# John Williams' <br> Shadow Government Statistics <br> Analysis Behind and Beyond Government Economic Reporting 

## COMMENTARY NUMBER 944

March Labor Conditions, Private Surveying, Trade Deficit, Construction Spending

April 8, 2018

No Such Thing as Free Trade
Worst-Ever Quarterly Real Merchandise Trade Deficit Remained on Track, Fueling Trade "Negotiations" and Dollar, Stock-Market and Economic Concerns

Increase in Nominal Balance-of-Payments Deficit in Goods and Services Reflected
Services Import of Intellectual Property for Broadcasting the Winter Olympics
March 2018 Household-Survey Count of Employed Declined by 37,000 (-37,000), While Full-Time Employed Dropped by 311,000 (-311,000)

March Payroll-Jobs Count Rose by 103,000 (by 53,000 Net of Revisions) but the Gain Was Not Statistically Different from Zero at the $\mathbf{9 5 \%}$ Confidence Level; Bloated January and February Payroll Levels Revised Lower March 2018 Unemployment Rates Declined Month-to-Month:
U. 3 Eased to $4.07 \%$ versus $4.14 \%$, U. 6 Declined to $8.00 \%$ from $8.24 \%$, and the ShadowStats-Alternate Declined to $\mathbf{2 1 . 7 \%}$ from $\mathbf{2 1 . 8 \%}$

Private Surveying of March Labor Conditions Showed Weakening Annual Growth and No Economic Expansion

Mixed but Faltering Annual Real Growth in Construction Spending Continued in a Pattern Last Seen Leading into the 2007 Recession

Annual Growth in March Money Supply Measures Slowed Sharply; Monetary Base Declined Year-to-Year;
Weakened Real Liquidity Growth Threatens Economic Activity

PLEASE NOTE: The next regular Commentary, planned for Wednesday, April 11th, will review March 2018 inflation: the Consumer and Producer Price Indices (CPI and PPI).

Best wishes — John Williams (707) 763-5786

Today's (April 8th) Opening Comments and Executive Summary. The Opening Comments reviews the latest headline economic details and trade deterioration in the context of unfolding first-quarter economic conditions, trade negotiations and financial market implications. Separately, the Conference Board Help-Wanted Online Advertising ${ }^{\circledR}$ (HWOL) is updated for March 2018. The Executive Summary (page 8) highlights reporting from March Employment and Unemployment, the February Trade Deficit and February Construction Spending.
The Reporting Detail (beginning on page 17) reviews in greater depth the March labor numbers, with background labor-reporting issues covered in the Supplemental Labor-Detail Background (page 33); the full reporting of the February Trade Deficit (page 41) and February Construction Spending (page 43).
The Hyperinflation Watch reviews current Monetary Conditions, including the initial estimate of year-to-year change in the March 2018 ShadowStats Ongoing Money Supply M3 and the latest detail on the Saint Louis Federal Reserve's Monetary Base (page 53).

The Consumer Liquidity Watch (page 57) reviews current liquidity conditions for consumers (not updated from its last publication, other than for links and minor language adjustments).
The Week, Month and Year Ahead (page 71) provides background on recent Commentaries and previews the reports of next week's March CPI and PPI inflation detail.

## OPENING COMMENTS

Opening Salvos of U.S. Trade Negotiations. Trade deficit concerns and negotiations increasingly have come to the fore, in the context of early indications of a headline softening in U.S. payrolls, and in conjunction with an inflation-adjusted real merchandise trade deficit headed for a record shortfall. That deficit should take a fair chunk out of real First-Quarter 2018 GDP,.

Discussed in the Opening Comments of Commentary No. 939, the deteriorating trade circumstance was discussed in terms of its stimulating trade negotiations, such as renegotiating NAFTA, various tariff impositions and increased risk of a "weaker dollar" policy. Circumstances have evolved in the last couple of weeks to include tariff impositions and threats going back and forth between the United States and China. Presumably those are opening "negotiations" for something of a restructured trading relationship.

Bad trade deals and arrangements indeed have damaged the U.S. economy, with the loss of U.S. productive capacity, wealth and jobs moving offshore. While running for office, Donald Trump promised to address that circumstance, and Main Street U.S.A. helped to elect Mr. Trump as President based on
expectations of changes in the trade policy arena. Discussed here regularly in recent years, there is a reason that "Free Trade" deals such as the North American Free Trade Agreement broadly will not work well for Main Street U.S.A.: production costs usually are quite a bit cheaper outside the United States.

Why Free Trade Deals Do Not Work for the U.S. Described in ShadowStats writings of March 9, 2005:
"Forgetting for a moment that none of Washington's free trade deals really have been based on free trade, or that the politicians pushing through flawed trade policies had agenda other than helping the U.S. economy, there is a basic flaw in the popular theory used to support free trade.
"The problem lies in the prop so common to theoretical economists: simplifying assumptions. Assume two countries are at full employment and do not trade with each other. Country A is very efficient at making widgets, but weak in making wadgets. Country B is very efficient at making wadgets, but weak in making widgets. Now if the two countries trade freely, Country A eventually will make all the widgets and Country B all the wadgets. The good news is that given the different countries' respective efficiencies, more total widgets and wadgets will be made than had the two economies not traded. Everyone is happy and better off..."
"The problem is that none of the United States' free-trade partners were or are at full employment, at least not as traditionally measured ... Free trade, under such a circumstance, means that manufacturing will shift to the low cost producer [wages, benefits, worker safety, environmental concerns, etc.] with the high cost producer losing jobs and national income. The economy of the high cost producer stagnates in a slowly deepening downward spiral, until costs and wages equalize among the trading partners.
"Thanks to the trade-policy geniuses of the current and recent administrations, the U.S. now suffers a $\$ 110.8$ billion deficit with its NAFTA trading partners (Mexico $\$ 45.1$ billion, Canada $\$ 65.8$ billion) up from $\$ 92.4$ billion in 2003 (Mexico $\$ 40.7$ billion, Canada $\$ 51.7$ billion). Before NAFTA was enacted ten years ago, the U.S. enjoyed small trade surpluses with both Mexico and Canada."

Nonetheless, that balance has shifted, with the 2017 deficit now at $\$ 98.8$ billion with NAFTA trading partners (but with Mexico jumping to $\$ 74.0$ billion and Canada falling to $\$ 24.8$ billion). Consider, the two largest trade deficits for the United States in 2017 by country were with China and Mexico (NAFTA partner). Shown in Table 1, the top two trade deficits by country accounted for more than half the net annual trade deficit (total of deficits and surpluses). The largest element of imbalance comes with the China circumstance, with U.S. imports from China, outweighing U.S. exports to China by an unusually strong ratio of 4-to-1, presumably one of the proximal triggers to the current negotiating turmoil.

## Table 1: U.S. Merchandise Trade Deficits - Two Largest by Trading Partner

| Top Two U.S. Trade Deficits by Trading Partner (China and Mexico) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U.s. <br> Trade <br> Deficit |  | U.S. Exports |  | U.S. Imports |  |
|  | \$ Billions | Percent | \$ Billions | Percent | \$ Billions | Percent |
| Total United States | (862.73) | 100.0\% | 1,546.76 | 100.0\% | 2,409.49 | 100.0\% |
| China | (395.82) | 45.9\% | 130.37 | 8.4\% | 526.19 | 21.8\% |
| Mexico | (73.99) | 8.6\% | 243.00 | 15.7\% | 316.99 | 13.2\% |
| Total of Top Two | (469.81) | 54.5\% | 373.37 | 24.1\% | 843.18 | 35.0\% |
| Sources: Census Bureau, using CIF Imports; ShadowStats. Rounding Differences. |  |  |  |  |  |  |

References to a trade war or the dumping of U.S. Treasury bonds by China keep surfacing, but what appears to be happening are opening elements of the public-side of the negotiations. At the moment, more likely than open financial conflict, is a compromise that will rebalance somewhat a heavily unbalanced system.

With an ongoing downturn of domestic economic circumstances and a likely "softening" of policy by the Federal Reserve's Federal Open Market Committee (FOMC), underlying factors already are in place or unfolding that should weaken the U.S. dollar. Accordingly, the U.S. dollar circumstance is reviewed in the Executive Summary coverage of the Trade Deficit, where it will be highlighted regularly, along with its regular coverage in the mid-month Hyperinflation Watch (usually with the monthly CPI coverage).

## Intensified Selling of the U.S. Dollar and Intensified, Negative Stock-Market Turmoil Remain Likely.

 In the context of deteriorating fiscal circumstances in Washington, D.C., given the recent budget package, the U.S. dollar is particularly vulnerable to heavy selling, especially in the context of a deteriorating economic outlook and trade-deficit circumstances. Watch out for unexpected weakness in the headline reporting of March Retail Sales and Industrial Production on April 16th and 17th. These issues will be reviewed in the Opening Comments and Hyperinflation Watch of Commentary No. 945 of April 11th.The FOMC still remains likely to abandon its current path of policy tightening, for a renewed and expanded quantitative-easing program to bolster an increasingly liquidity-challenged domestic banking system, in response to likely intensified systemic stresses an increasingly "unexpected" economic downturn. The market response to, or anticipation of such a shift in policy, also should pummel the value of the U.S. dollar in the global markets, spiking gold, silver and oil prices. Again, in turn, domestic equity and credit-market prices should fall sharply, as significant capital flees the weakening U.S. dollar and the domestic markets.

Holding physical gold and silver remain the ultimate hedges-stores of wealth-for preserving the purchasing power of one's U.S. dollar assets, in the context of liquidity and portability, during the difficult and highly inflationary times that lie ahead.

March 2018 Help-Wanted Advertising Gained for the Month and Year-to-Year (Albeit Slowing) but Continued in Economic Non-Expansion. The Conference Board Help-Wanted Online Advertising ${ }^{(8)}$ (HWOL) for March 2018 gained month-to-month by $2.2 \%$, having declined by $3.8 \% ~(-3.8 \%)$ in February, while the "New Ads" subcomponent rose by $0.4 \%$, having 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 "Total Ads" reflected a year-to-year gain of $3.7 \%$ in March 2018, unchanged from $3.7 \%$ in February 2018, following 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 softened to $0.2 \%$, in March 2018, having jumped 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 March, 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, March 2018 "Total Ads" were down by 15.9\% (-15.9\%), with "New Ads" down year-to-year by $25.6 \%$ ( $-25.6 \%$ ).

Annual growth began to slow in 2010 and turned negative year-to-year in late-2015 and early-2016. The shaded area in the graph 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-1: The Conference Board Help Wanted OnLine ${ }^{\circledR}$ to March 2018
The Conference Board Help Wanted OnLine ${ }^{\circledR}$
Year-to-Year Percent Change, Seasonally-Adjusted To March 2018 [ShadowStats, Conference Board, NBER]


Many thanks to The Conference Board for permission to publish the accompanying graph of year-to-year change in its Help Wanted OnLine ${ }^{\circledR}$ 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: The Conference Board Help Wanted OnLine®.

