

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

COMMENTARY NUMBER 833
Annual Income, Consumer Liquidity, CPI, Real Retail Sales and Earnings

September 18, 2016

Consumer Conditions Continue to Deteriorate

**2015 Household-Income Boost Reflected New Surveying of
IRA Withdrawals and Census-Gimmicked Interest Income**

**Consistently Surveyed, 2015 Household Income Remained Shy of
Its Level at the 2009 Trough of the Economic Collapse and
Held Below Levels of the Late-1980s and-Early 1970s**

**Real Consumer Credit (Ex-Student Loans) and Household-Sector Debt Outstanding
Are Down Respectively by 13.7% (-13.7%) and 12.6% (-12.6%) from Pre-Recession Peaks**

**August 2016 Annual Inflation Firmed by 0.2% to 0.3%, with
CPI-U at 1.1%, CPI-W at 0.7% and ShadowStats at 8.7%**

**August Real Retail Sales Plunged by 0.5% (-0.5%) Month-to-Month, with
Annual Growth at a 30-Month Low, an Intensifying Recession Signal**

August Real Earnings Fell by 0.3% (-0.3%)

Markets Increasingly Seem to Anticipate a Rate Hike

PLEASE NOTE: The next regular Commentary, scheduled for Tuesday, September 20th will cover the August Housing Starts.

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

Gimmicked Economic Data Do Not Fool Main Street U.S.A. The headline 5.2% surge in 2015 annual real median household “income” was boosted by survey changes designed to reflect increasing IRA withdrawals and interest-income gains not reported previously. An unusually-rapid rise in IRA withdrawals most frequently is a sign of increasing financial stress for households, rather than planned retirement cash flows. Rapidly rising interest income for households demonstrably is not happening in the current low-interest-rate environment, despite what the Census Bureau believes households should be reporting. The survey changes break the historical consistency of the real-income series, and related year-to-year comparability, although the Census Bureau has provided information to allow an assessment of the numbers on something of a consistent basis.

Annual real median household income did get a legitimate boost in 2015 from low headline inflation, reduced by collapsing oil prices. Viewed on a consistent basis, the data show consumer liquidity still to be stressed severely, with the real median household income in 2015 not only below its level at the purported trough of the economic collapse into 2009, but also below levels seen in the early-1970s and late-1980s. To the extent the new data are to be believed, income inequality among households in the United States is higher than previously estimated.

Contrary to the happy hype out of the Census Bureau and related press, Main Street U.S.A. will not buy the positive economic spin unless the average person is experiencing similar circumstances. Such has been seen regularly with positively-massaged data, otherwise viewed as nonsense by the public. Voters usually vote their pocketbooks in national elections, irrespective of any faux pre-election happy hype.

Today’s Commentary (September 18th). These *Opening Comments* concentrate first on assessing the 2015 annual household income reporting, in the context of a full update of a variety of consumer liquidity measures and conditions, with new graphs and detail on consumer credit, including second-quarter 2016 Flow-of-Funds accounting from the Federal Reserve. Covered second is the regular monthly summary of headline CPI reporting (for August 2016) and related Real Retail Sales and Real Earnings series, with extended information in the *Reporting Detail*.

Financial markets are showing increased anticipation of an interest-rate hike by the Federal Reserve, perhaps as early as this Wednesday, September 21st. That matter is reviewed in the *Hyperinflation Watch*, along with the usual monthly graphs and discussion on gold and the U.S. dollar that accompany the monthly CPI reporting.

The *Week and Month Ahead* reviews the Housing Starts reporting due for release on September 20th.

Booming Household Income Growth Is More Statistical Gimmicking than Actual Experience.

[*Income and Poverty in the United States: 2015*](#), the government’s annual survey of real median household income and poverty, headlined: “Real median household income increased 5.2 percent between 2014 and 2015. This is the first annual increase in median household income since 2007.” With the Administration touting that good news, out of context, however, it is a bit premature for the brass bands to be striking up “Happy Days Are Here Again.”

