

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

COMMENTARY NUMBER 931

December Retail Sales, Consumer and Producer Price Indices, Financial Markets

January 15, 2018

**Headline Fourth-Quarter 2017 Real Average Weekly Earnings Contracted;
Annual Real Earnings Growth Fell to a Five-Year Low**

**December Real Retail Sales Softened, but Headline Activity Surged for the Holiday Season,
Despite Contracting Real Earnings and Slowing Real Growth in Consumer Credit**

Nominal Fourth-Quarter Sales Jump Reflected Higher Inflation and Insurance Payments

**CPI-U Monthly Inflation Slowed to 0.15% in December 2017,
Annual Growth Slowed to 2.11%, with Core Inflation at 1.78%, Still Below FOMC Target**

**Final-Demand PPI Monthly Inflation Declined by 0.09% (-0.09%) in December 2017,
Annual Gain Pulled Back to 2.61%, from a 70-Month High of 3.07% in November 2017**

**Dampened PPI Inflation Reflected a Reversal from Hurricane-Disrupted Energy Prices, with
Monthly Goods Inflation at 0.00% and Services Down by 0.17% (-0.17%)**

**Despite the Booming Headline Numbers,
Prospects Continue to Darken for U.S. Economic and Financial-Market Activity**

**Tax Cuts and High Stock Prices Are Positive for the Economy, but
Do Not Mistake Inflation and a Declining Dollar for Increased Wealth or Income**

PLEASE NOTE: The next Regular Commentary on Thursday, January 18, 2018, will cover December 2017 Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Best wishes — John Williams (707) 763-5786

Today's (January 15th) Opening Comments and Executive Summary. The *Opening Comments* reviews heavy distortions in current headline economic data and related impact on the financial markets. Specifically reviewed are some issues with Inflation and Real Average Weekly Earnings. The *Executive Summary* (page 5) reviews highlights of December Retail Sales (Nominal and Real), Real Average Weekly Earnings and the Consumer and Producer Price Indices.

The *Reporting Detail* (page 10) discusses in the headline December Retail Sales, Earnings and the CPI and PPI in greater depth.

The *Hyperinflation Watch* (page 33) addresses the latest U.S. dollar circumstances and general financial-market conditions and outlook, including gold and silver and the U.S. stock market.

The *Consumer Liquidity Watch* (page 39) has been updated to reflect December Real Average Weekly Earnings and November Consumer Credit Outstanding.

The *Week, Month and Year Ahead* (page 51) provides background on recent *Commentaries*, and previews releases of December 2017 Industrial Production and New Residential Construction (Housing Starts and Building Permits) later in the week.

OPENING COMMENTS

U.S. Stock Indices at All-Time Highs, but the Underlying Happy Economic Data Do Not Add Up.

As of the Friday, January 12th close, the Dow Jones Industrial Average, the S&P 500 and the NASDAQ Composite all stood at historic highs. The wealth effect from robust stock markets is an economic plus, if it can hold. As discussed the *Hyperinflation Watch* (see page 33), however, the value of the U.S. dollar is in decline at the same time, and that reduces the attractiveness of dollar-denominated U.S. equities to the already-substantial foreign holders of those instruments. As the dollar plunges, as it likely will in the months ahead, such should trigger flight from both the U.S. equity and credit markets, pummeling both stock and bond prices, spiking bond yields in the process.

A sharp rise in bond yields could be avoided briefly from massive intervention by the Board of Governors of the Federal Reserve System's Federal Open Market Committee (FOMC). That could happen in the form of a significant shift in FOMC policy, back towards expanded quantitative easing. Such would be used to provide continuing, needed liquidity to a banking system that still has not recovered fully from the Panic of 2008, as well as needed liquidity to the U.S. Treasury. In a broad flight from the U.S. dollar, if the Federal Reserve did not buy the U.S. Treasury Securities, who would absorb the growing supply of those instruments needed to fund an ever-expanding U.S. budget deficit?

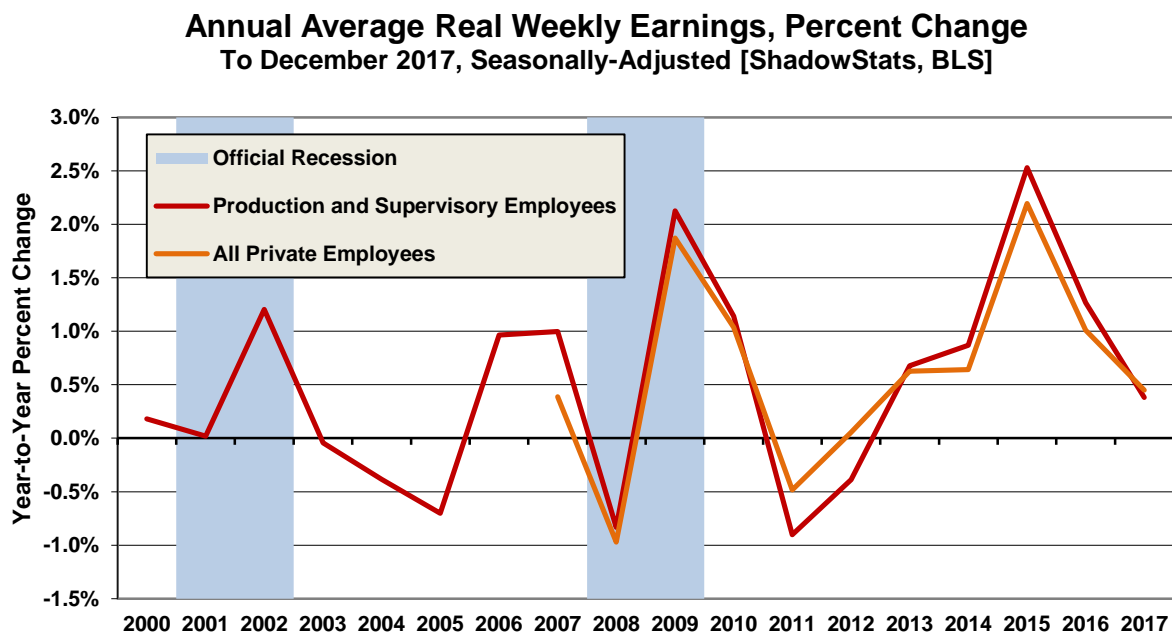
Economic Distortions. Despite all the happy headline news on the economy, which has helped to fuel the ongoing stock-market rally, underlying economic data of recent months have not resulted from normal, healthy consumer or business conditions. The economic numbers have been skewed heavily, biased to the upside by insurance payments or liquidation of savings made to pay for meaningful, regional-hurricane and wildfire damages. Those numbers are just beginning to work out of the system of headline reporting.

Separately, skewed employment numbers out of the Bureau of Labor Statistics' just-revised Household Survey initially were distorted heavily by definitions of how to treat people unemployed by bad weather (the September 2017 survey was taken during the week Florida was hit by Hurricane Irma). The original survey data were not revised (standard practice), only the seasonal adjustments were, and what was reported in the January 5th benchmarking simply was not credible (see [Commentary No. 930-B](#)).

What lies ahead in the pending Payroll Survey benchmark revisions of February 2nd remains to be seen. Underlying data there are revised, as are the seasonals, with an initial indication for an upside revision to payrolls as of the benchmarking base of March 2017 data. That said, the pattern of annual growth in that series has been signaling renewed contraction or a new recession (again, see [Commentary No. 930-B](#)), and that pattern is not likely to change with the benchmarking.

Consumer Earnings and Tax Cuts. Discussed in the detail of *Real Average Weekly Earnings*, the earnings of Production and Nonsupervisory Employees (series starts in 1964), graphed monthly in both the *Executive Summary* (Graph 3) and the *Consumer Liquidity Watch* (Graph CLW-7), contracted quarterly in both third- and fourth-quarter 2017. These real average weekly earnings (all before taxes) also contracted for the All Private Sector employees (series starts in 2006) during fourth-quarter 2017.

Graph OC-1: Annual Average of Weekly Earnings, Annual Percent Change (2000 to 2017)



Shown in *Graph OC-1*, both series showed a sharply slowing pace in annual growth, presumably coming off more-positive economic circumstances, the patterns 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 the consumer.

Not all economic downturns are reflected in the headline economic data. For example, the industrial production series 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 OC-1*. See the related discussions in the latest GDP and Industrial Production missives of [Commentary No. 928](#) and [Commentary No. 926](#).

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-11* of the *Consumer Liquidity Watch* (page 39).

A New Table for Comparing Inflation Measures Confirms the Recent Inflation Upturn Was Driven by Gyrating Gasoline/Oil Prices, Not by a Strong Economy. Introduced in today's *CPI Section* of the *Reporting Detail* is *Table 1* (page 17), which details headline year-to-year inflation on both a quarterly and annual basis for the various Consumer and Producer Price Indices, allowing direct comparison of same for the past five years. Irrespective of the aggregate series viewed, wherever "energy" is shown to be surging, annually or quarterly, the aggregate Consumer or Produce Price Index also surges. The energy inflation of recent years has been dominated by oil-price distortions generated by the U.S. dollar's exchange rate or various politically-dominated supply issues, more so than by underlying supply and demand for the oil-related products. Accordingly, the recent upturn in inflation was not due to an overheating U.S. economy as claimed by some interest-rate bulls on the FOMC.

Table Highlights and Other Inflation Distortions. Included in the new table are the headline CPI-U and its Food, Energy and Core (ex-Food and Energy) components, the narrower CPI-W and the fully-substitution based C-CPI-U. The C-CPI-U now is used in determining tax brackets for individuals, and likely also will be used in the not-so-distant future for determining Cost of Living Adjustments (COLA) for Social Security and related programs.

The concept and intent of the C-CPI-U was to reduce the headline reporting of consumer inflation, with the effect of reducing the federal budget deficit, without anyone in Congress having to make politically-impossible votes, such as to cut Social Security COLA adjustments. Discussed in the [Public Commentary on Inflation Measurement](#), deflation by too-low an inflation number including any of the headline CPI series (particularly the C-CPI-U) results in overstated tax brackets and understated COLA adjustments, which respectively boost Federal Revenues and cut Federal Spending. Using understated inflation in deflating headline nominal activity, in economic series such as Retail Sales or Average Weekly Earnings, results in overstated inflation-adjusted economic growth (see *Graphs 1* and *2* and *Graph 3* in the related comments in the *Executive Summary*, pages 7 and 8).

Also included is the ShadowStats Alternate Inflation Measure (1980-Based), which restates the CPI-U for methodological reporting changes since 1980 that otherwise have been used to reduce headline consumer inflation reporting since the early-1980s (again see [Public Commentary on Inflation Measurement](#)).

Definitions of these various consumer-inflation series and further details follow on page 19 and the ensuing specific CPI-related sections.

Separately included in *Table 1* is the Final Demand Producer Price Index (FD-PPI), purportedly a measure of wholesale inflation, and a breakout by its major subcomponents of inflation in Goods, Services and Construction. The issues with this series, which, like the CPI series, are that headline inflation is understated versus common experience through the use of fully substitution-based estimation of the headline inflation rate. Its meaningfulness also suffers from definitional issues with the Services Sector detail, estimated from profit margins instead of costs, all as discussed in the PPI section, beginning on page 28.

C-CPI-U Reduced Headline CPI-U Annual Inflation by 0.23% (-0.23%) Over the Last Five Years. The headline C-CPI-U was designed to reduce headline CPI-U consumer inflation. What *Table 1* shows is that over the last five years the headline average annual CPI-U, constrained by collapsing oil, gasoline and related energy prices was 1.32%, versus 1.09% for the C-CPI-U, a net reduction in the headline C-CPI-U average annual inflation by 0.23% (-0.23%) versus the headline CPI-U.

The reduction in the C-CPI-U versus the CPI-W, however, was just 0.02% (-0.02%). Where the C-CPI-U is defined based on the CPI-U, the headline inflation savings would be similar to those versus the CPI-U, if the C-CPI-U were defined against the CPI-W. Where the CPI-W is more heavily weighted for gasoline, falling gasoline prices have left the five-year annual average CPI-W at 0.21% (-0.21%) below the CPI-U. In 2017, with some rebound in energy prices, both the CPI-U and CPI-W showed five-year high average annual inflation of 2.13%, versus 1.95% in the C-CPI-U, a deficit of 0.18% (-0.18%). If oil prices were to continue to be depressed, one might anticipate the introduction of the C-CPI-W, if it is not already being calculated off the headline books of the BLS.

EXECUTIVE SUMMARY: Retail Sales—December 2017—Nominal Holiday Sales Boomed, Reflecting Higher Inflation and Hurricane Distortions, Not Real Income or Credit Growth. In often volatile and heavily revised monthly retail sales reporting, the booming Holiday Shopping Season reflected a combination of surging inflation and headline distortions from hurricane effects, as discussed in the *Opening Comments*.

Nominal and Real Retail Sales—December 2017. Headline nominal activity increased monthly by 0.35% in December 2017, down from an upwardly revised gains of 0.85% in November and 0.67% in October. Net of the prior-month's revisions, December 2017 sales gained 0.54% for the month. The December 2017 nominal year-to-year change in Retail Sales showed a gain of 5.45%, versus upwardly revised annual gains of 6.01% in November 2017 and 5.04% in October 2017.

Net of December 2017 CPI-U inflation, real month-to-month retail sales gained 0.20%, versus upwardly-revised gains of 0.46% in November and 0.56% in October 2017. Real annual Retail Sales growth declined to 3.26% in December 2017, versus upwardly-revised annual gains of 3.70% in November 2017 and against 2.94% in October 2017.

Real Retail Sales Graphs, Corrected and Otherwise. In the *Reporting Detail*, *Graphs 4* and *6* show the level of real retail sales activity (deflated by the CPI-U), while *Graphs 5* and *7* show year-to-year percent

change. The apparent “recovery” of headline real retail sales shown in the following *Graph 1* (again, see also *Graph 4* in the *Reporting Detail*) generally continued into late-2014. Although headline reporting turned down in December 2014, into first-quarter 2015, it turned higher into the third-quarter 2015, slowed to a near-standstill in fourth-quarter 2015 and contracted in first-quarter 2016, with an uptick in second-quarter 2016, with renewed slippage into third-quarter 2016, a further uptick in fourth-quarter 2016 and upturn into 2017, with a hurricane-induced or related surge of activity in the last four months of September through November 2017.

Nonetheless, headline real growth in retail sales continues to be overstated heavily, due to the understatement of CPI-U inflation used in deflating the retail sales series. Discussed more fully in *Chapter 9* of [2014 Hyperinflation Report—Great Economic Tumble – Second Installment](#) and [Public Commentary on Inflation Measurement](#), deflation by too-low an inflation number (such as the CPI-U) results in the deflated series overstating inflation-adjusted economic growth.

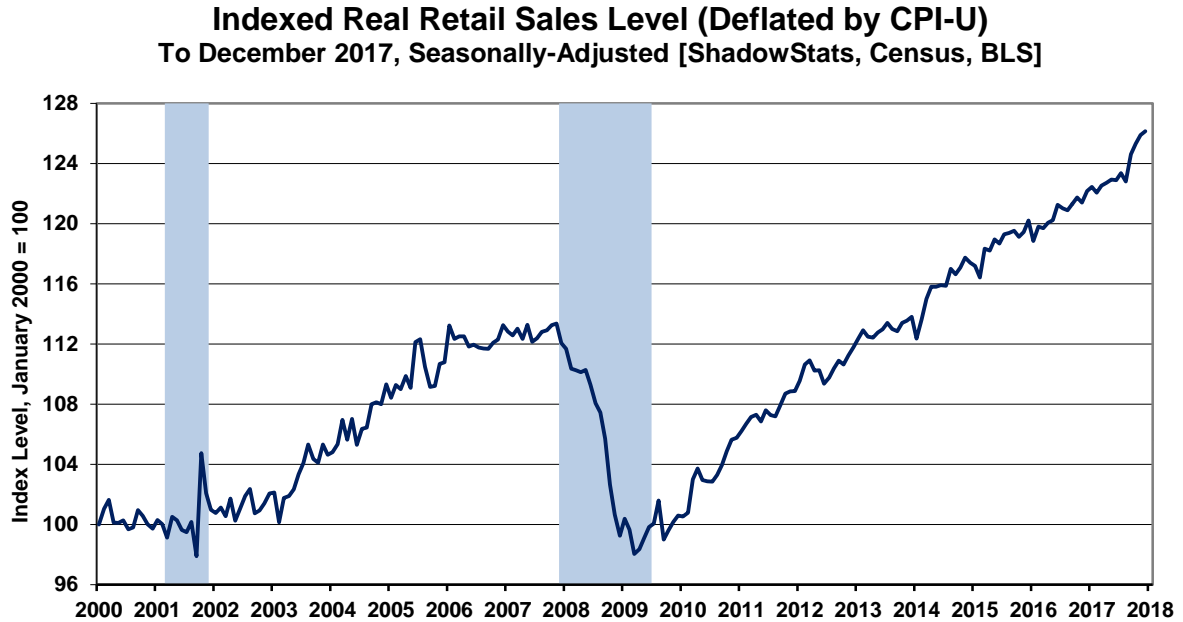
Both of the accompanying graphs are indexed to January 2000 = 100.0 to maintain consistency in the series of graphs related to corrected inflation-adjustment. Parallel, regular plots of the ShadowStats “corrected” industrial production index are found in [Commentary No. 926](#) (see *Graphs 3* and *4*) and in [Commentary No. 928](#) for graphs of “corrected” new orders for durable goods and the “corrected” GDP.

The first graph here reflects the official real retail sales series, except that it is indexed, instead of being expressed in dollars. The plotted patterns of activity and rates of growth are exactly the same for the official series, whether the series is indexed or expressed in dollars, again, as is evident in a comparison of *Graph 1* with *Graph 4* in the *Retail Sales—Nominal and Real* in the *Reporting Detail* section.

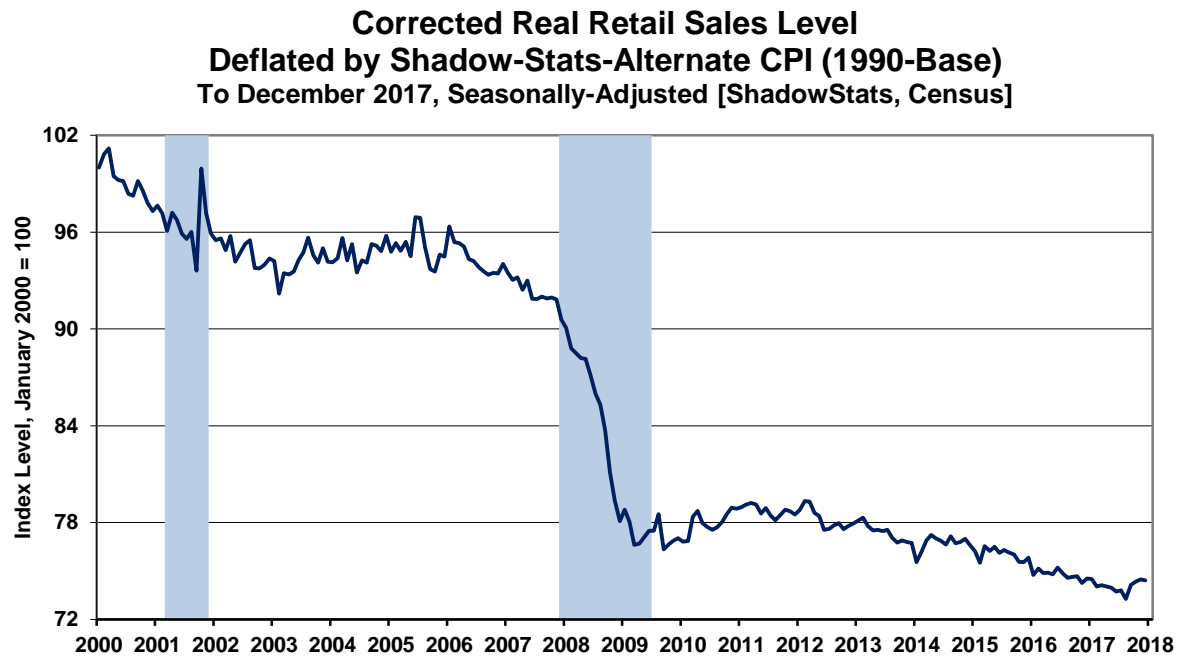
Instead of being deflated by the CPI-U, the “corrected” real retail sales numbers—in *Graph 2*—use the ShadowStats-Alternate Inflation Measure (1990-Base) for deflation. With the higher inflation of the ShadowStats measure, the revamped numbers show a pattern of plunge and stagnation and renewed downturn. That pattern generally is consistent with consumer indicators such as real average weekly earnings (see *Graph 3* in the next section and *Graph CLW-7* in the *Consumer Liquidity Watch*) and faltering consumer liquidity conditions (again, see the *Consumer Liquidity Watch* and the *ECONOMY* section of [No. 859 Special Commentary](#)). Extended coverage is found in the *Reporting Detail*.

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

Graph 1: Headline Real Retail Sales Level, Indexed to January 2000 = 100



Graph 2: "Corrected" Real Retail Sales Level, Indexed to January 2000 = 100

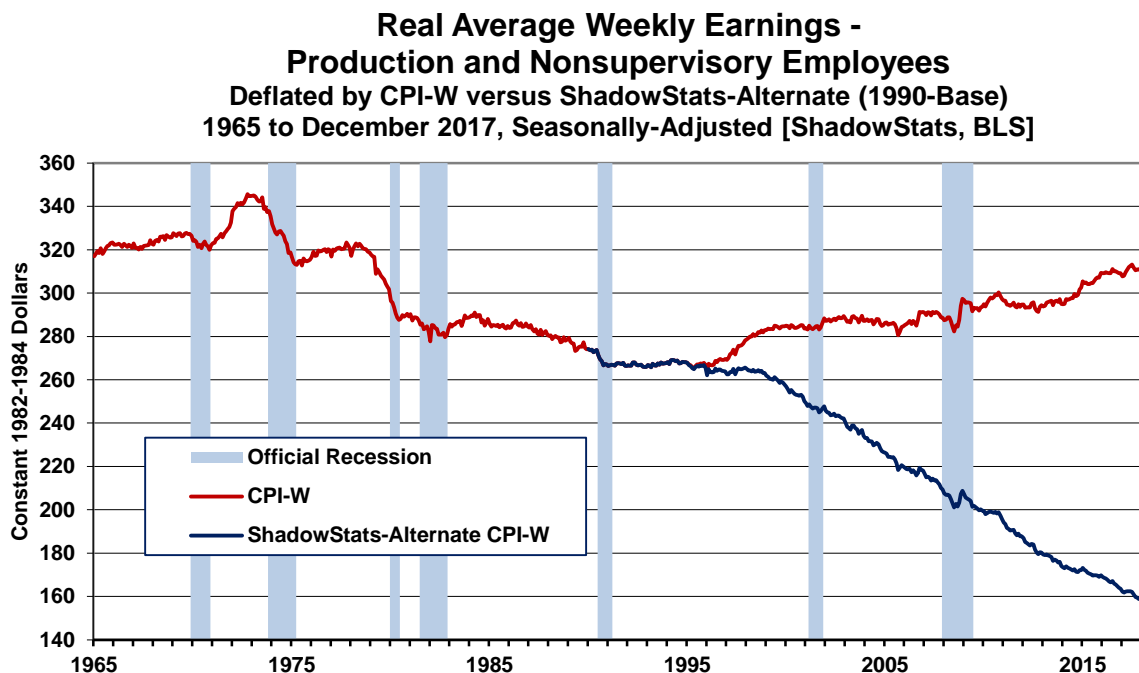


Consumer Price Index (CPI)—December 2017—Adjusted Monthly Gain of 0.15%, Unadjusted Annual Gain of 2.11%. Gasoline-price volatility continued to move headline CPI-U monthly inflation, with declining gasoline prices softening the headline CPI data. Month-to-month, headline CPI-U softened to 0.15%, from a gasoline-spiked 0.39% in November and versus a gasoline-price depressed 0.11% in October. Unadjusted year-to-year inflation rose by 2.11% in December 2017, versus 2.20% in November 2017 and 2.04% in October 2017.