While much of this text is repetitive of prior discussions in Commentary No. 939, No. 852 and No. 820, 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.

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. Pre-natural disaster economic disruptions and the 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 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 odds increasing for an outright contraction in first-quarter 2018 GDP net of the short-lived, natural-disaster reporting disruptions, and the current, beginning unwinding of same.

The Conference Board Help Wanted OnLine ${ }^{\circledR}$ Advertising, Historical Background. [Please note: this section been updated from prior reporting, with the inclusion of comparative, historical Graph OC-2.] 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. 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-2). Although the new series tracked the newspapers with parallel shifts in annual growth, the new series relative changes were at more-positive levels. If the new series were shifted visually to match the old series, the current plot still would be underwater.

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 Special Commentary No. 885, 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 Commentary No. 820 of July 16, 2016, the HWOL is updated here through March 2018 (released April 4th). 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 happened here. Graph OC-2 show the post-World War II era.

## Graph OC-2: Historical Comparisons of Help-Wanted Advertising versus Economic Activity, Post World War II

Help-Wanted Advertising (Newspapers and HWOL ${ }^{\text {}}$ ), Yr-to-Yr \% Change 1945 to March 2018, Seasonally-Adjusted [ShadowStats, St. Louis Fed, Conference Board]


Since formal tracking switched to help-wanted advertising on the Internet ( $\mathrm{HWOL}^{\circledR}$ ), around 2005, seen with The Conference Board Help Wanted OnLine ${ }^{\circledR}$, that series has been through only one, formallyconfirmed 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 (in tandem with the final surveys of newspaper helpwanted online advertising, which continued for a while), and it has tracked to the downside in the current 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 ${ }^{\circledR \text {, }}$ 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 by better-quality economic series such as Industrial Production (see Commentary No. 942-B), and which still 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.

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 should still begin to catch 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 33.

EXECUTIVE SUMMARY: Employment and Unemployment—March 2017—Payrolls Growth Crashed, Amidst Downside Revisions, Yet Unemployment Rates Narrowed. While the seasonallyadjusted Household Survey numbers showed the March 2018 headline unemployment rate (U.3) holding at a 17-year low of $4.1 \%$ for the sixth straight month, it dropped at the second decimal point to $4.07 \%$ in March, versus $4.14 \%$ in February. That tied the current-cycle-low of October 2017, and it shifted by enough in the month to reduce the rounded headline one-decimal point rate by $0.1 \%$, more often than not.

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 $8.00 \%$ in March 2018, from $8.24 \%$ in February, which had risen from $8.19 \%$ in January and $8.08 \%$ in December.

Built upon the U. 6 rate, accounting for estimates of long-term "discouraged" and displaced workers no longer tallied by government surveying, the still-broader ShadowStats-Alternate unemployment rate notched lower to $21.7 \%$ in March 2018, from $21.8 \%$ in February and January, easing back to December's level of $21.7 \%$, all as reflected in accompanying Graph 1.

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


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. Such is confirmed in 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).

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 7.609 million individuals held multiple jobs in March 2018.

Counting each individual only once, the Household Survey showed the headline aggregate count of employed individuals to have declined by $37,000(-37,000)$ in March 2018, with full-time employed down by $311,000(-311,000)$ and part-time employed increasing by 310,000 . Those numbers never total exactly due to variations in the seasonal adjustment processes of the Bureau of Labor Statistics (BLS). Nonetheless, given the weak gains in March payrolls, the headline payroll increase likely reflected gains in part-time jobs rather than full-time jobs.

## Graph 2: Nonfarm Payroll Employment 2000 to Date



March 2018 payrolls rose month-to-month by an unusually-soft 103,000, which was statistically insignificant-indistinguishable from zero-at the $95 \%$ confidence interval. Net of prior-period revisions, that was a gain of just 53,000 . Where that was against an upwardly revised monthly gain of 326,000 [previously 313,000] in February, that revision was enabled only by a relative downside revision of $63,000(-63,000)$ to the level of jobs activity reported previously for January. Although no longer consistent with the unrevised, previous December 2017 reporting, the headline January 2018 monthly gain revised lower to 176,000 [previously 239,000 , initially 200,000] jobs. As usual, the headline monthly gains and the January 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 33.

Reflected in Graph 3, unadjusted annual payroll growth of $1.55 \%$ in March 2018, versus downwardly revised annual growth of $1.55 \%$ [previously 1.57\%] in February 2018 and the downwardly-revised recent, regular (as opposed to hurricane-distorted) near-term low of $1.42 \%$ [previously 1.45\%] in January 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 March 2018, Not Seasonally Adjusted [ShadowStats, BLS]


Separately, discussed in the Opening Comments, the March 2018 Conference Board Help-Wanted Online Advertising ${ }^{\circledR}$ survey showed slower monthly and annual gains in a state of continued economic nonexpansion.

Extended coverage on the March 2018 details of both the Household and Payroll Surveys follows in the Reporting Detail (see page 17).

Trade Deficit—February 2018—Real Merchandise Deficit Still on Track for Worst-Ever Quarterly Showing. The headline, full reporting of the February 2018 merchandise trade deficit kept first-quarter 2018 on track for the worst real quarterly U.S. merchandise trade deficit ever recorded. Although the headline January and February details now are running even with fourth-quarter 2015 for that distinction, monthly merchandise trade deficit deterioration likely continued in March. Odds are strong for not only a record, inflation-adjusted quarterly shortfall, but also for a major trade-deficit hit against the initial estimate of first-quarter 2018 GDP on April 27th. With the current fourth-quarter 2018 trade-deficit trend reflected in Graph 4, the political and economic issues related to this circumstance are discussed in the Opening Comments.

Nominal Balance of Payments Deficit Hit a Ten-Year High. The nominal (not adjusted for inflation) February 2018 balance-of-payments trade deficit widen to its worst reading since October 2008, to $\$ 57.665$ billion, up by $1.6 \%$ from a revised, widened deficit of $\$ 56.665$ billion in January 2018. The
widening in the monthly February deficit reflected a gain of $\$ 3.497$ billion in exports, more than offset by an increase in imports of $\$ 4.425$ billion (with rounding differentials).

The February 2018 deficit also widened by $\$ 13.167$ billion, or by $29.6 \%$, versus the year-ago $\$ 44.424$ billion trade shortfall for February 2017. Factors affecting the net monthly change in the February 2018 trade nominal balance of payments detail largely reflected offsetting imports and exports on the goods side deficit, but the usual services-side surplus was hit by a one-time $\$ 1.0$ billion increase of imported intellectual property for the broadcast rights for the Winter Olympics.

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

Real U.S. Merchandise Trade Deficit (Census Basis) Quarterly Deficit at Annual Rate (1994 to Early-1q2018 [Jan \& Feb]) Seasonally-Adjusted [ShadowStats, Census]


Quarterly Real Deficits Moving Towards 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 $\$ 760.2$ billion, versus $\$ 734.5$ billion in 2016. The 2017 deficit was the worst since 2007.

Based solely on the initial headline detail for January and February 2018, first-quarter 2018 is on track for an annualized quarterly deficit of $\$ 834.4$ billion [previously $\$ 836.7$ billion, based just on initial January detail]. If realized, that deficit would be tied with fourth-quarter 2005 as the worst real merchandise trade deficit in the history of the series. Again, odds favor a new record, with the first-quarter 2018 real deficit likely to be the worst in modern reporting.

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

Financial- vs. Trade-Weighted U.S. Dollar
Monthly Average Dollar Indices through March 2018 ShadowStats FWD-CNY and FRB Major Currency TWD Indices Indices, January 1985 = 100 [ShadowStats, FRB, WSJ]


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

Financial- vs. Trade-Weighted U.S. Dollar Monthly Average Year-to-Year Percent Change, to March 2018 ShadowStats FWD-C and FRB Major Currency TWD Indices
[ShadowStats, FRB, WSJ]

U.S. Dollar. Traditionally, mounting trade deficits tend to pummel the domestic currency's foreign exchange rate. A deteriorating trade deficit also can encourage the affected nation to attempt a competitive devaluation of its currency (see the Opening Comments).

Beginning with today's Commentary, the regular Trade Deficit coverage will include accompanying Graphs 5 and 6, plots of 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 March 2018 Financial- and Trade-Weighted U.S. Dollar are detailed in the Alternate Data tab of www.ShadowStats.com. These graphs also are repeated in the usual mid-month Hyperinflation Watch accompanying the monthly reporting of the Consumer and Producer Price Indices (CPI and PPI).

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. Of note, the largest and dominant segment of the near-record real merchandise trade deficit faced by the United States is with mainland China (see the Opening Comments).

Irrespective of any officially desired or designed direction for the U.S. dollar, it generally has been weakening in the last year. With Federal Reserve Chairman Jerome Powell having taken command of the Fed, policy actions may vary from recent experience. It remains the ShadowStats contention that a renewed weakening, not a strengthening, in the U.S. economy is at hand. A shift in market expectations in that direction would tend to back away from intensified Fed tightening and rate hikes, back towards some easing (perhaps renewed quantitative easing), all with implications for a weaker dollar, and potentially for some limited trade benefit, but also for increased domestic inflation and higher prices for wealth-preserving assets such as physical gold and silver.

## Construction Spending-February 2018-On Top of an 0.8\% Upside Revision to December,

 Nominal Spending in January and February Spending Was Flat-to-Minus. In the context of regular, unstable month-to-month reporting and parallel upside revisions to the levels of December 2017 and the January 2018 activity, February 2018 construction spending declined month-to-month and year-to-year, net of inflation. The upside revisions to December and January reflected stronger private construction and weaker public construction spending than had been reported previously (see the Reporting Detail).While the upside revisions of $0.8 \%$ to the level of December 2017 and $0.7 \%$ to January 2018 activity were enough push real year-to-year change positive for those two months, real year-to-year change sank anew with the February 2018 detail. Headline real February 2018 construction spending still was down by $20.7 \%(-20.7 \%)$ from its pre-recession peak, where, in contrast, March 2018 Construction Employment was down by $7.4 \%$ ( $-7.4 \%$ ) from recovering its pre-recession high.

Negative, annual real growth by quarter remained intact, as reflected in Graph 7, and with a February 2018 annual real contraction of $0.62 \%(-0.62 \%)$, first-quarter 2018 remain on track for its third consecutive quarter of year-to-year real contraction.

The signals here remain for an intensifying downturn, as last seen in the housing collapse of 2005/2006. Despite the monthly blips, real year-to-year change continued in annual contraction, in onset and scope, again, in a manner last seen during the housing collapse of 2006, 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.

February Spending. In the context of the upside revisions to December and January activity levels, nominal construction spending in February 2018 was a statistically-insignificant gain of $0.1 \%$, versus an unrevised monthly "unchanged" in January 2018 and an upwardly-revised gain of $1.6 \%$ in December 2017. Net of the Composite Construction Deflator inflation, those were real monthly changes of a $0.3 \%$ $(-0.3 \%)$ decline in February 2018, a $0.3 \%$ ( $-0.3 \%$ ) decline in January and a 1.4\% gain in December 2017.

