in February, 4.49% in January, 3.93% in December 2017, 3.92% in November, 3.89% in October, 4.07% in September, 4.53% in August, versus 4.60% in July, 4.49% in June, 4.11% in May 2017, 4.11% in April, 4.56% in March, 4.95% (rounds to 4.9%) in February and 5.14% in January.

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

On top of the seasonally-adjusted April 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 April 2018 U.6 unemployment rate declined to 7.79%, from 8.00% in March, 8.24% in February, versus 8.19% in January, 8.08% in December 2017, 7.99% in November, 7.99% in October, 8.29% in September, 8.56% in August, 8.53% in July, 8.54% in June, 8.42% in May, 8.57% in April, 8.82% in March, 9.20% in February and 9.39% in January.

The unadjusted U.6 unemployment rate was 7.40% April 2018, versus 8.10% in March, 8.60% in February, 8.85% in January, 8.00% in December 2017, 7.66% in November, 7.61% in October, 8.29% in September, 8.64% in August, 8.86% in July, 8.59% in June, 8.10% in May, 8.15% (rounds to 8.1%) in April, 8.94% in March, 9.54% in February and 10.08% in January 2017.

Marginally-Attached and Displaced Workers. New discouraged and otherwise marginally-attached workers always are moving into U.6 unemployment accounting from U.3, while those who have been discouraged or otherwise marginally-attached for one year, continuously, are dropped from the U.6 measure. As a result, the U.6 measure has been easing along with U.3, for a while, but those being pushed out of U.6 still are counted in the ShadowStats-Alternate Unemployment Estimate, which has remained relatively stable, despite recent monthly declines. Monthly counts in April 2018 showed a reduced level of 1.362 million marginally attached, of which 408,000 were discouraged workers.

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

It is the displaced 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. The remaining redefined short-term discouraged and redefined marginally-attached workers were included in U.6.

ShadowStats Alternate Unemployment Estimate. Adding back into the total unemployed and labor force the ShadowStats estimate of effectively displaced long-term discouraged workers—a broad measure of unemployment more in line with common experience—the ShadowStats-Alternate Unemployment Estimate for April 2018 was 21.5%, versus 21.7% in March, 21.8% in February, 21.8% in January, 21.7% in December 2017, 21.7% in November, 21.7% in October 2017, 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, 22.7% in February and 22.9% in January 2017. The ShadowStats estimate generally shows the toll of long-term unemployed leaving the headline labor force—effectively becoming long-term discouraged or displaced workers—as discussed in the Supplemental Labor-Detail Background, page 39.

Payroll Survey: April's Jobs Gain of 164,000 Was 194,000 Net of Revisions, With Annual Growth of 1.55% 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 April 2018 was 164,000, versus a revised 135,000 [previously 103,000] in March and 324,000 [previously 326,000, initially 313,000] in February, as reflected in *Graphs 22* and *23*.

Non-Comparable and Inconsistent Seasonally-Adjusted Monthly Changes. The adjusted headline April total payroll gain detail was stated on a consistent basis with the February and March headline details, but not with prior periods, from which recent headline growth was borrowed (see the *Supplemental Labor-Detail Background*, page 39, for discussion on the various reporting distortions and gimmicks).

Headline Payroll Detail. The headline April 2018 payroll gain of 164,000 formally was statistically-insignificant +/- 135,000 (a confidence interval more appropriately in the range +/- 300,000) at the 95% confidence interval (all confidence intervals used are at the 95% level). As noted in the opening paragraph in this subsection, that followed a revised and heavily distorted headline gain of 135,000 [previously 103,000] in March and a revised 324,000 [previously 326,000] in February, again see *Graphs* 22 and 23.

Annual percentage change in payroll employment also gained, but it remained in recession-signal territory with a 1.55% year-to-year increase in April 2018, versus a revised 1.58% [previously 1.55%] in March 2018 and a revised 1.56% [previously 1.55%] annual increase in February 2018, and an unrevised 1.42% year-to-year gain in unadjusted January 2018 payrolls, which 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 24* and 25.

Contrary to claims by economists at the San Francisco Fed, far from being healthy or normal, such low-level annual growth rates are seen either coming out of recession, or going into recession, but never seen

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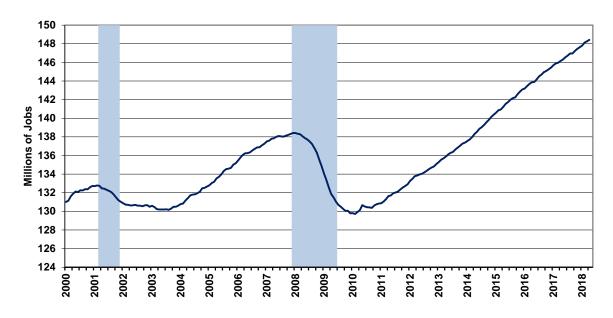
consistently in the regular variability of ongoing, sustainable, normal economic activity, as discussed in <u>Commentary No. 843</u>. Current levels of annual growth in unadjusted payrolls likely are at the threshold, on the downside, of heading into recession.

Graphs 22 to 25 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 1945. In perspective, the longer-term graph of the headline payroll-employment levels shows the extreme duration of what had been the official non-recovery in payrolls, the worst such circumstance of the post-Great Depression era.

[Graphs 22 to 27 begin on the next page.]

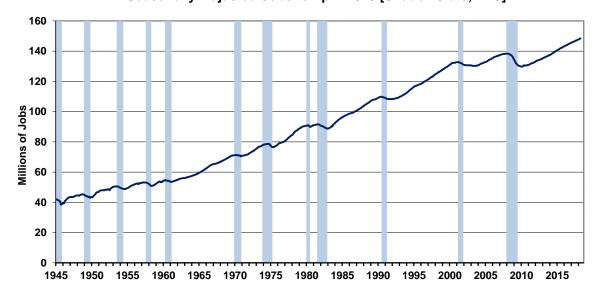
Graph 22: Nonfarm Payroll Employment, 2000 to Date
(Same as Graph 2 in the Executive Summary)

Nonfarm Payroll Employment Seasonally-Adjusted Levels to April 2018 [ShadowStats, BLS]



Graph 23: Nonfarm Payroll Employment, 1945 to Date

Nonfarm Payrolls Seasonally-Adjusted Jobs to April 2018 [ShadowStats, BLS]



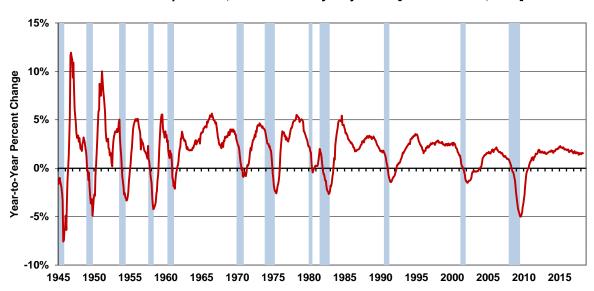
Graph 24: Payroll Employment, Year-to-Year Percent Change, 2000 to Date
(Same as Graph 3 in the Executive Summary)

Nonfarm Payrolls Year-to-Year Percent Change 2000 to April 2018, Not Seasonally Adjusted [ShadowStats, BLS]



Graph 25: Payroll Employment, Year-to-Year Percent Change, 1945 to Date

Nonfarm Payrolls Year-to-Year Percent Change 1945 to April 2018, Not Seasonally Adjusted [ShadowStats, BLS]



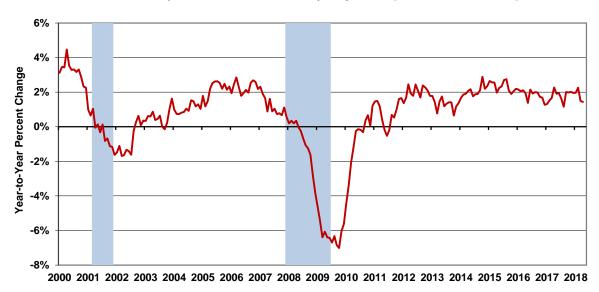
Graph 26: Full-Time Employment (Household Survey), 2000 to Date

Civilian Full-Time Employment Level - (Household Survey)
Counts Number of People Who Are Employed (Not Number of Jobs Held)
Seasonally-Adjusted Levels to April 2018 [ShadowStats, BLS]



Graph 27: Full-Time Employment (Household Survey), Year-to-Year Percent Change, 2000 to Date

Full-Time Employment Year-to-Year Percent Change 2000 to April 2018, Not Seasonally Adjusted [ShadowStats, BLS]



Unlike the Payroll Survey, which counts "employed" people with more than one job (such as part-time jobs) for each job counted, the Household Survey counts employed individuals only once, irrespective of the number of jobs held.

Where, out of the payroll survey, headline payroll employment (again, counting each part-time job as an employed person) rose month-to-month by 164,000 in April 2018, out of the household survey, the total "employed" count rose by 3.000. Where full-time employment gained by 309,000, part-time employment declined by 350,000 (-350,000), with multiple job holders (already counted as employed individuals) gaining 58,000. The seasonally-adjusted sub-categories in the Household Survey rarely up, due to the seasonal adjustments. Among other differences between the Payroll and Household series, the Payroll Survey is nonfarm, where the Household Survey covers agricultural employment.

Year-to-year change in unadjusted full-time employment (Household Survey) eased to 1.44% in April 2018, versus 1.49% in March 2018 and 2.26% in February 2018.

April 2018 Construction Payrolls Gained by 0.24% Month-to-Month, Rose to 3.84 Year-to-Year and Remained Down by 7.2% (-7.2%) from Its Pre-Recession Peak. In the context of headline April 2018 payroll reporting, construction payrolls gained month-to-month, on top of minimal upside revisions to seasonally-adjusted March and February activity, as reflected in Graph 34 in the Construction Spending section, page 55.

<u>Headline Construction Detail.</u> Headline April 2018 construction payrolls rose month-to-month by 0.24%, versus a revised decline of 0.14% (-0.14%) [previously down by 0.21% (-0.21%)], versus revised a revised gain of 0.94% [previously 0.92%, initially 0.86%] in February. Unadjusted year-to-year change was 3.84%, versus a revised 3.80% [previously 3.71% in March 2018] and a revised 4.33% [previously 4.14%, initially 4.18%] in February 2018.

The payroll series remained down from its pre-recession peak by 7.2% (-7.2%), while the real construction spending series remained down from its pre-recession high by 20.9% (-20.9%).

[The Supplemental Labor-Detail Background Begins on the Next Page.]

SUPPLEMENTAL LABOR-DETAIL BACKGROUND

The following material provides background on issues with headline monthly reporting of 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 is not revised each month from its prior version, except for updated monthly numbers through the latest headline detail (currently April 2018), which also are referenced separately in the related standard employment and unemployment text in the *Executive Summary* and *Reporting Detail*. Note: Accompanying Household (December 2017) and Payroll-Survey (January 2018) comments reflect the indicated, recently-published annual benchmarkings.

- (I.) Headline Distortions from Shifting Concurrent Seasonal-Adjustment Factors
- (II.) Payroll-Employment Monthly Bias Factors (Birth-Death Modeling)
- (III.) ShadowStats Alternate-Unemployment Rate (Accounting for Displaced Workers)
- (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 a concurrent-seasonal-adjustment process to adjust both the payroll and unemployment data for the latest seasonal patterns. As new headline data are seasonally-adjusted for each series, the re-adjustment process also revises the monthly history of each series. A new seasonally-adjusted history is recalculated for every month, going back five years, so as to be consistent with the new seasonal patterns generated for the current headline number. The problem remains that the historically-comparable revised data are not published along with the new headline detail.

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

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

Discussed in the following paragraphs, the historical data never are published on a consistent basis for the Payroll Survey, even when 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.

<u>Effective Reporting Fraud.</u> The problem remains that the BLS does not publish the monthly historical revisions along with the new headline data. As a result, current headline reporting is neither consistent nor comparable with published historical data, including the most-recent months, and the unreported

actual monthly variations versus headline detail can be meaningful. The deliberately-misleading reporting effectively is a fraud. The problem is not with the BLS using concurrent-seasonal-adjustment factors; it is with the BLS not publishing the consistent data, where those data are calculated each month and are available internally to the Bureau. The BLS expressed reasons for not publishing the revised monthly numbers on a consistent basis: "Numerous revisions during the year, however, should be avoided, because they tend to confuse data users and to increase publication costs substantially."