As an aside and a simple correction to the Census Bureau’s press story: the first annual increase in real median household income since 2007 was a headline increase of 0.3% between 2012 and 2013, based on consistent historical reporting, as found in Table A-1 of the *Income and Poverty* link.

The issues with the purported 5.2% income jump in 2015 are manifold, due to surveying re-definitions, that took place in 2014 but that were used fully, for the first time, in the 2015 survey. Some changes that boosted headline income actually were counter to indicating an improving household income environment. Others showed the Census Bureau moving into the uncomfortable realm of actually estimating certain elements of income for the households being surveyed.

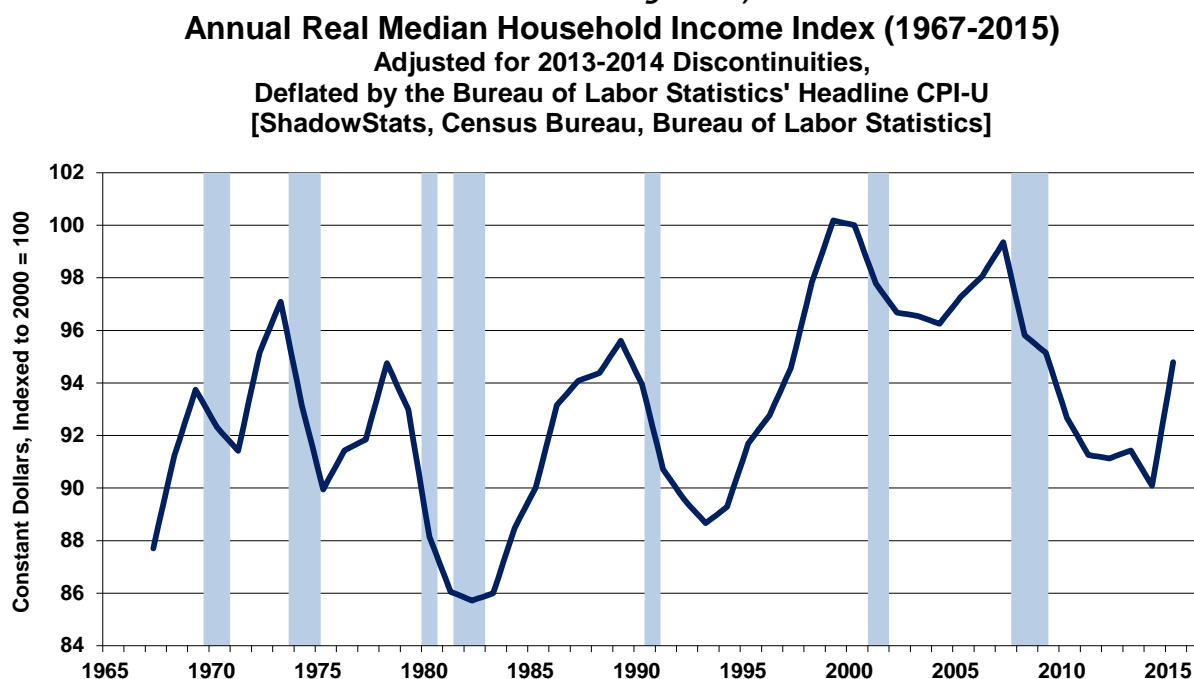
IRA Withdrawals Now Spike Household Income. Consider that withdrawals from IRAs and related accounts now are counted diligently as “boosts” to household income, even though the funds may have been counted before when the income to create those accounts was earned. In today’s difficult environment a number of households have had to draw down their retirement savings in order to survive financially. The spike now reported in that area of activity is not good news for household liquidity conditions, yet “improved reporting” upped the number of recipients of money from IRA, Keogh and 401k withdrawals by 419.5%, increasing aggregate income in that area by 230.1% (see [Census Bureau Assessment of Changes to Household Income Surveying](#) [CBAC] Charts 13, 17 and 18).