Headline annual nominal growth rose by a statistically-significant $3.0 \%$ in February 2018, versus revised annual gains of $4.0 \%$ in January 2018 and $4.2 \%$ in December 2017. Net of inflation, February 2018 was down year-to-year by $0.6 \%$ ( $-0.6 \%$ ), having gained $0.5 \%$ in January 2018 and $0.8 \%$ in December 2017. Again, the preceding headline details are reflected in accompanying Graphs 7 and 8.

The statistically-insignificant, nominal $0.1 \%$ gain in aggregate monthly February 2018 spending, versus unrevised "unchanged" January 2018 spending, included a headline monthly contraction of $2.1 \%(-2.1 \%)$ in February 2018, versus an upwardly-revised gain of $2.3 \%$ in January Public Construction Spending. Private Construction Spending rose by $0.7 \%$ in February, having declined by $0.7 \%(-0.7 \%)$ in January. Within total Private Construction Spending, Residential Construction activity rose by $0.1 \%$ in February, having gained by a downwardly-revised $0.1 \%$ in January, while the Nonresidential Construction sector gained by $1.5 \%$ in February, having declined by a deeper $1.7 \%$ (-1.7\%) in January.

## 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 February 2018 Seasonally-Adjusted [ShadowStats, Census Bureau]


2000200120022003200420052006200720082009201020112012201320142015201620172018

Reflected in accompanying Graphs 8 to 11, 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
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 February 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 February 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 February 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 February 2018, Seasonally-Adjusted [ShadowStats, Census]

[Extended analysis of the latest economic releases follows in the Reporting Detail.]

## REPORTING DETAIL

## EMPLOYMENT AND UNEMPLOYMENT (March 2018)

March U.S. Labor Conditions Showed Weaker Payrolls Amidst Downside Revisions to Bloated January and February Numbers, Unemployment Rates Softened. In the context of the regular reporting distortions discussed in Special Commentary No. 885 as well as in the Supplemental LaborDetail Background following on page 33, incorporated here by reference, broad labor circumstances generally have weakened sharply, with some catch-up reporting shown in the March payroll-employment, despite the continued happy hype on the continued, nonsensically-low $4.1 \%$ headline unemployment rate.

The Bureau of Labor Statistics (BLS) released the details of its March 2018 Household Survey (Unemployment Rate) and Payroll Survey (Payroll Employment) on Friday, April 6, 2018.

Household Survey details show that despite headline U. 3 unemployment holding at $4.1 \%$ for the sixth straight month, general circumstances are not improving. 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, minimally, in March 2018. Nonetheless, the lower the reading of those ratios, the more-distressed are employment conditions, as correlated with the heavy negative impact of an estimated significant level of discouraged and displaced workers on the ShadowStats Alternate Unemployment Measure.

Where seasonally-adjusted Household Survey employment contracted by $37,000(-37,000)$ month-tomonth in March 2018, full-time employment dropped by $311,000(-311,000)$ while part-time employment (counting each individual employed only once, irrespective of the number of jobs held) rose by 310,000 . Those two series never add up to the aggregate due to seasonal-adjustment variations, but they have major implications this month for the Payroll Survey results, suggestive of the meager payroll gains resulting from a loss of full-time jobs to part-time jobs. The Payroll Survey counts each part-time job as an employment, counting multiple part-time jobholders as employed multiple times. The Household Survey also reflected a monthly drop of $255,000(-255,000)$ in multiple-jobholders.

Seen in Graph 24, annual growth in unadjusted payroll employment held at low levels seen historically with economies either coming out of recession, or in the current circumstance of falling into recession, although the March 2018 annual growth was minimally above the near-term January 2018 low, both the January and February 2018 annual growth rates revised lower, with March 2018 annual growth holding even with February.

The headline March 2018 monthly payroll gain of 103,000 jobs (53,000 net of prior-period revisions) was not statistically significant at the $95 \%$ confidence level as to whether or not the headline gain was different from zero. Downside revisions to the levels of prior reporting removed some of the bloat added into the payrolls with the February 2018 headline detail. Separately, where strong, headline February payroll gains in areas such as the construction industry, ran counter to headline estimates of industry activity, as discussed and reviewed in the Payroll Survey section of Commentary No. 939, those numbers, in particular, took some revised hit to the downside in the latest detail.

In terms of underlying reality, the seasonally-adjusted 103,000 monthly payroll jobs gain in March, likely was an outright contraction, 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 March 2018 unemployment at $4.1 \%$ for the U. 3 rate was much closer to $21.7 \%$, when viewed from the perspective of common experience. Extended assessment of headline labor-reporting distortions, again, is found separately in No. 885.

Household Survey: Counting All Discouraged and Displaced Workers, March 2018 Unemployment Notched Lower to $\mathbf{2 1 . 7 \%}$. The headline detail from the Household Survey continued nonsensically positive in March 2018, never having recovered from heavily-distorted hurricane impacts in September and October 2017, negligibly revised in December's annual benchmarking (revisions there were only to seasonal adjustments, not in correcting unadjusted levels of activity), 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.

Despite declining employment, unemployment declined even faster, down by $121,000(-121,000)$ in the month, with a resulting decline in the headline unemployment rate. Unusual and contradictory relative shifts in employment and unemployment activity frequently reflect the non-comparability on the month-to-month seasonally-adjusted data, where the published headline adjusted numbers have unique seasonal adjustments each month (see Supplemental Labor-Detail...).

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 March 2018 eased to $21.7 \%$, versus $21.8 \%$ in February and January. The broadest government unemployment measure U. 6 eased to $8.0 \%$ from $8.2 \%$ in February, while the headline U. 3 rate held at $4.1 \%$ for the sixth straight month, although it eased enough at the second decimal point to notch lower in most rounding circumstances. 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 33).

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 $4.07 \%$ in March 2018, followed $4.14 \%$ 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 $8.00 \%$ in March 2018, 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 $21.7 \%$ in March 2018, versus $21.8 \%$ 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 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 March 2018 U. 3 unemployment rate holding at a 17-year low, in theory a strong economic positive. Headline U. 3 unemployment largely remains a nonsense number.

Reflected in Graph 12, the headline U. 3 was $4.07 \%$ in March 2018, versus 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 $8.00 \%$ in March 2018, 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 $21.7 \%$ in March 2018, 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 January 2001, 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-topopulation 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. The recent upturn on the headline ShadowStats measure is in tandem with renewed weakening in the broad employment indicators.

The inverted-scale of the ShadowStats unemployment measure tends to move with the employment-topopulation ratio over time, which narrowed minimally to $60.36 \%$ in March 2018 versus $60.38 \%$ in February, against $60.14 \%$ in both January December, then down from higher, post-hurricane disruptions, with the ShadowStats unemployment measure narrowing slightly in March. Nonetheless, that ratio remained somewhat 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 A/ternate Unemployment Measure

ShadowStats-Alternate Unemployment Rate (Inverted Scale) Long-Term Discouraged/Displaced Workers Included (BLS Excluded Since 1994) To March 2018, Seasonally-Adjusted [ShadowStats, BLS]


## Graph 14: Civilian Employment-to-Population Ratio

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


Graph 15: Labor-Force Participation Rate
Participation Rate [Labor Force as a Percent of Population] To March 2018, Seasonally-Adjusted [ShadowStats, BLS]


Graph 15 shows the March 2018 participation rate (ratio of the headline labor force to the population) easing to $62.9 \%$ 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.

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 March 2018 Household-Survey reporting simply are not available, irrespective of any protestations to the contrary by the BLS.

The Economy Remains Far From Full-Employment. Argued here for many months, the U.S. economy is not at, or close to full employment. As with much-earlier comments from former Fed Chair Janet Yellen, Treasury Secretary Steven Mnuchin has raised "concerns as to the historically-high level of the participation rate (labor force/working-age population), despite an ongoing 17-year low in the headline U. 3 unemployment rate." Again, many thanks to the subscriber who forwarded the link: Treasury Secretary Mnuchin: Economy is not really at full employment yet (see Commentary No. 940).

Discussed in the Fedspeak portion of the Fed section of No. 859 Special Commentary and the Opening Comments of Commentary No. 870, certain members of the Federal Reserve Board (Commentary No. 827) have suggested that an unemployment rate near $5.0 \%$ (U. 3 now is at $4.1 \%$ ) reflected fullemployment conditions in the United States. Noted in Commentary No. 845, one would expect that "full employment" not only would be consistent with a certain headline unemployment rate, traditionally about $5.0 \%$, but also with a coincident labor-force participation rate, traditionally of about $66 \%$.

For example, at the formal onset of the recession in December 2007, the headline unemployment rate was $5.0 \%$, with the participation rate at a $66.0 \%$ near-term peak (higher peaks in participation, in the early 2000 's, were coincident with U. 3 unemployment of about 4.0\%). Full employment with unemployment at $5.0 \%$, also minimally should be reflected at a near-term peak in the participation rate, not at a trough. The March 2018 headline unemployment rate of $4.1 \%$, for example was in the context of a $62.9 \%$ participation rate. Yet, that participation rate was more consistent with a headline unemployment rate (U.3) of $8.5 \%$ instead of the headline $4.1 \%$. Where the count of Household Survey employed generally is not gimmicked, that $66 \%$ full-employment participation rate-consistent with the latest hyped "fullemployment" economy-generally was consistent with a U. 3 unemployment $70 \%$ above the hyped $5.0 \%$ full-employment unemployment rate, and well more than double the current headline U. 3 number. ${ }^{1}$ The reason for the heavily-distorted current unemployment detail remains that the numbers reflect the unusual nature of the post-recession drop in headline unemployment. The declining unemployment rate heavily has reflected discouraged 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 the GDP or relative employment. That detail was expanded upon and covered in Special Commentary No. 935; see also prior Commentary No. 943 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 March 28th third-estimate of fourth-quarter 2017 GDP, where the plot has been corrected for the understatement of inflation used in deflating the headline GDP.

[^0]Other graphs range from the February 2018 Cass Freight Index (Graph 17) to January 2018 U.S. Petroleum Consumption (Graph 18), the benchmark-revised February 2018 U.S. Industrial Capacity Utilization (Graph 19), related February Consumer Goods Production (Graph 20) and February Housing Starts (Graph 21) [Consider also Graph 31 of Real Construction Spending in the Reporting Detail on page 51, with all but the Petroleum Consumption graph from Commentary No. 941, Commentary No. 942-B and Commentary No. 943.