Even with unadjusted annual December 2017 CPI-U inflation at 2.11%, year-to-year inflation is not and has not been quite as low as indicated, when considered in the context of traditional CPI reporting and common experience. Moving on top of the unadjusted annual changes to the CPI-U, the ShadowStats-Alternate Inflation Measures showed year-to-year inflation in December 2017 of 5.7%, based on 1990 methodologies, and of 9.8%, based on 1980 methodologies.

The Consumer Price Index for All Urban Consumers (CPI-U) is the broadest headline consumer-inflation number, used to adjust numerous economic measures such as Retail Sales for inflation effects. The narrower Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used for deflating measures such as earnings for production and nonsupervisory employees on private nonfarm payrolls (see *Graph 3*). More heavily weighted for the rising gasoline prices, the December 2017 seasonally-adjusted CPI-W rose month-to-month by 0.14%, versus gains of 0.60% in November and 0.08% in October. Unadjusted, year-to-year change in the December 2017 CPI-W was 2.05%, versus 2.32% in November 2017 and 2.05% in October 2017.

Graph 3: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date
(Same as Graph CLW-7 in the Consumer Liquidity Watch)



Real Average Weekly Earnings—December 2017—Quarterly Real Earnings in Ongoing Contraction. The headline estimate for December 2017 real average weekly earnings was published along with the release of the headline December 2017 CPI-W on January 12th. In the production and nonsupervisory

employees category—the only series for which there is a meaningful history, back to 1964, the regularly-volatile, real average weekly earnings gained month-to-month in December 2017 (see accompanying *Graph 3*), but fourth-quarter 2017 earnings contracted quarter-to-quarter, for the second consecutive quarter, down at an annualized pace of 0.94% (-0.94%), having declined by 0.07% (-0.07%) in third-quarter 2017. In the broader all-employees category (not plotted, with a history beginning in March 2006), fourth-quarter real average weekly earnings also contracted, down at an annualized pace of 1.16% (-1.16%), having gained 0.63% in third-quarter 2017 activity.

Graph 3 shows 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 headline CPI-W (also used in calculating Social Security cost-of-living adjustments) helped to prop up the reported real earnings. Official real earnings today still have not recovered their inflation-adjusted levels of the early-1970s, and, at best, have been in a minimal uptrend for the last two decades (albeit spiked recently by negative headline inflation). Deflated by the ShadowStats (1990-Based) measure, real earnings have been in fairly-regular decline for the last four decades, which is much closer to common experience than the pattern suggested by the CPI-W. See the [Public Commentary on Inflation Measurement](#) for further detail.

Producer Price Index (PPI)—December 2017—Annual Final Demand PPI Inflation Pulled Back to 2.61%, Reflecting a Headline Monthly Deflation of 0.09% (-0.09%). In November, surging gasoline prices had spiked the energy goods sector, which was flat in December, with declining margins on gasoline stocks a major deflationary factor in December services sector, due to continued, severe definitional problems in that sector, as discussed in the *Reporting Detail*. The aggregate detail contracted month-to-month by 0.09% (-0.09%), reflecting Goods inflation at 0.00%, the dominant Services inflation down by 0.17% (-0.17%) and the Construction inflation down by 0.08% (-0.08%).

The old-fashioned, headline seasonally-adjusted monthly goods inflation in December 2017 was 0.00%, versus monthly gains of 0.98% in November and 0.27% in October, all spiked by falling or rising gasoline prices, driven by factors other than underlying, broad economic activity. The headline December goods inflation of 0.00% reflected food prices down by 0.68% (-0.68%), with energy prices unchanged at 0.00%, and “core” inflation (ex-food and energy) up by 0.18%.

Continued nonsensical movements in the hypothetical services inflation numbers are detailed, along with the specific goods sectors in the *Reporting Detail*.

[Extended analysis and graphs of the headline series follows in the Reporting Detail.]

REPORTING DETAIL

RETAIL SALES—Nominal and Real (December 2017)

Holiday Season Sales Jumped 0.85% in November and 0.35% in December, Reflecting Higher Inflation and Hurricane Distortions, Not Much in Real Income or Consumer Credit Growth. In often volatile and heavily revised month retail sales reporting, the booming Holiday Shopping Season growth reflected a combination of surging inflation and headline distortions from hurricane effects, as discussed in the *Opening Comments*.

The inflation issues are addressed in the *Real Retail Sales* section. Hurricane-related disruptions to retail sales reporting were discussed in [Commentary No. 926](#), [Commentary No. 920](#) and [Commentary No. 916](#), where replacement sales for damaged automobiles and other destruction continued. Hurricane distortions largely should be worked out of the various economic series by the headline reporting of January or February 2018 detail. To the extent that seasonal adjustments have been warped heavily, some data resolutions may await annual benchmark revisions in the year ahead. The underlying ShadowStats outlook of non-recovering broad economic activity and renewed downturn has not changed.

As to the regular concurrent seasonal-adjustment instabilities (see *Headline Distortions from Shifting Concurrent-Seasonal Factors* in prior [Commentary No. 930-B](#), *Supplemental Labor-Detail Background* on page 31), only the headline retail sales data for October to December 2017, and November to December 2016 were published on a consistent basis, using the concurrent seasonal factors based on December 2017. The revisions to the November and December 2016 data showed an impact of the new seasonals lowering sales estimates for November and December 2016, and boosting them in October and November 2017, with no accounting for how the rest of the recent, headline retail-sales activity had been rejiggered.

Nominal Retail Sales—December 2017. The Census Bureau reported its “advance” estimate of December 2017 Retail Sales on Friday, January 12th. Headline nominal activity increased by month-to-month 0.35%, near consensus, down from an upwardly revised gain of 0.85% [previously 0.79%] in November, with October showing a revised monthly headline gain of 0.67% [previously 0.55% , initially 0.23%]. Net of the prior-month’s revisions, December 2017 sales gained 0.54% for the month.

The headline, seasonally-adjusted December 2017 nominal monthly gain of 0.35% +/- 0.59% was not statistically-significant (all confidence intervals are expressed at the 95% level). The revised headline November 2017 monthly retail sales gain of 0.85% +/- 0.23%, however, was statistically significant.

Year-to-Year Annual Change. The December 2017 nominal year-to-year change in Retail Sales showed a statistically-significant increase of 5.45% +/- 0.82%, which included an inconsistent boost of 0.25% from the downside revision to December 2016 activity. That was against upwardly revised annual gains of 6.01% [previously 5.50%] in November 2017 and 5.04% [previously 4.91%, initially 4.55%] in October 2017.

December 2017 Core Retail Sales, Net of Food and Gasoline. Reflecting an environment that in theory should be on the plus-side for grocery stores, with seasonally-adjusted food prices up by 0.16%, and on the downside for gasoline stations, with seasonally-adjusted gasoline prices fall by 2.69% (-2.69%), per the BLS, seasonally-adjusted retail sales grocery-store sales rose month-to-month by a headline 0.66%, with gasoline-station sales up by 0.03%.

Under normal conditions, the bulk of non-seasonal variability in food and gasoline sales is in pricing, instead of demand. “Core” retail sales—consistent with the Federal Reserve’s historical preference for ignoring food and energy prices when “core” inflation is lower than full inflation (at times when the Fed is looking to downplay inflation)—are estimated using two approaches:

Version I: Nominal December 2017 versus November 2017 seasonally-adjusted retail sales series—net of total grocery store and gasoline-station sales—rose by 0.34%, versus the official headline aggregate sales gain of 0.35%.

Version II: Nominal December 2017 versus November 2017 seasonally-adjusted retail sales series—net of the monthly *change* in grocery store and gasoline-station revenues—rose by 0.28%, versus the official headline aggregate sales gain of 0.35%.

Real Retail Sales—December 2017—In the Context of Modest CPI Inflation and Continued Headline Reporting Distortions, Real Sales Gained 0.20%. December 2017 CPI-U inflation (also released January 12th, as detailed in the next section) showed a monthly gain in seasonally-adjusted consumer inflation of 0.15% in December 2017, versus 0.39% in November and 0.11% in October, with year-to-year seasonally-adjusted CPI-U inflation of 2.12% in December, 2.23% in November 2017 and 2.05% in October 2017.

Accordingly, real month-to-month retail sales gained 0.20% in December 2017, versus upwardly-revised gains of 0.46% in November and 0.56% in October 2017. Real annual Retail Sales growth declined to 3.26% in December 2017, versus upwardly-revised annual gains of 3.70% in November 2017 and 2.94% in October 2017.

Recession Signal Continues in Abeyance. During normal economic times, annual real growth in Retail Sales at or below 2.0% signals an imminent recession. That signal broadly had been in play since February 2015 (a “new” recession likely still will be timed from December 2014, based on industrial production, retail sales and other indicators), suggesting a deepening, broad economic downturn. Headline detail and revisions since October have pushed that signal back into abeyance, once more.

When that annual growth signal had moved higher, close to three-percent earlier in 2017, ShadowStats had viewed that recession signal as in temporary abeyance. Post-2017 benchmarking ([Commentary No. 882](#) of April 27th), however, annual growth rates shifted lower, towards two-percent, and then below,

reviving that recession signal. In the context of volatile near-term revisions, 1.22% year-to-year real growth reported initially in August 2017 was the most-solid recession signal since the economy crashed anew into early-2015.

That August reading revised higher to 1.58% in October, along with headline annual real growth in September 2017 at a revised 2.55% and October at 2.46%, still broadly within the recession-signal range, particularly in the context of the near-term, short-lived spikes. More significantly, year-to-year real quarterly growth then stood at 2.02% in third-quarter 2017, versus 1.94% in second-quarter 2017, both close to 2.0%. Despite the initial strong headline November 2017 detail and revisions, third-quarter 2017 real year-to-year growth held 2.08%, still in recession territory.

With the December 2017 numbers, however, third-quarter 2017 real year-to-year growth held 2.08%, but initial fourth-quarter 2017 real annual activity jumped to 3.30%.

Annualized Real Quarterly Growth/Downside revisions to Fourth-Quarter 2016. Reflecting an downside revision to November and December 2016 real retail sales activity, fourth-quarter 2016 annualized quarterly growth revised to 2.33% [previously 2.69%, initially 2.89%], with first-quarter 2017 annualized growth firming to 1.89% [previously 1.54%, previously 1.34%] as a result. Those revisions reflect nothing more than the inconsistent publishing of the concurrent December 2017 seasonal-factor revisions published and revealed only for November and December 2016, aside from the two most-recent months of October and November 2017.

Second-quarter 2017 annualized real quarterly growth was unrevised at 1.68%, with third-quarter 2017 reporting, including hurricane-boosted and upwardly-revised September detail, at a revised 2.41% [previously 2.18%, initially 2.08%]. The initial full reporting for fourth-quarter 2017 activity, heavily spike by hurricane-replacement automobile sales, jumped to an a real, annualized quarterly rate of 7.31%.

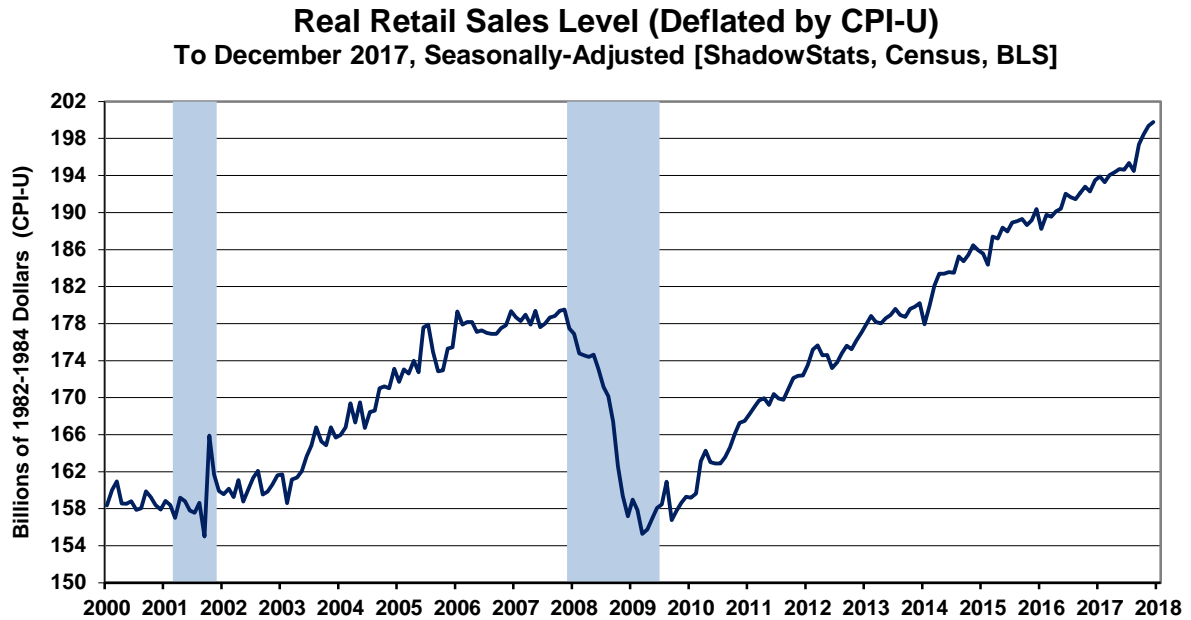
Structural Liquidity Issues Continue to Impair Retail Sales. An extreme consumer-liquidity bind increasingly constrains retail sales activity (discussed in the *Consumer Liquidity Watch* and the *Opening Comments*). Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including retail sales, real or nominal. That circumstance—in the last ten-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad, inflation-adjusted U.S. economic activity, 73% of which (third-quarter 2017 real GDP activity) is dependent on personal spending and residential real estate.

As headline consumer inflation generally continues its upside climb in the year ahead, and as overall Retail Sales—net of natural-disaster impacts—continue to suffer from the ongoing consumer liquidity squeeze, the real Retail Sales data soon should resume trending meaningfully lower, in what likely still will gain recognition as a formal “new” recession, another down-leg in the economic collapse that began in 2006, known formally as the 2007 recession.

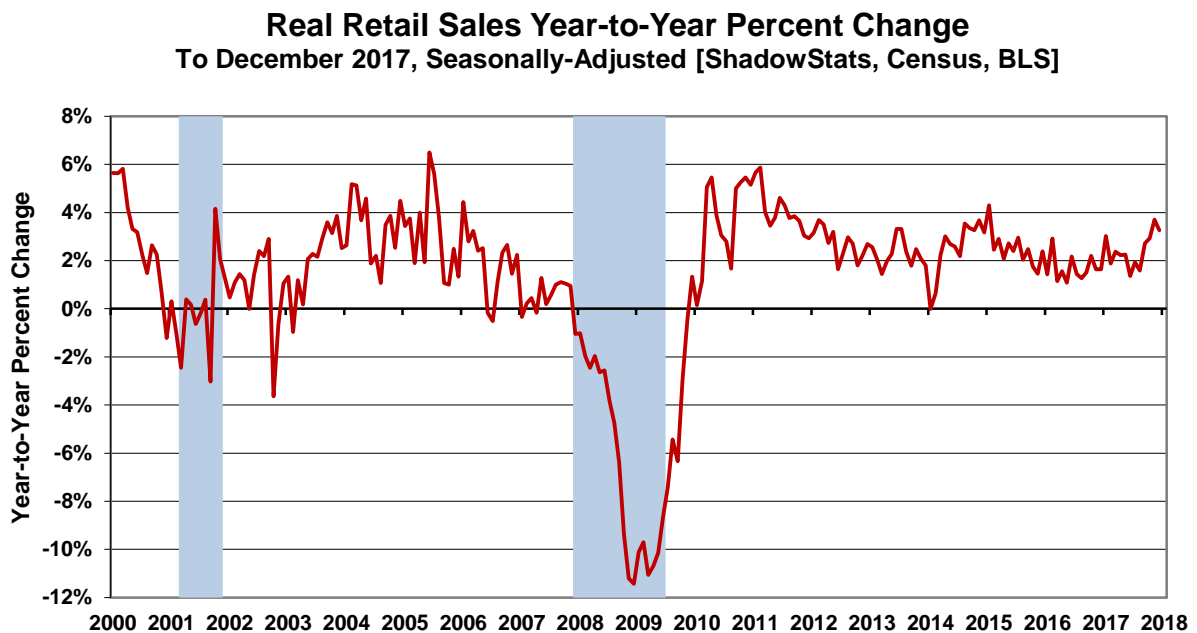
Real Retail Sales Graphs. The first of the four graphs following, *Graph 4* shows the level of real retail sales activity (deflated by the CPI-U) since 2000; *Graph 5* shows the year-to-year percent change for the same period. Annual real growth had slowed markedly into fourth-quarter 2015 and 2016, generating an intense recession signal. With the new, near-term volatility, including the jump in December and upside revisions to real annual real growth in recent months, that recession signal, again is in temporary

abeyance. *Graphs 6 and 7* show the level of, and annual growth in, real retail sales (and its predecessor series) in full post-World War II detail.

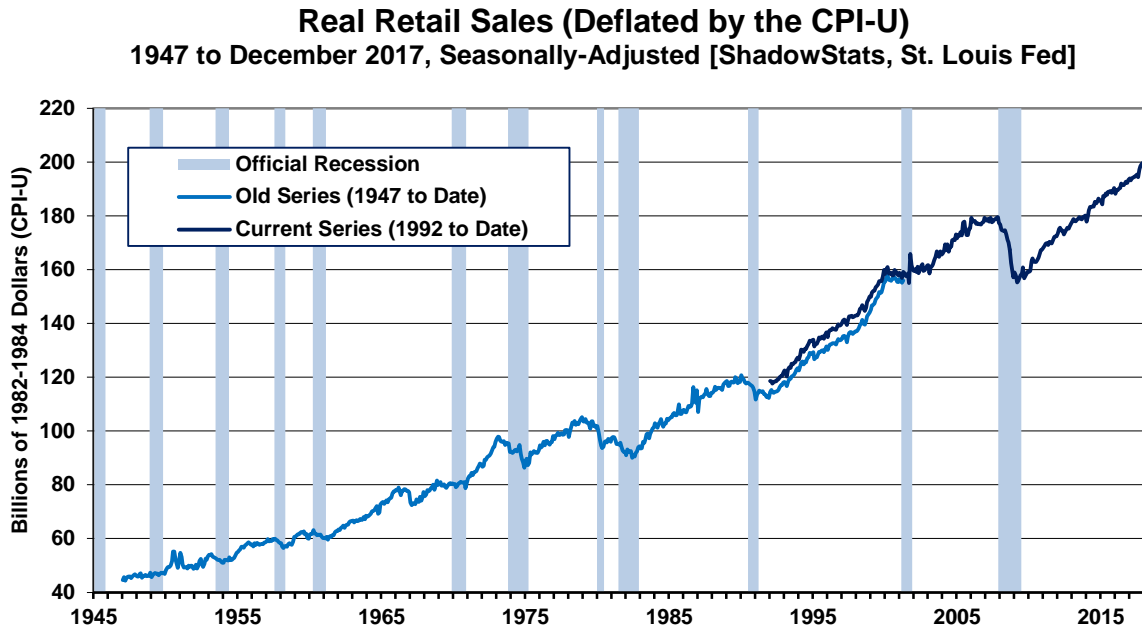
Graph 4: Level of Real Retail Sales (2000 to Date)



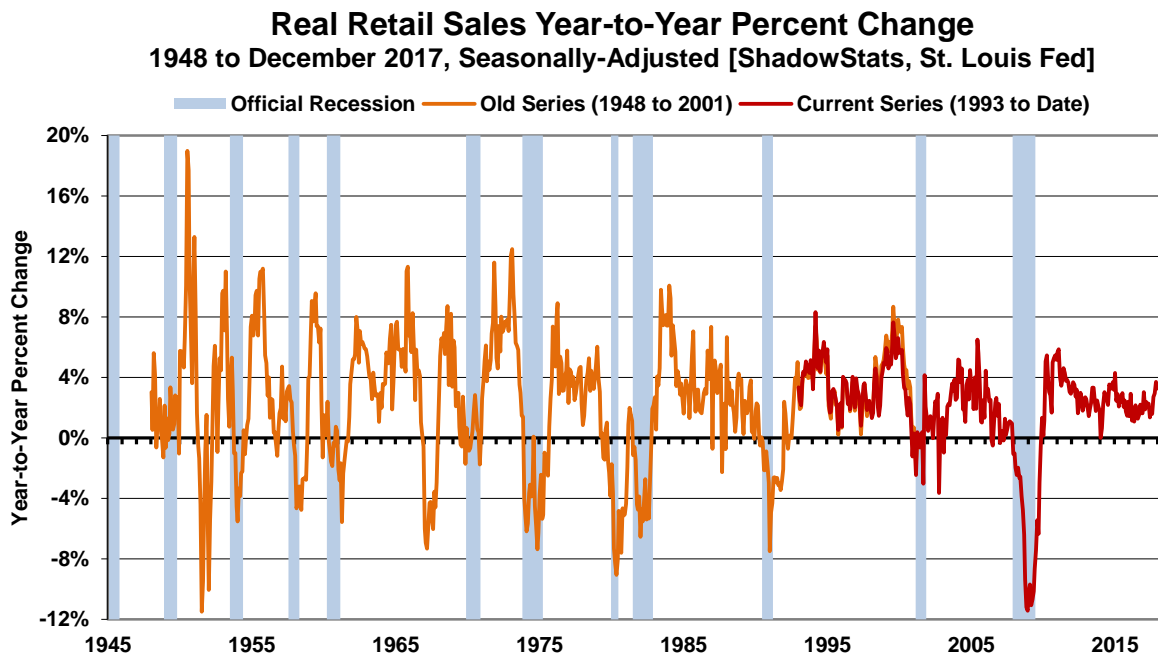
Graph 5: Real Retail Sales (2000 to Date), Year-to-Year Percent Change



Graph 6: Level of Real Retail Sales (1947 to Date)



Graph 7: Real Retail Sales (1948 to Date), Year-to-Year Percent Change



The relative strength seen in the real retail series since the economic trough in 2009 largely has reflected the understatement of the rate of inflation used in deflating the series. Discussed more fully in *Chapter 9* of [2014 Hyperinflation Report—Great Economic Tumble – Second Installment](#), deflation by too low an

inflation number (such as the CPI-U) results in the deflated series overstating inflation-adjusted, real economic growth. Shown in the latest “corrected” real retail sales—*Graph 2* in the *Executive Summary* section—with the deflation rates corrected for the understated inflation reporting of the CPI-U, the recent pattern of real sales activity had turned increasingly negative, before the hurricane-related spikes of recent months. The corrected graph shows that the post-2009 period of protracted stagnation ended, and a period of renewed and ongoing contraction began in second-quarter 2012 and continues to date. The corrected real retail sales numbers use the ShadowStats-Alternate Inflation Measure (1990-Base) for deflation instead of the CPI-U.