Census Bureau Now Determines What Your Interest Income Should Have Been. Equally bad, were changes suggestive of the direct rigging of the reporting of items such as “interest income” by the Census Bureau, which now calculates the interest income for each household—based on what the household should be earning—instead of surveying what the household actually earned in this happy “zero” interest environment. Keep in mind that Gross Domestic Income (GDI) details show average annual real personal interest income, by household, declined year-to-year in 2014, 2015 and in first-half 2016 (ShadowStats calculations, using the GDI, GDP implicit price deflator and Census Bureau household counts).

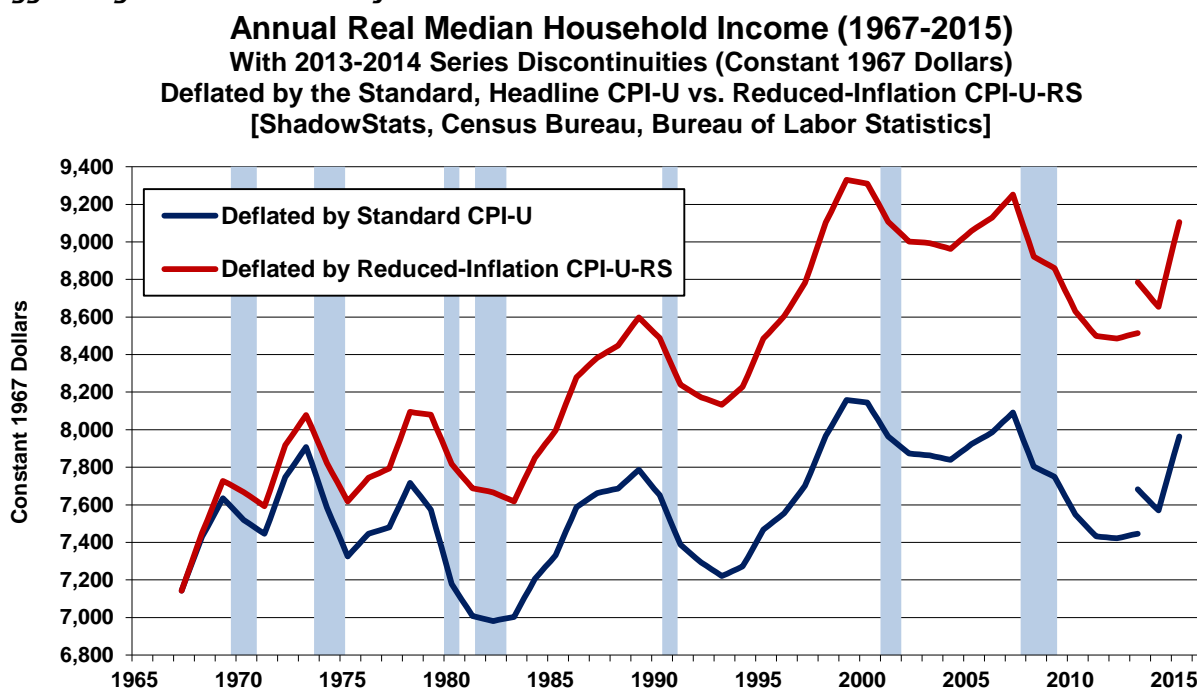
That said, the spike now reported in household interest income from “improved reporting” increased the number of recipients of money from interest accounts by 41.6%, and increased aggregate income in that area by 111.7%, thanks to Census calculating what interest income “really was” in the current low-rate environment (see [CBAC] Charts 14, 17 and 18).

Census Provides Some Basis for Estimating a Consistent Historical Series. In fairness, the Census Bureau has estimated and published the impact of its “improved” surveying methodology, which adds about 3.0% to each year’s level of real median household income, from what it would have been with historically-consistent surveying. That detail has been used to plot the Real Annual Median Household Income series on something of an historically-consistent basis, through 2015—the 2013-2014 discontinuity removed—as reflected in *Graph 1*. Separately, the definitional changes to the surveying also have had the negative effect of exacerbating income inequality, as shall be discussed shortly.