Household Survey. In the case of the published Household Survey (unemployment rate and related data), the seasonally-adjusted headline numbers usually are not comparable with the prior monthly data or any month before. Accordingly, the published headline detail as to whether the unemployment rate was up, down or unchanged in a given month is not meaningful 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.

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.

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

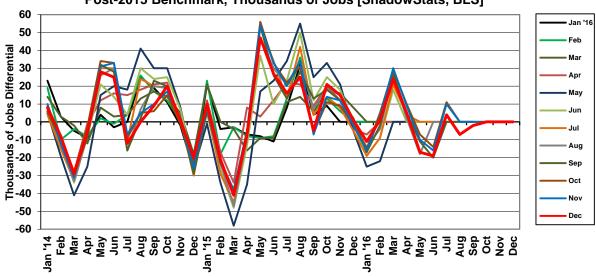
and the new "selective" seasonal adjustment processes. Such variability in seasonal factors, though, rarely is seen in a stable economic series. These data again suggest heavily-gamed headline reporting.

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

Seasonal-Factor Misreporting versus 2015 Benchmark

Seasonally-Adjusted Nonfarm Payroll Employment
Difference Between Actual Series and

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

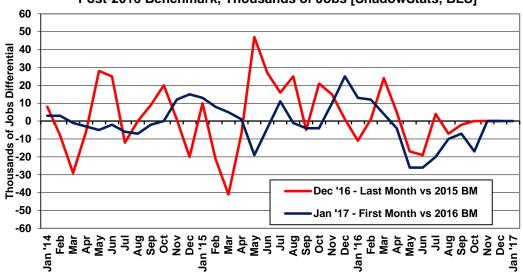


Graph SLD-2: Concurrent-Seasonal-Factor Irregularities — January '17 Detail versus 2016 Benchmarking

Seasonal-Factor Misreporting versus 2016 Benchmark

Seasonally-Adjusted Nonfarm Payroll Employment
Difference Between Actual Series and

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



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

(II.) Payroll-Employment Monthly Bias Factors (Birth-Death Modeling: BDM). Despite the ongoing, general overstatement of monthly payroll employment (see <u>Special Commentary No. 885</u>, 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 and 2017 excepted), with the 2017 benchmark revision of February 2, 2018 on the upside by 138,000 (initially estimated at 95,000).

As a separate matter, though, formalized, downside revisions increasingly have been more than offset by upside revisions to the monthly bias factors, going forward, as was the case in 2016 (see <u>Commentary No. 864</u>). 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 <u>Commentary No. 830</u>). Those changes, however, were massaged and recast to an aggregate downside revision of 81,000 (-81,000) jobs. That change then was used to impute adjustments back to April 2015, and it should have been carried forward to December 2016, but that did not happen, again, as discussed in the *Opening Comments* of <u>No. 864</u>.

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

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

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

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

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

employment of jobs creation due to new businesses starting up, versus jobs lost due to bankruptcies or closings of existing businesses.

April 2018 Add-Factor Bias. In context of the recently published 2017 benchmarking (see the *Opening Comments* of *Commentary No. 934-B*), the not-seasonally-adjusted monthly add-factor bias in April 2018 was 260,000, previously up by 255,000. The revamped, aggregate upside annual bias for the trailing twelve months through April 2018 is estimated from the current headline bias reporting at a nice, even 1,100,000, up by 208,000 or 23.3% from the last prior count of 892,000 in December 2017. That is a monthly average now of 91.667, 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.

<u>Problems with the Model.</u> The aggregated upside annual reporting bias in the BDM reflects an ongoing assumption of a net-positive jobs creation by new companies versus those going out of business. Such becomes a self-fulfilling system, as the upside biases boost reporting for financial-market and political needs, with relatively good headline data, while often also setting up downside benchmark revisions for the next year, which traditionally are ignored by the media and the politicians. The BLS cannot measure meaningfully the impact of jobs loss and jobs creation from employers starting up or going out of business, on a timely basis (within at least five years, if ever), or by changes in household employment that were incorporated into the 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 result in overstated official estimates of general economic growth. Along with these happy guesstimates, there usually are underlying assumptions of perpetual economic growth in most models. Accordingly, the functioning and relevance of those models become impaired during periods of economic downturn, and the current, ongoing downturn has been the most severe—in depth as well as duration—since the Great Depression.

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

The presumed net additional "surplus" jobs created by start-up firms are added on to the payroll estimates each month as a special add-factor. On top of that, the monthly BDM add-factors have been increased now to an average of 91,667 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). 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 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 an unadjusted 5,010 million in April 2018, 5.115 million on a seasonally-adjusted basis, versus 4.793 million in March 2018, 5.096 million on a seasonally-adjusted basis (both numbers up in the month despite a declining unemployment rate). 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 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." 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 13* to *15* there). Other measures, such as the ShadowStats-Alternate GDP Estimate, the Cass Freight Index, U.S. Petroleum Consumption, etc. are highlighted in subsequent *Graphs 16* to *21* there and in the *Economy* section of *Special Commentary No. 935*.

Headline April 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 April 2018 was 21.5%, moving lower on top of the underling U.6 rate, versus 21.7% in March, 21.8% in February 2018, 21.8% in January 2018, 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 April 2018 ShadowStats reading was down by 180 (-180) basis points or 1.8% (-1.8%) from the 23.3% series high seen in May 2014.

In contrast, the April 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 7.8% in April 2018, was down by 940 (-940) basis points or 9.4% (-9.4%) from its peak of 17.2% April 2010.

A subscriber raised the question 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 *Executive Summary*, *Graph 12* 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 recently, against a higher level, fluttering U.6 and a still-higher level, relatively stagnant, but mixed-trend ShadowStats number, which had been flat for several months, yet all have notched lower with the headline April 2018 detail.

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%.

[Extended Coverage of the U.S. Trade Deficit and Construction Spending Begins on the Next Page.]

U.S. TRADE DEFICIT (March 2018)

Real Merchandise Trade Deficit Backed Off a Worst-Ever Quarterly Showing, but Still Deepened Quarter-to-Quarter: Worst Showing Since First-Quarter 2007 and Contrary to Headline GDP. The March 2018 nominal goods and services trade deficit sharply backed off its nine-year high in February. At its least-negative reading since September 2017, the March balance-of-payments trade shortfall shrank to \$49.0 billion from a revised, somewhat deeper deficit of \$57.7 billion in February.

Real Merchandise Deficit Narrowed for the Month, Widened for the Quarter. On an inflation-adjusted basis, in the context of minimal, narrowing revisions to the monthly merchandise trade deficits in January 2018 to \$69.9 [previously \$70.0, initially \$69.7] billion, and in February 2018 to \$69.0 [previously \$69.1] billion, the headline March 2018 deficit narrowed sharply to \$62.1 billion.

Combined with a negligible downside revision to the real merchandise trade deficit in fourth-quarter 2017, what had been on track for a quarterly widening of the real merchandise trade deficit to historic proportions, pulled back to near-historic proportions, as discussed in the *Real Merchandise Trade Deficit* section. The first-quarter 2018 real merchandise trade deficit was \$804.0 billion, the worst showing in eleven years, since first-quarter 2007, as plotted in *Graph 4* in the *Opening Comments* and in *Graph 28*.

Headline First-Quarter 2018 GDP Growth of 2.0% Instead of 2.3%? Where headline March trade details showed an inflation-adjusted deterioration in the annualized first-quarter 2018 goods/merchandise trade deficit of \$2.8 (-\$2.8) billion, the parallel number in the April 27th initial estimate of First-Quarter 2018 GDP reflected a headline improvement in the annualized real quarterly Net Exports shortfall in goods of \$10.6 billion. The difference between the GDP Net Exports and the March Trade Deficit detail—encompassing first-quarter 2018 data—was in a larger, quarterly increase of real imports of goods, as reported in the trade detail.

The headline March merchandise trade reporting encompassed more current and complete information than the week-earlier headline GDP. While the headline quarterly real merchandise trade detail and the GDP's real net-export account for goods usually are quite close in their aggregate accounting, they rarely are identical. If the headline, annualized real First-Quarter 2018 GDP growth had reflected the net trade deterioration seen in the March trade-reporting detail for the first-quarter, GDP growth would have come in at the consensus 2.0%, instead of the official headline of 2.3% (see *Commentary No. 947*).

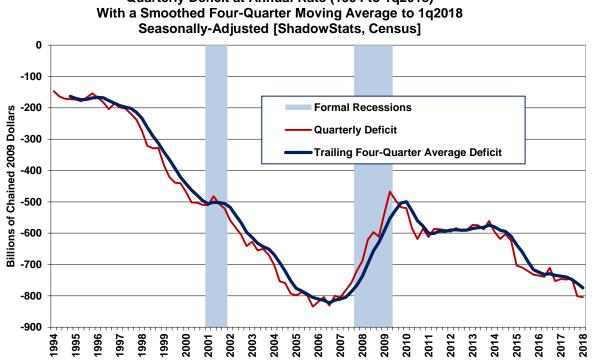
Narrowing in the Nominal March Balance of Payments Deficit Was Boosted Partially by Not Having February's One-Time Import of Intellectual Property for Broadcasting the Olympics. The Bureau of Economic Analysis (BEA) and the Census Bureau (Census) reported Thursday, May 3rd, that the nominal (not adjusted for inflation), seasonally-adjusted monthly trade deficit in goods and services for March 2018 narrowed on a balance-of-payments basis by \$8.787 (-\$8.787) billion, or by 15.2% (-15.2%), to \$48.956 billion, versus a revised \$57.743 [previously \$57.591] billion in February 2018. The narrowing in the monthly March deficit reflected a nearly-even split between a gain of \$4.175 billion in exports, complemented by a decline in imports of \$4.612 (-\$4.612) billion.

That said, the headline March 2018 deficit still widened by \$4.227 billion, or by 9.5%, versus the yearago \$44.729 billion trade shortfall for March 2017. Factors affecting the net monthly change in the March 2018 trade balance included increased exports and a parallel of decreased imports, across-the-board (including complimentary parallels of increasing oil exports an oil imports) a net trade gain, which

was unusual in nature and not particularly credible. Unusual corrective swings could be seen with the April data. On the services side, there was as a monthly reversal in March of the February deficit increase tied to the import of intellectual property for broadcasting the Winter Olympics.

Energy-Related Petroleum Products. March 2018 imported oil prices declined by 0.1% (-0.1%), unadjusted, to \$54.00, versus \$54.61 per barrel in February 2018, but were up by 16.7% from \$46.25 per barrel in March 2017. Separately, unadjusted physical oil-import volume in March 2018 averaged 7.068 million barrels per day, up from 7.059 million barrels in February 2018, but down from 8.383 million in March 2017.

Graph 28: Quarterly and Four-Quarter Smoothed, Real Merchandise Trade Deficit (1994-2018)



Real U.S. Merchandise Trade Deficit (Census Basis)

Quarterly Deficit at Annual Rate (1994 to 192018)

discussed here and plotted in *Graph 28* (see also *Graph 4* of the *Executive Summary*). The seasonally-adjusted details are in real terms, net of oil-price swings and other inflation (2009 chain-weighted dollars, as used in GDP deflation).

Real Merchandise Trade Deficit - March 2018. Reporting detail for the real merchandise trade deficit is

The March 2018 real merchandise trade deficit (no services) narrowed to \$62.110 billion, from \$68.985 [previously \$69.105] billion in February 2018, but widened sharply versus the deficit of \$60.670 billion in March 2017.

In 2016, the annual real merchandise trade deficit widened for the year to \$734.5 billion, versus \$716.4 billion in 2015. The 2016 annual trade shortfall then was the worst since 2008.

On an annual basis, the 2017 real merchandise trade deficit widened to \$760.0 [previously \$760.2 billion], versus \$734.5 billion in 2016. The 2017 deficit was the worst since 2007.

The first-quarter 2017 deficit narrowed minimally to \$746.6 billion, the second-quarter 2017 deficit widened to \$748.0 billion, the third-quarter 2017 deficit narrowed to \$744.3 billion, with the fourth-quarter 2017 real merchandise trade deficit exploding to a revised \$801.2 [previously \$801.7] billion, the worst showing since second-quarter 2007.

Based on the initial, full-headline detail for first-quarter 2018, the annualized quarterly merchandise deficit was \$804.0 billion [previously on track for \$834.4 billion, based on just January and February reporting]. Discussed in the earlier *Headline First-Quarter 2018 GDP Growth of 2.0% Instead of 2.3%?* section, the small net headline deterioration in the first-quarter 2018 real merchandise trade deficit ran counter to a headline quarterly narrowing in the deficit of the net-export account for goods in the initial first-quarter GDP estimate.