CONSUMER PRICE INDEX (December 2017)

In the Context of Easing but Unstable Gasoline Prices, December CPI-U Softened to 0.15% Month-to-Month, 2.11% Year-to-Year, with the Fed’s Targeted “Core” Annual Inflation Still Below 2.0%. Thanks to the unstable patterns of Bureau of Labor Statistics (BLS) seasonal adjustments against volatile and irregular patterns of monthly movements in gasoline prices, in particular, what was a headline gain of 0.15% in the monthly CPI-U, was a decline of 0.06% (-0.06%) not seasonally adjusted.

Repeating patterns of recent years, more-positive seasonal adjustment factors, beginning in July 2017, started to boost the headline reporting of CPI-U inflation in the second-half of the calendar year, reversing the negatively-biased reporting of the seasonally-adjusted monthly inflation in the first-half of 2017 (excepting January). Unadjusted annual growth notched slightly lower to 2.11% in December 2017 from 2.20% in November 2017 still well shy of its 60-month high of 2.74% in February 2017, having hit a subsequent near-term trough of 1.63% in June 2017, with rebounds to 1.73% in July 2017, to 1.94% in August 2017 and 2.23% in September 2017 and backing of to 2.04% in October 2017.

What had led to the recent inflation surge into the February 2017 CPI annual gain were rising gasoline prices, largely independent of near-term economic activity. The same remains true in the current circumstance, heavily distorted by hurricane-disruptions and shifting political circumstances in the Middle East. Near-term inflation volatility largely usually reflects volatile gasoline prices, which also reflect a number of other more-controlled factors, such as the U.S. dollar and Federal Reserve policies. These inflation surges, past and present, have not been driven by an overheating economy, as claimed by some on the Fed’s FOMC. Indeed, the FOMC’s favored CPI-U inflation measure, the “Core” rate, net of food and energy, was at an unadjusted 1.78% in December 2017, where it has held for nine months +/- 0.10%, otherwise tied as the lowest annual core inflation rate since 1.6% in December 2015.

Separately, with unadjusted annual December 2017 CPI-U inflation up by 2.1%, year-to-year inflation is not and has not been quite as low as indicated, when considered in the context of traditional CPI reporting and common experience. Moving on top of the unadjusted annual changes to the CPI-U, the ShadowStats-Alternate Inflation Measures showed year-to-year inflation in December 2017 at 5.7%, based on 1990 methodologies, and at 9.8%, based on 1980 methodologies.

Longer-Range Inflation Outlook. Despite U.S. dollar strength of recent years, and what had been accelerating, then faltering dollar strength, subsequent to the post-election euphoria, the dollar recently has come under mounting selling pressure (see today’s *Hyperinflation Watch*). A tremendous threat to the dollar and systemic U.S. liquidity and market stability continues. That is tied to the U.S. Federal

Reserve's ongoing inability to resolve fundamentally the 2008 financial collapse, other than having bought limited time with its emergency, stopgap measures. Recent FOMC tightenings have been despite continued, intensifying "adverse" economic circumstances. Those circumstances have been masked, temporarily, by near-term hurricane-generated boosts to activity. They also have acted as a drain on insurance-industry reserves and personal saving used to pay for disaster damages. The U.S. central bank has been forced to prop banking-system liquidity against the ongoing gale of renewed, economically-driven, banking-system solvency and liquidity issues, with those pressures intensified by recent systemic disruptions from natural disasters, increasing political discord in Washington and mounting global political instabilities. Despite strong speculation and protestations to the contrary, ultimately, the FOMC should end up reverting to renewed and expanded quantitative easing.

Compounding the high-risk of an increasing near-term run on the U.S. dollar remains mounting recognition in global markets of the Fed's conundrum. The U.S. Federal Reserve and other central banks still have no effective idea as to how to boost current economic activity, how to stabilize global banking-system solvency, or otherwise how to slog their way out of a self-generated quagmire. That circumstance only can be exacerbated by intensifying economic and political uncertainties (see the *Opening Comments* and *Hyperinflation Watch*).

A New Table for Comparing Annual Inflation Rates. [The descriptive text here largely is repeated to today's *Opening Comments*.] Introduced with today's (January 15th) *Commentary* is *Table 1*, which details headline year-to-year inflation on both a quarterly and annual basis for the various Consumer and Producer Price Indices, allowing direct comparison of same for the past five years. Included are the headline CPI-U and its Food, Energy and Core (ex-Food and Energy) components, the narrower CPI-W and the fully-substitution based C-CPI-U. The C-CPI-U now is used in determining tax brackets for individuals, and likely also will be used in the not-so-distant future for determining Cost of Living Adjustments (COLA) for Social Security and related programs.

The concept and intent of the C-CPI-U was to reduce the headline reporting of consumer inflation, with the effect of reducing the federal budget deficit, without anyone in Congress having to make politically-impossible votes, such as to cut Social Security COLA adjustments. Discussed in the [Public Commentary on Inflation Measurement](#), deflation by too-low an inflation number including any of the headline CPI series (particularly the C-CPI-U) results in overstated tax brackets and understated COLA adjustments, which respectively boost Federal Revenues and cut Federal Spending. Using understated inflation in deflating headline nominal activity, in economic series such as Retail Sales or Average Weekly Earnings, results in overstated inflation-adjusted economic growth (see *Graphs 1* and *2* and *Graph 3* in the related comments in the *Executive Summary*).

Also included is the ShadowStats Alternate Inflation Measure (1980-Based) which restates the CPI-U for methodological reporting changes since 1980 that otherwise have been used to reduce headline consumer inflation reporting since the early-1980s (again see [Public Commentary on Inflation Measurement](#)).

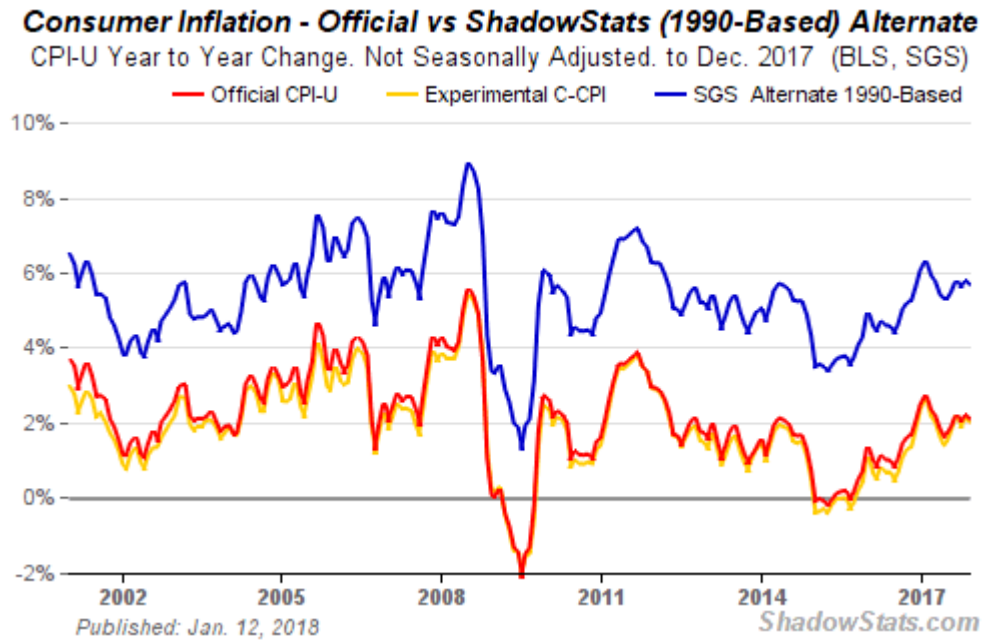
Definitions of these various consumer-inflation series and further details are found on third page following and in the ensuing specific CPI-related sections. Also included in *Table 1* is the Final Demand Producer Price Index (FD-PPI) measure of wholesale inflation and a breakout of its major subcomponents in Goods, Services and Construction. Like the CPI-U series, FD-PPI headline inflation is understated by the use of fully substitution-based estimates. It also suffers from definitional issues with the Services Sector detail, estimated from profit margins instead of costs, all as discussed in the following PPI section.

Table 1: Various Measures of Annual and Quarterly Year-to-Year U.S. Inflation (2013 to 2017)

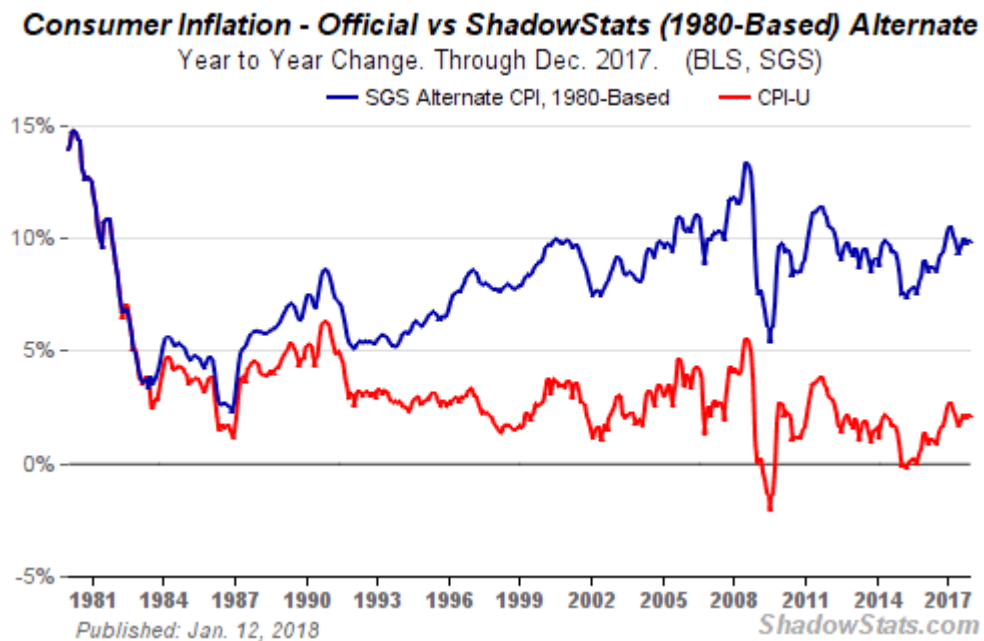
Year-to-Year Inflation for Headline Quarterly and Annual Averages of Various Measures of Consumer, Producer and ShadowStats Price Indices 2013 to 2017, Not Seasonally Adjusted											
Quarter	CPI-U	Food	Energy	Core**	CPI-W	C-CPI-U	Shadow-Stats*	FD-PPI	Goods	Services	Const.
2013											
1st-Q	1.68%	1.58%	-0.12%	1.94%	1.59%	1.42%	9.33%	1.49%	1.17%	1.69%	1.27%
2nd-Q	1.39%	1.43%	-0.76%	1.68%	1.28%	1.15%	9.03%	1.18%	1.02%	1.23%	1.20%
3rd-Q	1.55%	1.40%	0.44%	1.73%	1.49%	1.29%	9.19%	1.58%	0.77%	1.99%	1.80%
4th-Q	1.23%	1.17%	-2.32%	1.71%	1.11%	1.04%	8.80%	1.20%	0.33%	1.60%	3.12%
2014											
1st-Q	1.41%	1.40%	-0.03%	1.62%	1.31%	1.26%	9.06%	1.35%	0.98%	1.56%	3.29%
2nd-Q	2.05%	2.23%	3.23%	1.91%	2.04%	1.86%	9.79%	1.93%	2.22%	1.81%	3.24%
3rd-Q	1.78%	2.75%	0.81%	1.77%	1.70%	1.61%	9.51%	1.80%	1.74%	1.83%	3.10%
4th-Q	1.25%	3.22%	-5.64%	1.71%	0.97%	1.05%	8.93%	1.25%	0.09%	1.92%	2.17%
2015											
1st-Q	-0.06%	2.84%	-18.87%	1.70%	-0.68%	-0.35%	7.52%	-0.48%	-4.05%	1.39%	1.97%
2nd-Q	-0.04%	1.79%	-16.87%	1.76%	-0.59%	-0.20%	7.55%	-0.81%	-4.40%	1.04%	1.66%
3rd-Q	0.11%	1.62%	-16.03%	1.84%	-0.41%	-0.10%	7.71%	-0.93%	-4.41%	0.82%	1.80%
4th-Q	0.47%	1.21%	-14.89%	2.01%	0.03%	0.18%	8.09%	-1.26%	-4.36%	0.27%	2.15%
2016											
1st-Q	1.08%	0.83%	-10.56%	2.24%	0.79%	0.76%	8.73%	0.00%	-2.66%	1.34%	1.16%
2nd-Q	1.05%	0.65%	-9.48%	2.21%	0.71%	0.73%	8.71%	0.12%	-2.24%	1.33%	1.99%
3rd-Q	1.12%	-0.02%	-7.79%	2.24%	0.76%	0.74%	8.78%	0.21%	-1.49%	1.15%	0.71%
4th-Q	1.80%	-0.33%	2.18%	2.15%	1.65%	1.50%	9.52%	1.37%	0.90%	1.66%	0.61%
2017											
1st Q	2.54%	0.11%	12.26%	2.17%	2.56%	2.36%	10.31%	1.98%	3.71%	1.14%	1.38%
2nd Q	1.90%	0.76%	5.58%	1.77%	1.80%	1.65%	9.62%	2.21%	3.07%	1.80%	1.11%
3rd Q	1.97%	1.15%	6.64%	1.69%	1.96%	1.80%	9.70%	2.35%	2.92%	2.06%	3.31%
4th Q	2.12%	1.43%	7.55%	1.75%	2.18%	2.01%	9.86%	2.82%	3.63%	2.35%	3.03%
Year											
2013	1.46%	1.39%	-0.68%	1.76%	1.37%	1.22%	9.08%	1.36%	0.82%	1.63%	1.85%
2014	1.62%	2.40%	-0.34%	1.75%	1.50%	1.45%	9.32%	1.58%	1.26%	1.78%	2.95%
2015	0.12%	1.86%	-16.70%	1.83%	-0.41%	-0.12%	7.72%	-0.87%	-4.30%	0.88%	1.90%
2016	1.26%	0.28%	-6.58%	2.21%	0.98%	0.93%	8.94%	0.42%	-1.38%	1.37%	1.12%
2017	2.13%	0.86%	7.92%	1.84%	2.13%	1.95%	9.87%	2.34%	3.33%	1.84%	2.21%
Sources: ShadowStats, Bureau of Labor Statistics (BLS). * ShadowStats Alternate CPI Measure, 1980 Base. ** Ex-Food and Energy.											

[Graphs 8 and 9 and the
 “Notes on Different Measures of the Consumer Price Index” begin on the next page.]

Graph 8: Comparative Headline Year-to-Year Change, CPI-U vs. ShadowStats 1990-Based Alternate



Graph 9: Comparative Headline Year-to-Year Change, CPI-U vs. ShadowStats 1980-Based Alternate



Notes on Different Measures of the Consumer Price Index

The Consumer Price Index (CPI) is the broadest inflation measure published by the U.S. Government, through the Bureau of Labor Statistics (BLS), Department of Labor:

*The **CPI-U (Consumer Price Index for All Urban Consumers)** is the monthly headline inflation number (seasonally adjusted) and is the broadest in its coverage, representing the buying patterns of all urban consumers. Its standard measure is not seasonally-adjusted, and it never is revised on that basis except for outright errors.*

*The **CPI-W (CPI for Urban Wage Earners and Clerical Workers)** covers the more-narrow universe of urban wage earners and clerical workers and is used in determining cost of living adjustments in government programs such as Social Security. Otherwise, its background is the same as the CPI-U.*

*The **C-CPI-U (Chain-Weighted CPI-U)** was an experimental measure—now set to go active, formally, with pending 2017 Tax Reform (see the Opening Comments)—where the weighting of components is fully substitution based. It generally shows lower annual inflation rate than the CPI-U and CPI-W. The latter two measures once had fixed weightings—so as to measure the cost of living of maintaining a constant standard of living—but now are quasi-substitution-based. Since it is fully substitution based, the series tends to reflect lower inflation than the other CPI measures. Accordingly, the C-CPI-U is the “new inflation” measure being proffered by Congress and the White House as a tool for reducing Social Security cost-of-living adjustments by stealth. Moving to accommodate the Congress, the BLS introduced changes to the C-CPI-U estimation process with the February 26, 2015 reporting of January 2015 inflation, aimed at finalizing the C-CPI-U estimates on a more-timely basis, and enhancing its ability to produce lower headline inflation than the traditional CPI-U.*

*The **ShadowStats Alternative CPI-U Measures** are attempts at adjusting reported CPI-U inflation for the impact of methodological change of recent decades designed to move the concept of the CPI away from being a measure of the cost of living needed to maintain a constant standard of living. There are two measures, where the first is based on reporting methodologies in place as of 1980, and the second is based on reporting methodologies in place as of 1990.*

Comparative Annual Inflation Rate for the CPI-Related Series, by Year and by Quarter. *Table 1 (page 17) details the last five years of comparative annual inflation, including the major components of the CPI-U, along with details of the Producer Price Index (PPI) and its major subcomponents.*

CPI-U. The Bureau of Labor Statistics (BLS) reported January 12th, that the headline, seasonally-adjusted December 2017 CPI-U inflation increased month-to-month by 0.1% [up by 0.15% at the second decimal point], following gains of 0.4% [0.39%] in November, 0.1% [0.11%] in October, 0.5% [0.55%] in September, 0.4% [0.40%] in August and 0.1% [0.11%] in July, “unchanged” at 0.0% [an actual decline of 0.02% (-0.02%)] in June, a monthly decline of 0.1% (-0.1%) [0.13% (-0.13%)] in May, an increase in April of 0.2% [0.17%], a March drop of 0.3% (-0.3%) [down by 0.29% (-0.29%)], and monthly gains of 0.1% [0.12%] in February, 0.6% [0.55%] in January, and 0.3% [0.26%] in December 2016.

Unadjusted monthly December 2017 CPI-U declined by 0.06% (-0.06%), having been unchanged at 0.00% in November, having declined in October by 0.06% (-0.06%), having gained by 0.53% in September and 0.30% in August, having declined in July by 0.07% (-0.07%), and having gained by

0.09% in June, 0.09% in May, 0.30% in April, 0.08% in March, 0.31% in February, 0.58% in January and 0.03% in December 2016.

Major CPI-U Groups. Unadjusted annual changes by quarter and by year of the headline CPI-U and its major sub-groups are detailed in *Table 1*.

On a monthly basis, in the context of continuing gasoline price swings, impact post-hurricanes in combination with other recent short-term gasoline price volatility, and despite continuing positive seasonal adjustments, the gain in adjusted December 2017 CPI-U monthly inflation reflected minimally-muted negative impact from declining Energy costs, with offsetting gains from Food and “Core” inflation (everything but food and energy). On an unadjusted basis, the total December CPI-U showed a small monthly contraction, with the negative monthly contribution from Energy prices more than offsetting the gain in Food prices and the negligible unadjusted gain “Core” prices.

Encompassed by the December 2017 CPI-U seasonally-adjusted monthly inflation gain of 0.15% [down by 0.6% (-0.6%) on an unadjusted basis], Food inflation gained by 0.16% [up by 0.15% unadjusted], where Energy inflation declined by 1.16% (-1.16%) [down by 1.33% (-1.33%) unadjusted], while the adjusted “Core” (ex-food and energy) inflation rate rose by 0.28% [up by 0.3% unadjusted].

Still running contrary to FOMC hopes and expectations, “Core” CPI-U inflation has yet to regain or hold 2.0% in the current cycle, showing an unadjusted year-to-year inflation rate of 1.78% in December 2017, versus 1.71% in November 2017, versus 1.77% in October 2017, 1.69% in September 2017, 1.68% in August 2017, 1.69% in July 2017, 1.70% in June 2017, 1.73% in May 2017, 1.88% in April 2017, 2.00% in March 2017, 2.22% in February 2017, 2.27% in January 2017 and versus 2.20% in December 2016.

December 2017 seasonal adjustments for monthly gasoline inflation—usually reflective of the dominant pressure in energy prices—continued the pattern of turning positive in the second-half of the year, for July, August, September, October, November and December, with January to follow, having been heavily negative in first-half 2017, from February on. Such narrowed a December 2017 CPI-U unadjusted monthly decline of 3.32% (-3.32%) 2.58% in gasoline prices to an adjusted month-to-month decline of 2.69% (-2.69%). The Department of Energy (DOE) had estimated an unadjusted monthly decline for December of 3.14% (-3.14%).

With early-January 2018 retail gasoline prices (DOE) running higher month-to-month versus December 2017, by an order of magnitude of 1.7% (-1.7%), and given likely still positive seasonal adjustments to January 2018 gasoline prices, there is a likely net-positive monthly impact of gasoline prices on the headline January CPI, both before and after positive seasonal adjustments.