Graph 1: Annual Real Median U.S. Household Income through 2015, 2013-2014 Discontinuities Removed



Graph 2: Annual Real Median Household Income through 2015, with the Discontinuities and with Deflation Using Both the Standard CPI-U and Reduced-Inflation CPI-U-RS Measure Preferred by the Census Bureau for Purposes of Exaggerating Real or Inflation-Adjusted Growth.



Noted earlier, when viewed on a consistent basis (*Graph 1*), the numbers show that real median household income in 2015 not only was below its level at the purported trough of the economic collapse

into 2009, but that it also continued below levels seen in the early-1970s and late-1980s. Such is consistent with the latest plot of Real Earnings, *Graph 16*, shown later, and it continues to indicate the long-term nature of the evolution of the major structural changes and stresses constraining consumer liquidity and impairing the current economy (see related discussion in [No. 777, 2014 Hyperinflation Report—The End Game Begins](#) and [2014 Hyperinflation Report—Great Economic Tumble](#)).

The difference between *Graph 1* and *Graph 2* is that the red line in *Graph 2* reflects the official median household income readings, including the 2013-2014 discontinuity, as deflated by the CPI-U-RS, used in the annual *Poverty Report*. That is a restated version of the headline CPI-U (used in deflating *Graph 1* and the blue line in *Graph 2*). The CPI-U is covered separately, later in this *Commentary*, for headline August 2016 reporting. The CPI-U-RS (research series) is CPI-U restated by the Bureau of Labor Statistics (BLS) and Census, as though all the inflation-reducing methodologies introduced by the BLS since 1980 were in place as of 1980. The differences have provided significant background and material for the estimation of the ShadowStats Alternate Inflation Measures, which look to recreate the CPI as if none of the inflation-debilitating changes had been made to CPI reporting methodology. The ShadowStats approach to alternate inflation measures is directly contrary to the CPI-U-RS concept (see [Public Commentary on Inflation Measurement](#)).

Census is the primary user of the CPI-U-RS, since that shows a stronger pattern of historical, inflation-adjusted income growth and lower poverty rates, than does the traditional CPI-U. The Bureau of Labor Statistics (BLS), however, usually deflates its income measures using the headline CPI-U or CPI-W, with the headline CPI-U being used to deflate the Annual Real Median Household Income (blue lines) in *Graphs 1* and *2*. The difference between the annual percent changes in the blue versus the red lines (*Graph 2*) is nil in recent years, since most major changes to headline inflation methodology were made prior to 2000.

Collapsing Gasoline and Oil Prices Have Spiked Inflation-Adjusted Income. Separately, a legitimate issue boosting real median household income in 2015 was the collapse in gasoline prices in 2014. That pummeled headline consumer inflation, with the effect of boosting the inflation-adjusted 2015 data.