Graph 16: Corrected Real GDP through 4q2017, Third-Estimate
Corrected Real GDP
Nominal GDP Deflated by Implicit Price Deflator Adjusted for
Understatement of Annual Inflation
To 4q2017, Seasonally-Adjusted [ShadowStats, BEA]


Graph 17: Cass Freight Index for North America (2000 - February 2018), Indexed to January $2000=100$
Cass Freight Index ${ }^{\text {TM }}($ Jan $2000=100)$
To February 2018, Not Seasonally Adjusted
[ShadowStats, Cass Information Systems, Inc.]


Graph 18: U.S. Petroleum Consumption to January 2018
U.S. Product Supplied of Crude Oil and Petroleum Product Millions of Barrels per Month, Trailing Twelve-Month Average To January 2018, Not Seasonally Adjusted [ShadowStats, EIA]


Graph 19: Utilization of Total U.S. Industrial Production Capacity (1994 to February 2018)
Capacity Utilization: Total U.S. Industry to February 2018
Percent of Capacity, Seasonally-Adjusted [ShadowStats, FRB]


Graph 20: Industrial Production - Consumer Goods Sector (1994 - February 2018)
Production - Consumer Goods (2012 = 100) Level 1994 to February 2018, Seasonally-Adjusted [ShadowStats, FRB]


Graph 21: Housing Starts, Annual Rate by Month (1994 - February 2018)
Housing Starts (Six-Month Moving Average of Annual Rate by Month) 1994 to February 2018, Seasonally-Adjusted [ShadowStats, Census]


Headline Unemployment Rates. The headline March 2018 U. 3 unemployment rate of $4.1 \%$ [4.07 \% at the second decimal point] followed 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 $0.07 \%(-0.07 \%)$ in the March 2018 U. 3 was well shy of being statistically-significant $(+/-0.23 \%$ at the at the $95 \%$ confidence interval). Other than for the once-peryear 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 LaborDetail 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 $4.13 \%$ in March 2018, from $4.39 \%$ 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 March 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 March 2018 U. 6 unemployment rate declined to $8.00 \%$, from $8.24 \%$ in February, $8.19 \%$ in January, versus $8.08 \%$ 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 $8.10 \%$ in March 2018, versus $8.60 \%$ 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 March 2018 showed a reduced level of 1.454 million marginally attached, of which 450,000 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 ShadowStatsAlternate 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 March 2018 was 21.7\%, versus 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 33.

> Payroll Survey: March's Jobs Gain of 103,000 Was Just 53,000 Net of Revisions, Far from Being Statistically Significant-Different from Zero-at the 95\% Confidence Interval. In the context of heavily distorted headline reporting and inconsistent and non-comparable seasonal-adjustments, the headline month-to-month payroll employment gain in March 2018 was 103,000, versus 326,000 [previously 313,000] in February and 176,000 [previously 239,000] in January 2018, as reflected in Graphs 22 and 23. The upwardly revised 326,000 surge in February was somewhat misleading, where the seasonally-adjusted payroll level in February was revised lower by $50,000(-50,000)$, boosted by an even greater downside revision to January payrolls by $63,000(-63,000)$.

Non-Comparable and Inconsistent Seasonally-Adjusted Monthly Changes. The adjusted headline March total payroll gain detail was stated on a consistent basis with the January and February headline details, but not with prior periods, from which recent headline growth was borrowed (see the Supplemental Labor-Detail Background, page 33, for discussion on the various reporting distortions and gimmicks).

Headline Payroll Detail. The headline March 2018 payroll gain of 103,000 formally was statisticallyinsignificant $+/-135,000$ (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 326,000 in February and 176,000 in January, again see Graphs 22 and 23.

Annual percentage change in payroll employment, also gained, but remained in recession-signal territory with a $1.55 \%$ year-to-year increase in March 2018, versus a downwardly-revised $1.55 \%$ [previously $1.57 \%$ ] year-to-year increase in February 2018, and a downwardly-revised $1.42 \%$ [previously $1.45 \%$ ] year-to-year gain in unadjusted payrolls 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 lowlevel annual growth rates are seen either coming out of recession, or going into recession, but never seen consistently in the regular variability of ongoing, sustainable, normal economic activity, as discussed in Commentary No. 843. Current levels of annual growth in unadjusted payrolls likely are 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 nonrecovery 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 March 2018 [ShadowStats, BLS]


Graph 23: Nonfarm Payroll Employment, 1945 to Date
Nonfarm Payrolls
Seasonally-Adjusted Jobs to March 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 March 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 March 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 March 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 March 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 103,000 in March 2018, out of the household survey, full-time employment declined by $311,000(-311,000)$, with 310,000 gained in part-time employment, with multiple job holders (already counted as employed individuals) declining by 255,000 ( $-255,000$ ). Among other differences, the payroll survey is nonfarm, where the Household Survey covers agricultural employment. The suggestion here is that the headline payroll jobs gain likely reflected part-time jobs.

Year-to-year change in unadjusted full-time employment (Household Survey) dropped to 1.49\% in March 2018, versus 2.26\% in February 2018 and $1.97 \%$ in January 2018.

March 2018 Construction Payrolls Dropped 0.21\% (-0.21\%) Month-to-Month, Slowed to 3.71\% Year-to-Year and Remained Down by 7.4\% (-7.4\%) from Its Pre-Recession Peak. In the context of headline March 2018 payroll reporting, construction payrolls declined month-to-month, on top of downside revisions to seasonally-adjusted February and January activity, as reflected in Graph 34 in the Construction Spending section, page 49.

Headline Construction Detail. Headline March 2018 construction payrolls declined month-to-month by $0.21 \%(-0.21 \%)$ [down by $0.32 \%(-0.32 \%)$ net of revisions], versus revised gains of $0.92 \%$ [previously $0.86 \%$ ] in February and $0.40 \%$ [previously $0.57 \%$, initially $0.51 \%$ ] in January. Unadjusted year-to-year change slowed to $3.71 \%$ in March 2018, from a downwardly-revised gain of $4.14 \%$ [previously 4.18\%] in February 2018 and against an unrevised $3.61 \%$ gain in January 2018.

The payroll series remained down from its pre-recession peak by $7.4 \%$ ( $-7.4 \%$ ), while the real construction spending series remained down from its pre-recession high by $20.7 \%(-20.7 \%)$.

## [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 March 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 <br> (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.

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

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-tomonth 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 seasonallyadjusted, month-to-month Household Survey comparisons have no meaning, even for the headline month.

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

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 Special Commentary No. 885, entitled Numbers Games that Statistical Bureaus, Central Banks and Politicians Play), the BLS adds in upside monthly biases to the payroll employment numbers. The continual overstatement is evidenced usually by regular and massive, annual downward benchmark revisions (2011, 2012 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 Commentary No. 864). The initial estimate (summary number) for the 2016 benchmarking was for a downside revision in total payrolls for March of 2016 by 150,000 ( $-150,000$ ), down for March 2016 by 224,000 $(-224,000)$ in just private-sector employment (see Commentary No. 830). Those changes, however, were massaged and recast to an aggregate downside revision of $81,000(-81,000)$ jobs. That change then was used to impute adjustments back to April 2015, and it should have been carried forward to December 2016, but that did not happen, again, as discussed in the Opening Comments of No. 864 .

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

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

With the March 2013 revision, though, the BLS separately redefined the Payroll Survey so as to include 466,000 workers who had been in a category not previously counted in payroll employment. The latter event was little more than a gimmicked, upside fudge-factor, used to mask the effects of the regular downside revisions to employment surveying, and likely was the excuse behind an increase then in the annual bias factor, where the new category could not be surveyed easily or regularly by the BLS.
Elements here likely had impact on the unusual issues with the 2014 benchmark revision.
Abuses from the 2014 benchmarking were detailed in Commentary No. 694 and Commentary No. 695. With the headline benchmark revision for March 2014 showing understated payrolls of $67,000(-67,000)$, the BLS upped its annual add-factor bias by 161,000 for the year ahead.

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

March 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 March 2018 was 65,000 , previously up by 32,000 . The revamped, aggregate upside annual bias for the trailing twelve months through March 2018 is estimated from the current headline bias reporting at $1,104,000$, up by 212,000 or $23.8 \%$ from the last prior count of 892,000 in December 2017. That is a monthly average now of 92,000 , 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.

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

Positive assumptions-commonly built into government statistical reporting and modeling-tend to 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 92,000 jobs per month for the current year. As a result, in current reporting, the aggregate average overstatement of employment change easily exceeds 200,000 jobs per month (the underlying positive base-assumption upside bias, plus the monthly Birth-Death Model add-factor).
(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 4.793 million in March 2018, 5.096 million on a seasonally-adjusted basis. 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 March 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 March 2018 was $21.7 \%$, versus $21.8 \%$ 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 March 2018 ShadowStats reading was down by 160 basis points or $1.6 \%$ ( $-1.6 \%$ ) from the $23.3 \%$ series high seen in May 2014.

In contrast, the February 2018 headline U. 3 unemployment rate of $4.1 \%$ was down by 590 basis points or by $5.9 \%(-5.9 \%)$ from its peak of $10.0 \%$ in October 2009. The broader U. 6 unemployment measure of $8.0 \%$ in March 2018, was down by 920 basis points or $9.2 \%$ ( $-9.2 \%$ ) 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 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.

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 (February 2018)

Real Merchandise Trade Deficit Still on Track for Worst Quarterly Showing in Recorded History. Consistent with discussions in Commentary No. 939 and Commentary No. 943 (based on the advance estimate of the February goods deficit), the headline full reporting of the monthly February deficit kept first-quarter 2018 on track to be worst real quarterly U.S. merchandise trade deficit ever recorded, although the headline January and February details are running even with, tied with fourth-quarter 2015 for that distinction, as discussed below. Where the deteriorating deficits are direct subtractions from headline growth in Gross Domestic Product (GDP), the first-quarter 2018 trade deterioration remains an intensifying negative contributor to the looming first-quarter 2018 GDP headline numbers (April 27th), which likely will fall into negative territory, as discussed in the Opening Comments.

## February's Nominal Goods and Services Trade Deficit Topped \$57 Billion for First Time Since 2008.

The nominal February 2018 balance-of-payments trade deficit at $\$ 57.6$ billion was the worst reading since October 2008, the same superlative description was used for the break above $\$ 56$ billion in January. Before inflation adjustment, with oil breaking above $\$ 130$ per barrel in 2008, the nominal monthly deficit in goods and services had spiked sharply in 2008 to a near-record peak of $\$ 66.8$ billion in July.

For the upwardly-revised inflation-adjusted real merchandise trade in January 2018 of $\$ 70.0$ [initially $\$ 69.7$ ] billion, however, the same monthly superlative gets pushed back to being the worst since August 2006 ( $\$ 70.4$ billion), only topped minimally by two other independently spiked months, not otherwise trending, as has been seen recently. The initial February 2018 reading eased back, though, to $\$ 69.1$ billion.