Year-to-Year CPI-U. Not seasonally adjusted, December 2017 year-to-year inflation for the CPI-U increased by 2.1% [2.11% at the second decimal point], versus gains of 2.2% [2.20%] in November 2017, 2.0% [2.04%] in October 2017, 2.2% [2.23%] in September 2017, 1.9% [1.94%] in August 2017, 1.7% [1.73%] in July 2017, 1.6% [1.63%] in June 2017, 1.9% [1.87%] in May 2017, 2.2% [2.20%] in April 2016, 2.4% [2.38%] in March 2017, a 60-month high of 2.7% [2.74%] in February 2017, 2.5% [2.50%] in January 2017 and 2.1% [2.07%] in December 2016.

Year-to-year, CPI-U inflation would increase or decrease in next month’s January 2018 reporting, dependent on the seasonally-adjusted month-to-month change, versus the adjusted, headline gain of 0.55% in the January 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 January 2018, the difference in January's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the unadjusted December 2017 annual inflation rate of 2.11%. Given an early guess of a 0.3% seasonally-adjusted monthly gain in January 2018 CPI-U, that would leave the annual CPI-U inflation rate for January 2018 at about 1.9%, plus-or-minus.

Quarterly CPI-U. On an annualized quarter-to-quarter basis, seasonally-adjusted CPI-U rose by 3.72% in fourth-quarter 2017, having gained 2.01% in third-quarter 2017, declined by 0.31% (-0.31%) in second-quarter 2017, having gained by 3.15% in first-quarter 2017, 3.04% in fourth-quarter 2016, 1.78% in third-quarter 2016, 2.33% in second-quarter 2016 and 0.11% in first-quarter 2016.

On an unadjusted, year-to-year basis, annual inflation by quarter was up by 2.12% in fourth-quarter 2017, versus 1.97% in third-quarter 2017, 1.90% in second-quarter 2017, 2.54% in first-quarter 2017, 1.80% in fourth-quarter 2016, 1.12% in third-quarter 2016, 1.05% in second-quarter 2016 and 1.08% in first-quarter 2016, see *Table 1* for additional detail.

Annual Average CPI-U. The unadjusted annual average CPI-U inflation rate was 2.13% in 2017, versus 1.26% in 2016 and 0.12% in 2015, see *Table 1* for additional detail.

CPI-W. The December 2017 seasonally-adjusted, headline CPI-W, which is a narrower series and has greater weighting for gasoline than does the CPI-U, rose month-to-month by 0.14%, following monthly gains of 0.50% in November, 0.08% in October, 0.66% in September, 0.46% in August and 0.10% in July, and declines of 0.05% (-0.05%) in June and 0.20% (-0.20%) in May, a monthly gain of 0.18% in April, a decline of 0.37% (-0.37%) in March, and gains of 0.06% in February, 0.61% in January 2017 and 0.29% in December 2016.

On an unadjusted basis, year-to-year CPI-W eased to 2.18% in December 2017, versus 2.32% in November 2017, 2.05% in October 2017, 2.31% in September 2017, 1.93% in August 2017, 1.64% in July 2017, 1.50% in June 2017, 1.78% in May 2017, 2.14% in April 2017, 2.35% in March 2017, 2.82% in February 2017, 2.51% in January 2017 and 1.99% in December 2016.

Quarterly CPI-W. On an annualized quarter-to-quarter basis, seasonally-adjusted CPI-W rose by 4.29% in fourth-quarter 2017, having gained 2.14% in third-quarter 2017, having declined in second-quarter 2017 by 0.77% (-0.77%), having gained by 3.22% in first-quarter 2017, by 3.30% in fourth-quarter 2016, 1.54% in third-quarter 2016 and 2.35% in second-quarter 2016, having declined in first-quarter 2016 by 0.55% (-0.55%).

On an unadjusted year-to-year basis, annual inflation by quarter was 2.18% in fourth-quarter 2017, versus 1.96% in third-quarter 2017, 1.80% in second-quarter 2017, 2.56% in first-quarter 2017, 1.65% in fourth-quarter 2016, 0.76% in third-quarter 2016, 0.71% in second-quarter 2016 and 0.79% in first-quarter 2016, see *Table 1* for additional detail.

Annual CPI-W. The unadjusted annual average CPI-W inflation rate was 2.13% in 2017, versus an average gain of 0.98% in 2016 and an average contraction of 0.41% (-0.41%) in 2015, see *Table 1* for additional detail.

Chained-CPI-U. The headline C-CPI-U is not seasonally adjusted, but it is revised quarterly for the prior year, as was last with October 2017 reporting, in which year-to-year inflation rates revised lower by 0.05% (-0.05%) for each month back through December 2016.

The headline annual inflation rate for the C-CPI-U in December 2017 was 2.02%, following annual gains of 2.11% in November 2017, 1.89% in October 2017, 2.17% in September 2017, 1.77% in August 2017, 1.46% in July 2017, 1.35% in June 2017, 1.62% in May 2017, 1.98% in April 2017, 2.16% in March 2017, 2.62% in February 2017, 2.31% in January 2017 and 1.81% in December 2016.

Quarterly C-CPI-U, Year-to-Year. On an unadjusted, year-to-year basis, annual inflation by quarter was up by 2.01% in fourth-quarter 2017, versus 1.80% in third-quarter 2017, versus 1.65% in second-quarter 2017, 2.36% in first-quarter 2017, 1.50% in fourth-quarter 2016, 0.74% in third-quarter 2016, 0.73% in second-quarter 2016 and 0.76% in first-quarter 2016, see *Table 1* for additional detail.

Annual Average C-CPI-U. The annual average C-CPI-U inflation rate was 1.95% in 2017, versus an annual gain of 0.93% in 2016 and an annual contraction of 0.12% (-0.12%) in 2015, see *Table 1* for additional detail.

C-CPI-U Reduced Headline CPI-U Annual Inflation by 0.23% (-0.23%) Over the Last Five Years.

Discussed in the *Opening Comments*, the headline C-CPI-U was designed to reduce headline consumer inflation, based on the CPI-U. What the preceding *Table 1* shows is that over the last five years the headline average annual CPI-U, constrained by collapsing oil, gasoline and related energy prices was 1.32%, versus 1.09% for the C-CPI-U, a reduction in headline C-CPI-U average annual inflation by 0.23% (-0.23%) versus the headline CPI-U.

The reduction in the C-CPI-U versus the CPI-W, however, was just 0.02% (-0.02%). Where the C-CPI-U is defined based on the CPI-U, the headline inflation savings would be similar to those versus the CPI-U, if the C-CPI-U were defined against the CPI-W. Where the CPI-W is more heavily weighted for gasoline, falling gasoline prices have left the five-year annual average CPI-W at 0.21% (-0.21%) below the CPI-U. In 2017, with some rebound in energy prices, both the CPI-U and CPI-W showed five-year high average annual inflation of 2.13%, versus 1.95% in the C-CPI-U, a deficit of 0.18% (-0.18%). If oil prices were to continue to be depressed, one might anticipate the introduction of the C-CPI-W, if it is not already being calculated off the headline books.

See the *Opening Comments* of [Commentary No. 920](#) as to the overhaul to federal income taxes in the new tax laws, and discussions in the earlier [Commentary No. 721](#) and in the opening notes in the *CPI Section* of [Commentary No. 699](#) as to the most-recent changes in the series. More-frequent revisions and earlier finalization of monthly detail broadly have been designed to groom the C-CPI-U series as the new Cost of Living Adjustment (COLA) index of choice for the budget-deficit-strapped federal government, as discussed in the [Public Commentary on Inflation Measurement](#).

Caution: Artificially-low inflation numbers estimated by the U.S. Government and used in fields ranging from Social Security COLAs (see the 2017 CPI-W estimate discussion in [Commentary No. 841](#)) to determining income-tax brackets, have been redesigned in recent decades specifically to help reduce the federal deficit. They are harmfully misleading to anyone using a government CPI estimate as a meaningful cost-of-living measure for guidance on income or investment purposes.

Alternate Consumer Inflation Measures. The ShadowStats-Alternate Consumer Inflation Measures are constructed on top of the unadjusted CPI-U series. Adjusted to 1990 methodologies—the ShadowStats-Alternate Consumer Inflation Measure (1990-Base)—year-to-year annual inflation was roughly 5.7% in December 2017, versus 5.8% in November 2017, 5.6% in October 2017, 5.8% in September 2017, 5.5% in August 2017, 5.3% in July 2017, 5.2% in June 2017, 5.5% in May 2017, 5.8% in April 2017, 6.0% in March 2017, 6.3% in February 2017, 6.1% in January 2017 and 5.7% in December 2016.

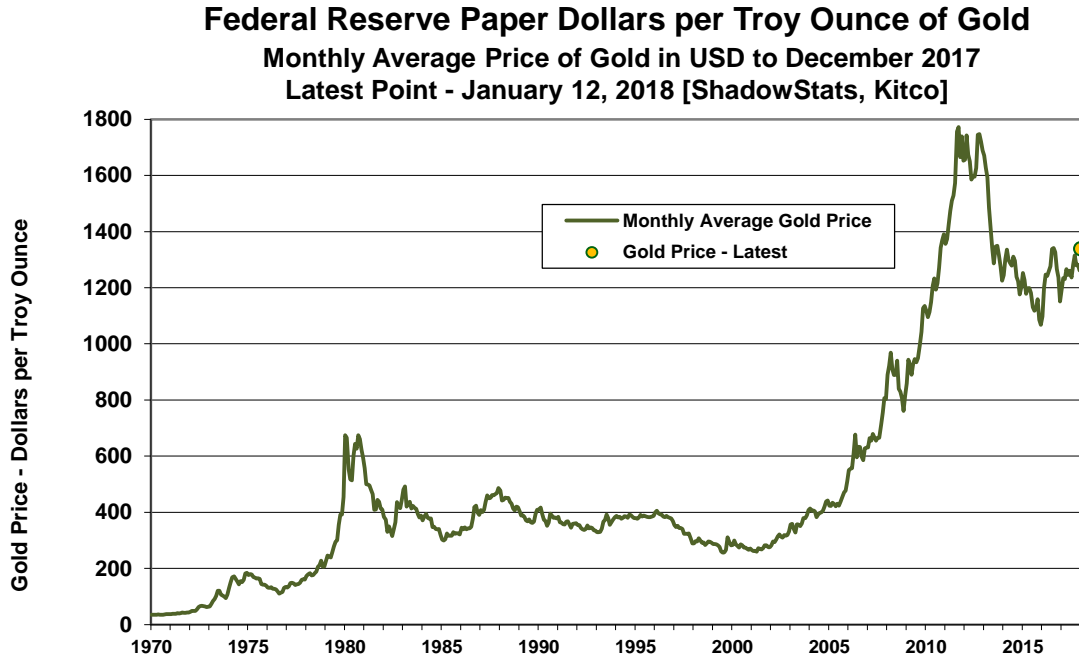
The December 2017 ShadowStats-Alternate Consumer Inflation Measure (1980-Base), which reverses gimmicked changes to official CPI reporting methodologies back to 1980, was at about 9.8% (9.85% at the second decimal point), versus 9.9% (9.95%) in November 2017, 9.8% (9.78%) in October 2017, 10.0% (9.98%) in September 2017, 9.7% (9.67%) in August 2017, 9.4% (9.44%) in July 2017, 9.3% (9.34%) in June 2017, 9.6% (9.60%) in May 2017, 10.0% (9.95%) in April 2017, 10.1% (10.14%) in March 2017, 10.5% (10.53%) in February 2017, 10.3% (10.27%) in January 2017 and 9.8% (9.81%) in December 2016. Historic monthly detail, along with an inflation calculator will be found in the [CPI](#) section of the Alternate Data tab of the ShadowStats home page: www.ShadowStats.com, see also *Table-1* for annual and quarterly detail.

Note: The ShadowStats-Alternate Consumer Inflation Measures largely have been reverse-engineered from BLS estimates of the anticipated impact on annual CPI inflation from various changes made to CPI reporting methodology since the early 1980s, as also incorporated in the CPI-U-RS series. That series provides an official estimate of historical inflation, assuming that all current methodologies were in place going back in time. The changes reflected there are parallel with and of the same magnitude of change as estimated by the BLS, when a given methodology was changed.

The ShadowStats estimates are adjusted on an additive basis for the cumulative impact on the annual inflation rate from the various BLS changes in methodology (reversing the net aggregate inflation reductions by the BLS). The series are adjusted by ShadowStats for those aggregate changes, but the series otherwise are not recalculated.

Over the decades, the BLS has altered the meaning of the CPI from being a measure of the cost of living needed to maintain a constant standard of living, to something that neither reflects the constant-standard-of-living concept nor measures adequately what most consumers view as out-of-pocket expenditures. Roughly five percentage points of the additive ShadowStats adjustment since 1980 reflect the BLS's formal estimate of the annual impact of methodological changes; roughly, two percentage points reflect changes by the BLS, where ShadowStats has estimated the impact not otherwise published by the BLS. For example, the BLS does not consider more-frequent weightings of the CPI series or shifting the nature of retail outlets to be changes in methodology. Yet those changes have had the effect of reducing headline inflation from what it would have been otherwise (See [Public Commentary on Inflation Measurement](#) for further details.)

[Graph 10 and
“Gold and Silver High Prices” follow on the next page.]

Graph 10: Monthly Average Gold Price in Dollars (Federal Reserve Notes)**Gold and Silver Historic High Prices Adjusted for December 2017 CPI-U/ShadowStats Inflation—**

CPI-U: GOLD at \$2,693 per Troy Ounce, SILVER at \$154 per Troy Ounce

ShadowStats: GOLD at \$14,848 per Troy Ounce, SILVER at \$851 per Troy Ounce

Despite the September 5, 2011 historic-high gold price of \$1,895.00 per troy ounce (London afternoon fix), and despite the multi-decade-high silver price of \$48.70 per troy ounce (London fix of April 28, 2011), gold and silver prices have yet to re-hit their 1980 historic levels, adjusted for inflation. The earlier all-time high of \$850.00 (London afternoon fix, per Kitco.com) for gold on January 21, 1980 would be \$2,693 per troy ounce, based on December 2017 CPI-U-adjusted dollars, and \$14,848 per troy ounce, based on December 2017 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (all series here are not seasonally adjusted).

In like manner, the all-time high nominal price for silver in January 1980 of \$49.45 per troy ounce (London afternoon fix, per silverinstitute.org)—although approached in 2011—still has not been hit since 1980, including in terms of inflation-adjusted dollars. Based on December 2017 CPI-U inflation, the 1980 silver-price peak would be \$154 per troy ounce and would be \$851 per troy ounce in terms of the December 2017 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (again, all series not seasonally adjusted).

Shown in *Table 1*, on page 47 of [No. 859 Special Commentary](#), over the decades, the increases in gold and silver prices have compensated for more than the loss of the purchasing power of the U.S. dollar as reflected by CPI inflation. They also effectively have come close to fully compensating for the loss of purchasing power of the dollar based on the ShadowStats-Alternate Consumer Price Measure (1980-Methodologies Base).

Real Retail Sales—December 2017—Net of Seasonally-Adjusted Monthly and Annual CPI Inflation, Sales Gained 0.20% in the Month, 3.26% Year-to-Year. Details are in the previous *Retail Sales* section.

Real Average Weekly Earnings—December 2017—Quarterly Real Average Weekly Earnings Contracted for the Second Consecutive Quarter. [Note: Details are plotted in the Executive Summary, Graph 3, and in the Consumer Liquidity Watch, Graph CLW-7.] For the production and nonsupervisory employees category (deflated by the CPI-W)—the only series for which there is a meaningful history, back to 1964, the regularly-volatile, real average weekly earnings gained month-to-month in December 2017, but fourth-quarter 2017 earnings fell quarter-to-quarter, for the second consecutive quarter, down at an annualized pace of 0.94% (-0.94%), having declined by 0.07% (-0.07%) in third-quarter 2017. The annual average change in the series dropped to a five-year low of 0.38%, not suggestive of accelerating economic growth.

In the broader, all-private employees category (deflated by the CPI-U, with a history back only to March 2006), fourth-quarter 2017 real average weekly earnings also contracted quarter-to-quarter, down at an annualized pace of 1.16% (-1.16%), having gained 0.63% in third-quarter 2017 activity. The annual average change in this series also dropped to a five-year low of 0.45%.

Discussed in the *Opening Comments*, the government's headline data are suggestive of intensifying income and liquidity issues for the consumer. Some common signals and general correlation between the two average earnings series are explored, as reflected there in *Graph OC-1*. Sharply slowing paces of annual growth for both series, 2017 versus 2016, is consistent with a renewed economic downturn, not with a new economic boom.

Production and Nonsupervisory Employee Details. The headline estimate for December 2017 real average weekly earnings was published along with the release of the headline December 2017 CPI-W. In the production and nonsupervisory employees category, again, the only series for which there is a meaningful history, the regularly-volatile real average weekly earnings gained month-to-month by 0.18% in December 2017, versus a revised decline of 0.06% (-0.06%) [previously 0.27% (-0.27%)] in November, a revised gain of 0.13% [previously 0.08%, initially 0.17%] in October, unrevised declines 0.30% (-0.30%) in September and 0.53% (-0.53%) in August and a gain of 0.17% in July.

Year-to-year, the adjusted December 2017 real change picked up to 0.69%, versus 0.50% [previously 0.25%] in November 2017 and 0.45% [previously 0.40%, initially 0.54%] in October 2017 against unrevised gains of 0.18% in September 2017, 0.47% in August 2017 and 0.67% in July 2017.

The annualized quarterly change in third-quarter 2017 real average weekly earnings was 0.07% (-0.07%), followed by an initial headline annualized contraction of 0.94% (-0.94%).

Second-quarter 2017 activity was an unrevised, annualized real quarterly gain of 4.43%, following contractions in first-quarter 2017 of 1.13% (-1.13%), in fourth-quarter 2016 of 1.36% (-1.36%), and third-quarter 2016 growth of 1.48%, a second-quarter 2016 contraction of 0.11% (-0.11%) and first-quarter 2016 annualized growth of 1.81%.

Year-to-year growth in the third third-quarter 2017 real earnings was 0.44%, followed by an initial fourth-quarter 2017 estimate of 0.55%.

Year-to-year change in second-quarter 2017 real earnings was unrevised at 0.83%, following an annual contraction of 0.29% (-0.29%) in first-quarter 2017, which had been the first annual or year-to-year quarterly contraction since fourth-quarter 2012, when the real GDP effectively was unchanged quarter-to-quarter. The signal there has highlighted financial stresses on the consumer and continuing major downside risk to headline real GDP reporting.

The 2015 rally in real annual income and the subsequent slowdowns in latter 2016 and early pickup, now slowdown in 2017 remain tied directly to the impact of irregularly-collapsing/rising gasoline prices, and intermittent, subsequent rebound/decline in inflation-adjusted income.

While these usually heavily-revised and seasonally-adjusted monthly changes are without much, if any, meaning in the near-term—effectively reporting garbage—over the longer term and quarterly, and particularly the benchmarked trends tend to be of some substance. As with the BLS reporting tied to the nonfarm payrolls, the headline seasonally-adjusted monthly data here are not comparable due to reporting issues with concurrent seasonal factor adjustments (see *Headline Distortions from Shifting Concurrent-Seasonal Factors* in prior [Commentary No. 930-B](#), *Supplemental Labor-Detail Background* on page 31).

Separately, the CPI-W-deflated reporting here also is biased versus the CPI-U-deflated series, where the CPI-W—more heavily weighted with gasoline prices—tends to have much deeper, negative headline inflation, with resulting stronger headline, real growth than would be seen with the CPI-U, when gasoline prices are falling, and vice versa. Such was seen minimally in December 2017 detail, where weaker, seasonally-adjusted gasoline prices helped to generate a headline, seasonally-adjusted CPI-W gain of 0.14% month-to-month, versus the parallel CPI-U gain of 0.15%.

Again, *Graph 3* in the *Executive Summary* and *Graph CLW-7* in the *Consumer Liquidity Watch*, plot this series, showing 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 headline CPI-W (also used in calculating Social Security cost-of-living adjustments) helped to prop up the reported real earnings. Official real earnings today still have not recovered their inflation-adjusted levels of the early-1970s, and, at best, have been in a minimal uptrend for the last two decades (albeit spiked recently by negative headline inflation). Deflated by the ShadowStats (1990-Based) measure, real earnings have been in fairly-regular decline for the last four decades, which is much closer to common experience than the pattern suggested by the CPI-W. See the [Public Commentary on Inflation Measurement](#) for further detail.

Real (Inflation-Adjusted) Money Supply M3—December 2017—Annual Growth Notched Minimally Higher, Reflecting a Pullback in the CPI-U Relative and Renewed Surge in Nominal M3 Growth. The signal for a double-dip, multiple-dip or simply protracted, ongoing recession, based on annual contraction in the real (inflation-adjusted) broad money supply (M3), recently had been re-triggered/intensified, but that signal then softened with a continuing, contrary bounce since May 2017. The previous signal had been, and has remained in place, despite real annual M3 growth having rallied into positive territory post-2010, and the real growth pattern having turned down anew, with annual nominal M3 growth slowing faster than CPI-U annual inflation into June 2017, followed by with the reversal of trend into October 2017 with monthly fluttering in November and December 2017 detail.

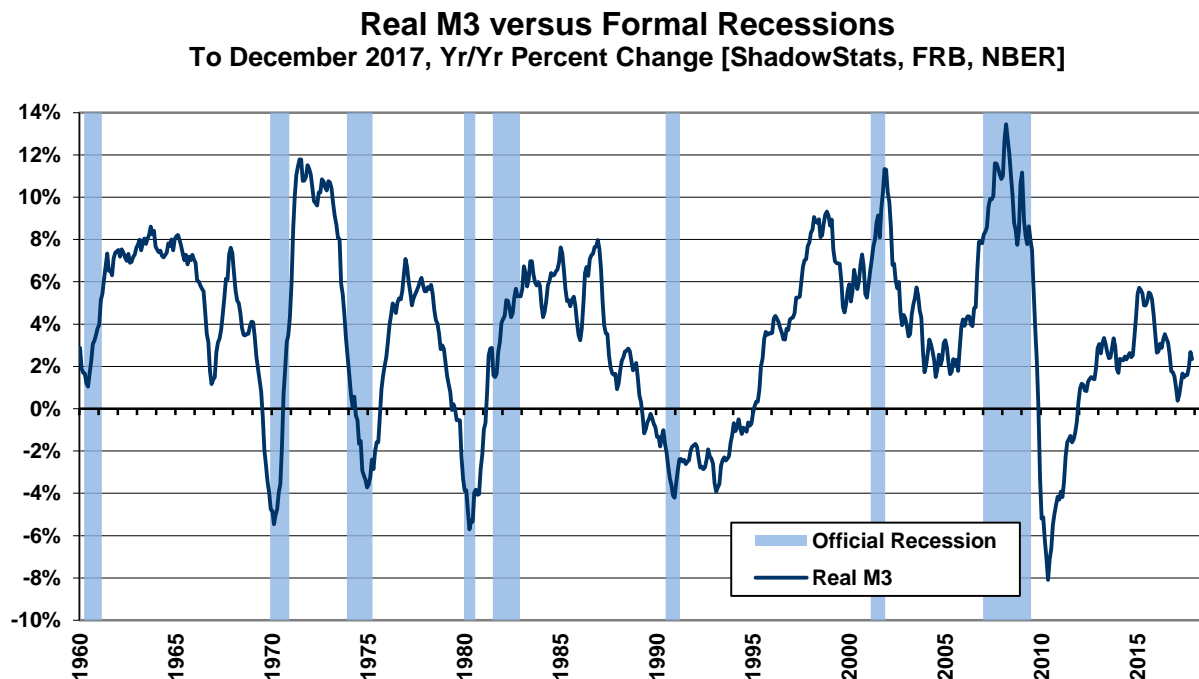
Shown in *Graph 11*—based on the December 2017 CPI-U reporting and the latest ShadowStats-Ongoing M3 Estimate—annual inflation-adjusted growth in December 2017 M3 moved higher to 2.66%, from a

downwardly-revised 2.35% [previously 2.43% in November] and a downwardly-revised 2.68% [previously 2.76%] in October 2017, versus a downwardly-revised 1.93% [previously 2.04% in September 2017]. Those levels of activity remained down from unrevised peak growth of a 5.71% in February 2015. The decline increase in the December versus the October number, reflected an increase in nominal December 2017 M3 annual growth by 0.22% (see [Commentary No. 930-B](#)), exacerbated by an unadjusted headline CPI-U annual inflation decline of 0.09% (-0.09%) in December 2017 (see the December 2017 CPI-U headline detail earlier in this section).