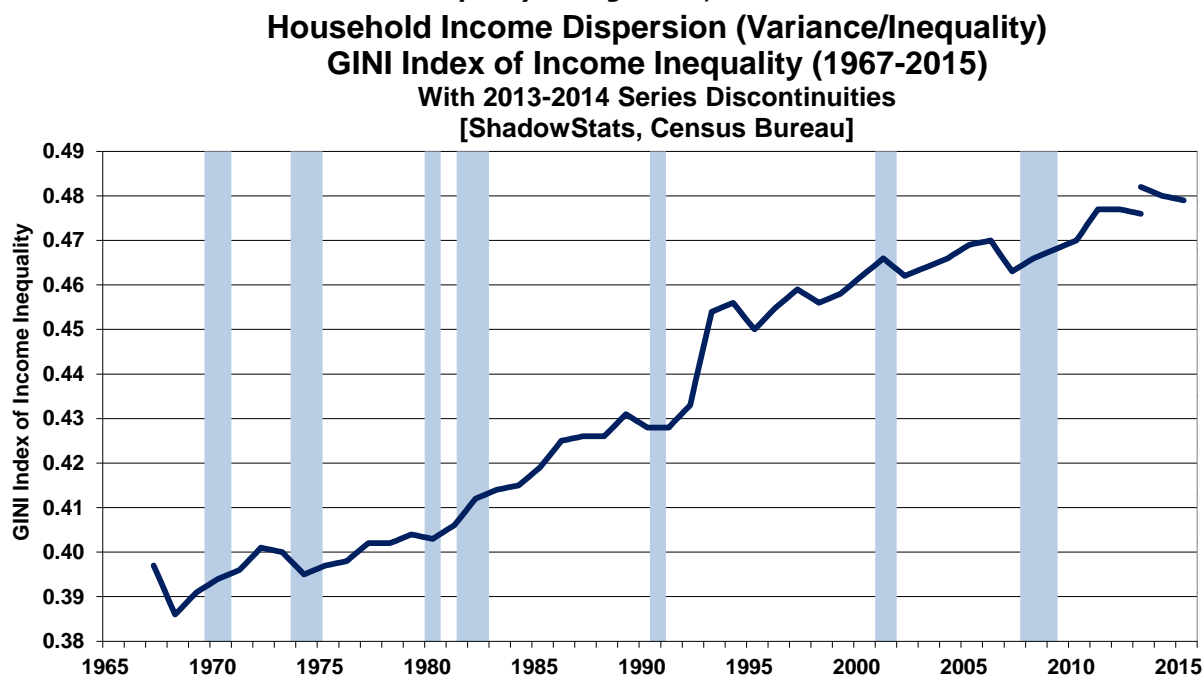
Reflecting the reduced headline inflation, much of the growth reflected in headline real median income in 2015 was due to the temporary drop in gasoline prices, not to growing nominal (not inflation adjusted) income, which more commonly has been the circumstance in Census Bureau surveys since 1967.

The impact of such gasoline-price driven, low headline CPI-U inflation has been seen regularly in the Monthly Real Median Household Income Measure published by www.SentierResearch.com, discussed in the monthly median real household income section. While the annual Census number has been updated on an inconsistent annual basis by the Census Bureau, through 2015, the Sentier number is shown monthly through July 2016, on a consistent basis in *Graph 5*. The Sentier numbers rose sharply in 2015, tied to low inflation, they turned down and began to stagnate again, in early 2016. Also discussed in that section, there well may be other significant issues with the current reporting quality of this series.

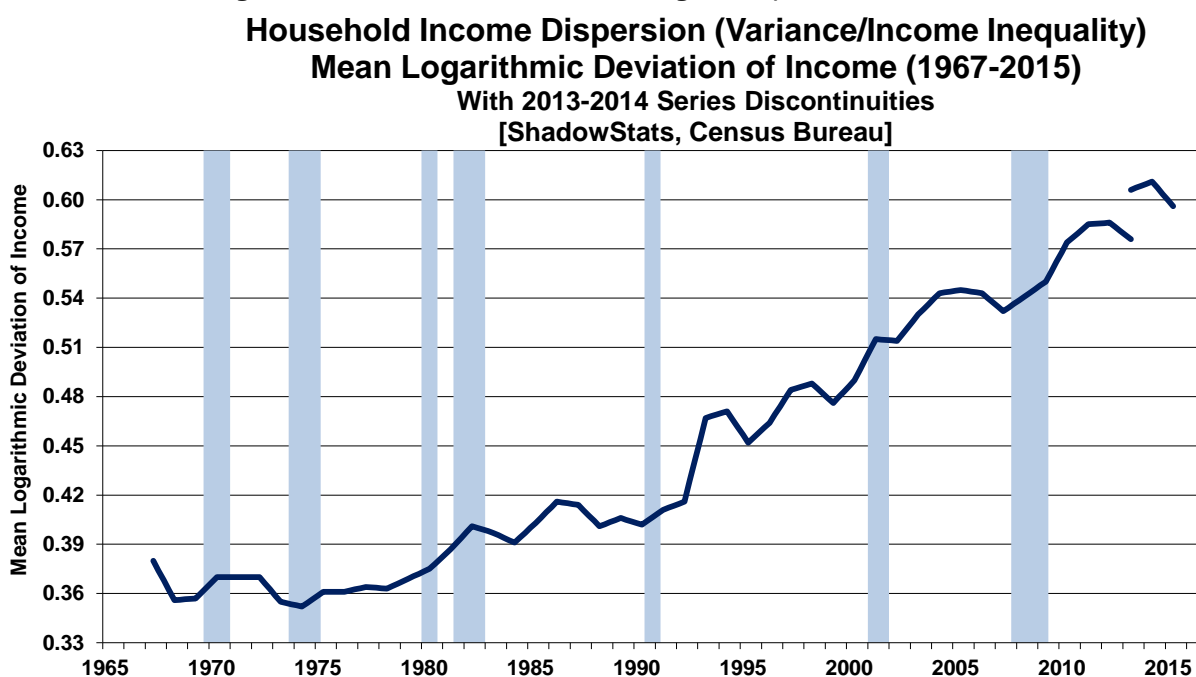
Increasing Income Variance? Updated estimates of income dispersion, or inequality, are shown through 2015 in *Graphs 3* and *4*. Measures of income dispersion, or variance, indicate the distribution of income within a population. A low level of income dispersion indicates that income tends to be concentrated in the middle, while a high level of dispersion indicates heavier income concentrations in the extremes of low and high income, with less in the middle. The higher the variance of income, the greater is the