If the first-quarter 2018 real merchandise trade deficit averages at the January and February 2018 levels, for an annualized quarterly shortfall of $\$ 834.4$ billion such would tie fourth-quarter 2015 as the worst real-quarterly merchandise trade deficit recorded in modern U.S. history. Chances remain strong, however, that the real first-quarter 2018 merchandise deficit will set an historic record. That circumstance is referenced in today's Opening Comments, discussed in the Real Merchandise Trade Deficit section, and plotted in Graph 4 in the Opening Comments and in Graph 28 here.

Import of Intellectual Property for Broadcasting the Olympics Accounted for the Headline Increase in February's the Nominal Balance of Payments Trade Deficit. The Bureau of Economic Analysis (BEA) and the Census Bureau (Census) reported Thursday, April 5th, that the nominal (not adjusted for inflation), seasonally-adjusted monthly trade deficit in goods and services for February 2018 widened on a balance-of-payments basis by $\$ 0.926$ billion, or by $1.6 \%$, to $\$ 57.591$ billion, versus a revised, widened deficit of $\$ 56.665$ [previously $\$ 56.601$ ] billion in January 2018. The widening in the monthly February deficit reflected a gain of $\$ 3.497$ billion in exports, more than offset by an increase in imports of $\$ 4.425$ billion (with rounding differentials).

The headline February 2018 deficit also widened by $\$ 13.167$ billion, or by $29.6 \%$, versus the year-ago $\$ 44.424$ billion trade shortfall for February 2017. Factors affecting the net monthly change in the February 2018 trade balance included increased exports of industrial supplies, automotive products, capital goods declining aircraft orders and industrial supplies, with some offset in declining pharmaceutical exports. On the import side were greater dollar volume in imports of capital goods, industrial supplies and foods, plus $\$ 1.0$ billion of imported intellectual property on the services side for the broadcast rights for the Winter Olympics.

Energy-Related Petroleum Products. February 2018 imported oil prices declined by an unadjusted 0.3\% $(-0.3 \%)$ to $\$ 54.61$ per barrel, versus $\$ 54.76$ in January 2018, but were up by $20.7 \%$ from $\$ 45.25$ per barrel in February 2017. Separately, unadjusted physical oil-import volume in February 2018 averaged 7.059 million barrels per day, down from 7.772 million barrels in January 2018 and down from 8.402 million in February 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 Early-1q2018 [Jan \& Feb]) With a Smoothed Four-Quarter Moving Average to 1 q2018 Seasonally-Adjusted [ShadowStats, Census]


Real February 2018 Merchandise Trade Deficit. Reporting detail for the real merchandise trade deficit is discussed here and plotted in Graph 28 (see also Graph 4 of the Executive Summary). The seasonallyadjusted details are in real terms, net of oil-price swings and other inflation (2009 chain-weighted dollars, as used in GDP deflation).

The February 2018 merchandise trade deficit (no services) narrowed to $\$ 69.105$ billion from a revised $\$ 69.958$ [previously $\$ 69.723$ billion] in January 2018, but widened sharply versus the deficit of $\$ 60.439$ billion in February 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 $\$ 760.2$ billion, versus $\$ 734.5$ billion in 2016. The 2017 deficit was the worst since 2007.

The first-quarter 2017 deficit narrowed minimally to a $\$ 746.6$ billion, with the second-quarter 2017 deficit widening 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 $\$ 801.7$ billion, the worst showing since second-quarter 2007.

Based solely on the initial headline detail for January and February 2018, first-quarter 2018 is on track for an annualized quarterly deficit of $\$ 834.4$ billion [previously $\$ 836.7$ billion, based just on initial January detail]. If realized, that deficit would be tied with fourth-quarter 2005 as the worst real merchandise trade deficit in the history of the series, in the modern economic history of the United States. Odds favor a new record, with the first-quarter 2018 real merchandise trade deficit likely to be the worst in modern reporting.

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 Announced for June 6th. The Census and the BEA Press Release of April 5th announced the annual revisions "updates" to the Balance of Payments Goods and Services as well as the Real (Chained-Dollar) Series for June 6, 2018. Where the inflation-adjusted real series will be recast from 2009 dollars into 2012 dollars, that is in parallel with what is planned for the July 27th comprehensive benchmark revision of the GDP back to 1929. Where these benchmarkings usually are negative, other than for gimmicked "positive" redefinitions of issues, look for the trade-deficit overhaul to be a major contributing factor to 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 number reflects seasonally-adjusted month-to-month change. Mentioned frequently here (see 2014 Hyperinflation Report-Great Economic Tumble for background), the extraordinary length and depth of the current business downturn/non-expansion and related, ongoing disruptions have distorted regular patterns of seasonality.

## CONSTRUCTION SPENDING (February 2018)

On Top of an $\mathbf{0 . 8 \%}$ Upside Revision to December, Nominal January and February Spending Were Flat, with Real February Down by $\mathbf{0 . 3 \%}(\mathbf{- 0 . 3 \%})$ for the Month and by $\mathbf{0 . 6 \%}(\mathbf{- 0 . 6 \%})$ for the Year. In the context of regular, unstable month-to-month reporting and parallel upside revisions to the levels of December 2017 and the January 2018 activity, February 2018 spending declined month-to-month and year-to-year, net of inflation. The upside revisions reflected stronger private construction versus weaker public construction spending.

While the upside revisions of $0.79 \%$ to the level of December 2017 and $0.74 \%$ to January 2018 activity were enough push real year-to-year change positive for those two months, year-to-year change nonetheless sank anew with the February 2018 detail. Headline real February 2018 construction spending still was down by 20.7\% (-20.7\%) from its pre-recession peak, where, in contrast, March 2018 Construction Employment was down by $7.4 \%$ ( $-7.4 \%$ ) from recovering its pre-recession high.

Revisions standardly go back only two months, subject to an annual benchmarking, which likely will be on July 2nd this year. Accordingly, the upwardly-revised December and January details are not necessarily consistent with the level of prior-year activity reported before December 2017. The Construction Spending series likely has seen some mixed, but continued distortions from recent natural-disaster-recovery bloating and the reversal of same.

## 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 February 2018 Seasonally-Adjusted [ShadowStats, Census Bureau]


2000200120022003200420052006200720082009201020112012201320142015201620172018

Fluttering Annual Growth Contraction. In the context of the $0.8 \%$ upside revision to activity in December 2017 and $0.7 \%$ in January 2018, what had been a minimal real year-to-year contraction in December 2017 [close to zero, down by $0.03 \%(-0.03 \%)$ net of inflation] revised to real gain of $0.79 \%$. Separately, negative real annual growth of $0.24 \%(-0.24 \%)$ in January 2018, had been the eighth straight month of year-to-year real contractions, but that revised to an annual gain of $0.51 \%$. Nonetheless, February 2018 showed a headline, annual real contraction of $0.62 \%$ ( $-0.62 \%$ ), with first-quarter 2018 still on track for its third consecutive quarter of year-to-year real contraction.

The signals here remain for an intensifying downturn, as last seen in the housing collapse of 2005/2006. Despite the monthly blips, real year-to-year change continued in 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). The broad housing and related construction sectors remain severely constrained by consumer liquidity issues, discussed in the Consumer Liquidity Watch.

February 2018 Construction Spending. The seasonally-adjusted, annualized nominal February 2018 Value of Construction Put in Place in the United States was $\$ 1,273.2$ billion, versus an upwardly-revised $\$ 1,272.2$ [previously $\$ 1,262.8$ ] billion in January 2018, versus an upwardly-revised $\$ 1,272.6$ [previously
$\$ 1,262.7$, initially $\$ 1,253.3$ ] billion in December 2017 and an unrevised $\$ 1,252.1$ billion in November 2017.

In the context of the upside revisions to December and January activity, nominal construction spending in February 2018 was a statistically-insignificant gain of $0.1 \%(0.07 \%)+/-1.8 \%$ (all confidence intervals are at the $95 \%$ level), versus an "unrevised" monthly "unchanged" at $0.0 \%$ [down by $0.04 \%(-0.04 \%)$ ] in January 2018. That was against an upwardly-revised gain of $1.6 \%$ [previously $0.8 \%$, initially $0.7 \%$ ] in December 2017 and an unrevised $1.2 \%$ in November. Net of the Composite Construction Deflator inflation (see the next section), those were real monthly changes of a $0.3 \%$ ( $-0.3 \%$ ) decline in February 2018, a $0.3 \%$ ( $-0.3 \%$ ) decline in January, a $1.4 \%$ gain in December 2017 and a $0.8 \%$ gain in November.

Headline annual nominal growth rose by a statistically-significant 3.0\% +/- 2.1\% in February 2018, versus revised annual gains of $4.0 \%$ [previously 3.2\%] in January 2018, $4.2 \%$ [previously $3.4 \%$, initially 2.6\%] in December 2017 and an unrevised 2.0\% in November 2017. Net of inflation, February 2018 was down year-to-year by $0.6 \% ~(-0.6 \%)$, having gained $0.5 \%$ in January 2018 and $0.8 \%$ in December 2017, versus an unrevised annual contraction of $1.5 \%(-1.5 \%)$ in November 2017. Again, the preceding headline details are reflected in accompanying Graphs 29 to 23 and in Graph 8 in the Executive Summary.

The statistically-insignificant, nominal $0.1 \%$ gain in aggregate monthly February 2018 spending, versus unrevised "unchanged" January 2018 spending, included a headline monthly contraction of 2.1\% (-2.1\%) in February 2018, versus an upwardly-revised gain of $2.3 \%$ in January Public Construction Spending. Private Construction Spending rose by $0.7 \%$ in February, having declined by a deeper $0.7 \%(-0.7 \%)$ in January. Within total Private Construction Spending, Residential Construction activity rose by $0.1 \%$ in February, having gained by a downwardly-revised $0.1 \%$ in January, while the Nonresidential Construction sector gained by $1.5 \%$ in February, having declined by a deeper $1.7 \%$ ( $-1.7 \%$ ) in January.

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 Commentary No. 829, 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 $3.67 \%$ for February 2018, versus 3.45\% [previously 3.46\%] for January 2018 and $3.37 \%$ [previously $3.39 \%$, initially $3.35 \%$ ] for December 2017. Month-to-month inflation was $0.38 \%$ for February 2018, $0.24 \%$ [previously $0.23 \%$ ] for January 2018 and $0.20 \%$ [previously $0.19 \%$, initially $0.15 \%$ ] for December 2017.

Continuing Quarterly Year-to-Year Real Contractions. In the context of the initial February 2018 reporting in this regularly, heavily-revised and volatile detail, first-quarter 2018 was on early track for real year-to-year decline of $0.1 \%(-0.1 \%)$, with annualized real quarterly growth of $3.2 \%$. If the annual contraction holds, such would be the third consecutive quarter underwater.

In the context of upside revisions to December activity, net of inflation, fourth-quarter 2017 activity grew at an annualized pace of $6.7 \%$ [previously $5.5 \%$ ], having contracted year-to-year by $0.5 \%(-0.5 \%)$ [previously $0.8 \%(-0.8 \%)]$.