Irrespective of occasional, quarterly aberrations and increasingly irregular, headline month-to-month activity, headline deficits broadly should continue to deteriorate sharply in the months and quarters ahead, revising and intensifying the ongoing and commonly-negative impact on headline GDP reporting.

Annual Benchmark Revisions Pending for June 6th. The Census and the BEA <u>Press Release</u> of May 3rd discussed, again, the annual revisions "updates" to the Balance of Payments Goods and Services as well as the Real (Chained-Dollar) Series scheduled for June 6, 2018. Where the inflation-adjusted real series will be recast from 2009 dollars into 2012 dollars, such is in parallel to what is planned for the July 27th comprehensive benchmark revision of the GDP series, back to 1929. Most frequently, these benchmarkings are negative. Other than for gimmicked "positive" redefinitions of issues, look for the trade-deficit overhaul to be a major contributing factor—likely to the downside—in the pending GDP revisions.

Ongoing Cautions and Alerts on Data Quality. Monthly trade data can be influenced by irregular shipping patterns, affected by factors ranging from labor disruptions to unusual weather conditions. Separately, potentially heavy distortions in headline data continue from inconsistent and unstable seasonal adjustments. Similar issues affect other economic releases, such as labor conditions and retail sales, where the headline numbers reflect seasonally-adjusted month-to-month changes (see Section I of the Supplemental Labor-Detail Background, on page 39, covering "Headline Distortions from Shifting Concurrent Seasonal-Adjustment Factors."

Also mentioned frequently here (see <u>2014 Hyperinflation Report—Great Economic Tumble</u> for background), the extraordinary length and depth of the current post-2007 business downturn/non-expansion and related, ongoing disruptions have distorted regular patterns of seasonality.

CONSTRUCTION SPENDING (March 2018)

Levels of Nominal Spending Revised Sharply Higher in January and February, but Plunged in March; with Real Annual Growth Following Similar Patterns. In the context of regularly unstable, although unusually large upside month-to-month and year-to-year revisions to January and February 2018 activity, March 2018 construction spending declined sharply month-to-month, both before and after

inflation adjustment, but gained year-to-year before, and declined year-to year after inflation adjustment. The nominal upside revisions reflected much stronger private construction, versus minimally-changed public construction spending.

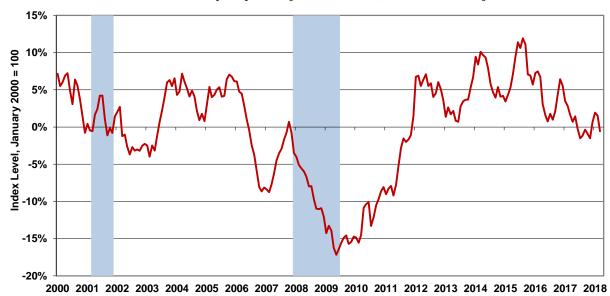
While the upside nominal monthly revisions of 1.72% to the level of January 2018 and 2.01% to February 2018 activity were enough to push real year-to-year change positive for the third-straight month through February, year-to-year change nonetheless sank anew with the March 2018 detail. Headline real March 2018 construction spending still was down by 20.9% (-20.9%) from its pre-recession peak of February 2006. In contrast, March and April 2018 Construction Employment levels were down respectively by 7.4% (-7.4%) and 7.2% (-7.2%) from recovering their pre-recession April 2006 peak.

Revisions standardly go back only two months in the construction-spending series, subject to an annual benchmarking, which is scheduled this year for July 2nd. Noted in the current <u>Press Release</u>, "With the May 2018 release, unadjusted data will be revised back to January 2016 and seasonally adjusted data will be revised back to January 2011. With each May release, seasonally adjusted data will now be revised for an additional five years beyond the revision period for unadjusted data. Research has shown that this revision span should produce more reliable seasonally adjusted time series."

Accordingly, the upwardly-revised January and February 2018 details are not necessarily consistent with the level of prior-year activity reported before January 2018. The Construction Spending series likely has seen some mixed, but continued wild distortions from recent natural-disaster-recovery bloating and the reversal of same. The upside monthly revisions also appeared to reflect upgraded estimates of related construction industry inflation as shown in the *Composite Construction Deflator (CCD)* section.

Graph 29: Total Real Construction Spending, Year-to-Year Percent Change (Same as Graph 7 in the Executive Summary)

Real Total Value of U.S. Construction Put in Place Year-to-Year Percent Change to March 2018 Seasonally-Adjusted [ShadowStats, Census Bureau]



Fluttering Annual Growth Contraction. In tandem with a 1.7% upside revision to January 2018 monthly activity and a 2.0% upside revision to February 2018, real year-to-year growth spiked in both months. Initially both December 2017 and January 2018 had been reported with real year-to-year contractions [close to zero, down by 0.03% (-0.03%) net of inflation] in December 2017, which revised to real gain of 0.79% with the February 2018 detail. Separately, where the initial negative real annual growth of 0.24% (-0.24%) in January 2018 had been the eighth straight month of year-to-year real contractions, that revised to an annual gain of 0.51%, also with the February reporting. The initial headline reporting for February 2018 showed a year-to-year real contraction of 0.62% (-0.62%), with first-quarter 2018 then on track for its third consecutive quarter of year-to-year real contraction.

Again, with the sharp upside revisions to the monthly detail for January and February in the March reporting, and despite some upwardly revised inflation, real annual growth revised sharply higher to 1.95% for January 2018, and to 1.54% for February 2018, with March 2018 showing an initial annual contraction of 0.56% (-0.56%). The upside revisions to January and February were enough to push annual real change in first-quarter 2018 activity to a gain of 0.97%

With a year-to-year real contraction in March 2018 construction spending, however, the signals here remained for an intensifying downturn, as last seen in the housing collapse of 2005/2006. Despite the recent monthly swings, real year-to-year change continued in broad annual contraction, in onset and scope, again, in a manner last seen during the housing collapse of 2006, leading into the 2007 recession (see *Graph 29*). Yet, given the increasingly volatile revision patterns in recent months, the annual benchmarking of July 2nd should provide some greater stability to recent real annual-change patterns. At present, the year-to-year change in real construction spending for the trailing 12 months ended March 2018 was a gain of 0.01%, versus an annual gain of 2.87% for the twelve months ended March 2017. The broad housing and related construction sectors remained severely weakened, constrained by consumer liquidity issues discussed in the *Consumer Liquidity Watch*.

March 2018 Construction Spending. The seasonally-adjusted, annualized nominal March 2018 Value of Construction Put in Place in the United States was \$1,284.7 billion, versus an upwardly-revised \$1,306.4 [previously \$1,273.2] billion in February 2018, an upwardly-revised \$1,294.0 [previously \$1,272.2, initially \$1,262.8] billion in January 2018 and an unrevised \$1,272.6 billion in December 2017.

In the context of upside revisions to January and February activity, the nominal month-to-month change in March 2018 construction spending was a statistically-insignificant contraction of 1.7% (-1.7%) [down by 1.65% (-1.65%) at the second-decimal point] +/- 1.8% (all confidence intervals are at the 95% level), versus a revised gain of 1.0% [previously down by 0.6% (-0.6%)] in February, a revised monthly gain of 1.7% [previously an "unrevised" monthly "unchanged" at 0.0%, initially down by 0.04% (-0.04%)] in January 2018. That was against an unrevised monthly gain of 1.64% in December 2017. Net of the Composite Construction Deflator inflation (see the next section), those were a real monthly decline of 2.4% (-2.4%) in March 2018, a gain of 0.4% in February, a gain of 1.5% in January and a 1.4% gain in December 2017.

Headline annual nominal growth was a statistically-significant 3.6% +/- 2.1% in March 2018, versus revised annual gains of 5.7% [previously 3.0%] in February 2018, 5.8% [previously 4.0%, initially 3.2%] in January 2018 and an unrevised 4.2% in December 2017. Net of inflation, March 2018 was down year-to-year by 0.6% (-0.6%), having gained in February 2018 by a revised 1.5%, in January 2018 by a revised

1.9% and by an unrevised 0.8% in December 2017. Again, the preceding headline details are reflected in accompanying *Graphs 30* to *33* and in *Graph 8* in the *Executive Summary*.

The statistically-insignificant, nominal 1.7% (-1.7%) decline in aggregate monthly March 2018 spending, versus the 1.0% gain February 2018, included an unchanged monthly reading in March 2018 Public Construction Spending, versus a gain of 0.1% in February. Private Construction Spending declined by 2.1% (-2.1%) in March, having gained by 1.2% in February. Within total Private Construction Spending, Residential Construction fell by 3.5% (-3.5%), having gained by 1.2% in February, while the Nonresidential Construction declined by 0.4% (-0.4%) in March, also having gained by 1.2% in February.

The preceding headline details are reflected in accompanying *Graphs 32* and *33* and in *Graphs 8* to *11* in the *Executive Summary*, which show headline detail both before and after adjustment for inflation.

Construction Inflation—ShadowStats Composite Construction Deflator (CCD). ShadowStats produces a Composite Construction Deflator (CCD) for use in converting current-dollar or nominal (not-adjusted-for-inflation) headline construction spending into inflation-adjusted, real or constant-dollar terms. Detailed in <u>Commentary No. 829</u>, previously used measures from the Producer Price Index (PPI) lacked historical consistency and did not measure inflation appropriately for the construction-spending series.

Updated for the latest related price indices in the national-income reporting, and private surveying, CCD year-to-year inflation was 4.23% for March 2018, 4.12% [previously 3.67%] for February 2018 and 3.75% [previously 3.45%, initially 3.46%] for January 2018. Month-to-month inflation was 0.73% for March 2018, 0.53% [previously 0.38%] for February 2018 and 0.38% [previously 0.24%, initially 0.23%] for January 2018.

Quarterly Year-to-Year and Annualized Quarterly Real Changes. In the context of March 2018 reporting in this regularly, heavily-revised and volatile detail, initial real first-quarter 2018 year-to-year change was a gain of 1.0%, with annualized real quarterly growth of 7.9%.

In the context of minor revisions to December activity, net of revised inflation, fourth-quarter 2017 activity grew at an annualized pace of 6.5% [previously 6.7%], having contracted year-to-year by a revised 0.6% (-0.6%) [previously 0.5% (-0.5%)].

Third-quarter 2017 real growth contracted at an annualized quarterly pace of 4.0% (-4.0%) and contracted year-to-year by 0.8% (-0.8%).

Second-quarter 2017 real growth contracted at an annualized real pace of 5.8% (-5.8%), versus first-quarter 2017, with year-to-year real growth at 0.6%.

The pattern here, again, coming into first-quarter 2018, has been one of annual slowdown and annual contraction, generally of a form not seen since the housing crash coming into the headline 2007 recession.

[Graphs 30 to 33 begin on the next page.]