income dispersion. Generally, economies with income concentrated in the middle tend to enjoy stronger and broader economic growth. The recent changes to the survey have shifted household incomes more into the “upper” categories, resulting in increased income inequality. Again, with the discontinuities shown in *Graphs 3 and 4*, these series now have been broken, in terms of internal, historical consistency.

Graph 3: Annual GINI Index of Income Inequality through 2015, with Discontinuities



Graph 4: Annual Mean Logarithmic Deviation of Income through 2015, with Discontinuities



Rising and near-record income dispersion levels usually foreshadow economic and financial-market turmoil. Despite—or perhaps due to—the ongoing nature of the economic and systemic-solvency crises, and the effects of the 2008 financial panic, income dispersion—the movement of income away from the middle towards both high- and low-level extremes—held near record highs in 2013, instead of moderating, as often seen during periods of financial distress, and is suggested to have moved to even greater extremes in 2014 and 2015.

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

Again, shown in *Graphs 3 and 4*, the current circumstance is at a record extreme, well above levels estimated to have prevailed before the 1929 stock-market crash and the Great Depression. Increasingly difficult times are likely for at least the next several years.

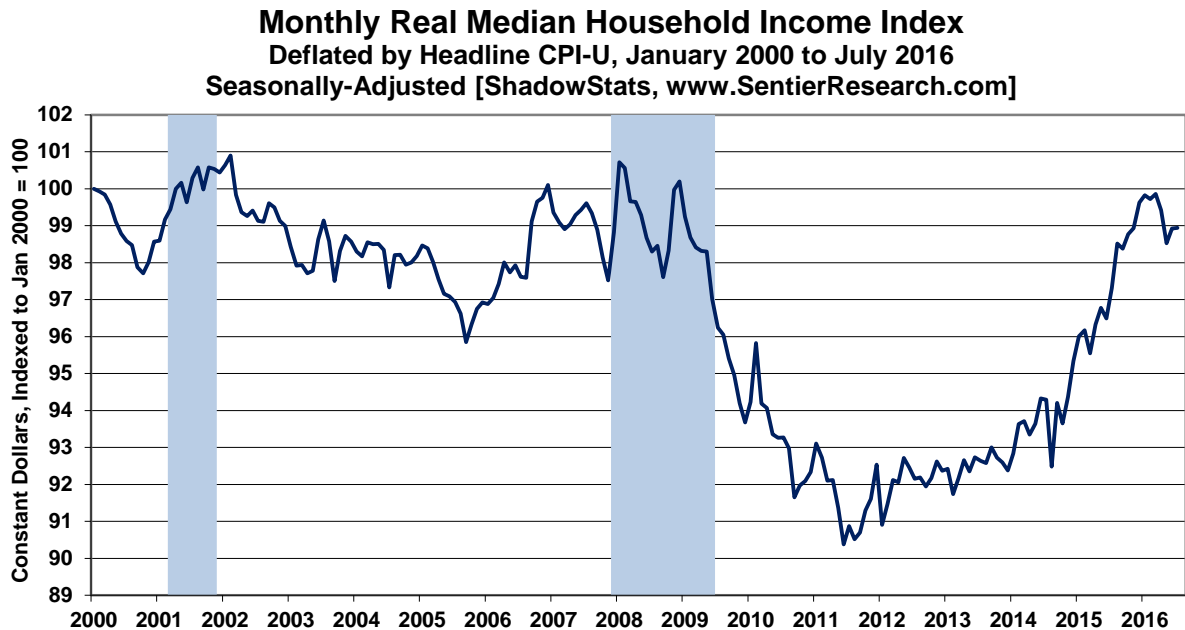
Monthly Household Income Measure Still Signals Broad-Based Economic Difficulties. Shown in *Graph 5* is the latest monthly real median household income detail through July 2016, as reported by www.SentierResearch.com. Headline reporting had turned down anew, with a statistically-significant monthly decline in May 2016, after several months of statistically-insignificant flutterings around its near-term January 2016 peak, and with statistically-insignificant flutterings again in June and July 2016.