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

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

The pattern here, again, has been one of consistent annual slowdown, of form not seen since the housing crash before the headline 2007 recession.
[Graphs 30 to 33 begin on the next page.]

Graph 30: Total Nominal Construction Spending
Nominal Total-Construction Spending to February 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 February 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 February 2018
Seasonally-Adjusted Annual Rate [ShadowStats, Census]
$■$ Public Spending $\square$ Private - Nonresidential $\quad$ Private - Residential


Graph 33: Aggregate Real Construction Spending by Major Category (Billions of November 2009 Dollars)
Real Construction Spending (\$2009) to February 2018
Seasonally-Adjusted Annual Rate [ShadowStats, Census]
$■$ Public Spending $\square$ Private - Nonresidential $\square$ Private - Residential


March 2018 Construction Payrolls Declined by 0.2\% (-0.2\%) Month-to-Month, Rose 3.7\% Year-toYear, but Remained Down by 7.4\% (-7.4\%) from the Pre-Recession Peak. Discussed earlier in the Employment and Unemployment section (see page 32), March 2018 construction payrolls declined month-to-month by $0.2 \%(-0.2 \%)$ [by $0.3 \%(-0.3 \%)$ net of prior-month revisions] and by gained $3.7 \%$ year-toyear, as plotted in accompanying Graph 34. The seasonally-adjusted March 2018 construction-payrollemployment level was shy of recovering the pre-recession high for the series by $7.4 \%$ ( $-7.4 \%$ ). Again, real Construction Spending remained shy of recovering its pre-recession high by $20.7 \%$ (-20.7\%) in February 2018.

Graph 34: Construction Employment (Payroll Survey) - 2000 to Date
Construction Payroll Employment to March 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, 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 33 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 February 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 Commentary No. 942-B) - 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.

Note the comparative monthly 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 February 2018 (see Commentary No. 941). Keep in mind that the construction spending series is in nominal terms, while housing starts reflect unit volume, which should be parallel with the inflationadjusted 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 NonResidential Construction spending surged beyond its pre-recession nominal peak in 2016, hitting a new high in December 2016 and broadly backing off same since. Public Construction spending, which is $98 \%$ nonresidential, had continued in a broad downtrend into 2014, with intermittent bouts of fluttering stagnation and then some upturn in 2015. In 2016 and into 2017, the nominal series still appeared to have fluttered into and out of a low-level top, now having move higher in recent months, at the upper end of recent fluttering, 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 prerecession peaks.
[Graphs 35 to 38 begin on the next page.]

## Graph 35: Nominal Private Residential Construction Spending to Date

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


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

## Aggregate Housing Starts (Monthly Rate)

Single- and Multiple-Unit Starts
To February 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]


Graph 37: Nominal Private Nonresidential Construction Spending to Date
Nominal Private Nonresidential Construction to February 2018 Seasonally-Adjusted Annual Rate [ShadowStats, Census]


Graph 38: Nominal Public Construction Spending to Date
Nominal Public Construction to February 2018
Seasonally-Adjusted Annual Rate [ShadowStats, Census]

[The Hyperinflation Watch begins on the next page.]

## HYPERINFLATION WATCH

## MONETARY CONDITIONS

## Beware Continuing, Unexpected Economic Weakness and Continued, Mounting Trade Deficit

 Pressures! In the context of the weaker-than-expected headline, March payroll employment details, consensus expectations have some reason to begin wavering as to the timing and frequency of future rate hikes out of the Federal Open Market Committee (FOMC) of the Board of Governors of the Federal Reserve System.Nonetheless, as regularly discussed here, unexpected, negative economic shocks loom, with retail sales and industrial production likely to show continued negative catch up (and negative benchmarking for retail sales) following recent hurricane-recovery distorted boosts, as well as intensifying issues with the labor numbers. Systemic reporting distortions now generally have passed from the numbers. As largely discussed previously, several non-consensus factors loom:

- Discussed below, money supply growth has shown a pattern of intensifying weakness, common to the onset of economic downturns.
- Noted last month, "The [March 21st] rate-hike 'clinching,' strong February jobs report, was of questionable quality [see the Reporting Detail of Commentary No. 939] and should be followed by a series of much weaker, related underlying detail reports such as retail sales and industrial production..." let alone the downside revisions just seen in the headline March jobs report.
- The Fed may come under political pressure from the Administration to back off its support of the U.S. dollar, as discussed anew in today's Opening Comments.
- In particular, though, as market sentiment increasingly shifts towards a weaker economy, pressure and expectations should mount on the FOMC to pull back from further tightening.

With the U.S. central bank's primary concern being the maintenance of solvency and liquidity in a stilltroubled banking system, intensifying economic and financial stresses remain likely to cause the FOMC to back off its formal, 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.

Money Supply M3 Annual Growth Eased to 4.4\% in February and March 2018, from a Downwardly-Revised $4.5 \%$ in January 2018, 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

March 2018 held at a six-month low of 4.4\% (4.41\%), versus 4.4\% (4.43\%) in February 2018, and against a downwardly-revised 4.5\% [previously 4.6\%, initially 4.5\%] in January 2018.

Those growth rates were against unrevised annual gains of $4.6 \%$ in December 2017, 4.5\% in November 2017 and $4.7 \%$ in October 2017. That October annual growth rate remains the highest level of year-toyear monthly growth 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, until an unrevised 3.0\% in March 2017. That had been the weakest year-to-year change since July 2012.

Take out headline inflation (see Graph 11 in Commentary No. 940), 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 $3.9 \%$ in March 2018, versus $4.0 \%$ in February 2018, its lowest annual growth rate since December 2010, following unrevised annual growth of $4.2 \%$ in January 2018, 4.7\% in December 2017, 4.6\% in November 2017, $5.0 \%$ in October 2017, $5.1 \%$ 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 24-Month Low. Annual nominal growth in March 2018 M1 slowed to $6.5 \%$, its lowest annual growth rate since March 2016, down from a revised 6.7\% [previously 6.8\%] annual gain in February 2018, and an unrevised 7.6\% in January 2018, 7.7\% in December 2017, 7.6\% in November 2017, $7.5 \%$ 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.

Graph HW-1: Comparative Money Supply M1, M2 and M3 Yr-to-Yr Changes through March 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 for both M1 and M2, than for M3, although that difference narrowed recently, with M3 growth now declining in tandem, with M1 and M2, where M3 narrowly had overtaken slowing annual M2 growth last month. With all three money measures either virtually unchanged or negative month-to-month, along with sharply slowing annual growth rates, the patterns here are suggestive of weakening or declining economic activity.

Where there had been some accelerating pace of annual growth in M1 into December, that likely reflected some movement into cash/near-cash. 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 or less-negative movement in annual M3 growth may have 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 reflect softening business activity at the moment, more than anything else does. The latest estimates of level and annual changes for March 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.

Annual Change in the Monetary Base Turned Negative for First Time Since March 2016. As annual growth in M3 jumped in recent months, 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. Both series peaked near-term in December 2017 and 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 now to an annual contraction of 2.3\% (-2.3\%) at March 28th. 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 begins to sell its Treasuries and Mortgage-Backed Securities more heavily, as part of its planned "balance sheet normalization," which has begun to happen, or otherwise to embark upon expanded quantitative easing, amidst increasing liquidity stresses in the banking system from deteriorating economic conditions. The FOMC accelerated its liquidation of Treasury notes and bonds coming into late-January, the first week of February 2018, likely triggering liquidity problems that exacerbated heavy stock market selling at the time.

Yet, 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 Federal Reserve Board's Federal Open Market Committee (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 recent money growth had begun to look like a potential covert shift in FOMC policy towards an easing, that has moved towards a tightening, with a vengeance. These issues will be reviewed in the next week's Hyperinflation Watch.

Graph HW-2: Saint Louis Fed Monetary Base, Billions of Dollars (1984 to March 28, 2018)
St. Louis Fed Adjusted Monetary Base
Bi-Weekly to March 28, 2018, Seasonally Adjusted [ShadowStats, St. Louis Fed]


Graph HW-3: Year-to-Year Percent Change, Saint Louis Fed Monetary Base (1985 to March 28, 2018)
St. Louis Fed Adjusted Monetary Base, Yr/Yr \%
Bi-Weekly to March 28, 2018, Seasonally Adjusted
[ShadowStats, St. Louis Fed]

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

## CONSUMER LIQUIDITY WATCH

## CONSUMER LIQUIDITY, INCOME, CREDIT AND RELATIVE OPTIMISM. [Not updated from prior publication other than for minor revisions needed to language or for links.]

Mounting Consumer Liquidity Stresses Constrain Broad Economic Activity. The U.S. consumer faces increasing financial stress, which had been mirrored in softening fundamental 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 have passed in the latest headline economic data. Indeed, as early first-quarter 2018 economic activity continues to turn down (see the Opening Comments and Commentary No. 940). Such effects are discussed in the separate analyses of relevant series in covered in the regular ShadowStats Commentaries. Where there have been recent signals of faltering consumer liquidity (see Consumer Credit Outstanding and Real Earnings), headline consumer optimism have moved off recent, along with softening underlying economic reality. The initial release of the Conference Board's March 2018 Consumer-Confidence Index ${ }^{\circledR}$, took a hit the context of a downside revision to February's prior reading, and the full-March Sentiment, revised lower from its "advance" estimate.

Monthly series that have faced the most severe, disaster-triggered reporting disruptions, where headline details have yet to stabilize or correct, still include Household Survey Employment and Unemployment. Retail Sales and Industrial Production appear to have stabilized, and broadly have begun to soften anew, but they still need to subside to levels stable with normal consumption activity and inventories. Despite the somewhat slower Fourth-Quarter 2017 GDP growth, the series remains heavily bloated from the disaster-distortions. Odds for an outright quarterly contraction in real First-Quarter 2018 GDP continue strengthen (see today's Opening Comments).

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 Special Commentary No. 888, 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 realworld 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 liquiditystarved 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. On top of the December 2017 readings pulling back sharply for both The Conference Board's ConsumerConfidence Index ${ }^{\circledR}$ (Confidence), and the University of Michigan's Consumer Sentiment Index (Sentiment), January 2018 Confidence and Sentiment readings were minimally-positive and down, with the February numbers rising anew. A renewed surge in the "advance" March 2018 Sentiment, though went counter to the full-month release of the March 2018 Confidence number on March 27th. That March Sentiment reading, however revised lower in its "final" reading of March 29th.

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 peaks by $11.8 \%$ ( $-11.8 \%$ ).

On a monthly basis the full-March 2018 Sentiment measure still is at its highest level since January 2004, currently down by $2.3 \%$ ( $-2.3 \%$ ) from that interim January 2004 peak.

Again, for both the Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index ${ }^{\circledR}$ (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 pre2007 recession highs, yet the still-high moving averages have slowed in their gains, having begun to falter in September 2017, before the storm-distorted, unusual headline surges in October and November activity and related headline economic 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 ${ }^{\circledR}$ 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 Commentary No. 764), 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 shortlived 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 in 2014, for second-and third-quarter 2015 and for third-quarter 2016 and into third-quarter 2017. In current environment of 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.