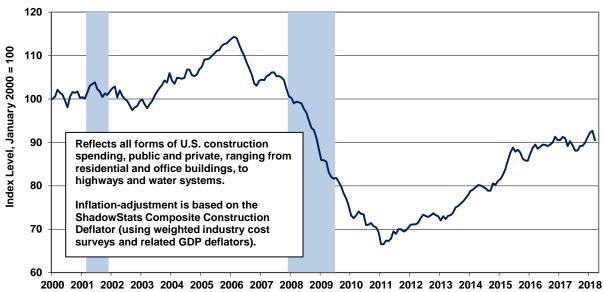
Graph 30: Total Nominal Construction Spending

Nominal Total-Construction Spending to March 2018 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



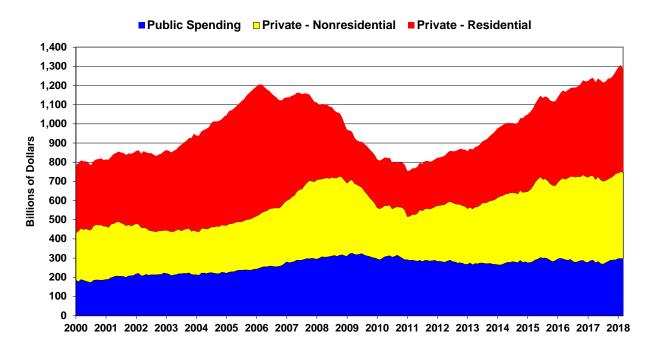
Graph 31: Index of Total Real Construction Spending

Index of Real Total Value of Construction Put in Place To March 2018, Inflation Adjusted (Jan 2000 = 100) Seasonally-Adjusted [ShadowStats, Census Bureau]



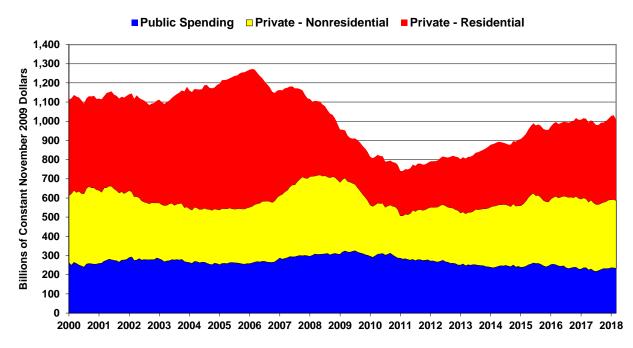
Graph 32: Aggregate Nominal Construction Spending by Major Category to Date

Nominal Construction Spending to March 2018 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



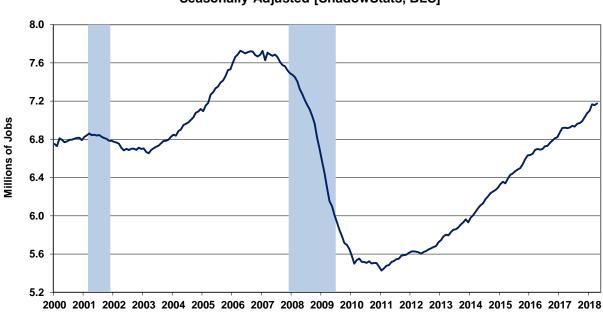
Graph 33: Aggregate Real Construction Spending by Major Category (Billions of November 2009 Dollars)

Real Construction Spending (\$2009) to March 2018 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



April 2018 Construction Payrolls Gained Month-to-Month by 0.2%, Rose 3.8% Year-to-Year, but Remained Down by 7.2% (-7.2%) from the Series' Pre-Recession Peak. Discussed earlier in the Employment and Unemployment section (see page 38), April 2018 construction payrolls gained month-to-month by 0.24% [by 0.34% net of the prior-month's revision] and by 3.84% year-to-year, as plotted in accompanying Graph 34. The seasonally-adjusted April 2018 construction-payroll-employment level held shy of recovering the pre-recession high for that series by 7.2% (-7.2%). Again, March 2018 real Construction Spending remained shy of recovering its pre-recession high by 20.9% (-20.9%).

Graph 34: Construction Employment (Payroll Survey) - 2000 to Date



Construction Payroll Employment to April 2018 Seasonally-Adjusted [ShadowStats, BLS]

Construction Spending and Related Graphs. Graphs 8 to 11 in the Executive Summary show comparative nominal and real construction activity for the aggregate series as well as for private residential- and nonresidential-construction and public-construction. Seen after adjustment for inflation, the real aggregate series generally have remained in low-level stagnation, now effectively flat to turning down, from mid-2015 into first-quarter 2018. Areas of recent relative strength in the major subcomponents generally have flattened out and have begun to turn down anew, after inflation adjustment.

The general pattern of real activity had been one of low-level, up-trending stagnation but, again, that now has turned generally flat-to-minus. The aggregate nominal detail, before inflation adjustment, is shown in *Graph 30* of this *Reporting Detail*, with the real, inflation-adjusted activity plotted in *Graph 31*, while *Graphs 32* and *33* show the relative patterns of nominal and real activity aggregated by sector.

Construction and Related Graphs of Physical Activity. Again, Graphs 30 and 31, and Graphs 32 and 33 reflect total construction spending through March 2018, both in the headline nominal dollar terms, and in real terms, after inflation adjustment. Graph 31 is on an index basis, with January 2000 = 100.0, where

Graph 29 reflects the same detail in terms of annual change. Adjusted for the CCD, real aggregate construction spending showed the economy slowing in 2006, plunging into 2011, then turning minimally higher in an environment of low-level stagnation, trending lower from late-2013 into mid-2014, then with some boost into early-2015. Activity declined in fourth-quarter 2015, with a rebound in 2016, sinking anew into 2017, with annual growth having turned negative, again as indicated in *Graph 29*. The pattern of non-recovered, inflation-adjusted construction spending turning down anew has continued to move contrary to the purported economic recovery and expansion indicated by headline GDP reporting.

The Data and Graphs Here Reflect Monthly Levels, Not Smoothed, Moving Averages. Unlike the housing-starts and home-sales series (see <u>Commentary No. 946</u> and <u>Commentary No. 947</u>)—where ShadowStats smooths the irregular and continually-revised monthly data with accompanying plots of smoothed, six-month moving averages—the construction spending series is shown here only on a monthly basis, as published. While the spending series is extremely volatile in its monthly revisions, it tends to remain reasonably smooth in the residual month-to-month change. Discussed in the opening paragraphs of this Construction Spending section, the Census Bureau's benchmark-revision notice previewed an extended historical base of seasonal-adjustment revisions, which purportedly will result in more-stable, less-violent revisions to the headline monthly reporting.

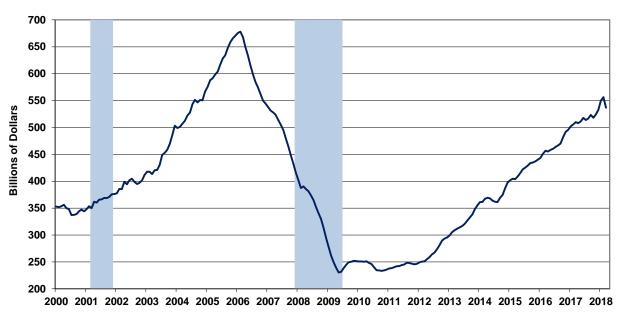
Note the comparative month-to-month volatilities in the non-smoothed *Graphs 35* and *36*, which cover private residential construction spending, along with housing starts (combined single- and multiple-unit starts) for March 2018 (see *Commentary No. 946*). Keep in mind that the construction spending series is in nominal dollar terms, while housing starts reflect unit volume, which should be parallel with the inflation-adjusted series shown in *Graph 9* in the *Executive Summary* section and *Graph 31* here.

The final two graphs (*Graphs 37* and *38*) show the patterns of the monthly level of activity in nominal private nonresidential-construction spending and in public-construction spending. Private Non-Residential Construction spending surged beyond its pre-recession nominal peak in 2016, hitting a new high in February 2018, the backing off in March 2018. Public Construction spending, which is 98% nonresidential, had continued in a broad downtrend into 2014, with intermittent bouts of fluttering stagnation and then some upturn in 2015. From 2016 and into 2018, the nominal series still is fluttering into and out of a low-level top, still shy of its pre-recession peak. Viewed net of inflation, in *Graphs 10* and *11* in the *Executive Summary* and in accompanying *Graph 32*, both series still appear stalled shy of their pre-recession peaks.

[Graphs 35 to 38 begin on the next page.]

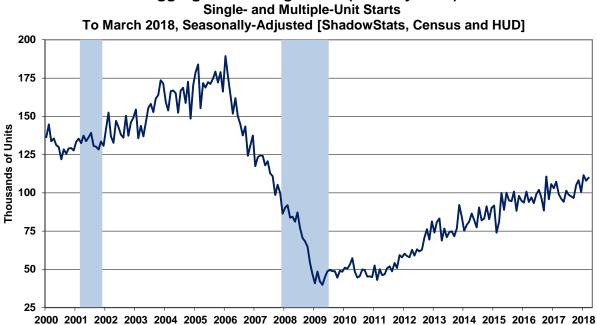
Graph 35: Nominal Private Residential Construction Spending to Date

Nominal Private Residential Construction to March 2018 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



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

Aggregate Housing Starts (Monthly Rate)



Graph 37: Nominal Private Nonresidential Construction Spending to Date





Graph 38: Nominal Public Construction Spending to Date

Nominal Public Construction to March 2018 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



[The Hyperinflation Watch begins on the next page.]

HYPERINFLATION WATCH

MONETARY CONDITIONS

Beware Unexpected Economic Weakness! Discussed in the *Opening Comments*, despite headline U.3 April unemployment dropping to a 17-year low of 3.9%, underlying labor-market stresses and a weak-employment circumstance signal trouble. Private surveying of jobs-market conditions and real-median-household income also suggest that recent headline, economic strength may not be as advertised.

Separately, serious, conflicting policy issues for the Federal Open Market Committee (FOMC) of the Board of Governors of the Federal Reserve System include the current tightening in monetary policy, which threatens to tank the U.S. economy. Related, weakening consumer liquidity, including faltering growth in real income and credit also threaten broad economic activity.

Regularly discussed here, unexpected, negative economic shocks lie ahead, with near-term retail sales and industrial production likely to soften sharply, along with pending negative benchmark revisions likely for key series. Series revisions are pending for new orders for durable goods and manufacturers' shipments (May 17th), retail sales (May 25th), the trade deficit (June 6th), construction spending (July 2nd) and the GDP (July 27th). Intensifying issues with the labor-market numbers also are a good bet. Disaster-related, systemic reporting distortions generally have passed from headline reporting, with some lagging detail seen possibly in the March construction spending numbers, discussed in the *Reporting Detail*.

The U.S. central bank's primary concern remains being the maintenance of solvency and liquidity in a still-troubled banking system. Intensifying economic and financial stresses on that system remain likely to cause the FOMC to back off its current pattern of promised rate hikes and balance-sheet liquidation, to revert again towards expanded quantitative easing, as openly allowed for in current FOMC policy.

As the mounting economic/systemic stresses continue to unfold, market pressures and expectations should mount on the FOMC to pull back from further tightening. Accordingly, consensus expectations as to the timing and frequency of future rate hikes by the Fed increasingly should begin to waver, with negative impact on the U.S. dollar.

Money Supply M3 Annual Growth in April 2018 Eased to a Seven-Month Low of 4.3%, with Rapidly Sinking Annual Growth in M1 and M2, Along with a Contracting Monetary Base. Based on three-plus weeks of reporting, with continued, sharp softening growth in the narrower M2 and M1 measures, the estimate of nominal annual growth for the ShadowStats Ongoing M3 Money Supply in April 2018 hit a seven-month low of 4.3%. That was down from 4.4% in March 2018, 4.5% in February

2018, 4.5% in January 2018, 4.6% in December 2018, 4.5% in November and 4.7% in October 2017. That October year-to-year change was highest level seen since November 2015.

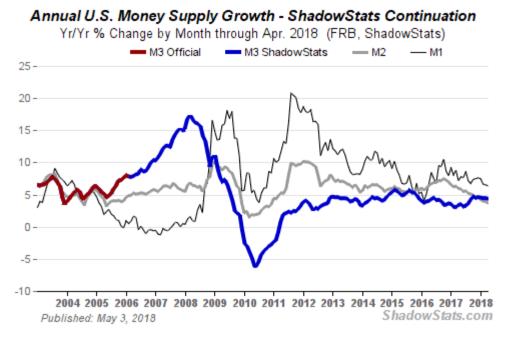
Those M3 growth rates were against unrevised annual gains of 4.2% in September 2017, 3.6% in August 2017 and irregular notching of annual growth lower back in time, to an unrevised 3.0% in March 2017, which was weakest year-to-year change since July 2012.

Take out headline inflation (see *Graph 5* of *Commentary No. 945* and the discussion in today's *Opening Comments*) and a new recession signal is unfolding rapidly.

M2 Annual Growth Still Weakest Since December 2010. Separately, nominal year-to-year growth for M2 declined to 3.7% in April 2018, the lowest level seen since 3.6% December 2010. That was against annual growth of 4.0% in March 2018, 4.1% in February 2018, 4.2% in January 2018, 4.7% in December 2017, 4.6% in November 2017, 5.0% in October 2017, 5.2% in September 2017, 5.3% in August 2017, 5.6% in July 2017, 5.6% in June 2017 and 5.9% in May 2017.

M1 Annual Growth at a 25-Month Low. Annual nominal growth in April 2018 M1 slowed to 6.4%, from 6.6% in March 2018, at its lowest annual growth rate since 5.2% March 2016. In turn, March 2018 annual growth had slowed from 6.7% in February 2018, 7.5% in January 2018, 7.7% in December 2017, 7.6% in November 2017, 7.4% in October 2017, 6.8% in September 2017, 7.2% in August 2017, 8.7% in July 2017, 7.7% in June 2017 and 7.9% in May 2017. Going backwards in time, the monthly annual change in M1 tends to notch higher, hitting a near-term peak annual of 10.6% in October 2016, which was the strongest growth since 10.7% in September 2014.