This measure of real monthly median household income generally can be considered as a monthly version of the annual detail shown in *Graph 6* (see also *Graph 1*), updated for the new 2015 detail, but the monthly specifics are generated from separate surveying and questioning by the Census Bureau.

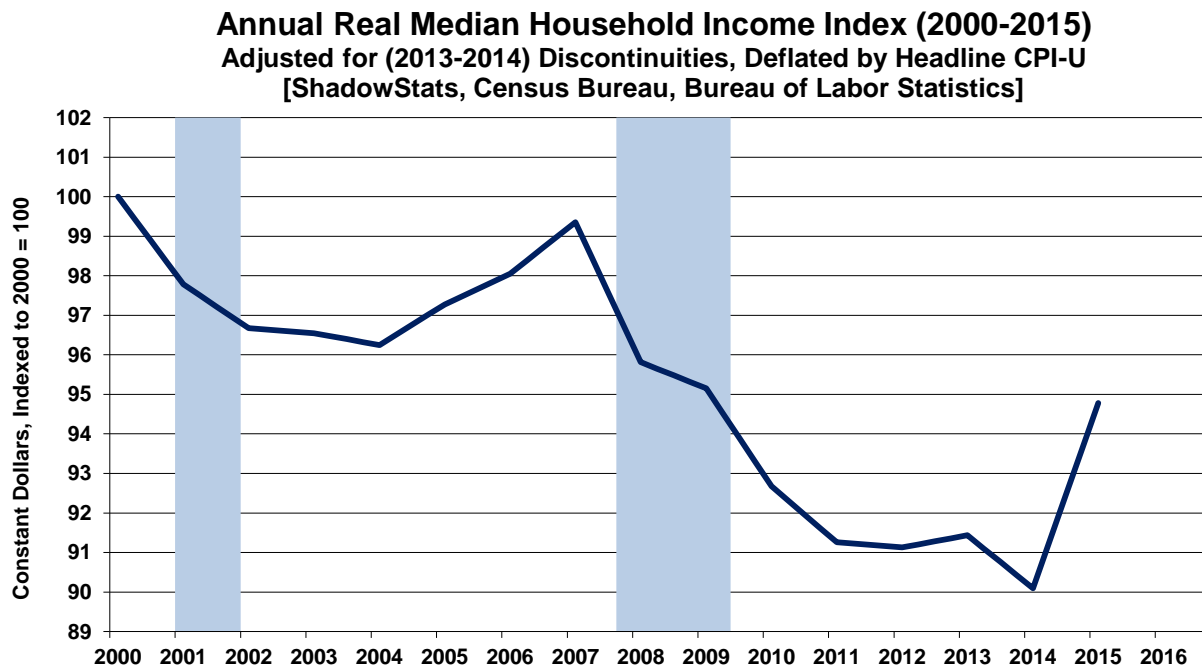
On a monthly basis, when headline GDP purportedly started its solid economic recovery in mid-2009, the monthly household income number nonetheless plunged to new lows. Generally, the income series had been in low-level stagnation, with the recent uptrend in the monthly index boosted specifically by collapsing gasoline prices and the related, negative headline CPI-U consumer inflation. The index reached pre-recession levels in the December 2015 reporting, but it remains minimally below the pre-recession highs for both the formal 2007 and 2001 recessions. It should continue to turn down anew, as headline monthly consumer inflation continues to pick-up in the months ahead.