The recent monthly upticks in annual growth still likely reflected a temporary reversal in the pattern of plunging annual growth, which has held at levels last seen in plunging growth into the 2009 economic collapse, a level always seen going into, or already in a recession.

The signal for a downturn or an intensified downturn is generated when annual growth in real M3 first slows sharply, approaches zero and turns negative in a given cycle; the signal is not dependent on the depth of the downturn or its duration. Breaking into positive territory does not generate a meaningful signal one way or the other for the broad economy. The previous “new” downturn signal was generated in December 2009, even though there had been no upturn since the economy purportedly hit bottom in mid-2009. The ongoing issue here confounding the regular signal is that the U.S. economy never has recovered fully from its collapse into 2009 (see [Commentary No. 877](#) and [Commentary No. 902-B](#)). The initial economic downturn never evolved into a meaningful or sustainable recovery. The current level and pattern of real annual M3 growth generally has been followed by annual contraction and recession signal.

Graph 11: Real M3 Annual Growth versus Formal Recessions



Again, when real M3 growth breaks above zero, there is no signal; the signal is generated only when annual growth moves to zero and into negative territory, from which it has backed off at present. The broad economy tends to follow in downturn or renewed deterioration roughly six-to-nine months after the signal. Weaknesses in a number of economic series have continued to the present, with significant new

softness in recent reporting, separate from what should be short-lived activity generated by the destruction a particularly-severe hurricane season. Actual post-2009 economic activity has remained at relatively low levels—in protracted stagnation—with no actual recovery (see [Commentary No. 923](#), and the *ECONOMY* section of [No. 859 Special Commentary](#)).

Despite the purported, ongoing recovery shown in headline GDP activity, a renewed downturn in official data is underway that likely still will gain official recognition as a “new” recession, in the months ahead. Underlying reality remains that the collapse into 2009 was followed by a plateau of low-level economic activity—no meaningful upturn, no full recovery from or end to the official 2007 recession, no new economic expansion—where the unfolding “new” downturn remains nothing more than a continuation and re-intensification of a downturn that began unofficially in 2006.

PRODUCER PRICE INDEX—PPI (December 2017)

December 2017 Final Demand Annual PPI Inflation: Pulled Back to 2.6%, Reflecting Neutral Monthly Goods Inflation and Services Inflation Hit by Falling Margins on Gasoline Prices. In November, surging gasoline prices had spiked the energy goods sector, which was flat in December, with declining margins on gasoline stocks a major deflationary factor in December services sector, due to severe definitional problems in that sector, as discussed shortly.

Hurricane Disruptions Abate As Regularly Unstable, Gasoline-Price Movements Continue. Discussed in recent months, large inflation swings over the near-term have been due to volatile gasoline prices, driven by hurricane-disrupted supply distortions, not by major swings in underlying economic activity. While gasoline prices likely will continue to be volatile, and to remain beyond the standard seasonal adjustments imposed by the Bureau of Labor Statistics (BLS) on its headline monthly inflation estimates, most of the hurricane-season disruption now should have passed.

As shown and reviewed with *Table 1* (page 17) in the preceding CPI coverage, the primary, headline inflation issue in these data remains energy-price distortions of the last several years, which have been rigged heavily through the Federal Reserve’s interest-rate jawboning and dollar-propping gimmicks, combined with OPEC-supply jawboning, political instabilities in the Middle East and short-terms supply disruptions from Hurricane Harvey.

Separate from the conundrums of the dominant services sector definitional issues, the old-fashioned, headline seasonally-adjusted monthly goods inflation in December 2017 unchanged at 0.0%, versus 0.98% in November and 0.27% in October, all hit or boosted by rising or falling gasoline prices, again driven by factors other than underlying, broad economic activity. The December aggregate monthly “unchanged” inflation, reflected monthly food prices down by 0.68% (-0.68%), with energy prices “unchanged,” and “core” inflation (ex-food and energy) up by 0.18%. Before seasonal adjustments, goods inflation was “unchanged,” with food inflation declining by 0.51% (-0.51%) in the month, energy prices “unchanged” and “core” inflation up by 0.18%. For the PPI-FD Goods sector, unadjusted annual inflation of 3.50% in December 2017, eased versus 4.17% in November 2017, but still above 3.23% in October 2017.

Services-Side Nonsense Detail. The headline monthly PPI Final Demand inflation generally reflects neither real-world activity, nor common experience, except by possible coincidence. As structured, the monthly wholesale inflation rate remains dominated by the services sector, which is of negligible common-experience or theoretical value, as discussed in the following *Bulk of Headline PPI Reporting Is of Little Practical Use* section. It also has proven to be highly unstable in its surveying and related reporting. Consider that the monthly PPI detail is subject to revision five months after its initial reporting.

For the August 2017 PPI revision, released with the December 2017 reporting, the seasonally-adjusted aggregative headline index change was revised higher to a monthly gain of 0.35% from a previous estimate of 0.18%. The net positive revision of 0.18% seen in the level of the aggregate index August 2017 index encompassed a net positive revision of 0.18% in the dominant services sector, a 0.09% net positive revision the goods sector, with the minimally-weighted construction sector inflation index also revising lower by 0.09% (-0.09%). As usual, though, the internal numbers did not add up to provide a consistent picture, particularly in the context of seasonal adjustments. Most frequently data-consistency issues are generated on the dominant services-side of the reporting (again, see *Inflation That Is More Theoretical than Real World*).

Bulk of Headline PPI Reporting Is of Little Practical Use. [The background text here and in the next subsection is as published previously.] Beyond the broad issues with general inflation measurement (see [Public Commentary on Inflation Measurement](#)), indeed the bulk of the PPI is covered by the “services” sector, where inflation is determined largely by shifting profit margins. Discussed in the next subsection, profit-margin inflation estimates generally are handled in a manner counter-intuitive to the more-traditional measurement of inflation in goods and services, otherwise calculated as a measurement of change in prices. Accordingly, the headline detail here increasingly has a limited relationship to real-world activity.

The conceptual differences between goods inflation and services profit margins do not blend well and are not merged easily or meaningfully in the current version of the PPI. While the dual measures are more meaningfully viewed independently, rather than as the hybrid measure of the headline Producer Price Index Final Demand, the aggregate headline series here (ShadowStats separates the analyses of those sectors by sub-category) also is reviewed and covered within the headline reporting conventions of the Bureau of Labor Statistics (BLS).

Inflation That Is More Theoretical than Real World. Effective with January 2014 reporting, a new Producer Price Index (PPI) replaced what had been the traditional headline monthly measure of wholesale inflation in Finished Goods (see [Commentary No. 591](#)). In the new headline measure of wholesale Final Demand, Final Demand Goods basically is the old Finished Goods series, albeit expanded.

The new, otherwise dominant Final Demand Services sector largely reflects problematic and questionable surveying of intermediate or quasi-wholesale profit margins in the services area. When profit margins shrink in the services sector, one could argue that the resulting lowered estimation of inflation actually is a precursor to higher inflation, as firms subsequently would move to raise prices, in an effort to regain more-normal margins. In like manner, in the circumstance of “increased” margins—due to the lower cost of petroleum-related products not being passed along immediately to customers—competitive pressures to lower margins tend to be reflected eventually in reduced retail prices (CPI). The oil-price versus margin gimmick works both way. In times of rapidly rising oil prices, it mutes the increase in Final Demand inflation, in times of rapidly declining oil prices; it tends to mute the decline in Final Demand inflation.

The current PPI series remains an interesting concept, but it appears limited as to its aggregate predictive ability versus general consumer inflation. Further, there is not enough history available on the new series (just eight years of post-2008-panic data) to establish any meaningful relationship to general inflation or other economic or financial series.

December 2017 Headline PPI Detail. The Bureau of Labor Statistics (BLS) reported January 11th, that the seasonally-adjusted, month-to-month, headline Producer Price Index Final-Demand (PPI-FD) inflation for December 2017 declined by 0.09% (-0.00%), versus monthly gains of 0.44% in both November and October and a revised September gain of 0.27%, against an upwardly revised level in August, which reflected a monthly gain of 0.35% [previously up by 0.18%]. Unadjusted, however, the monthly gain in August revised to 0.18% from 0.09%.

On a not-seasonally-adjusted basis—all annual growth rates are expressed unadjusted—year-to-year PPI-FD inflation in December 2017 eased back to 3.61%, from a 70-month high (since January 2012) of 3.07% in November 2017, versus annual gains of 2.79% in October 2017, 2.62% in September 2017 and a five-month revised 2.44% [previously 2.35%] in August 2017.

For the three major subcategories of the December 2017 PPI-FD, which showed a monthly decline of 0.09% (-0.09%) and 2.61% annual inflation, headline monthly Goods inflation was unchanged at 0.00% month-to-month, up by 3.50% year-to-year, Services “inflation” (profit margins) declined month-to-month by 0.17% (-0.17%), up by 2.24% year-to-year, and Construction inflation decreased, in the month by 0.08%, (-0.08%), up by 2.97% year-to-year for the second straight month.

Final Demand Goods (weighted at 33.81% of the Aggregate Index). Running somewhat in parallel with the old Finished Goods PPI series, headline month-to-month Final Demand Goods inflation in December 2017 was “unchanged” at 0.0%, following gains of 0.98% in November and 0.27% in October. There was neutral impact on the aggregate goods headline reading from underlying seasonal-factor adjustments. Not-seasonally-adjusted, December inflation also was “unchanged” at 0.00% as well.

Unadjusted, year-to-year goods inflation in December 2017 showed an annual gain of 3.50%, following gains of 4.17% in November 2017 and 3.23% in October 2017.

Headline seasonally-adjusted monthly changes by major components of the December 2017 Final Demand Goods:

- “Foods” inflation (weighted at 5.40% of the total index) declined month-to-month in December 2017 by 0.68% (-0.68%), having gained 0.26% in November and 0.52% in October. Seasonal adjustments were negative for the December headline change, which was a monthly contraction of 0.51% (-0.51%) unadjusted. Unadjusted and year-to-year, annual December 2017 foods inflation rose by 2.11%, having gained 3.54% in November 2017 and 2.64% in October 2017.
- “Energy” inflation (weighted at 5.50% of the total index) was “unchanged” month-to-month at 0.00% in December 2017, having gained 4.63% month-to-month in November and having been “unchanged” at 0.00% October. Seasonal adjustments were neutral in December, with unadjusted energy also “unchanged” at 0.00% for the month. Unadjusted and year-to-year, December 2017 energy prices gained 10.12%, versus annual gains of 12.15% in November 2017 and 7.62% in October 2017.

- “Less foods and energy” (“Core” goods) monthly inflation (weighted at 22.91% of the total index) gained month-to-month by 0.18% in December 2017, having gained 0.26% in both November and October. Seasonal adjustments were neutral for monthly core inflation, with the unadjusted monthly December inflation also up by 0.18%. Unadjusted and year-to-year, December 2017 “core” inflation eased to 2.33%, versus 2.43% in November 2017 and 2.34% in October 2017.

Final Demand Services (weighted at 64.12% of the Aggregate Index). Headline Final Demand Services inflation declined by 0.17% (-0.17%) in December 2017, having gained 0.17% in November and 0.53% in October. The overall seasonal-adjustment impact on headline services inflation was positive, with an unadjusted monthly decline of 0.35% (-0.35%). Year-to-year, unadjusted December 2017 services inflation was 2.24%, down from 2.41% in both November 2017 and October 2017.

The headline monthly changes by major component for December 2017 Final Demand Services inflation:

- “Services less trade, transportation and warehousing” inflation, or the “Other” category (weighted at 38.87% of the total index) monthly inflation here rose by 0.09% in December 2017, having gained 0.44% in November and 0.09% in October. Seasonal-adjustment impact on the adjusted December detail was positive, where the unadjusted monthly reading was unchanged at 0.00%. Unadjusted and year-to-year, December 2017 “other” services inflation was up by 2.35%, versus 2.25% in November 2017 and 1.98% in October 2017.
- “Transportation and warehousing” inflation (weighted at 4.99% of the total index) declined month-to-month by 0.42% (-0.42%) in December 2017, having gained 0.60% in November and 0.77% in October. Seasonal adjustments were positive for the headline December reading, versus an unadjusted monthly decline of 0.60% (-0.60%). Unadjusted and year-to-year, December 2017 transportation inflation rose by 1.83%, versus 3.52% in November 2017 and 3.36% in October 2017.
- “Trade” inflation (weighted at 20.26% of the total index) declined by 0.60% (-0.60%) month-to-month in December 2017, having declined by 0.34% (-0.34%) in November 2017 and having gained by 1.13% in October. Seasonal adjustments had a positive negative impact, where the unadjusted monthly change was down by 0.86% (-0.86%). Unadjusted and year-to-year, December 2017 trade inflation softened to an annual gain of 2.12%, versus 2.46% in November 2017 and 2.99% in October 2017.

Final Demand Construction (weighted at 2.07% of the Aggregate Index). Although a fully self-contained subsection of the Final Demand PPI, Final Demand Construction inflation receives no formal headline coverage. Month-to-month construction inflation declined by 0.08% (0.08%) in December 2017, having declined by 0.17% (-0.17%) in November and having gained by 0.51% in October. The impact of seasonal factors on the December reading was neutral, as usual, where the unadjusted monthly decline also was 0.08% (-0.08%). The issues here are a combination of monthly headline cost changes along with a quarterly estimate of contractor profit-margin changes that have little connection to real-world activity. The latter circumstance was addressed in [Commentary No. 829](#).

On an unadjusted basis, year-to-year construction inflation held for the second month at 2.97% in December and November 2017, versus 3.14% in October 2017. The PPI annual change here recently had moved closer to the estimates of private surveying and other government estimates (GDP deflators), which usually show much higher construction-related inflation than the PPI. The headline annual PPI

inflation, however, still is shy by an order of magnitude of at least a hundred basis points from the private and other surveying. Annual inflation in those measures generally appears to be on the rise. Discussed in [Commentary No. 829](#), ShadowStats has constructed a Composite Construction Deflator (CCD) now used by ShadowStats in deflating the Census Bureau's monthly estimates of Construction Spending Put in Place in the United States (see prior [Commentary No. 930-B](#)).

PPI-Inflation Impact on Pending Reporting of December 2017 New Orders for Durable Goods. As to the upcoming reporting of December 2017 New Orders for Durable Goods, monthly inflation (reported only on a not-seasonally-adjusted basis) for new orders for manufactured durable goods in December 2017 was unchanged at 0.00%, following monthly increases of 0.12% in November and 0.41% in October. Year-to-year annual inflation rose to eased to 1.67% in December 2017, from 1.92% in November 2017 and 1.86% in October 2017. December 2017 durable goods orders (both nominal and real) will be reported and calculable on January 26th, with coverage in *Commentary No. 933* of that date.

Massive PPI Overhaul Due for Publication Next Month, in February 2018. Announced initially the August 10th [Press Release](#), and reconfirmed in the Thursday's January 11th monthly [release](#), all PPI weightings will undergo significant revisions (updating current weightings, based on 2007, to weightings based on 2012 detail). Final Demand Producer Price Index and its key component indices such as Final Demand Goods and Final Demand Services only go back to November 2009. Current starting-month index levels of 100.0 will be maintained at 100.0. These revisions are in addition to the regular annual seasonal-adjustment and relative-importance revisions that also will be published in February.

[The Hyperinflation Watch begins on the next page.]

HYPERINFLATION WATCH

THE U.S. DOLLAR AND THE FINANCIAL MARKETS

Intensified Selling of the U.S. Dollar and Negative Stock-Market Turmoil Likely Loom. Discussed in today's *Opening Comments*, the headline economic boom that helped to drive the major U.S. stock indices to all-time closing highs on Friday, January 12th, likely will begin to fall apart in the next several weeks as underlying economic detail increasingly stabilizes at lower levels of activity, versus unusually severe, natural disaster distortions of the last several months. As the headline numbers falter anew, selling of the U.S. dollar should intensify, with both factors likely to begin turning stock prices lower. With a full-fledged dollar selling panic a fair bet, stock prices likely would tank in tandem, as foreign as well as domestic investors increasingly sought safer havens in other currencies.

Federal Reserve Still is Unable to Extricate Itself from the Panic of 2008. Today's *Opening Comments* largely provided some background economic context for this *Hyperinflation Watch*. Despite recent rate hikes, tightening moves and promises for more of the same by the Federal Open Market Committee (FOMC) of the Board of Governors of the Federal Reserve System, the U.S. economic outlook is far from stable and positive. Beyond negative indications from better-quality, underlying economic fundamentals, that circumstance was suggested by lame-duck Federal Reserve Chair Janet Yellen in describing the economic outlook as “highly uncertain” at her last press conference.

The increasing, fundamental disconnection between the happy hype in the media, the financial markets and the FOMC pronouncements as to a rapidly expanding U.S. economy, and the underlying reality of broad U.S. economic activity never having recovered its pre-recession 2007 peak, promises to disrupt FOMC policy and financial-market tranquility in the months ahead. Oncoming headline economic detail increasingly should confirm a renewed economic contraction (see [No. 859 Special Commentary](#), planned for a late-January 2018 update).

With the FOMC likely to abandon its current path of policy tightening, for a renewed and expanded quantitative-easing program to bolster the still liquidity-challenged domestic banking system, market response to, or anticipation of a shift in policy, 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.

The usual graphs in this section reflect New York closing prices of January 12th. With the U.S. markets and banks on holiday closure today (January 15th), the graphs have been left as they were for the 12th, for

comparative purposes with the S&P 500, despite today's relatively heavy selling of the U.S. dollar and some gains in the prices of gold, silver and oil prices in trading outside the United States.

U.S. Dollar. *Graphs HW-1 and HW-2* reflect 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; and the ShadowStats Financial-Weighted Dollar (FWD), which reflects the U.S. dollar exchange rate weighted versus same currencies based of respective currency trading volume in the markets, instead of merchandise trade.

ShadowStats modified the FWD to add the Chinese Yuan, at such time as it was recognized as a global reserve currency by the Bank for International Settlements, but there was no resulting visual difference in the ShadowStats plot, given the relatively low weighting of the CNY at present, and the closely tied movement of the CNY to USD over time. 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.

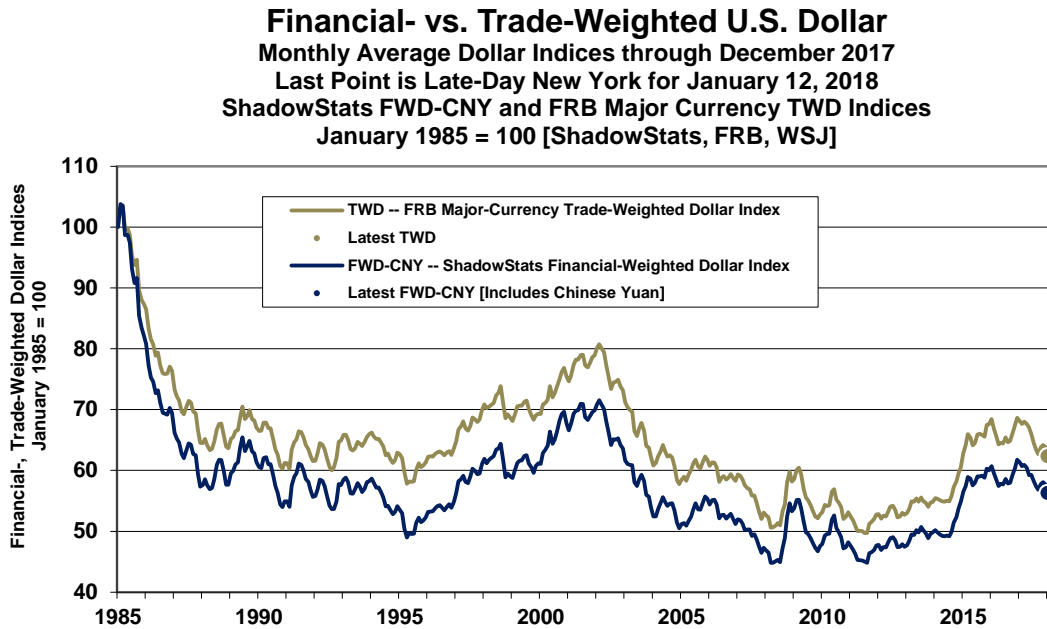
Gold and Silver, and Gold versus Stocks. *Graphs HW-3 and HW-4* show plots of the price level of the S&P 500 Total Return Index (all dividends reinvested) versus the price of physical gold, with both series indexed to January 2000 =100, with the first plot showing both series in nominal terms and the second plot in real, inflation-adjusted terms, deflated by the CPI-U. While Gold has outperformed the S&P 500 since the beginning of millennium, it is interesting to note that the S&P 500, net of inflation, did not break above parity until 2013.

Graphs HW-5 to HW-7 are the traditional ShadowStats gold graphs, respectively versus the Swiss Franc, versus Silver and versus Oil (Brent).