Graph HW-1: Comparative Money Supply M1, M2 and M3 Yr-to-Yr Changes through April 2018



For those living in the headline money-supply world comprised of just the Fed's M1 and M2, annual money growth had been relatively stronger in recent years for both M1 and M2, versus M3, until January 2018, when annual M3 growth overtook M2, in conjunction with interest rates being pushed higher by the

FOMC. Nonetheless, the monthly annual growth in each of M1, M2 and M3 has slowed consistently since December 2017, near-term, along with the year-to-year contractions in the Monetary Base, all reflecting Federal Reserve policy.

Fed Policy Has Moved Towards Restraining Headline Economic Activity. Annual M3 growth is declining in tandem with M1 and M2, at the same time as annual year-to-year CPI-U inflation was the rise in February and March, and likely with April 2018. These patterns are suggestive of weakening or declining economic activity, of the FOMC actively pushing to slow domestic economic growth, which still largely never recovered from the banking-crisis-induced economic collapse of 2008.

The relative weakness in annual M3 growth, versus M2 and M1 (M2 includes M1; M3 includes M2) had reflected a shift over time in funds from accounts included just in M3, such as large time deposits and institutional money funds, into accounts in M2 and M1. The recent relative strength in annual M3 growth, however, reflected a returning flow of cash from M2 back into M3 accounts, again, such as large-time deposits, institutional money funds and Fed funds repurchase agreements. Still, the latest, softening headline details likely reflects and/or will tend to induce softening business activity. The latest estimates of level and annual changes for April 2018 M3, M2 and M1, and for earlier periods, are detailed in the Alternate Data tab of www.ShadowStats.com. See the Money Supply Special Report for full definitions of those measures. Commentary No. 949 will update the April 2018 inflation-adjusted annual M3 growth.

Annual Change in the Monetary Base Turned Negative in March and April 2018, for the First Time Since March 2016. As annual growth in M3 jumped in late 2017 so, too, did annual growth in the Monetary Base. In the wake of near-term volatility surrounding recent rate hikes by the FOMC, and the related market efforts by New York Fed to establish or stabilize a consistent trading-range activity for the targeted federal funds rate, the level of the monetary base had been reasonably stable, with annual percentage change fluctuating around zero.

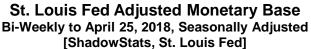
Still, in late-2017, the pace of annual growth had turned higher, rapidly moving to consecutive, multi-year highs, pulling back in roughly parallel timing with M3. Annual growth in both series peaked near-term in December 2017, at multi-year highs. The Monetary Base was up by 9.7% year-to-year in the two weeks ended January 3, 2018, fell back to 2.3% in the two weeks ended February 28th, and turned down year-to-year in mid-March. Now showing an annual contraction of 2.3% (-2.3%) for the two weeks ended March 28th, the Saint Louis Fed's estimate of the Monetary Base was down by 2.4% (-2.4%) year-to-year in the two weeks ended April 25th. Accompanying *Graphs HW-2* and *HW-3*, reflect that detail.

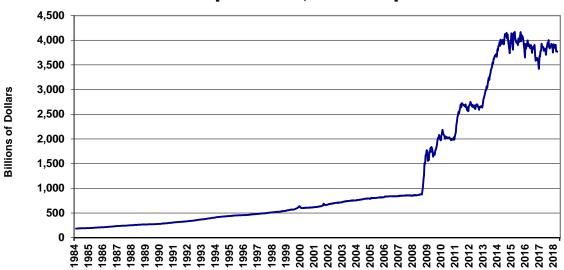
Aside from short-term gyrations around the timing of change in the targeted federal funds rate (as could have affected the late-March 2018 data), circumstances generally should remain relatively stable, until the Fed sells its Treasuries and Mortgage-Backed Securities more heavily, as part of its planned "balance sheet normalization." More speculatively, the Fed could fall back on expanded quantitative easing, amidst mounting liquidity stresses in the banking system, generated by deteriorating economic conditions.

Nonetheless, the level of the Monetary Base remains well within the bounds of activity seen in the last several years. That said, prior to the institution of Quantitative Easing, changing the level of the Monetary Base had been the primary tool of the FOMC for targeting growth in the money supply. Recent upside movements seen in annual growth for M3 and the Monetary Base have softened sharply. Although late-year 2017 money growth had begun to look like a potential covert shift in FOMC policy towards

easing, that now has moved sharply, instead, towards a tightening. Related economic issues are discussed in the *Opening Comments*.

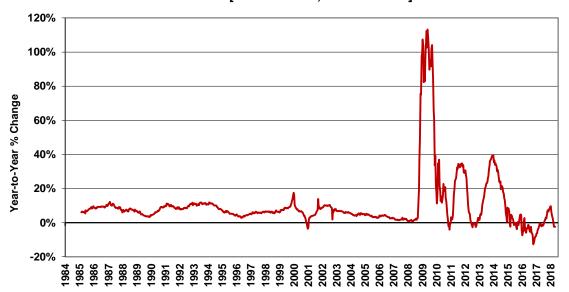
Graph HW-2: Saint Louis Fed Monetary Base, Billions of Dollars (1984 to April 25, 2018)





Graph HW-3: Year-to-Year Percent Change, Saint Louis Fed Monetary Base (1985 to April 25, 2018)

St. Louis Fed Adjusted Monetary Base, Yr/Yr % Bi-Weekly to April 25 2018, Seasonally Adjusted [ShadowStats, St. Louis Fed]



VELOCITY OF MONEY

First-Quarter 2018 Velocity of Money Declined Minimally for M1, Gained Minimally for M2 and M3. In context of initial, somewhat stronger nominal, annual growth in First-Quarter 2018 GDP and somewhat weaker nominal annual growth in First-Quarter 2018 Money Supply measures, the velocity of money in the First-Quarter 2018 was slightly higher for the broader money supply measures M2 and M3 than in Fourth-Quarter 2017. The pace of money supply velocity for fourth-quarter M1, however, slowed minimally, having been down or flat for the last ten quarters, suggestive of somewhat greater physical cash relative to the GDP in the system, although that could be offshore. Velocity is a measure of how many times the money supply turns over in a year, versus the broad economy (GDP). See the discussion in the *Hyperinflation Watch* of prior *Commentary No. 947*,

[The Consumer Liquidity Watch begins on the next page.]

CONSUMER LIQUIDITY WATCH

CONSUMER LIQUIDITY, INCOME, CREDIT AND RELATIVE OPTIMISM. [Updated for Sentier Research's re-introduction of their monthly series of Real Median Household Income, through March 2018, and for March 2018 Consumer Credit Outstanding.]

Consumer Liquidity Constraints Have Intensified, Given Tightening Conditions With Income, Credit and Employment and Weakening Optimism. Today's *Consumer Liquidity Watch* should be viewed in the context of, and as a supplement to the today's *Opening Comments* and the discussion there surrounding the latest details on monthly Real Median Household Income.

Mounting financial stress on the U.S. consumer is not good for pending domestic economic growth. Noted in the *Executive Summary* of prior *Commentary No. 947*, mounting liquidity issues already may have taken some hit on real First-Quarter 2018 GDP activity, where consumer real consumption of goods actually declined and real investment growth in residential real estate was nil.

Liquidity conditions have been tightening for consumers, with Real Consumer Credit Outstanding continuing to falter in March 2018, with headline Real Average Weekly Earnings contracting quarter-to-quarter in first-quarter 2018 and with monthly Real Median Household Income in March 2018 up by only 1.8% from what appears to have been be a near-term series peak eighteen-plus years ago, in January of 2000. These factors are among the likely elements driving the early signs of a downturn in consumer optimism and consumer consumption and residential investment (a shrinking 72.9% of First-Quarter 2018 GDP). In combination, these various factors should exacerbate financial-market, policy-maker and FOMC concerns as to any ongoing, positive direction in broad U.S. economic activity.

Weakening consumer liquidity conditions previously had been mirrored in weakening, headline economic activity coming into the series of major natural disasters that disrupted the economy, beginning in August 2017. Intensifying weakness had included Payroll-Employment, Real Retail Sales, Housing and Construction, and the Manufacturing/Production sector, generally pre-natural disaster activity.

Net of what have been mixed, but significant, hurricane and later-wildfire distortions, initial hits to activity were followed by related and transient economic boosts from recovery, replacement and restoration activity, particular in fourth-quarter 2017. Funded by insurance payments and savings liquidation, those distortions increasingly had passed into the recent headline economic data and now begun to recede. Against artificially bloated third- and fourth-quarter 2017 activity of 3.2% and 2.9%, first-quarter 2018 economic activity slowed to 2.3% and likely will revise sharply lower as better-quality numbers become available. Such effects are discussed in the separate analyses of relevant series in covered in the regular *ShadowStats Commentaries*. Where there are current signals of faltering consumer

liquidity (again see Consumer Credit Outstanding and Real Earnings), headline consumer optimism has begun to move off recent highs, along with softening underlying economic reality. The April 2018 releases of the Conference Board's Consumer-Confidence Index[®] and the University of Michigan Consumer Sentiment both were off recent peak activity.

Liquidity Issues Limit Economic Activity. Severe and persistent constraints on consumer liquidity of the last decade or so drove economic activity into collapse through 2009, and those conditions have prevented meaningful or sustainable economic rebound, recovery or ongoing growth since. The limited level of, and growth in, sustainable real income, and the inability and/or unwillingness of the consumer to take on new debt have remained at the root of the liquidity crisis and ongoing economic woes.

These underlying pocketbook issues contributed to the anti-incumbent electoral pressures in the 2016 presidential race. The post-election environment showed a near-term surge in both the consumer confidence and sentiment measures to levels generally not seen since before the formal onset of the recession in 2001, let alone 2007. Yet, underlying liquidity conditions, economic reality and lack of positive actions out of the government to turn the economy meaningfully, so far, all have continued to remain shy of consumer hopes, and those numbers have begun to stumble in recent detail.

A temporary liquidity boost fueled by recent disaster effects, such as insurance payments or savings drawdowns to fund replacement of storm-damaged assets, are of a one-time nature and short-lived in terms of ongoing economic impact. The underlying, fundamental longer-term liquidity issues remain in place. Nonetheless, mirroring the disaster-fueled economic hype in the popular press, consumer optimism had rallied strongly, albeit, again, now faltering or mixed, as discussed shortly.

Including the various consumer-income stresses discussed in <u>Special Commentary No. 888</u>, broad, underlying consumer-liquidity fundamentals simply have not supported, and still do not support a fundamental turnaround in general economic activity—a post "Great Recession" expansion—and broadly are consistent with a "renewed" downturn in that non-recovered economic activity. Indeed, never truly recovering post-Panic of 2008, limited growth in household income and credit have eviscerated and continue to impair broad, domestic U.S. business activity, which is driven by the relative financial health and liquidity of consumers. These underlying liquidity conditions and reality—particularly income and credit—remain well shy of average consumer hopes and needs, irrespective of the new tax laws.

The combined issues here have driven the housing-market collapse and ongoing, long-term stagnation in consumer-related real estate sales and construction activity, and have constrained both nominal and real retail sales. Related, personal-consumption-expenditure and residential-construction categories accounted for 73.1% of the headline real, Fourth-Quarter 2017 U.S. GDP.

Net of short-lived disaster distortions (insurance payments, savings liquidations), with the better-quality economic indicators and underlying economic reality never having recovered fully from the collapse into 2009, consumers increasingly should pull back on consumption in the months ahead. Underlying reality is evident in more-meaningful economic indicators—not the GDP—irrespective of the transient boosts from disasters or political gimmicks, discussed recently in *General Commentary No.* 929 and the *Executive Summary* of *Commentary No.* 928.

Anecdotal Evidence of Business and Consumer Uncertainty Continue to Indicate a Seriously-Troubled Economy and Very Dangerous Financial Markets. Against what appears to be a headline economic consensus that all is right again, with the U.S. economy and financial markets, underlying real-world common experience suggests a much different outlook. Regularly discussed here, ongoing non-recovery, low-level stagnation and signs of renewed downturn remain patterns common to key elements of headline U.S. economic activity. Consider factors ranging from housing sales and broad construction activity, to headline reporting of domestic manufacturing (and revisions), as well as those series that are heavily gimmicked, such as the Gross Domestic Product (GDP), also regularly discussed and dissected here.