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.
[Graphs CLW-1 to CLW-3 begin on the next page.]

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

Consumer Confidence Survey ${ }^{\text {® }}$-- Conference Board
Monthly and 3-Month Moving-Average Index (Jan 2000 = 100) To March 2018, Seasonally-Adjusted [ShadowStats, Conference Board]


Graph CL W-2: Consumer Sentiment (2000 to 2018)
Consumer Sentiment Index -- University of Michigan
Monthly and 3-Month Moving-Average Index (Jan 2000 = 100)
To March 2018, Not-Seasonally-Adj [ShadowStats, Univ of Michigan]


Graph CL W-3: Comparative Confidence and Sentiment (6-Month Moving Averages, 1970 to 2018)
Consumer Confidence and Consumer Sentiment Indices
Six-Month Moving Averages, 1970 to March 2018
[ShadowStats, Conference Board, University of Michigan, NBER]


2016 Annual Real Median Household Income Still Was Below Its 2007 Pre-Recession High, Below Activity in the Late-1990s, About Even with the Mid-1970s. The measure of real monthly median household income, which was provided by www.SentierResearch.com, generally can be considered as a monthly version of the annual detail shown in Graph CLW-4, based on the most-recent annual detail released by the Census Bureau and as discussed the Opening Comments of Commentary No. 909.

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

Annual Real Median Household Income Index (2000-2016)
Adjusted for (2013-2014) Discontinuities, Deflated by Headline CPI-U [ShadowStats, Census Bureau, Bureau of Labor Statistics]


Last Monthly Estimate Showed Stagnating Monthly Real Growth. Last reported by Sentier Research, in what appears to have been the final estimate for the series, May 2017 Real Median Household Income was statistically unchanged, despite a boost from falling gasoline prices. Discussed in General Commentary No. 894 , and in the contexts of then-faltering gains in post-election consumer optimism, and inflation-adjusted activity boosted by declining headline Consumer Price Index (CPI-U) inflation (weakened by seasonally-adjusted gasoline price declines), May 2017 Real Median Monthly Household Income was "statistically unchanged" (a statistically-insignificant monthly gain of $0.10 \%$ ). That followed a statistically-significant monthly gain of $1.00 \%$ in April 2017. Shown in Graph CLW-4, such enabled May 2017 real monthly median household income to hold a level regained in April and otherwise last seen in February 2002. Year-to-year real median household income rose to $2.44 \%$ in May 2017, the highest level since June 2016, following an annual gain of 1.57\% in April 2017 (see Graph CLW-5).

Where real monthly median income plunged into the headline trough of the economic collapse in 2009, it did not then rebound in tandem with the headline GDP activity. When the GDP purportedly started its solid economic recovery in mid-2009, the monthly household income numbers nonetheless plunged to new lows, hitting bottom in 2011. The income series then held in low-level stagnation, until collapsing gasoline prices and the resulting negative CPI-U inflation drove a post-2014 uptrend in the inflationadjusted monthly income index. The index approached pre-recession levels in the December 2015 reporting, but it remained minimally below the pre-recession highs for both the formal 2007 and 2001 recessions until recent months. Real median household income had the potential to resume turning down anew, as the headline pace of monthly consumer inflation picked up anew, with the August 2017 CPI.

Nonetheless, the most-recent recent "rebound" reported in the series still left consumers financially strapped. Where lower gasoline prices had provided some minimal liquidity relief to the consumer, indications are that any effective extra cash largely was used to help pay down unsustainable debt or other obligations, not to fuel new consumption. Except for mixed gyrations in first-half 2017, the effects of changing gasoline prices in the headline CPI-U generally had reversed, pushing headline consumer inflation higher and beginning to push real income lower.

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.

Graph CL W-5: Monthly Real Median Household Income (2000 to May 2017) Index, January 2000 = 100
Monthly Real Median Household Income Index
Deflated by Headline CPI-U, January 2000 to May 2017 (Final)


Graph CLW-6: Monthly Real Median Household Income (2000 to May 2017) Year-to-Year Change
Monthly Real Median Household Income Yr/Yr Change Deflated by Headline CPI-U, January 2001 to May 2017
Seasonally-Adjusted [ShadowStats, www.SentierResearch.com]


Real Average Weekly Earnings—February 2018—Headed for a Third-Consecutive, Quarterly Contraction. For the production and nonsupervisory employees category-the only series for which there is a meaningful history (see the Executive Summary of Commentary No. 940), real average weekly earnings gained $0.8 \%$ in February 2018, but declined in January 2018 by a deeper 1.1\% ( $-1.1 \%$ ), setting up first-quarter 2018 as a likely, third-consecutive quarter of contraction in real earnings. Based on the latest detail, the early trend for first-quarter 2018 is for an annualized contraction pace of $1.8 \%(-1.8 \%)$.

That also would be the fifth real quarterly contraction of the last six quarters. See the Reporting Detail for further information.

Graph CL W-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 February 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 CPIW. See the Public Commentary on Inflation Measurement for further detail.

Shown in Graph CLW-8, and as discussed in Commentary No. 931, 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.

Annual Average Real Weekly Earnings, Percent Change To December 2017, Seasonally-Adjusted [ShadowStats, BLS]


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

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


Graph CL W-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
To January 2018, Not Seasonally Adjusted [ShadowStats, FRB, BLS]


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 121 months 40-plus quarters of non-expansion. That is reflected on a parallel basis through fourth-quarter 2017 reporting shown in $C L W-9$. Please note that the scale in Graph 10 is indexed to Consumer Credit Outstanding Ex-Federal Student Loans equal to 100 in January 2000. In Graphs 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-seasonallyadjusted, the following three related graphs and the preceding Graph CLW-10 are so plotted.

Shown through the January 2018 reading (released March 7th), the headline nominal monthly Consumer Credit Outstanding (CLW-11) is a subcomponent of the nominal Household Sector debt. Where Graph $C L W$ - 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 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 January 2018 was down from recovering its December 2007 pre-recession peak by $14.3 \%$ ( $-14.3 \%$ ). That is 121 months or a full, ten-plus years of non-expansion of credit. Year-to-year real growth shown in Graph $C L W$-13 tends to resolve most of the monthly distortions in the not-seasonally-adjusted data.
[Graphs CLW-11 to CLW-13 begin on the next page.]

## Graph CL W-11: Nominal Consumer Credit Outstanding (2000 to 2018)



Graph CL W-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)


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

## WEEK, MONTH AND YEAR AHEAD

Instabilities and Turmoil in the U.S. Dollar and the Financial-Markets Remain at High Risk, in the Context of an Increasingly-Faltering, Non-Expanding Real-World Broad Economic Activity. Updated outlooks for the U.S. economy, the U.S. dollar, gold, silver and the financial markets were reviewed in Special Commentary No. 935, covered there in the Executive Summary beginning on page 2, with Contents and links to Major Sections and Graphs beginning on page 6. The faltering economic outlook also was reviewed in the Opening Comments and Industrial Production Benchmark Revisions sections of Commentary No. 942-B. Related financial market vulnerabilities also are discussed in today's Opening Comments in the context of the latest economic reporting and unfolding trade negotiations. These matters also will be reviewed in the Opening Comments and Hyperinflation Watch of Commentary No. 945, planned for April 11th, updating similar coverage in Commentary No. 940.

Conditions Continue to Darken. Natural-disaster-impact from late-2017 continued to unwind in most headline monthly economic reporting of January and February and now with some indication the March 2018 payrolls. These elements have suggested an intensifying risk for an outright quarterly contraction in the initial estimate of First-Quarter 2018 GDP on April 27th, particularly with the deteriorating trade deficit discussed in the Opening Comments and in Commentary No. 937. Increasingly, headline economic details and pending benchmark revisions are likely to disappoint market expectations.

The real-world economy is not recovering or booming as advertised, despite heavy hype in the press of a booming, full-employment economy, and in the context recent FOMC tightening actions.

If not already there, reporting in most series should be back to normal (allowing for hurricane disruptions and recovery) with the pending headline reporting of March 2018 economic activity, as discussed in General Commentary No. 929. Most series increasingly should reflect "unexpected" downtrending economic activity. Where misleading, recent headline details had contributed to a manic stock market, that mania is vulnerable to rapid unwinding, a process should accelerate as market perceptions increasingly shift towards renewed economic downturn.

An unhappy period of market readjustment to underlying real-world circumstances looms, where Wall Street's proponents of a never-ending stock-market rally have parlayed temporary, nonrecurring economic boosts from natural disasters into a year-end 2017 economic boom. Negative economic "surprises" increasingly should shock the markets and the U.S. dollar on the downside. As the reported economic downturn intensifies in the months ahead, the FOMC-under its new Chairman Jerome H. Powelleventually should face an "unexpected" policy retrenchment, moving back towards quantitative easing.

In these circumstances, the U.S. dollar and financial markets remain at extraordinarily-high risk of intensified panicked declines, likely in the very near term (again, see the Opening Comments and

Hyperinflation Watch of Commentary No. 940). 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

PENDING ECONOMIC RELEASES: Producer Price Index-PPI (March 2018). The Bureau of Labor Statistics (BLS) will release the March 2018 PPI on Tuesday, April 10th, with detail covered in Commentary No. 945 of April 11th. Odds favor negative, wholesale inflation on the goods side of the reporting, reflecting a combination of relatively small monthly gains in wholesale gasoline and crude oil prices in March more than offset by negative seasonal adjustments in energy-sector inflation. Consensus expectations appear to be running around a $0.1 \%$ monthly gain for the combined goods and services measure.

The dominant services-sector "inflation," often provides some counter-move to the hard-inflation estimate on the goods side, where services could be a positive contributor in the current circumstance. Such comes particularly from counterintuitive "inflation" or "deflation," reflecting rising or falling "margins," in turn reflecting falling or rising costs. Guesstimation in that services sector remains highly problematic, as discussed in Inflation that Is More Theoretical than Real World? in Commentary No. 936, where, again, the services component could offset some of the negative pressures in the headline goods inflation.

Per the Department of Energy (DOE), unadjusted crude oil prices and wholesale gasoline prices moved higher in March 2018. Based on the two most-widely-followed crude oil contracts, monthly-average oil prices increased by $1.0 \%$ for both Brent and WTI. That was accompanied by gains in unadjusted, monthly-average wholesale gasoline prices of $0.5 \%$ [NY Harbor] and by $2.7 \%$ [Gulf Coast]. Where PPI seasonal adjustments for energy are heavily negative in March, petroleum-related unadjusted monthly price gains still could have negative impact on the month-to-month, seasonally- adjusted Final Demand Goods component of the PPI.