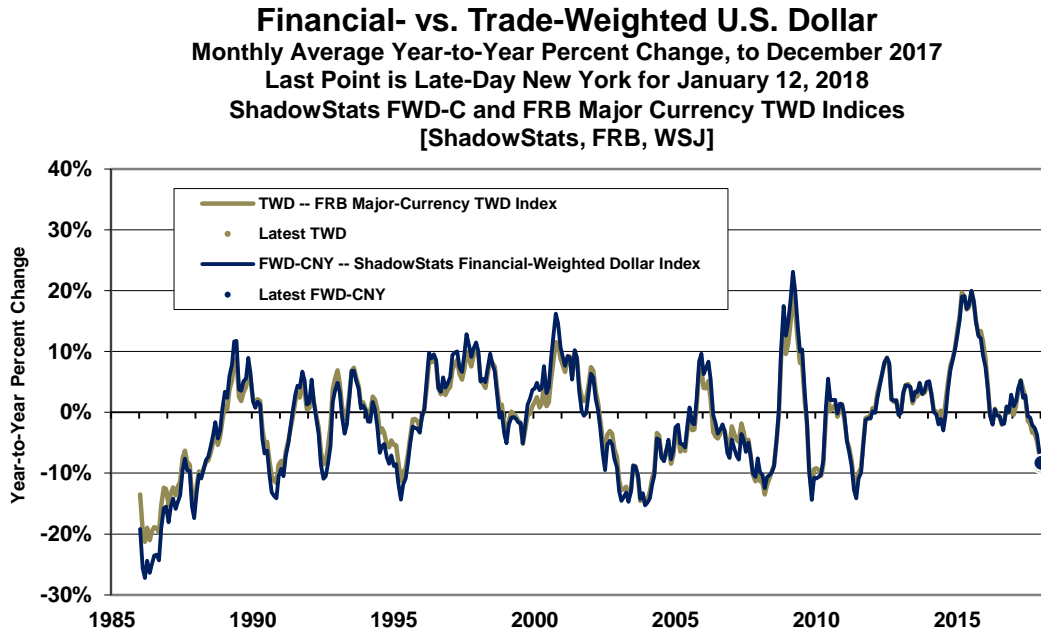
Again, the final price points in the various graphs reflect the closing or late-day January 12, 2018 New York prices.

[Graphs HW-1 to HW-7 begin on the next page.]

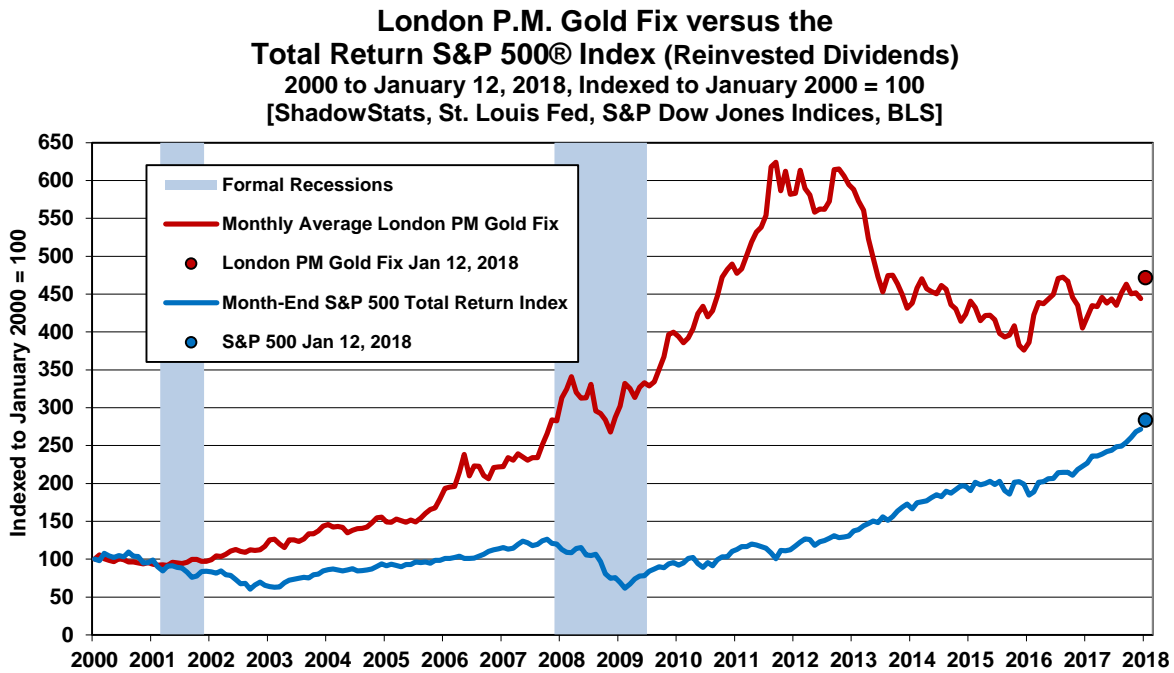
Graph HW-1: Financial- versus Trade-Weighted U.S. Dollar



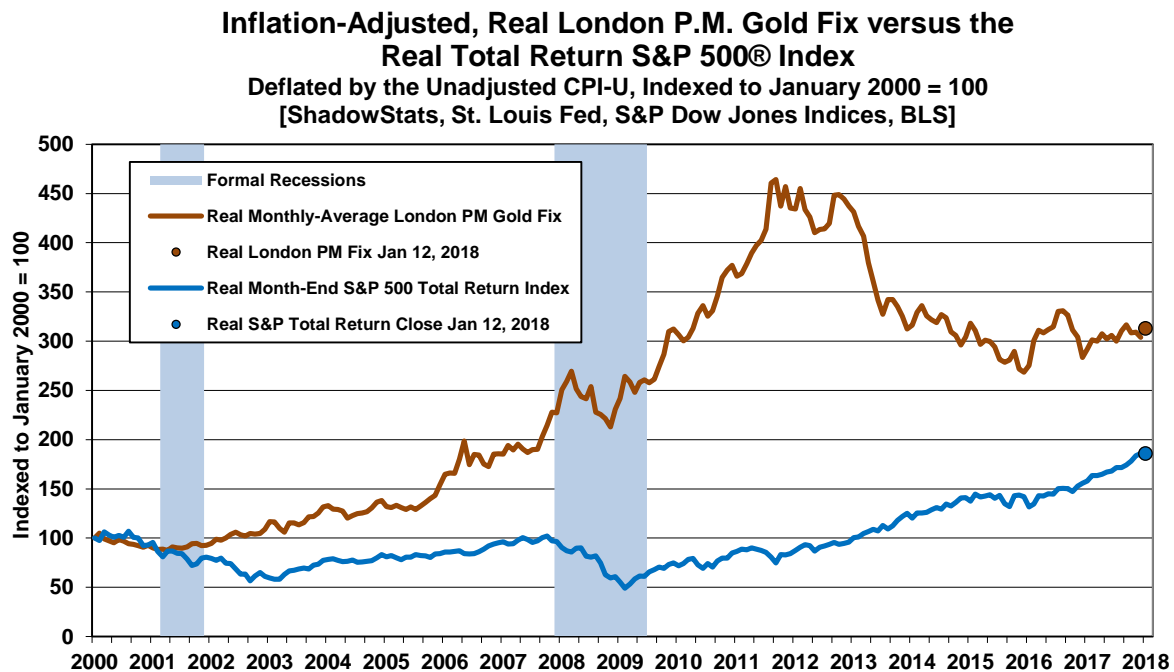
Graph HW-2: Year-to-Year Change, Financial- versus Trade-Weighted U.S. Dollar



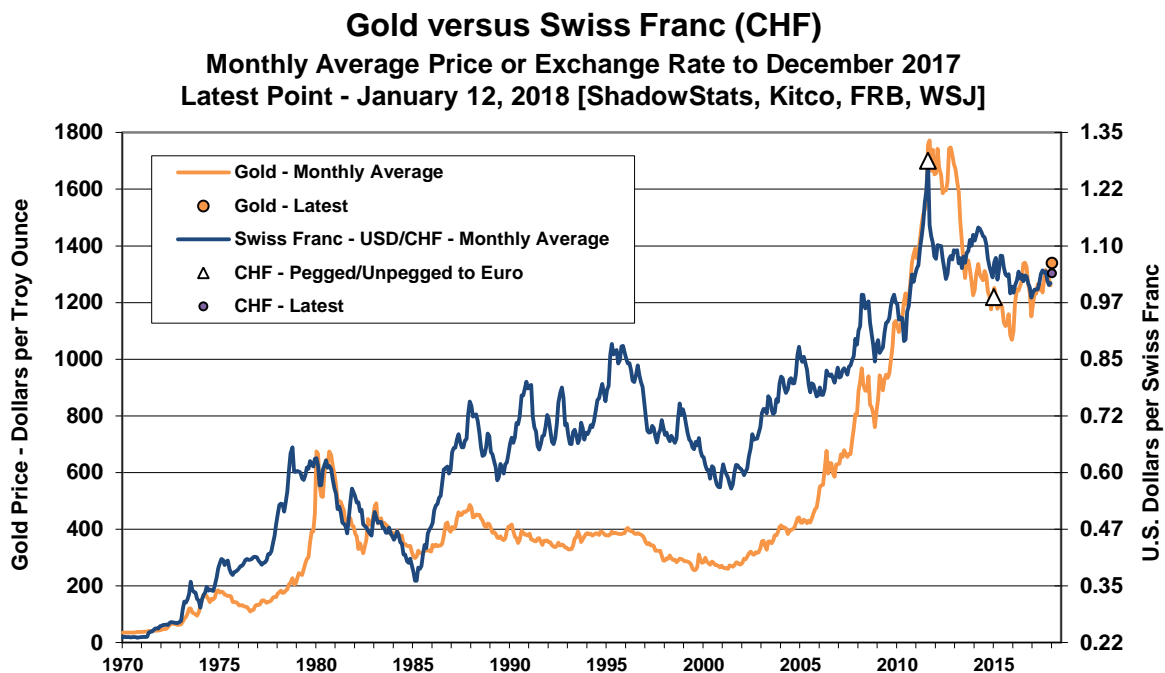
Graph HW-3: Nominal Gold versus the Nominal Total Return S&P 500



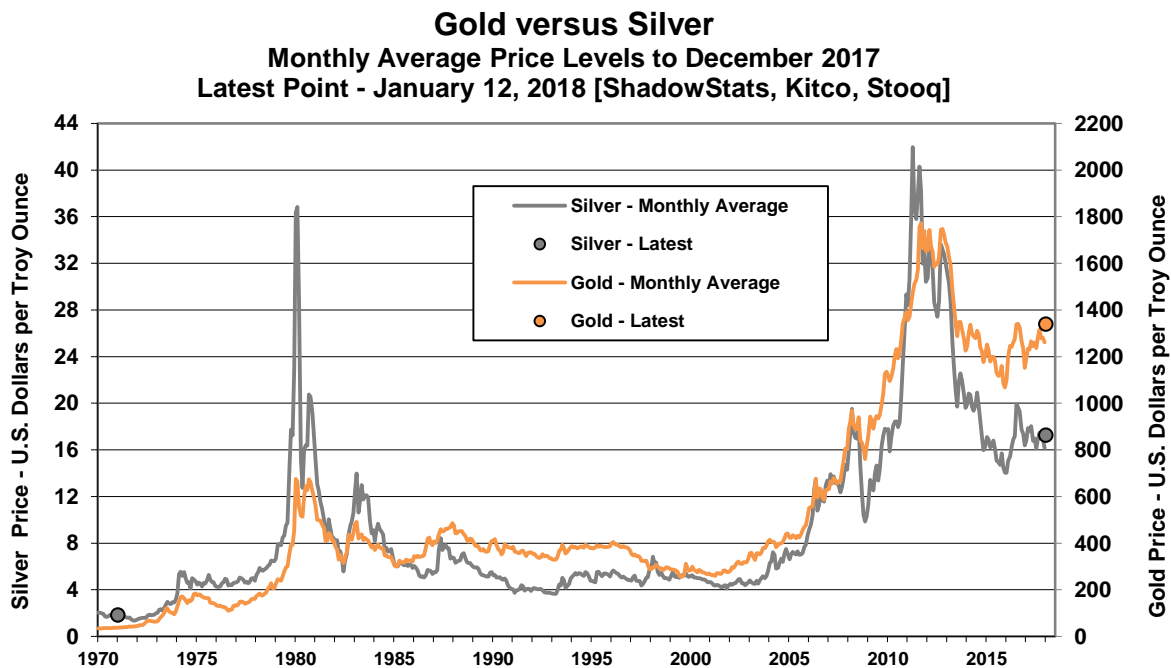
Graph HW-4: Real Gold versus the Real Total Return S&P 500



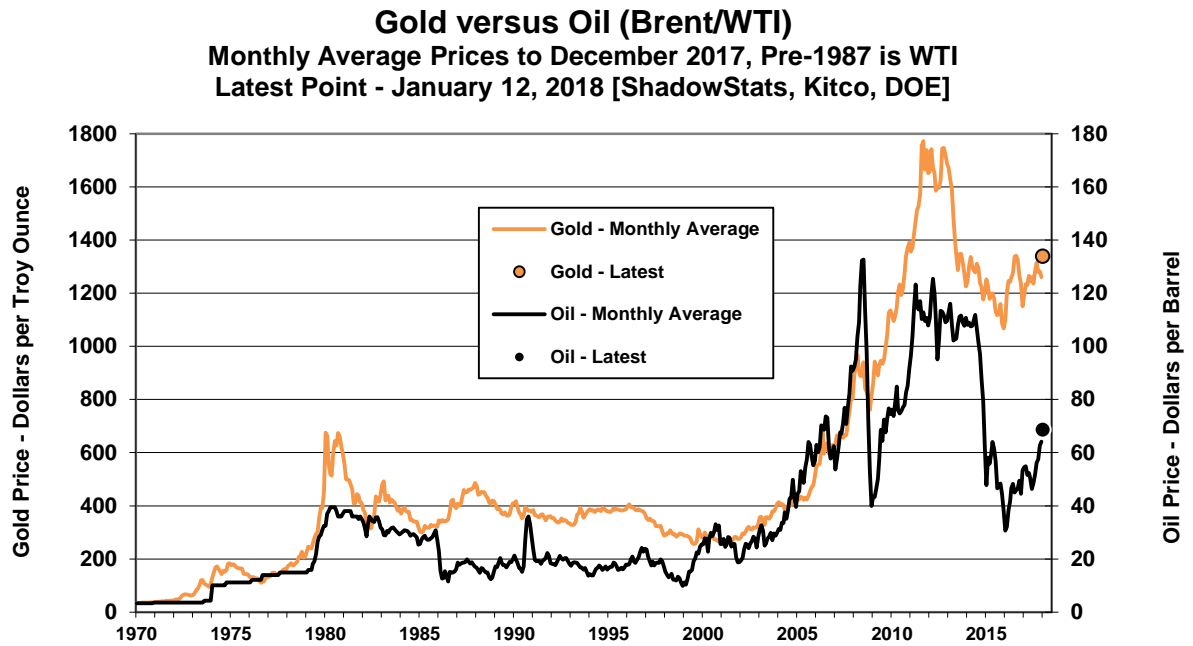
Graph HW-5: Gold versus the Swiss Franc



Graph HW-6: Gold versus Silver



Graph HW-7: Gold versus Oil



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

CONSUMER LIQUIDITY WATCH

CONSUMER LIQUIDITY CONDITIONS: INCOME, CREDIT AND RELATIVE OPTIMISM.

[The CLW has been updated for November Consumer Credit Outstanding, December Real Average Weekly Earnings and referral links. See also the comments on Average Weekly Earnings in the Opening Comments Section, which will be incorporated into this section in the next Commentary.]

Continuing Consumer Liquidity Stresses Constrain Broad Economic Activity. The U.S. consumer faces ongoing financial stress, which recently had been mirrored in renewed softening of fundamental headline economic activity, including Payroll-Employment, Real Retail Sales, Housing and Construction, and the Manufacturing/Production sector, all pre-hurricane activity. Net of what have been mixed, but significant, near-term hurricane distortions, initial hits to activity were followed by related and transient economic boosts from recovery, replacement and restoration activity. Funded by insurance payments and savings liquidation, those distortions broadly should have passed from headline economic releases by the February/March reporting of January 2018-headline detail. Such effects have been, and will continue to be, discussed in the separate analyses of relevant series in the covering *ShadowStats Commentaries*.

Monthly series that have faced the most severe, disaster-triggered reporting disruptions, where headline details have yet to stabilize or correct, include in particular Household Survey Employment and Unemployment (see the *Opening Comments* of [Commentary No. 930-B](#)) and Retail Sales. November Industrial Production appeared to have stabilized in terms of surging activity, but it still needs to subside to levels stable with normal consumption activity and inventories (see retail sales and production coverage in [Commentary No. 926](#)).

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.

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 in recent months, although it has begun to falter anew, 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% of the headline real, third-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 most 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, as well as those series that are heavily gimmicked, such as the Gross Domestic Product (GDP), also regularly discussed and dissected here.

Similar signals of such economic stress are seen in patterns of activity that move along with the real-world broad economy. They range from indicators such as freight volume and domestic consumption of petroleum to factors such as levels of real consumer debt outstanding, real average weekly earnings and measures of employment stress in the broad economy. Those stresses are reflected in historically-low levels of the employment-population ratio and the labor-force participation rate. With the liquidity-starved U.S. consumer driving three-quarters of the GDP, there is no way for the broad economy to boom—happy Retail Sales headlines aside—without some meaningful shift in underlying consumer circumstances. Links to background discussions in these various areas are found in the *Recent Commentaries* section of the *Week, Month and Year Ahead*, along with links to background discussions on the quality of the more-politicized GDP ([Commentary No. 928](#)) and employment/unemployment details discussed in the *Supplemental Labor-Detail Background* of [Commentary No. 930-B](#).

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 early in 2018. That said, albeit reflecting some of the headline economic hype in the popular press, headline consumer optimism remains strong, albeit newly faltering.

Consumer Optimism: December 2017 Consumer Sentiment and Confidence Faltered. Full-month December 2017 readings pulled back sharply for both The Conference Board’s Consumer-Confidence Index[®] (Confidence) as of December 27th, and the University of Michigan’s Consumer Sentiment Index (Sentiment) as of December 22nd. Reflected in *Graphs CLW-1* and *CLW-2*, Confidence and Sentiment monthly readings had jumped sharply, respectively to multi-year highs in November and October. Yet, the December Confidence reading plunged, more than offsetting the November gain and most of the October gain, in context of a downside revision to the November reading. Similarly, November and December Sentiment readings also pulled back sharply, largely offsetting the October surge there. Nonetheless, the latest headline readings remained above their pre-2007 recession peaks.

The sharp monthly downturns in both the headline Sentiment and Confidence numbers are not consistent with headline, resurgent economic/employment activity, or with the popular media’s heavily-touted, strong Holiday-Shopping Season.

For both the Conference Board’s seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index[®] (*Graph CLW-1*), and the University of Michigan’s not-seasonally-adjusted Consumer-Sentiment Index (*Graph CLW-2*), the three-month moving averages also were above pre-2007 recession highs, yet the still-high moving averages—both notched higher despite December’s downside activity—also had begun to falter in September 2017, before the unusual October and November surges.

Smoothed for six-month moving averages (see *Graph CLW-3*), both series continued above their pre-2007 recession peaks, with the Confidence measure at its highest level since March 2001, as it had been plummeting into the onset 2001 recession. That said, on a monthly basis, the current December 2017 readings for both the Confidence and Sentiment measures were down respectively from their pre-2001 recession peaks of May and January 2000, by 15.6% (-15.6%) and 14.4% (-14.5%).

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

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

The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in [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 short-lived hurricane boosts to activity particularly on unemployment (not payroll employment), retail sales and industrial production. Headline financial and economic reporting in the next month or two should turn increasingly-negative and unstable. The current downturn in consumer outlook, despite euphoric headlines is unusual and likely reflects some deep-seated consumer liquidity concerns.

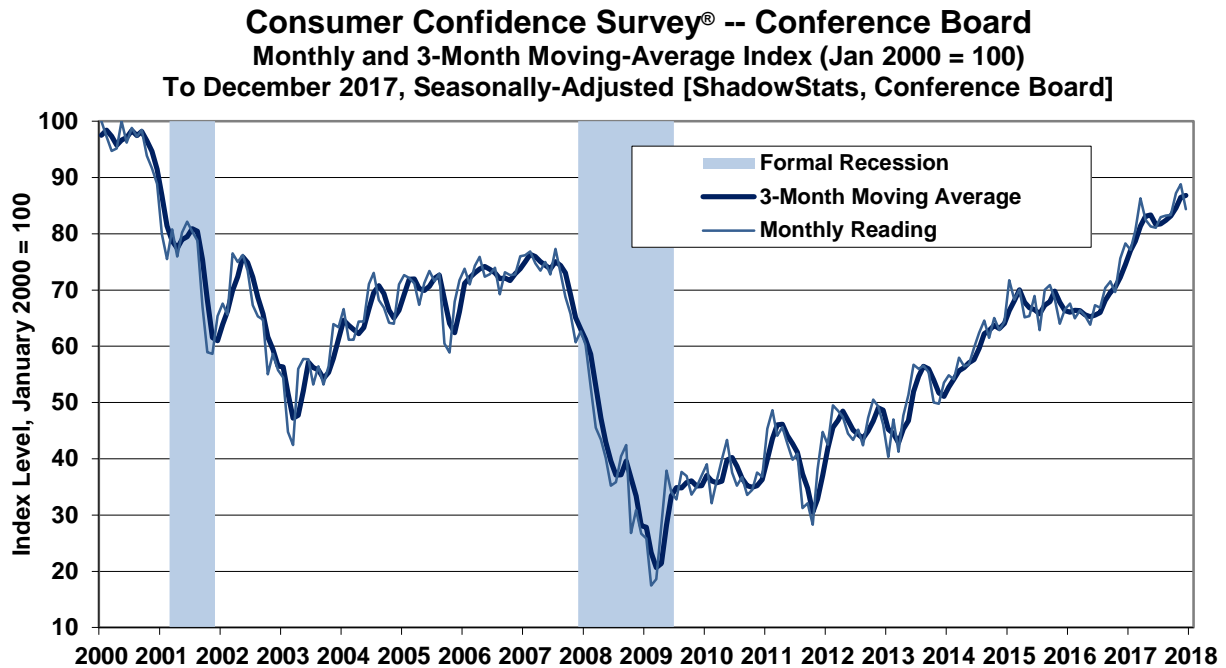
With near-term headline financial and economic reporting likely to turn increasingly negative in the next couple of months, successive negative hits to both the confidence and sentiment readings are likely to continue in the near future.

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. Beyond having happy feelings about the future, consumers still need actual income, cash-in-hand or credit in order to increase their spending.