Similar signals of such economic stress are seen in patterns of activity that move along with the real-world broad economy. They range from indicators such as freight volume and domestic consumption of petroleum to factors such as levels of real consumer debt outstanding, real average weekly earnings and measures of employment stress in the broad economy. Those stresses are reflected in historically-low levels of the employment-population ratio and the labor-force participation rate. With the liquidity-starved U.S. consumer driving three-quarters of the GDP, there is no way for the broad economy to boom—happy Retail Sales headlines aside—without some meaningful shift in underlying consumer circumstances. Links to background discussions in these various areas are found in the *Recent Commentaries* section of the *Week, Month and Year Ahead*, along with links to background discussions on the quality of the more-politicized GDP (*Commentary No. 938*) and employment/unemployment details discussed in the *Supplemental Labor-Detail Background* of *Commentary No. 939*.

Beyond assessing headline economic numbers, ShadowStats also looks at anecdotal evidence, including comments by subscribers and clients, who live in the real world. Two broad observations have come from a number of recent conversations. First, real estate activity appears to be slowing in recently strong areas. Second, a number of major companies are "sitting on their hands," holding back on issuing new contracts to third-party vendors in areas such as upgrading computer systems and other consulting. The companies cite the slowdown in contracts as "due to uncertainty," an issue, as well with the U.S. consumer, where that uncertainty encompasses:

- Unfolding circumstances in the Washington, D.C. political arena.
- Where the manic financial markets are headed.
- Ultimately, what is, or will be, happening to near-term business activity?

Economic reporting, and business and financial-market stories sometimes receive happy year-end spikes in the press. That circumstance was supplemented in late-2017 by near-term hurricane boosts to, and distortions of, some current economic activity, such as the November Retail Sales reporting. The latter circumstance should prove fleeting. The underlying, broadly-faltering U.S. economy should be dominating headline economic reporting, once again, and all too soon, most likely in the next couple of months. That said, albeit reflecting some of the headline economic hype in the popular press, headline consumer optimism remains strong.

Consumer Optimism: Consumer Sentiment and Confidence Have Backed Off Recent Peak. Having hit peak activity in February 2018 the Conference Board's Consumer-Confidence Index[®] (Confidence) measure pulled back in March and remained lower in its initial April 2018 (released April 24th). The University of Michigan's Consumer Sentiment Index (Sentiment) peaked in March 2018 and also turned down in its full reporting for April 2018. Though revised slightly higher in its final April estimate, on April 27th, Sentiment remained down sharply month-to-month.

Reflected in *Graphs CLW-1* and *CLW-2*, Confidence and Sentiment monthly readings had jumped sharply to multi-year highs in February 2018, despite mounting financial-market and economic uncertainties, with early-March Sentiment jumping anew. Following a downside revision to the February 2018 reading, which still remained at its strongest reading since 2000, the March 2018 reading fell back below its level of November 2017. The still-strong numbers here for both Confidence and Sentiment remain above their, pre-2007 recession peaks. Other than for the recent months of stronger Confidence readings, Confidence is at its highest level since May 2000, but remain down from that May 2000 peak by 11.1% (-11.1%).

On a monthly basis the final April 2018 Sentiment measure has backed off sharply. Although still at a high level, it is below a number of monthly levels seen back over the last year, currently down from what once was its comparative prior peak of January 2004 by 4.8% (-4.8%).

For both the Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index (*Graph CLW-1*), and the University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph CLW-2*), the three-month moving averages also remain above pre-2007 recession highs, yet the still-high moving averages have slowed in their gains, having begun to falter along with the softening detail and related headline consumer activity.

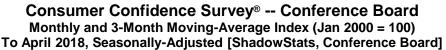
Pre-election, September 2016 Confidence and Sentiment jumped and then plunged in October 2016, likely reflecting concerns as to the direction of the presidential race. Post-election, both measures rallied sharply, reflecting surges in consumer optimism into early-2017. Both series then topped and pulled back, with mixed numbers into August and September 2017, but with the October 2017 Sentiment measure showing a large jump, purportedly because consumers were willing to accept diminished prospects for their living standards (see *Commentary No. 916*)? Nonetheless, the Sentiment measure retrenched in November and December. The Conference Board blamed hurricane impact in Texas and Florida for its downturn in September 2017 Confidence, but those numbers exploded into October and November 2017, again reversing largely with December's headline downturn.

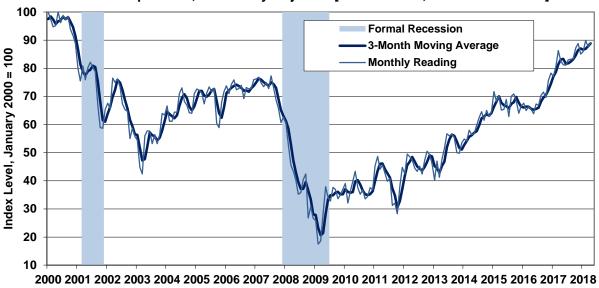
Showing the Consumer Confidence and Consumer Sentiment measures on something of a comparable basis, *Graphs CLW-1* to *CLW-3* reflect both measures re-indexed to January 2000 = 100 for the monthly reading. Standardly reported, the Conference Board's Consumer Confidence Index[®] is set with 1985 = 100, while the University of Michigan's Consumer Sentiment Index is set with January 1966 = 100.

The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in <u>Commentary No. 764</u>), and often are highly volatile month-to-month, as a result. Recent press has been highly positive on the headline economic and employment news, reflecting short-lived hurricane boosts to activity particularly on unemployment (not payroll employment), retail sales and industrial production. As headline financial and economic reporting in the next month or two turn increasingly-negative and unstable, so too should the surging "optimism." Increasingly, a downturn in consumer outlook should take hold, despite any euphoric headlines, reflecting some deep-seated consumer liquidity issues.

Broadly, though, the harder, financial consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth as suggested by headline GDP growth into fourth-quarter 2017. In current environment of what had been surging optimism, beyond having happy feelings about the future, consumers still need actual income, cash-in-hand or credit in order to increase their spending.

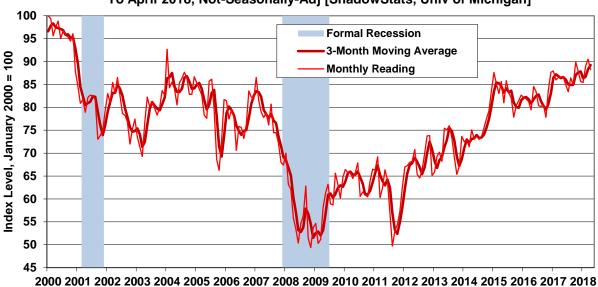
Graph CLW-1: Consumer Confidence (2000 to 2018)





Graph CLW-2: Consumer Sentiment (2000 to 2018)

Consumer Sentiment Index -- University of Michigan Monthly and 3-Month Moving-Average Index (Jan 2000 = 100) To April 2018, Not-Seasonally-Adj [ShadowStats, Univ of Michigan]

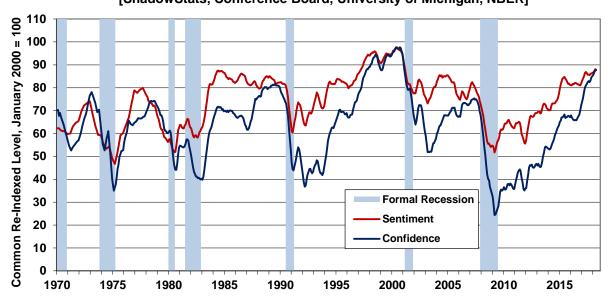


Smoothed for irregular, short-term volatility, the two series still generally had held at levels seen typically in recessions, until the post-2016 election circumstance. Suggested in *Graph CLW-3*—plotted for the last 48 years—the latest readings of Confidence and Sentiment recently have recovered levels seen in periods

of normal, positive economic activity of the last four decades, with their six-month moving averages at levels last seen going into the 2001 recession, although increasingly, they appear to be topping out.

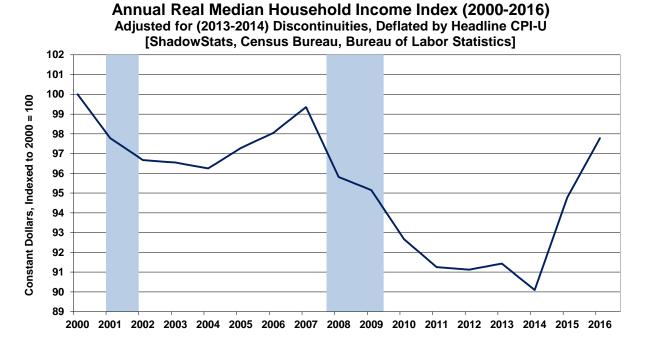
Graph CLW-3: Comparative Confidence and Sentiment (6-Month Moving Averages, 1970 to 2018)

Consumer Confidence and Consumer Sentiment Indices
Six-Month Moving Averages, 1970 to April 2018
[ShadowStats, Conference Board, University of Michigan, NBER]



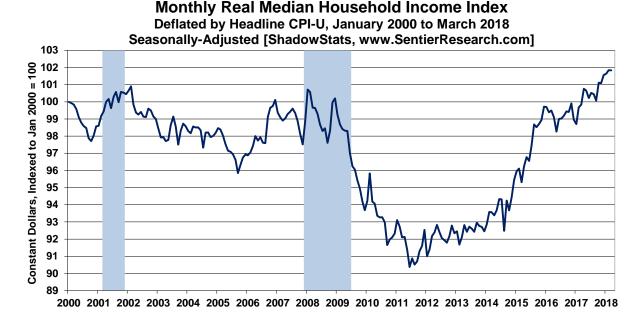
Annual Real Median Household Income in 2016 Held Below Its 2007 Pre-Recession Peak, Below Late-1990s Activity and About Even with the Mid-1970s, Monthly Activity Has Been Broadly Stagnant. Graphs CLW-4 and CLW-5 show the latest plots of annual and monthly Real Median Household Income.

Graph CLW-4: Annual Real Median U.S. Household Income (1967 to 2016)

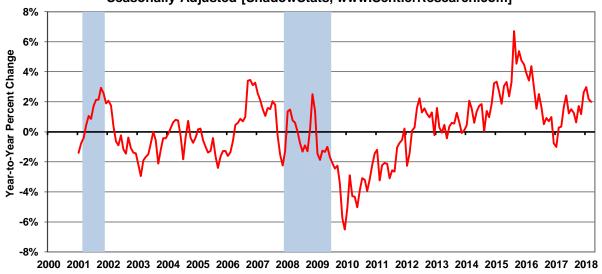


Monthly Real Median Household Income, provided by Sentier Research (*Graph CLW-5*) generally can be considered a monthly version of the annual detail shown in preceding *Graph CLW-4*, based on the most-recent (2016) release by the Census Bureau in September 2017, and as discussed in today's *Opening Comments* (see also the *Opening Comments* of *Commentary No. 909*).

Graph CLW-5: Monthly Real Median Household Income (2000 to March 2018) Index, January 2000 = 100 (See Graph OC-1 in Today's Opening Comments)



Graph CLW-6: Monthly Real Median Household Income (2000 to March 2018) Year-to-Year Change
Monthly Real Median Household Income Yr/Yr Change
Deflated by Headline CPI-U, January 2001 to March 2018
Seasonally-Adjusted [ShadowStats, www.SentierResearch.com]



The Reinstituted Sentier Research Monthly Series Shows Stagnant Monthly Real Growth. Also discussed in the Opening Comments, Sentier Research (www.SentierResearch.com) has reinstituted its

monthly reporting of Real Median Household Income (the Household Income Index or HII), where publication had been suspended, temporarily, following the release of May 2017 headline detail. The series has been updated, monthly, through March 2018, with minor revisions incorporating recent benchmark revisions to the CPI-U, which is used in deflating the series. The current monthly series is plotted here, both as to level (*Graph CLW-5*) and as to year-to-year change (*Graph CLW-6*).

Methodological understatement of the CPI-U by the Bureau of Labor Statistics broadly has had the effect of overstating the growth in headline real or CPI-U inflation-adjusted series (see the <u>Public Commentary on Inflation Measurement</u>). In a related area, recent extreme volatility in monthly gasoline prices has had varying impact on the headline data. Details are reviewed in today's *Opening Comments*, where monthly change in March 2018 was nil, and where annual average growth in the series since its January 2000 onset has been roughly 0.1% per year. Material in the today's *Opening Comments* will be moved to this section for future *Consumer Liquidity Watch* coverage.