Consumer Price Index-CPI (March 2018). The Bureau of Labor Statistics (BLS) will release its March 2018 CPI on Wednesday, April 11th, which will be covered in Commentary No. 945 of that date. The headline March CPI-U likely will be flat, plus-or-minus, in the context of a small monthly gain in unadjusted gasoline prices, heavily offset by negative seasonal adjustments. Unadjusted year-to-year annual inflation for March 2018 should come in around $2.3 \%$, somewhat higher that the $2.2 \%$ level seen in February 2018.

Negative Monthly Inflation Impact from Relatively Flat Gasoline Prices and 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 and by $0.1 \%$ ( $0.15 \%$ at the second decimal point as estimated by the Department of Energy) for March 2018. Nonetheless, negative seasonal adjustments likely will have the impact of transmuting the unadjusted monthly gasoline gain of $0.1 \%$ into a monthly contraction of about $4.6 \% ~(-4.6 \%)$. That translates into a negative gas-price contribution of about $0.17 \%(-0.17 \%)$ to the headline, seasonally-adjusted monthly

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CPI-U inflation. Likely boosted, though, by higher food and "core" (net of food and energy) inflation, the headline monthly CPI-U reading should come in about flat, plus or minus, for March 2018. Expectations appear to be for the headline CPI-U to be unchanged.

Annual Inflation Rate. Noted in Commentary No. 940, year-to-year CPI-U inflation can be estimated for March 2018 reporting, dependent on the seasonally-adjusted month-to-month change, versus the adjusted, headline decline of $0.16 \%(-0.16 \%)$ in the March 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 March 2018, the difference in March's headline monthly change (or forecast of same), versus the yearago monthly change, should be added to or subtracted directly from the unadjusted February 2018 annual inflation rate of $2.21 \%$. Given an early guess of a seasonally-adjusted monthly "unchanged" in March 2018 CPI-U, that would leave the annual CPI-U inflation rate for March 2018 at about 2.3\%, plus or minus.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. In the context of historical background provided in Special Commentary No. 885: 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 Supplemental Commentary No. 784-A and Commentary No. 695.

Further, discussed in Commentary No. 778, a heretofore unheard of spate of "processing errors" surfaced in 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 Commentary No. 823.

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 Commentary No. 669). Investigative-financial/business reporter John Crudele of the New York Post has written extensively on such reporting irregularities: Crudele Investigation, Crudele on Census Bureau Fraud and John Crudele on Retail Sales.

## 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 No. 777 Year-End Special Commentary (December 2015), No. 742 Special Commentary: A World Increasingly Out of Balance (August 2015) and No. 692 Special Commentary: 2015-A World Out of Balance (February 2015). In turn, they updated the long-standing hyperinflation and economic outlooks published in 2014 Hyperinflation Report-The End Game Begins - First Installment Revised (April 2014) and 2014 Hyperinflation Report-Great Economic Tumble - Second Installment (April 2014).

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

Recent 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 weekly Commentaries are published at least weekly and update the general outlook, as circumstances develop.
Commentary No. 943 (March 29th) covered the third-estimate of, second-revision to Fourth-Quarter 2017 GDP and the only estimates to be made in current reporting of the GDI and GDP, as well as the "advance" estimate of the February merchandise trade deficit.
Commentary No. 942-B (March 27th) reviewed the Industrial Production annual benchmark revisions, general reporting-quality issues, February 2018 New Orders for Durable Good, New- and Existing-Home Sales and the Cass Freight Index ${ }^{\text {TM }}$.

Commentary No. 942-A (March 23rd) provided a brief summary of the much more extensive details covered in Commentary 942-B.
Commentary No. 941 (March 19th) covered February Industrial Production and New Construction Spending (Housing Starts and Building Permits), along with a general discussion in the Opening Comments on economic conditions and a preview of the Industrial Production benchmark revisions.

Commentary No. 940 (March 15th) covered February 2018 Retail Sales, CPI, PPI and related Real Average Weekly Earnings, real Annual Growth in M3 and updated financial market prospects.
Commentary No. 939 (March 9th) covered the February 2018 Employment and Unemployment details, the full-reporting of the January 2018 Trade Deficit, February Conference Board Help Wanted OnLine ${ }^{\circledR}$ Advertising and February Monetary Conditions.

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

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

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

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

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

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

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

Commentary No. 932 (January 18, 2018) covered December Industrial Production and New Residential Construction (Housing Starts and Building Permits).
Commentary No. 931 (January 15, 2018) reviewed December 2017 Retail Sales and the CPI and PPI, along with an update on the U.S. dollar, the financial markets and gold graphs.

Commentary No. 930-B (January 8th) expanded upon the December 2017 Employment and Unemployment numbers and Household Survey benchmarking, Conference Board Help Wanted OnLine ${ }^{\circledR}$ 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 ${ }^{\circledR}$ Advertising, December Monetary Conditions and the November 2017 Trade Deficit and Construction Spending.
General Commentary No. 929 (December 28, 2017) reviewed current economic and market conditions at year-end 2017.

Commentary No. 928 (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.
Commentary No. 927 (December 19, 2017) reviewed November 2017 New Residential Construction (Housing Starts and Building Permits) and Cass Freight Index ${ }^{\mathrm{TM}}$, along with an expanded discussion on underlying economic reality and the financial markets.

Commentary No. 926 (December 15, 2017) reviewed the headline November 2017 numbers for Retail Sales (both real and nominal), and Industrial Production, along a discussion on the dampening economic impact of business and consumer "uncertainty."
Commentary No. 925 (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.
Commentary No. 924 (December 8, 2017) discussed the November 2017 Employment and Unemployment details and Conference Board Help Wanted OnLine ${ }^{\circledR}$ Advertising, the October Trade Deficit and Construction Spending and updated Monetary Conditions in November.

Commentary No. 923 (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.
Commentary No. 919-B (November 6, 2017) provided more in-depth detail on the October 2017 labor detail.

Commentary No. 919-A (November 3, 2017) provided initial detail and background on October labor data, and reviewed the October 2017 Conference Board Help Wanted OnLine ${ }^{\circledR}$ Advertising, the September Cass Freight Index ${ }^{\text {TM }}$, Trade Deficit and Construction Spending, and updated Monetary Conditions.

Special Commentary No. 918-B (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.
Commentary No. 917 (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.
Commentary No. 916 (October 20th) reviewed the September 2017 Retail Sales details along with the headline Consumer and Producer Price Indices for September.
Commentary No. 915 (October 6, 3017) reviewed the September 2017 Employment and Unemployment details, along with September 2017 monetary conditions.
Commentary No. 913 (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.
Commentary No. 910 (September 15, 2017) reviewed the August 2017 releases of Industrial Production and nominal and real Retail Sales.

Commentary No. 909 (September 14, 2017) assessed the annual release of 2016 Real Median Household Income, along with a review of August Consumer Price Index (CPI) and the Producer Price Index (PPI) and an updated Alert on the financial markets
Commentary No. 908-B (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.
Special Commentary No. 904 (August 14, 2017) issued an "Alert" on the financial markets (including U.S. equities, the U.S. dollar gold and silver, as well as FOMC policy), in the context of historical activity
and unfolding circumstances of deteriorating economic and political conditions. Separately, headline details were reviewed for the July Consumer Price Index (CPI) and the Producer Price Index (PPI).

Commentary No. 903 (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 ${ }^{\circledR}$, and June trade deficit and construction spending.
Commentary No. 902-B (July 31, 2017) reviewed the 2017 annual benchmark revisions of GDP and related series, along with the "advance" estimate of second-quarter 2017 GDP.

Commentary No. 900 (July 19, 2017) reviewed June 2017 New Residential Investment (Housing Starts and Building Permits), and previewed the upcoming annual GDP benchmark revisions and the coincident "advance" estimate of second-quarter 2017 GDP.
Commentary No. 897 (July 6, 2017) reviewed the headline May 2017 Construction Spending and the annual revisions to same, along the May Trade Deficit, and June The Conference Board Help Wanted OnLine ${ }^{\circledR}$ Advertising and the May Cass Freight Index ${ }^{\text {TM }}$.
General Commentary No. 894 (June 23, 2017) reviewed unfolding economic, financial and political circumstances in the context of market expectations shifting towards an "unexpected" headline downturn in broad economic activity, along with headline details on May 2017 Real Median Household Income (Sentier Research) and New- and Existing-Home Sales.

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

Special Commentary No. 888 (May 22, 2017) discussed evolving political circumstances that could impact the markets and the economy, reviewed the annual benchmark revisions to Manufacturers' Shipments and New Orders for Durable Goods and updated Consumer Liquidity Conditions.
Commentary No. 887 (May 18, 2017) reported on the April 2017 detail for Industrial Production and Residential Construction (Housing Starts), with some particular attention to historic, protracted periods of economic non-expansion, of which the current non-recovery is the most severe.
Special Commentary No. 885, entitled Numbers Games that Statistical Bureaus, Central Banks and Politicians Play, (May 8, 2017) reviewed the unusual nature of the headline reporting of the April 2017 employment and unemployment details.
Commentary No. 882 (April 27, 2017) summarized the annual benchmark revisions to Retail Sales and reviewed the March 2017 releases of New Orders for Durable Goods and New- and Existing-Home Sales.

Commentary No. 877 (April 2, 2017) outlined the nature of the downside annual benchmark revisions to industrial production, along with implications for pending annual revisions to Retail Sales, Durable Goods Orders and the GDP.
Commentary No. 876 (March 30, 2017) current headline economic activity in the context of formal definitions of the business cycle (no other major series come close to the booming GDP, which is covered in its third revision to fourth-quarter activity). Also the February 2017 SentierResearch reading on real median household income was highlighted.
Commentary No. 875 (March 24, 2017) assessed and clarified formal definitions of the U.S. business cycle, which were expanded upon significantly, subsequently, in No. 876. It also provided the standard
review of the headline February 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the Cass Freight Index ${ }^{\text {TM }}$.

General Commentary No. 867 (February 24, 2017) assessed mixed signals for a second bottoming of the economic collapse into 2009, which otherwise never recovered its level of pre-recession activity. Such was in the context of contracting and faltering industrial production that now rivals the economic collapse in the Great Depression as to duration. Also covered were the prior January 2017 New- and Existing Home Sales.

Commentary No. 864 (February 8, 2017) analyzed January 2017 Employment and Unemployment detail, including benchmark and population revisions, and estimates of December Construction Spending, Household Income, along with the prior update to Consumer Liquidity.
Commentary No. 861 (January 13, 2017) covered the December 2016 nominal Retail Sales, the PPI, with a brief look at some summary GAAP reporting on the U.S. government's fiscal 2016 operations.

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


[^0]:    ${ }^{1}$ Consider with the March 2018 working-age population of 257.097 million, that the implied labor force at a full-employment participation rate of $66.0 \%$ would be $0.66 \times 257.097=169.684$. That labor force less current headline employed, $169.684-$ $155.178=14.505$ million implied unemployed $/$ labor force of $169.684=8.5 \%$ unemployment. The problem with the assumptions underlying these numbers and concept, again, remains that the economy is not at full employment, as claimed.