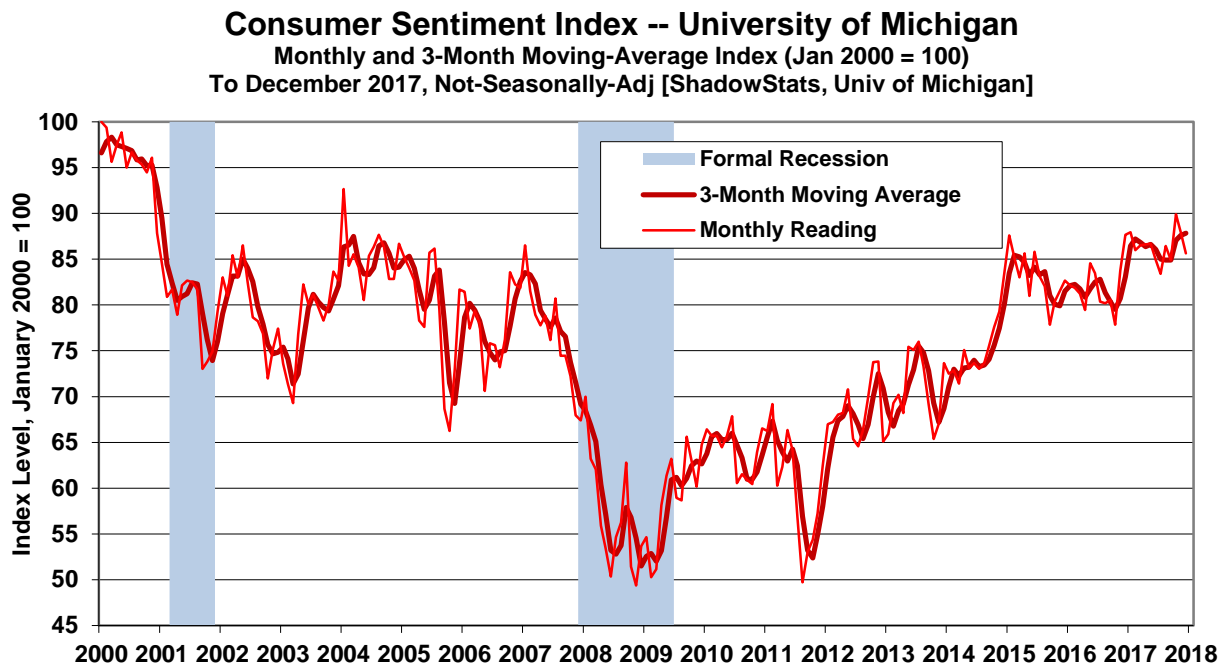
Smoothed for irregular, short-term volatility, the two series still generally had held at levels seen typically in recessions, until the post-2016 election circumstance. Suggested in *Graph CLW-3*—plotted for the last 47 years—the latest readings of Confidence and Sentiment recently have recovered levels 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.]

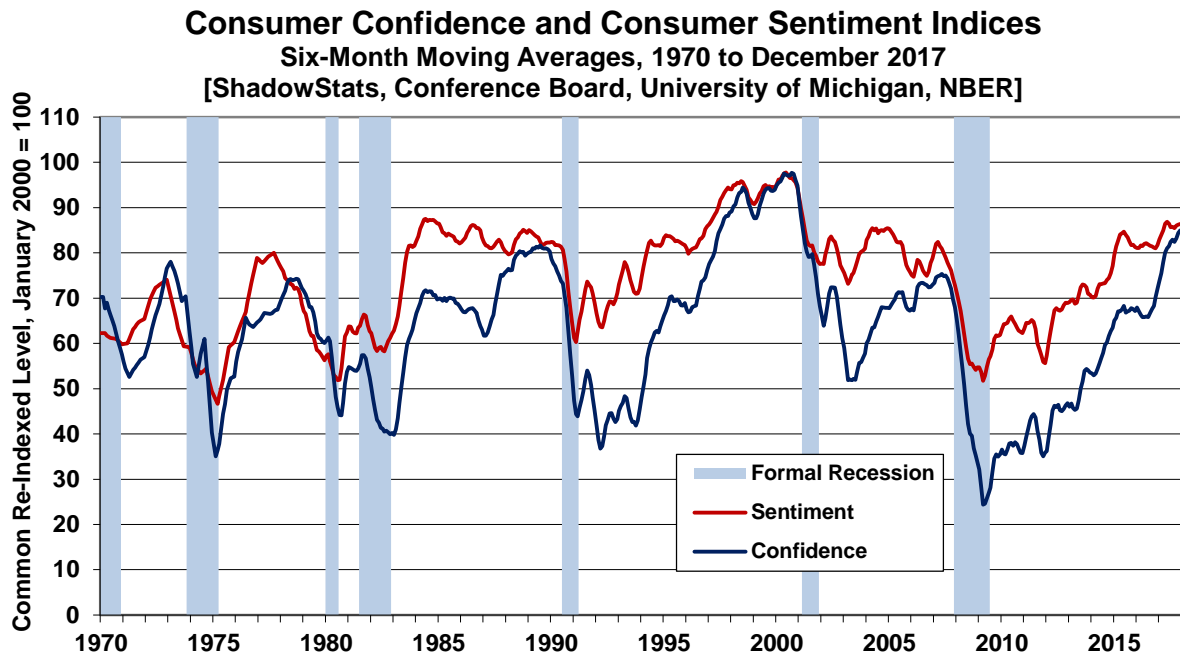
Graph CLW-1: Consumer Confidence (2000 to 2017)



Graph CLW-2: Consumer Sentiment (2000 to 2017)

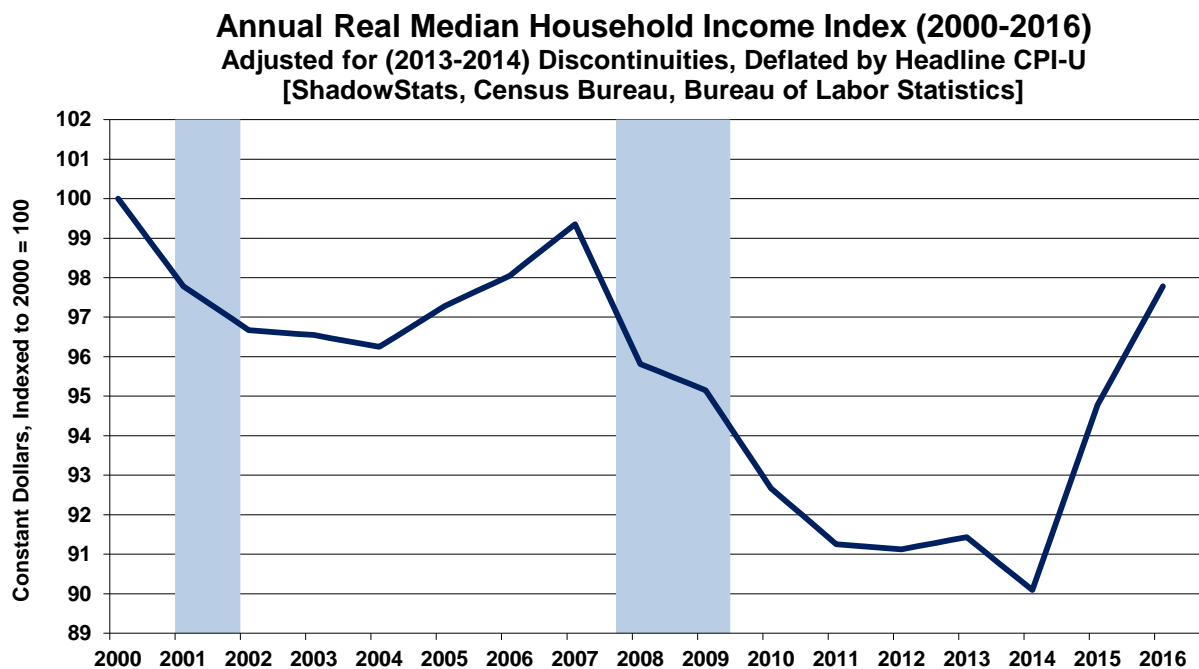


Graph CLW-3: Comparative Confidence and Sentiment (6-Month Moving Averages, 1970 to 2017)



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



Last Monthly Estimate Showed Stagnating Monthly Real Growth. As last reported by Sentier Research in its likely 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*). Again, the May detail, appears to have been the final reporting of the monthly series (see the *Special Note* that follows).

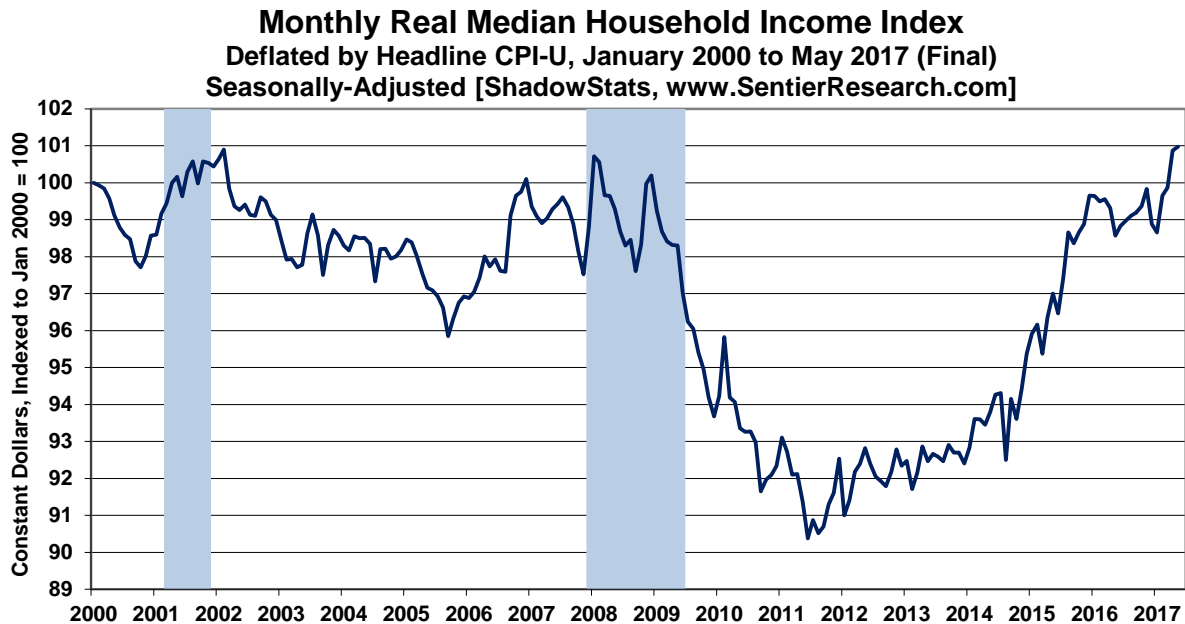
Where real monthly median income plunged into the headline trough of the economic collapse in 2009, it did not then rebound in tandem with the headline GDP activity. When the GDP purportedly started its solid economic recovery in mid-2009, the monthly household income numbers nonetheless plunged to new 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 inflation-adjusted 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.

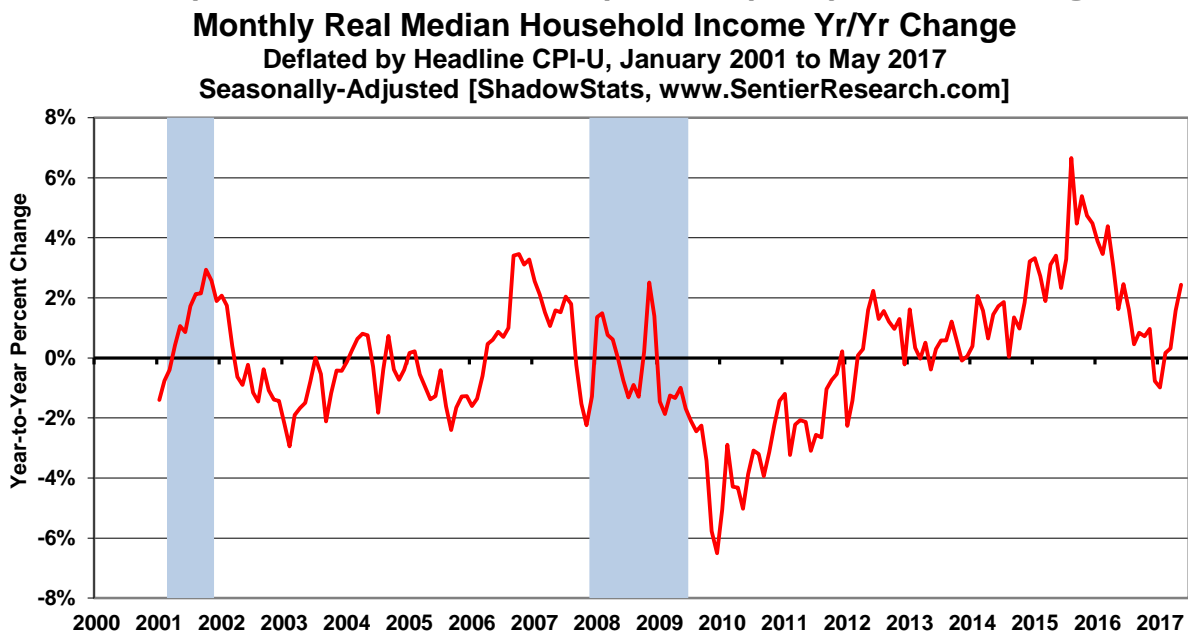
Differences in the Monthly versus Annual Median Household Income. The general pattern of relative monthly historical weakness has been seen in the headline reporting of the annual Census Bureau numbers, again, shown in *Graph CLW-4*, with 2014 real annual median household income having hit a ten-year 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 CLW-5: Monthly Real Median Household Income (2000 to May 2017) Index, January 2000 = 100



Graph CLW-6: Monthly Real Median Household Income (2000 to May 2017) Year-to-Year Change



Special Note: Accompanying the release of the May 2017 data by Sentier Research was this [Notice of Final Report](#):

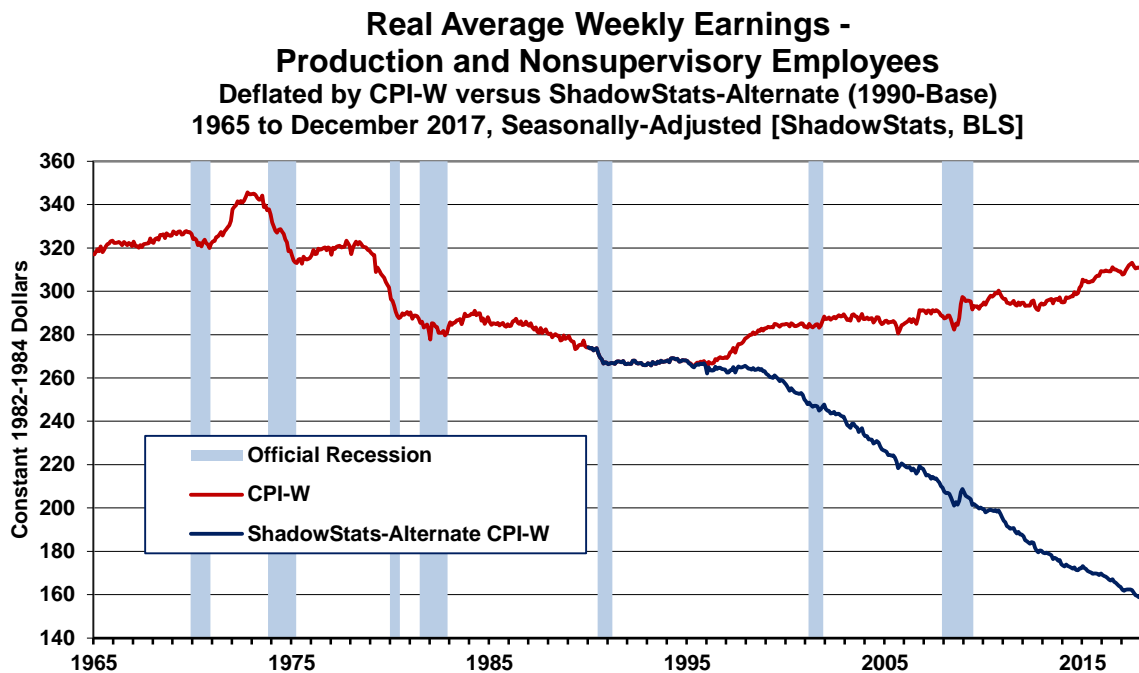
Dear Friends, This will be our final report in the monthly series of median household income. We can no longer afford to provide these estimates given our current level of resources. We believe, as we hope you do, that these estimates provided an important new dimension regarding the economic situation of American households as we slowly climbed out of the Great Recession. The story continues but we must move on. Our hope is that someone will be able to continue this work. Should you or someone you know be interested please contact us. Thanks to all of you for your kind support.. John and Gordon

ShadowStats still hopes a circumstance might unfold that would enable continued/renewed reporting of this extraordinarily valuable and timely indicator of consumer liquidity. Gordon Green and John Coder, the authors of the monthly report, both are former senior officials at the U.S. Census Bureau, with unique understandings of the underlying monthly data. The Census Bureau publishes a broadly-similar series on an annual basis, but with an extraordinary time lag. The 2017 Census annual detail will not be released until September 2018. Again, the 2016 Census annual detail was covered in [Commentary No. 909](#).

Real Average Weekly Earnings—December 2017—Contracted for the Second Consecutive Quarter.

For the production and nonsupervisory employees category—the only series for which there is a meaningful history (see the discussion in today’s, January 15th, *Reporting Detail* and *Opening Comments*), the regularly-volatile, real average weekly earnings gained month-to-month in December 2017, but fourth-quarter 2017 earnings contracted quarter-to-quarter, for the second consecutive quarter, down at an annualized pace of 0.94% (-0.94%), having declined by 0.07% (-0.07%) in third-quarter 2017. In the broader all-employees category, fourth-quarter real average weekly earnings also contracted, down at an annualized pace of 1.16% (-1.16%), having gained 0.63% in third-quarter 2017 activity.

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



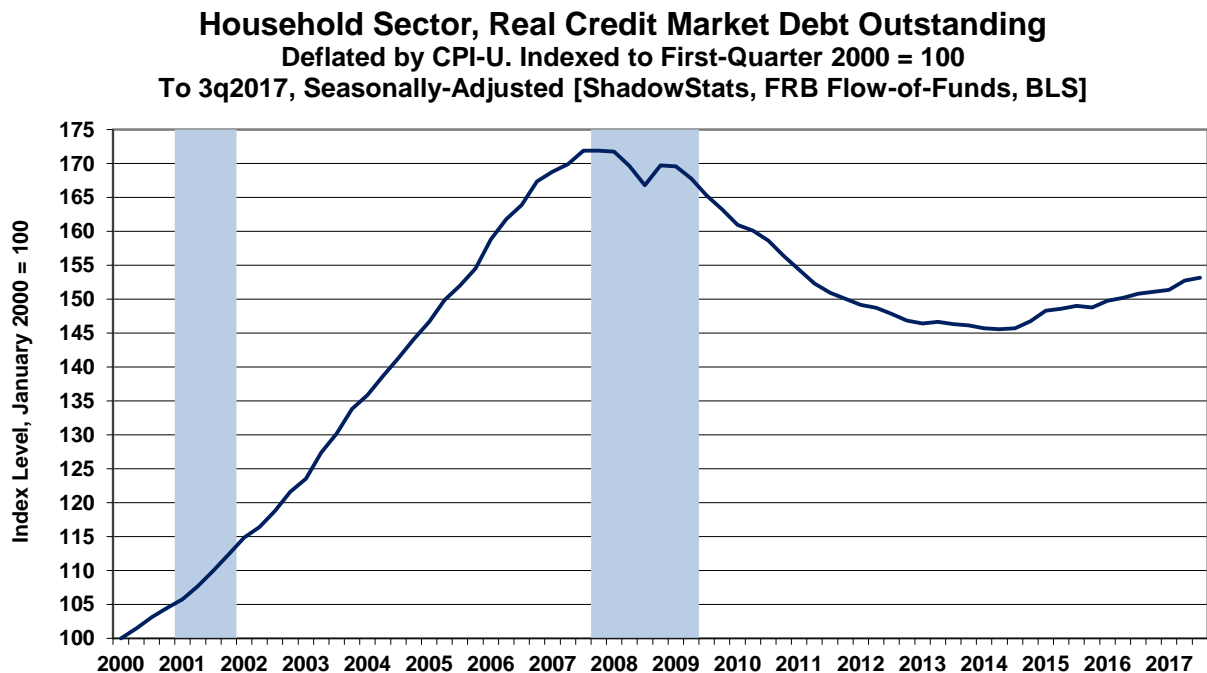
Graph CLW-7 plots the seasonally-adjusted earnings as officially deflated by the BLS (red-line), and as adjusted for the ShadowStats-Alternate CPI Measure, 1990-Base (blue-line). When inflation-depressing methodologies of the 1990s began to kick-in, the artificially-weakened CPI-W (also used in calculating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

Consumer Credit: Lack of Meaningful Real Consumer Credit Growth Remains an Economic Constraint.

The final four graphs on consumer conditions address consumer borrowing. Where debt expansion can help make up for a shortfall in income growth, adequate expansion of consumer debt, which would help fuel growth in personal consumption, has been lacking.

Quarterly Series. Consider *Graph CLW-8 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 third-quarter 2017, released on December 7th. Household Sector, Real Credit Market Debt Outstanding in third-quarter 2017 still was down by 10.9% (-10.9%) from its pre-recession peak of third-quarter 2007. That was against a second-quarter 2017 decline of 11.2% (-11.2%). The flattened visual uptick at the latest point in *Graph CLW-8* reflected a slowing in real year-to-year change from 1.70% in second-quarter 2017, to 1.55% in third-quarter 2017.