Differences in the Monthly versus Annual Median Household Income. The general pattern of relative monthly historical weakness has been seen in the headline reporting of the annual Census Bureau numbers, again, shown in *Graph CLW-4*, with 2014 real annual median household income having hit a ten-year low, and, again, with the historically-consistent 2015 and 2016 annual number still holding below the 2007 pre-recession high.

The Sentier numbers had suggested a small increase in 2014 versus 2013 levels, low-inflation induced real increases in 2015 and 2016. Allowing for the direction difference in 2014, and continual redefinitions and gimmicks in the annual series (again, see the *Opening Comments* of *Commentary No.* 909) the monthly and annual series had remained broadly consistent, although based on separate questions within the Consumer Population Series (CPS), as conducted by the Census Bureau.

Where Sentier used monthly questions surveying current annual household income, the headline annual Census Bureau detail is generated by a once-per-year question in the March CPS survey, as to the prior year's annual household income. The Median Household Income surveying results are broadly consistent with Real Average Weekly Earnings.

Real Average Weekly Earnings—March 2018—Third-Consecutive Quarterly Contraction. For the production and nonsupervisory employees category—the only series for which there is a meaningful history (discussed in Commentary No. 945 and plotted here in Graph CLW-7), real average weekly earnings were unchanged month-to-month at 0.0% in March 2018 having gained 0.7% in February and declined by 1.1% (-1.1%) in January. As result, real earnings contracted quarter-to-quarter in first-quarter 2018 at an annualized pace of 1.5% (-1.5%). Such was the third-consecutive quarterly decline in real earnings for the production and nonsupervisory employees category, the fifth real quarterly contraction of the last six quarters. Separately, real quarterly earnings for all employees also contracted, down at an annualized of pace of 0.3% (-0.3%) in first-quarter 2018, for the second consecutive quarterly contraction. See the Reporting Detail for further information.

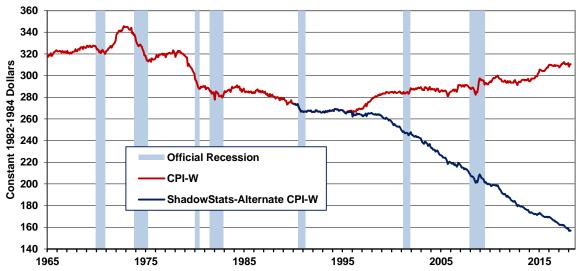
Graph CLW-7 plots the seasonally-adjusted earnings as officially deflated by the BLS (red-line), and as adjusted for the ShadowStats-Alternate CPI Measure, 1990-Base (blue-line). When inflation-depressing methodologies of the 1990s began to kick-in, the artificially-weakened CPI-W (also used in calculating Social Security cost-of-living adjustments) helped to prop up the reported real earnings. Official real earnings today still have not recovered their inflation-adjusted levels of the early-1970s, and, at best, have

been in a minimal uptrend for the last two decades (albeit spiked recently by negative headline inflation). Deflated by the ShadowStats (1990-Based) measure, real earnings have been in fairly-regular decline for the last four decades, which is much closer to common experience than the pattern suggested by the CPI-W. See the *Public Commentary on Inflation Measurement* for further detail.

Graph CLW-7: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date

Real Average Weekly Earnings -

Production and Nonsupervisory Employees Deflated by CPI-W versus ShadowStats-Alternate (1990-Base) 1965 to March 2018, Seasonally-Adjusted [ShadowStats, BLS]



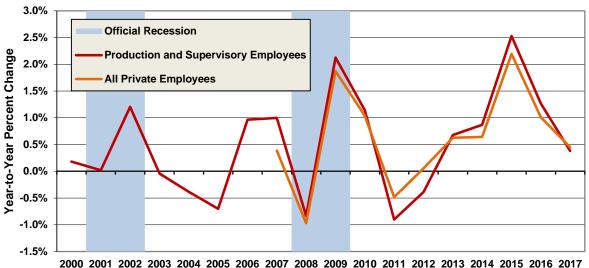
Graph CLW-7 plots the seasonally-adjusted earnings as officially deflated by the BLS (red-line), and as adjusted for the ShadowStats-Alternate CPI Measure, 1990-Base (blue-line). When inflation-depressing methodologies of the 1990s began to kick-in, the artificially-weakened CPI-W (also used in calculating Social Security cost-of-living adjustments) helped to prop up the reported real earnings. Official real earnings today still have not recovered their inflation-adjusted levels of the early-1970s, and, at best, have been in a minimal uptrend for the last two decades (albeit spiked recently by negative headline inflation). Deflated by the ShadowStats (1990-Based) measure, real earnings have been in fairly-regular decline for the last four decades, which is much closer to common experience than the pattern suggested by the CPI-W. See the <u>Public Commentary on Inflation Measurement</u> for further detail.

Shown in *Graph CLW-8*, and as discussed in <u>Commentary No. 931</u>, both the "all-employees" and "production and nonsupervisory employees" categories showed a sharply slowing pace in annual growth in 2017. Presumably coming off more-positive economic circumstances, the patterns there are consistent with a renewed economic downturn, not with a new economic boom, and the current pace of decline is greater than the average tax reduction to be seen by consumers in the year ahead.

Not all economic downturns are reflected in the headline economic data. For example, industrial production indicated the U.S. economic downturn intensified in fourth-quarter 2014, enough to qualify as a new recession, which is consistent with the plot in *Graph CLW-8*. See the related discussions in *Commentary No.* 928 and *Commentary No.* 936.

Graph CLW-8: Annual Average of Weekly Earnings, Annual Percent Change (2000 to 2017)





When income growth is inadequate to support consumption growth, consumers often make up the difference in debt expansion. Yet, real Consumer Credit Outstanding has shown a patterns of declining annual real growth for the last several quarters, irrespective of the specific series, as reflected in the plots of real monthly year-to-year change in *Graph CLW-13*.

Consumer Credit: Lack of Expansion in Real Consumer Credit Constrains Economic Growth. The final five graphs on consumer conditions address consumer borrowing. Where debt expansion can help make up for a shortfall in income growth, expansion of consumer debt, which would help fuel expansion in personal consumption, has been nonexistent.

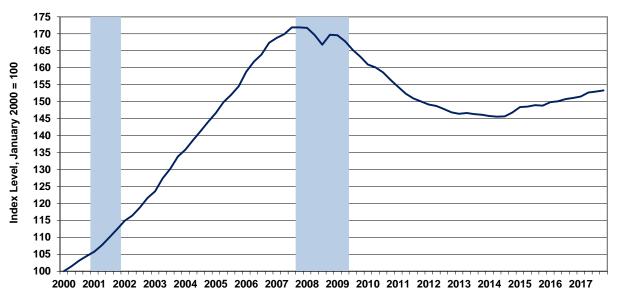
Quarterly Series. Consider Graph CLW-9 of Household Sector, Real Credit Market Debt Outstanding. The level of real household debt declined in the period following the Panic of 2008, reflecting loan defaults and reduced banking lending, and it has not recovered fully, based on the Federal Reserve's flow-of-funds accounting through fourth-quarter 2017, released on March 8th. Household Sector, Real Credit Market Debt Outstanding in fourth-quarter 2017 still was down by 10.8% (-10.8%) from its pre-recession peak of third-quarter 2007. That was against a revised third-quarter 2017 decline of 11.0% (-11.0%) [previously 10.9% (-10.9%)]. The flattened visual uptick at the latest point in Graph CLW-9 reflected a slowing in real year-to-year change from 1.72% [previously 1.70%] in second-quarter 2017, to 1.48% [previously 1.55%] in third-quarter 2017 and to 1.47% in fourth-quarter 2017. Such completes 41 straight quarters—a full decade-plus—of credit non-expansion, versus its pre-recession peak.

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

into the regular flow of commerce. The slight upturn seen in the series through 2015 and into 2016 was due primarily to gasoline-price-driven, negative CPI inflation, which continued to impact the system through second-quarter 2016 and intermittently into fourth-quarter 2017. Current activity also has reflected continuing relative strength from student loans, as shown in the *Graphs CLW-10* to *CLW-13*.

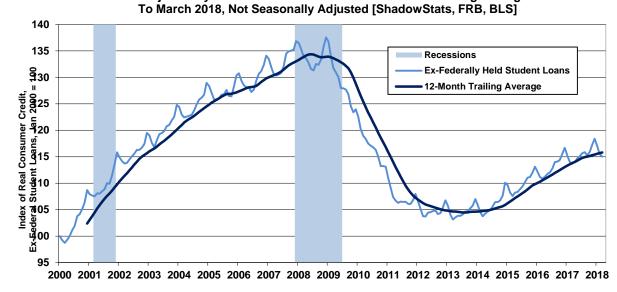
Graph CLW-9: Household Sector, Real Credit Market Debt Outstanding (2000 through Fourth-Quarter 2017)

Household Sector, Real Credit Market Debt Outstanding Deflated by Headline CPI-U. Indexed to First-Quarter 2000 = 100 To 4q2017, Seasonally-Adjusted [ShadowStats, FRB Flow-of-Funds, BLS]



Graph CLW-10: Real Consumer Credit Outstanding, Ex-Federal Student Loans (2000 to 2018)

ShadowStats Index of Real Consumer Credit Outstanding Ex-Federally Held Student Loans (Deflated by CPI-U) Unadjusted by Month and Smoothed with a 12-Month Trailing Average



Shown for comparative purposes is *Graph CLW-10*, real, not-seasonally-adjusted Consumer Credit Outstanding, Ex-Federally-Held Student Loans, has not recovered on a monthly, let alone the 12-month trailing-average basis used as a surrogate for seasonal adjustment. Discussed in the next section, this measure of consumer credit now has been through 123 months 41 quarters of non-expansion. That is reflected on a parallel basis through fourth-quarter 2017 reporting shown in *CLW-9*. Please note that the scale in *Graph CLW-10* is indexed to Consumer Credit Outstanding Ex-Federal Student Loans equal to 100 in January 2000. In *Graphs CLW-11* to 13, that indexing is applied to the total Consumer Credit Outstanding number, which is greater in amount than its dominant Ex-Federal Student Loans subcomponent.

Monthly Series. Indeed, the ShadowStats analysis usually focuses on the particular current and continuing weakness in monthly levels of consumer credit, net of what has been rapidly expanding government-sponsored student loans. Where detail on that series only is available not-seasonally-adjusted, the following three related graphs and the preceding *Graph CLW-10* are so plotted.

Shown through the March 2018 reading (released May 7th), the headline nominal monthly Consumer Credit Outstanding (*CLW-11*) is a subcomponent of the nominal Household Sector debt. Where *Graph CLW-12* reflects the real or inflation-adjusted activity for monthly Consumer Credit Outstanding terms of both level (*Graph CLW-12*) and year-to-year change (*Graph CLW-13*). *Graphs CLW-12* and *CLW-10* are comparable to the inflation-adjusted Household Sector plot in *Graph CLW-9*.

Post-2008 Panic, growth in outstanding consumer credit has continued to be dominated by growth in federally-held student loans, not in bank loans to consumers that otherwise would have fueled broad consumption or housing growth. Although in slow uptrend, the nominal level of Consumer Credit Outstanding (ex-student loans) has not recovered since the onset of the recession. These disaggregated data are available and plotted only on a not-seasonally-adjusted basis, with the pattern of monthly levels during one year reflecting some regular, unadjusted seasonal dips or jumps.

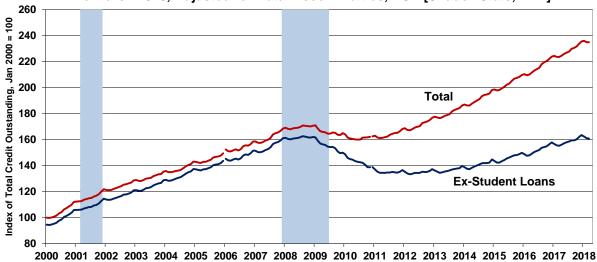
Adjusted for inflation, the lack of recovery in the ex-student loan area is more obvious. Where the recent monthly downside move in the not-seasonally-adjusted real consumer credit reflected something of a seasonal pattern, the pattern of year-to-year growth has been in downtrend, suggesting some tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in March 2018 was down from recovering its pre-recession peak of December 2007 by 16.0% (-16.0%). That is 123 months, 41 quarters or ten-plus years of non-expansion of credit. Year-to-year real growth shown in *Graph CLW-13* tends to resolve most monthly seasonal distortions in the not-seasonally-adjusted data.

[Graphs CLW-11 to CLW-13 begin on the next page.]