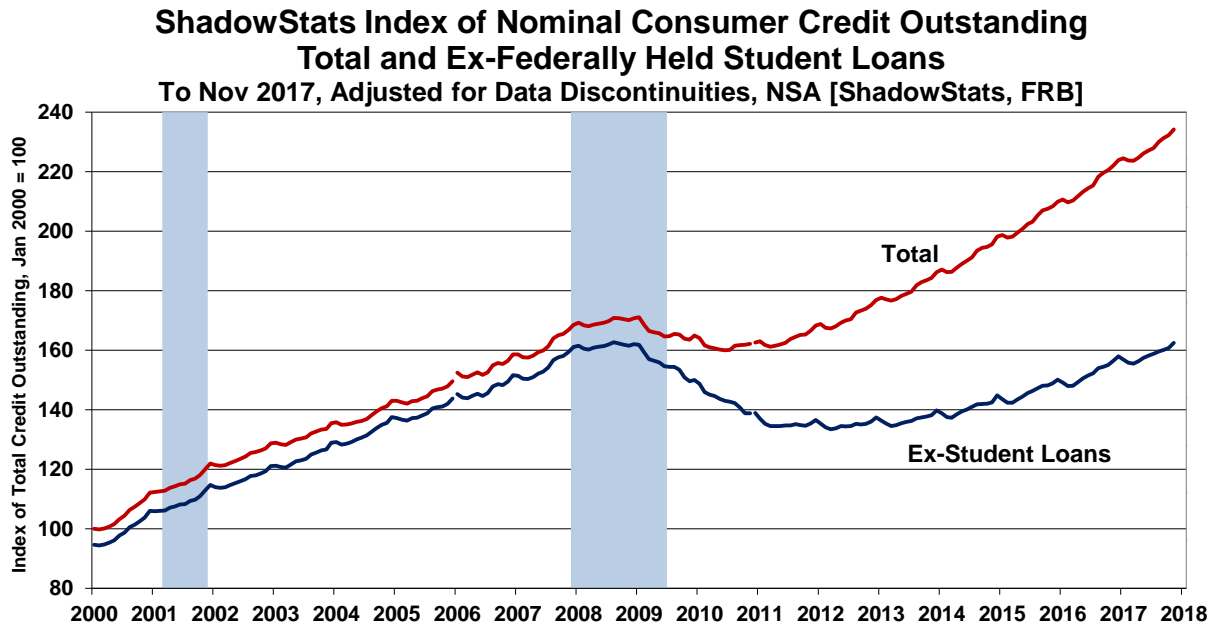
The series includes mortgages, automobile and student loans, credit cards, secured and unsecured loans, etc., all deflated by the headline quarterly CPI-U. The level of real debt outstanding has remained stagnant for several years, reflecting, among other issues, lack of normal lending by the banking 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 second-quarter 2017. Current activity also has reflected continuing relative strength from student loans, as shown in the *Graphs CLW-9 to CLW-11*.

Graph CLW-8: Household Sector, Real Credit Market Debt Outstanding (2000 through Third-Quarter 2017)

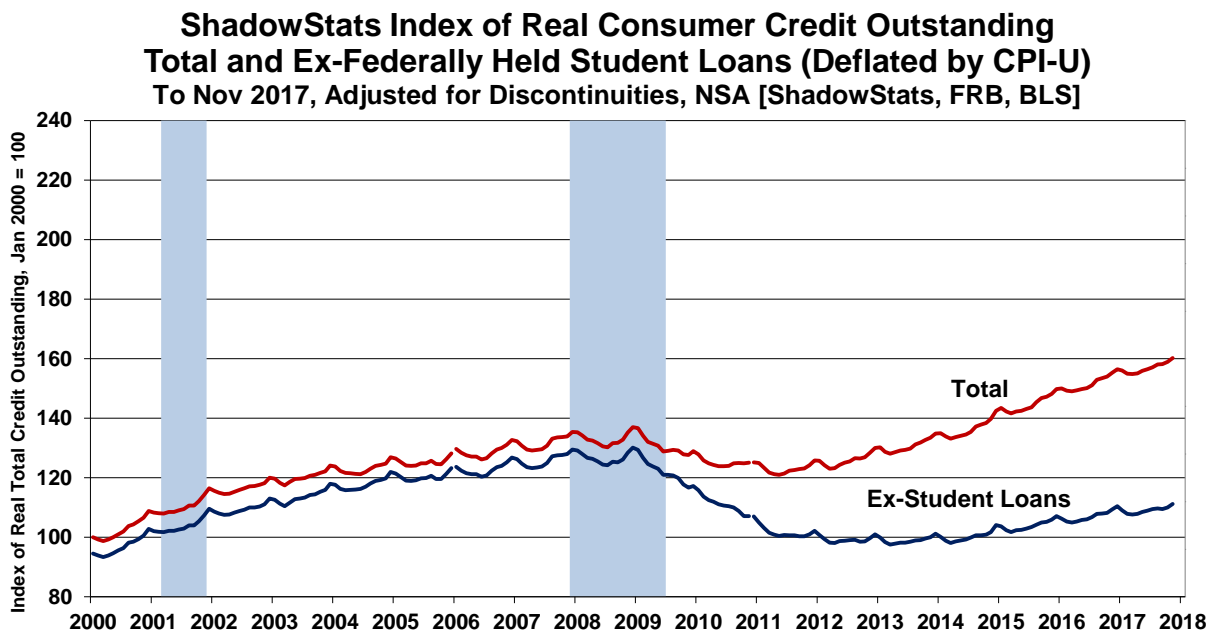
Monthly Series. The ShadowStats analysis usually focuses on the particular current and continuing weakness in monthly levels of consumer credit, net of what has been rapidly expanding government-sponsored student loans. Where detail on that series is only available not-seasonally-adjusted, the following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

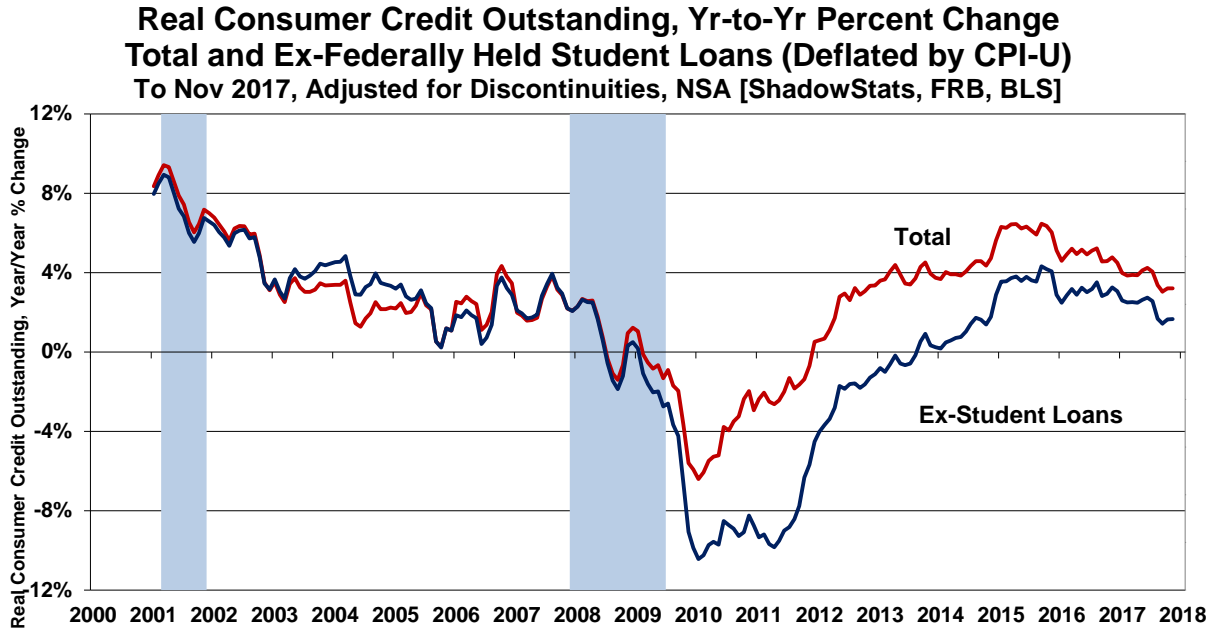
Shown through the November 2017 reading (released January 8th), *Graph CLW-9* of monthly Consumer Credit Outstanding is a subcomponent of the preceding *Graph CLW-8* on real Household Sector debt. Where *Graph CLW-9* reflects the nominal reporting, real or inflation-adjusted activity for monthly Consumer Credit Outstanding is shown in terms of both level (*Graph CLW-10*) and year-to-year change (*Graph CLW-11*).

Graph CLW-9: Nominal Consumer Credit Outstanding (2000 to 2017)



Graph CLW-10: Real Consumer Credit Outstanding (2000 to 2017)



Graph CLW-11: Year-to-Year Percent Change, Real Consumer Credit Outstanding (2000 to 2017)

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 fuel 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. Although the recent monthly upside move in the not-seasonally-adjusted consumer credit reflected a seasonal pattern, the pace of year-to-year growth has continued to slow sharply, suggesting some tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in November 2017 was down from its December 2007 pre-recession peak by 14.1% (-14.1%). Year-to-year real growth shown in *Graph CLW-11* tends to resolve most of the monthly distortions in the not-seasonally-adjusted data.

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

WEEK, MONTH AND YEAR AHEAD

U.S. Dollar and Financial-Market Instabilities, and Turmoil Continue at High Risk, Along with Deterioration of Domestic and Global Economic and Political Circumstances. Irrespective of some distortedly strong, recent economic numbers statistics, and heavy press hype of a booming, full-employment economy, and in the context recent FOMC tightening actions and Federal Reserve Chair Yellen's perception of a "highly uncertain" economic outlook, the real-world economy is not recovering or booming as advertised. Allowing for hurricane disruptions and recovery from same, most series should be back to normal, reflecting "unexpected" downtrending economic activity, by the time of headline reporting for headline January and February 2018 economic activity, as discussed in [General Commentary No. 929](#). Nonetheless, misleading, current headline details have been contributing factors to the manic stock market, discussed in the *Opening Comments* and *Hyperinflation Watch* (pages 2 and 33).

Where the Wall Street proponents of a never-ending stock-market rally have hyped temporary, nonrecurring economic boosts from natural disasters into a year-end 2017 economic boom, an unhappy period of the markets adjusting to underlying real-world circumstances likely looms early in 2018. Negative economic "surprises" increasingly should shock the markets and the U.S. dollar on the downside. As the reported the economic downturn intensifies, the FOMC should be forced into an "unexpected" policy retrenchment, moving back towards quantitative easing as discussed in today's *Hyperinflation Watch*.

In such circumstances, the U.S. dollar and financial markets remain at extraordinarily-high risk of panicked declines, again, increasingly likely in the very near term. The *Opening Comments* of [Commentary No. 930-B](#), [General Commentary No. 929](#) and the *Opening Comments* and expanded *Hyperinflation Watch* of [Commentary No. 927](#) reviewed some background to real-world economic conditions, continuing from the *Opening Comments* and brief *Hyperinflation Watch* of [Commentary No. 925](#). Those comments speak for themselves.

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 times of high inflation and currency debasement, and/or political-system upheaval, discussed regularly here. See the comments linked to other recent *Hyperinflation Watches*, provided in the next section.

Following this note, other than for the *Pending Releases* and updated links, language changes in this section from the prior posting in [Commentary No. 930-B](#) are minimal. Please call (707) 763-5786, if you would like to discuss current circumstances, or otherwise. *Best wishes – John Williams*

Recent Hyperinflation Watch and Special Comments. Previous background to the markets and potential near-term FOMC activity have been reviewed recently in the *Hyperinflation Watches* of [Commentary No. 920](#) and [Special Commentary No. 918-B](#) of October 30th, with the nomination for the new Fed Chairman, as touched upon in the *Hyperinflation Watch* [Commentary No. 919-A](#) of November 3rd, not likely to have immediate, near-term market impact.

Discussed in *Hyperinflation Watch* of [Commentary No. 909](#), given the continuing and broadening weakness in the U.S. economy and shifting political instabilities/circumstances in Washington, mixed pronouncements of sharp, near-term rate hikes and aggressive balance-sheet liquidation remain unlikely to solidify as promised. Accordingly, selling pressure against the U.S. dollar still should re-intensify, shortly, pressuring inflation and the prices of precious metals on the upside. Increasingly, foreign capital should flee the U.S. equity and credit markets at an accelerating pace.

In the context of the *Opening Comments* and *Hyperinflation Watch* of the August 14th [Special Commentary No. 904](#) and the *Opening Comments* of [Commentary No. 905](#), underlying reality remains a weakening and vulnerable, seriously-impaired U.S. economy, as seen, for example with the latest employment and construction detail, and in likely weak data in the week ahead, all amidst continuing domestic and global political instabilities and unfolding natural disasters.

Unfolding circumstances still threaten the promised shift in FOMC policy, combined with the mounting political discord discussed in [Special Commentary No. 904](#) (see also the *Opening Comments* of [Commentary No. 901](#) and [Special Commentary No. 888](#)), odds continue to mount for intensifying financial-market turmoil in the near future, particularly as would be triggered by a market-related, intensifying heavy sell-off in the U.S. Dollar.

Broad economic activity never recovered fully from its crash into 2009, and it has started to turn down anew. As explored previously in the *Hyperinflation Watches* of [Commentary No. 899](#) and [General Commentary No. 894](#), and further to the *Opening Comments* and *Hyperinflation Watch* of [Commentary No. 892](#), headline economic reporting during June, July and early August of 2017, had shown a marked downturn versus consensus forecasts. While these circumstances usually signal an unfolding, major downshift in underlying economic reality, at present, they also forewarn of a potential shift in FOMC activity. Where such an event remains well removed from consensus expectations, at this time, in terms of Fed policy, that would mean a cessation of incremental rate hikes and a shift back towards expanded quantitative easing.

Immediate effects of such a policy change likely would include a massive sell-off in the U.S. dollar, which otherwise has been propped by recent FOMC rate hikes and continual jawboning for same. In parallel, heavy selling in the U.S. equity and credit markets would follow. As consensus economic forecasts have begun to soften, so too has the U.S. dollar exchange rate, while gold prices generally have firmed.

The circumstances here and the outlook still remain as broadly outlined in [No. 859 Special Commentary](#); currently shifting headlines only reflect the continued movement and evolution forward in time of the Fed's difficulties discussed in that missive.

The problem for the Federal Reserve remains that faltering domestic economic activity stresses banking-system solvency. Aside from formal obligations of the Fed to maintain healthy domestic economic and inflation conditions, the central bank's primary function (in practice) always has been to keep the banking system afloat. The near-absolute failure of that function in 2008 remains the primary ongoing and unresolved problem for the Fed, and it continues as one of the ongoing primary issues preventing the return of U.S. economic activity to normal functioning. Contrary to the recent purported headline comments of "not in our lifetime" by Federal Reserve Chair Janet Yellen, the continued unfolding of "unexpected" economic deterioration suggests that the next major systemic financial crisis is likely to break in the next several months.

Generally, 2017 benchmark revisions to Construction Spending (see [Commentary No 897](#)), the Trade Deficit ([Commentary No. 890](#)), Industrial Production ([Commentary No. 877](#)), Manufacturers' Shipments ([Special Commentary No. 888](#)), Housing Starts ([Commentary No. 887](#)) and Retail Sales ([Commentary No. 882](#)), and reporting subsequent to the benchmarks, confirmed that historical activity in recent years has been overstated and/or that it was turning down anew, particularly in 2015, with the availability of better-quality historical detail. Again, that is despite some recent near-term improvement in details, such as the headline unemployment rate, which increasingly suffers from dysfunctional definitional and sampling issues, and the latest headline GDP detail.

The reporting patterns of the better-quality, less-gimmicked series likely will continue to weaken with increasing intensity in the weeks and months ahead. Adding a negative uncertainty to unfolding financial-market risks remains potential political surprise, discussed in [Special Commentary No. 888](#). Otherwise, the broad outlook has not changed. Reflected in common experience, actual U.S. economic activity generally continues in stagnation or downturn, never having recovered its level of pre-economic-collapse (its pre-2007-recession peak), while the latest GDP reporting shows an otherwise unconfirmed economic expansion of 14.4%.

Discussed in [No. 859 Special Commentary](#), the Trump Administration continues to face extraordinarily difficult times, but still has a chance to turn the tide on factors savaging the U.S. economy and on highly negative prospects for long-range U.S. Treasury solvency and stability. Any forthcoming economic stimulus faces a nine-month to one-year lead-time, once in play, before it meaningfully affects the broad economy. Increasing and continuing delays from political discord continue to push targeted programs back in time. Needed at the same time are a credible plan for bringing the U.S. long-term budget deficit (sovereign solvency issues) under control and action to bring the Federal Reserve under control and/or to reorganize the banking system. These actions broadly are necessary to restore domestic-economic and financial-system tranquility (see [No. 859](#)), but they cannot happen without the meaningful participation and cooperation of Congress. The financial crisis at hand likely will intensify well before the 2018 Congressional Election will have any chance to stabilize the political outlook for economic policy.

[No. 859 Special Commentary](#) updated the post-election, near-term economic and inflation conditions, including general economic, inflation and systemic distortions, which had evolved out of the Panic of 2008, have continued in play and, again, need to be addressed by the Trump Administration and Congress (see also the *Hyperinflation Watch* of [Commentary No. 862](#) and [Commentary No. 869](#)).

Contrary to the official reporting of an economy that collapsed from 2007 into 2009 and then recovered strongly into ongoing expansion, underlying domestic reality remained and remains that the U.S. economy started to turn down somewhat before 2007, collapsed into 2009 but never recovered fully. While the economy bounced off its 2009 trough, it entered a period of low-level stagnation and then began to turn down anew in December 2014, a month that eventually should mark the beginning of a “new” formal recession (see [General Commentary No. 867](#)). Formal economic expansion does not begin until economic recovery breaks above its pre-recession high.

Coincident with and tied to the economic crash and the Panic of 2008, the U.S. banking system moved to the brink of collapse, a circumstance from which U.S. and global central-bank policies never have recovered. Unwilling to admit its loss of systemic control, the Federal Reserve has made loud noises in the last year or so of needing to raise interest rates, in order to contain an “overheating” economy, but that “overheating” activity—never recognized by Main Street, U.S.A.—has been fading quickly. As this

ongoing crisis evolves towards its unhappy end, the U.S. dollar ultimately should face unprecedented debasement with a resulting runaway domestic inflation.

Broad economic and systemic conditions are reviewed regularly, with the following *Commentaries* of particular note: [Commentary No. 902-B](#), [General Commentary No. 894](#), [Special Commentary No. 885](#), [Commentary No. 869](#), [No. 859 Special Commentary](#), [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). Those publications updated 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 month 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).]*

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

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

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

[Commentary No. 928](#) (December 22nd) 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 19th) reviewed November 2017 New Residential Construction (Housing Starts and Building Permits), along with an expanded discussion on underlying economic reality and the financial markets.

[Commentary No. 926](#) (December 15th) 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 8th) discussed the November 2017 Employment and Unemployment details and Conference Board Help Wanted OnLine[®] Advertising, the October Trade Deficit and Construction Spending and updated Monetary Conditions in November.

[Commentary No. 923](#) (November 29th) 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 6th) provided more in-depth detail on the October 2017 labor detail.

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

[Special Commentary No. 918-B](#) (October 30th) 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 26th/27th) 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 6th) reviewed the September 2017 Employment and Unemployment details, along with September 2017 monetary conditions.

[Commentary No. 913](#) (September 28th) 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 15th) reviewed the August 2017 releases of Industrial Production and nominal and real Retail Sales.

[Commentary No. 909](#) (September 14th) 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 6th) 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 14th) 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[®], 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[®] Advertising and the May Cass Freight Index[™].

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

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

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

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

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

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

[Commentary No. 877](#) (April 2, 2017) outlined the nature of the downside annual benchmark revisions to industrial production, along with implications for pending annual revisions to Retail Sales, Durable Goods Orders and the GDP.

[Commentary No. 876](#) (March 30, 2017) current headline economic activity in the context of formal definitions of the business cycle (no other major series come close to the booming GDP, which is covered in its third revision to fourth-quarter activity). Also the February 2017 SentierResearch reading on real median household income was highlighted.

[Commentary No. 875](#) (March 24, 2017) assessed and clarified formal definitions of the U.S. business cycle, which were expanded upon significantly, subsequently, in *No. 876*. It also provided the standard review of the headline February 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the Cass Freight Index[™].

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

[Commentary No. 864](#) (February 8, 2017) analyzed January 2017 Employment and Unemployment detail, including benchmark and population revisions, and estimates of December Construction Spending, Household Income, along with the prior update to Consumer Liquidity.

[Commentary No. 861](#) (January 13, 2017) covered the December 2016 nominal Retail Sales, the PPI, with a brief look at some summary GAAP reporting on the U.S. government's fiscal 2016 operations.

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

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 the 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 provide particularly unstable headline economic results, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). 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](#).

PENDING ECONOMIC RELEASES: Industrial Production (December 2017). The Federal Reserve Board will publish its estimate of December 2017 Industrial Production on Wednesday, January 17th, with coverage in *Commentary No. 932* of January 18th. Where recent monthly activity had been boosted by recovery from hurricane disruptions to petroleum production, and spiked by factors such as production of replacement automobiles for storm-destroyed vehicles, those distortions began to unwind in the November 2017. That process that likely will have accelerated in December 2017.

Despite regularly-positive consensus expectations for the production series, production has a good shot of a pullback in December, along with continuing non-recovery and non-expansion in the manufacturing sector. Accordingly, a strong-consensus outlook in the range of a 0.4% to 0.5% monthly gain likely will be disappointed by the headline results.

New Residential Construction—Building Permits and Housing Starts (December 2017). The Census Bureau will release the December 2017 estimate of New Residential Construction, including Housing Starts and Building Permits on Thursday, January 18th, with detail covered in *Commentary No. 932* of that date.

The extreme liquidity bind besetting consumers continues to constrain residential real estate activity, as updated in today's *Consumer Liquidity Watch* and as reviewed in the *Consumer Liquidity* section of [No. 859 Special Commentary](#). Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including residential real estate activity and related demand for residential construction. That circumstance—in the last ten-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity.

In line with common-reporting experience of recent years and extreme volatility, monthly results are likely to be unstable, heavily revised and not statistically meaningful, holding in a general pattern of stagnation, as still seen in recent months, despite recent positive, albeit highly unstable monthly growth. That said, in the wake of the frequent extreme monthly gyrations, almost anything is possible in this unstable series in a given month, despite what usually are positive consensus expectations for the headline reporting detail. Given the extreme, but still statistically-insignificant surges in October and November, however, some fall-back in December is a reasonable expectation, and the consensus seems to be running just a little shy of flat.

Irrespective of the usual lack of significance in the headline detail, the broad pattern of Housing Starts should remain consistent with the low-level, stagnant-to-downtrending activity, seen in the last year. Both Housing Starts and Building Permits showed patterns of continuing non-recovery in the context of respective November 2017 activity down by 42.9% (-42.9%) and by 42.6% (-42.6%) from recovering pre-recession highs. Such low-level stagnation is evident particularly with headline detail viewed in the context of a six-month moving average. Again, these series remains subject to regular and extremely-large, prior-period revisions.

Pending Formal Review of 2017 and Preview of 2018. The ShadowStats formal annual review of 2017 and preview of 2018, updating [No. 859 Special Commentary](#) of January 8, 2017, is planned for *No. 934 Special Commentary* of January 30, 2018.