Graph CLW-11: Nominal Consumer Credit Outstanding (2000 to 2018)

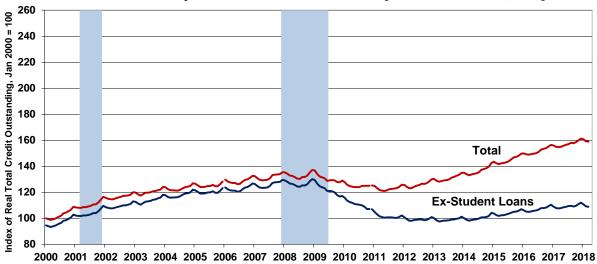
ShadowStats Index of Nominal Consumer Credit Outstanding Total and Ex-Federally Held Student Loans

To March 2018, Adjusted for Data Discontinuities, NSA [ShadowStats, FRB]



Graph CLW-12: Real Consumer Credit Outstanding (2000 to 2018)

ShadowStats Index of Real Consumer Credit Outstanding Total and Ex-Federally Held Student Loans (Deflated by CPI-U) To March 2018, Adjusted for Discontinuities, NSA [ShadowStats, FRB, BLS]



Graph CLW-13: Year-to-Year Percent Change, Real Consumer Credit Outstanding (2000 to 2018)





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

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WEEK, MONTH AND YEAR AHEAD

U.S. Dollar and Financial-Market Turmoil Remain at High Risk, Amidst Mounting Fiscal Concerns, Consumer Liquidity Issues and Non-Expanding, Real-World Economic Activity. In the context of intensifying, negative stresses on basic consumer-liquidity conditions, and weakening, underlying fundamental drivers of broad economic activity, discussed in today's and *Commentary No.* 947's *Opening Comments* and *Consumer Liquidity Watch*, the headline first-quarter GDP reflected difficult economic times hitting U.S. consumer activity, where the U.S. consumer remains the fundamental driving force behind the domestic business conditions. Negative reporting surprises likely will follow most key economic series in the regular economic reporting and annual benchmark revisions of the next couple months. The broad outlook has not changed. Weaker economic growth and renewed, faltering economic headlines should follow.

Broad outlooks for the U.S. economy, the U.S. dollar, gold, silver and the financial markets were reviewed in <u>Special Commentary No. 935</u>, covered there in the <u>Executive Summary</u> beginning on page 2, with <u>Contents</u> and links to <u>Major Sections</u> and <u>Graphs</u> beginning there on page 6. The faltering economic outlook also was reviewed in the <u>Opening Comments</u> and <u>Industrial Production Benchmark Revisions</u> sections of <u>Commentary No. 942-B</u>. The circumstances broadly have not changed from the related financial market vulnerabilities discussed in the <u>Hyperinflation Watch</u> of <u>Commentary No. 945</u>, incorporated here by reference. U.S. dollar and related market conditions will be reviewed in pending <u>Commentary No. 949</u>.

The U.S. dollar and financial markets remain at extraordinarily-high risk of intense, panicked declines, still likely in the very near term. Holding 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

CURRENT AND PENDING INFLATION RELEASES: Producer Price Index—PPI (April 2018).

The Bureau of Labor Statistics (BLS) released the April 2018 PPI, this morning, Wednesday, May 9th. The headline Final-Demand Producer Price Index (PPI-FD) gained a seasonally-adjusted 0.1% month-to-month in April 2018, versus 0.3% in March, and gained 2.6% year-to-year in April 2018, versus 3.0% in March 2018. Such was weaker than consensus expectations, which had been in a range of 0.2% to 0.3%. Full detail will be covered in *Commentary No. 949* of May 11th.

Consumer Price Index—CPI (April 2018). The Bureau of Labor Statistics (BLS) will release its April 2018 CPI, tomorrow, Thursday, May 10th, which will be covered in *Commentary No. 949* of May 11th. The headline April CPI-U likely will show a monthly gain of about 0.3%, plus-or-minus, in the context of a large monthly gain in unadjusted gasoline prices, offset partially by negative seasonal adjustments there. Unadjusted year-to-year annual inflation for April 2018 should come in around 2.5%, somewhat higher that the 2.4% level seen in March 2018. Those estimates also appear to be the current consensus outlook.

Positive Monthly Inflation Impact from Rising Gasoline Prices, Despite Negative Seasonal Adjustments. Unadjusted gasoline prices jumped month-to-month by a hurricane-induced 10.6% in September 2017, retreating by 5.4% (-5.4%) in October, rebounding by 2.6% in November, dropping by 3.3% (-3.3%) in December 2017, rising by 3.2% in January 2018, by 1.3% in February, by 0.1% (0.15% at the second decimal point) in March 2018 and now by 4.0% in April 2018, as estimated by the Department of Energy.

Negative seasonal adjustments, though, likely will soften that monthly gain of 4.0% to about 2.9%. That translates into a positive gasoline-price contribution of about 0.1% to the headline, seasonally-adjusted monthly CPI-U inflation. Likely boosted further by higher food and "core" (net of food and energy) inflation, the headline monthly CPI-U reading should come in around 0.3%, plus-or-minus, for April 2018.

Annual Inflation Rate. Noted in <u>Commentary No. 945</u>, year-to-year CPI-U inflation can be estimated for April 2018 reporting, dependent on the seasonally-adjusted month-to-month change, versus the adjusted, headline gain of 0.15% in the April 2017 CPI-U. The adjusted change is used here, since that is how consensus expectations are expressed. To approximate the annual unadjusted inflation rate for April 2018, the difference in April's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the unadjusted March 2018 annual inflation rate of 2.36%. Given an early guess of a seasonally-adjusted monthly gain of about 0.3% in the April 2018 CPI-U, that would leave the annual CPI-U inflation rate for April 2018 at about 2.5%, plus-orminus.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. In the context of historical background provided in <u>Special Commentary No. 885</u>: Numbers Games that Statistical Bureaus, Central Banks and Politicians Play, significant reporting-quality problems remain with most major economic series. Beyond pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended both to understate inflation and to overstate economic activity meaningfully—as generally viewed in the common experience of Main Street, U.S.A.—ongoing, near-term headline reporting issues often reflect systemic distortions of monthly seasonal adjustments.

Data instabilities—induced partially by the still-evolving economic turmoil of the last eleven years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn have provided particularly unstable headline economic results, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). While historical seasonal-factor adjustments are revised every month, based on the latest, headline monthly data, the consistent, revamped historical data are not released or reported at the

same time. That issue is discussed and explored in the labor-numbers related <u>Supplemental Commentary No. 784-A</u> and <u>Commentary No. 695</u>.

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

Combined with ongoing allegations in the last several years of Census Bureau falsification of data in its monthly Current Population Survey (the source for the BLS Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular - economic series (see <u>Commentary No. 669</u>). Investigative-financial/business reporter John Crudele of the New York Post has written extensively on such reporting irregularities: <u>Crudele Investigation</u>, <u>Crudele on Census Bureau Fraud</u> and <u>John Crudele on Retail Sales</u>.

LINKS TO PRIOR COMMENTARIES AND SPECIAL REPORTS

Prior Writings Underlying the Current *Special Commentaries* and a Sampling of Recent *Regular 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 missive also are built upon writings of prior years, including <u>No. 777 Year-End Special</u> <u>Commentary</u> (December 2015), <u>No. 742 Special Commentary: A World Increasingly Out of Balance</u> (August 2015) and <u>No. 692 Special Commentary: 2015 - A World Out of Balance</u> (February 2015). In turn, they updated the long-standing hyperinflation and economic outlooks published in <u>2014</u> <u>Hyperinflation Report—The End Game Begins</u> – First Installment Revised (April 2014) and <u>2014</u> <u>Hyperinflation Report—Great Economic Tumble</u> – Second Installment (April 2014).

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

Recent Commentaries. [Listed here are Commentaries of the last several months or so, plus recent Special Commentaries and others covering a variety of non-monthly issues, including annual benchmark revisions, dating back through 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 usually are published at least weekly and update the general economic and financial omarket outlook, as circumstances develop.

<u>Commentary No. 947</u> (April 27th) detailed the first estimate of Frist-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.

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

<u>Commentary No. 945</u> (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.

<u>Commentary No. 944</u> (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.

<u>Commentary No. 943</u> (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.

<u>Commentary No. 942-B</u> (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 IndexTM.

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

<u>Commentary No. 941</u> (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.

<u>Commentary No. 940</u> (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.

<u>Commentary No. 939</u> (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.

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

<u>Commentary No. 937</u> (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 IndexTM.

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

<u>Special Commentary No. 935</u> (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.

<u>Commentary No. 934-B</u> (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.

<u>Commentary No. 934-A</u> (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.

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

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

<u>Commentary No. 931</u> (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.

<u>Commentary No. 930-B</u> (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.

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

<u>Commentary No. 928</u> (December 22, 2017) covered November 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the third estimate of Third-Quarter 2017 GDP.

<u>Commentary No. 927</u> (December 19, 2017) reviewed November 2017 New Residential Construction (Housing Starts and Building Permits) and Cass Freight IndexTM, along with an expanded discussion on underlying economic reality and the financial markets.

<u>Commentary No. 926</u> (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."

<u>Commentary No. 925</u> (December 13th) reviewed November 2017 headline detail on the CPI and PPI, along with an update on the FOMC actions and the regular U.S. dollar, gold graphs.

<u>Commentary No. 924</u> (December 8, 2017) discussed the November 2017 Employment and Unemployment details and Conference Board Help Wanted OnLine[®] Advertising, the October Trade Deficit and Construction Spending and updated Monetary Conditions in November.

<u>Commentary No. 923</u> (November 29, 2017) covered the second estimate of Third-Quarter 2017 GDP, including initial estimates for Third-Quarter GNP, GDI and Per Capita Real Disposable Income, the October Trade Deficit, Cass Freight Index and New-Home Sales.

<u>Commentary No. 919-B</u> (November 6, 2017) provided more in-depth detail on the October 2017 labor detail.

<u>Commentary No. 919-A</u> (November 3, 2017) provided initial detail and background on October labor data, and reviewed the October 2017 Conference Board Help Wanted OnLine[®] Advertising, the September Cass Freight IndexTM, Trade Deficit and Construction Spending, and updated Monetary Conditions.

<u>Special Commentary No. 918-B</u> (October 30, 2017) provided a more comprehensive review of the initial third-quarter 2017 GDP detail, along with update versions of the *Hyperinflation Watch* and *Consumer Liquidity Watch*.

<u>Commentary No. 917</u> (October 26/27, 2017) reviewed September Industrial Production, New Orders for Durable Goods, New Residential Construction (Housing Starts and Building Permits) and New- and Existing-Home Sales.

<u>Commentary No. 916</u> (October 20th) reviewed the September 2017 Retail Sales details along with the headline Consumer and Producer Price Indices for September.

<u>Commentary No. 915</u> (October 6, 3017) reviewed the September 2017 Employment and Unemployment details, along with September 2017 monetary conditions.

<u>Commentary No. 913</u> (September 28, 2017) reviewed the third-estimate of second-quarter 2017 GDP, with a further consideration of some unusual economic reporting in the near future.

<u>Commentary No. 910</u> (September 15, 2017) reviewed the August 2017 releases of Industrial Production and nominal and real Retail Sales.

<u>Commentary No. 909</u> (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

<u>Commentary No. 908-B</u> (September 6, 2017) provided extended detail of the August 2017 Labor and Monetary conditions and July 2017 Construction Spending, along with coverage of the July 2017 Trade Deficit and the initial estimate of the 2017 Payroll Employment benchmarking.

<u>Special Commentary No. 904</u> (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).

<u>Commentary No. 903</u> (August 7, 2017) discussed new signals of economic deterioration in terms of political and FOMC considerations, along with headline coverage of the July labor data, M3 and The Conference Board Help Wanted OnLine[®], and June trade deficit and construction spending.

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

<u>Commentary No. 900</u> (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.

<u>Commentary No. 897</u> (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 IndexTM.

<u>General Commentary No. 894</u> (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.

<u>Commentary No. 890</u> (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 IndexTM, and the monthly trade deficit and construction spending.

<u>Special Commentary No. 888</u> (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.

<u>Commentary No. 887</u> (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.

<u>Special Commentary No. 885</u>, 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.

<u>Commentary No. 882</u> (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.

<u>Commentary No. 877</u> (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.

<u>Commentary No. 876</u> (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.

<u>Commentary No. 875</u> (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 IndexTM.

<u>General Commentary No. 867</u> (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.

<u>Commentary No. 864</u> (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.

<u>Commentary No. 861</u> (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.

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