Where lower gasoline prices had provided some minimal liquidity relief to the consumer, indications are that any effective extra cash generally has been used to help pay down unsustainable debt or other obligations, not to fuel new consumption. Again, the effects of lower gasoline prices have begun to bottom out or reverse.

Graph 5: Monthly Real Median Household Income through July 2016



Graph 6: Annual Real Median Household Income through 2015, Discontinuities Removed



Differences in the Monthly versus Annual Median Household Income. The general pattern of relative historical weakness also has been seen in the headline reporting of the annual Census numbers, shown in *Graph 6*, with 2014 real annual median household income having hit a ten-year low, and with the new, historically consistent 2015 annual number still holding below that seen when the collapsing economy hit its purported trough in 2009. The Sentier numbers had suggested a small increase in 2014 versus 2013 levels. Still, the monthly and annual series remain broadly consistent, although based on separate

questions within the monthly Consumer Population Series (CPS), as conducted by the Census Bureau. Where Sentier uses monthly questions surveying current annual household income, the headline annual Census detail is generated by a once-per-year question in the March CPS survey, as to the prior year's annual household income.

Did Census Surveying Problems Warp the 2014 Data? Due to possible misreporting by the Census Bureau of the 2013 and/or 2014 data resulting from surveying difficulties, a more realistic annual graph might show a small increase in the 2014 annual median household income level, instead of the headline decline, with a more-moderate and credible relative gain into 2015. Again, in the 2014 detail, the monthly Sentier numbers had suggested an increase in the annual 2014 Census number, which did not happen, despite the high correlation seen standardly between the monthly and annual series.

The annual surveying is piggy-backed on the monthly CPS conducted in March of the ensuing calendar year. Problems discussed in the next section, as to the completion of the regular Census surveys, coincided with periods involved with the break in historical consistency of the household-income surveying.

Census Misreporting and Survey Problems. Due to problems with those conducting monthly Census Bureau Current Population Surveys (CPS) completing their surveys on a full and timely basis, survey quotas were met by some interviewers completing the survey forms, themselves, without actually conducting the purported interview (see the *Note on Reporting-Quality Issues...* in the *Week an Month Ahead Section*). Excerpted from [Commentary No. 669](#), of October 28, 2014:

Further Issues with the Falsification of Census Bureau Unemployment Surveying. With the October headline unemployment data due for release on November 7th, post-election, it will be interesting to see when the BLS offers comment on the reporting-quality issues surrounding its household survey, conducted by the Census Bureau [No comment followed]. A deepening scandal has been indicated per recent press coverage.

As discussed in the October 3rd [Commentary No. 663](#): “Reporting-quality issues continue to intensify for the popularly-followed employment and unemployment series. The House Committee on Oversight and Government Reform and the U.S. Congress Joint Economic Committee have been investigating ‘data falsification’ in the monthly Current Population Survey (CPS, a.k.a. the Household Survey), which is conducted by the U.S. Census Bureau on behalf of the Bureau of Labor Statistics [The CPS in March of each year is used as the platform for the prior year’s *Poverty Survey*].

“The investigation was triggered by the November 18, 2013 *New York Post* story by John Crudele, *Census ‘faked’ 2012 election jobs report*. A Congressional *Staff Report* published on September 18, 2014, indicated data falsification had taken place at the Philadelphia Regional Office of the Census Bureau, in order to meet survey-participation requirements for the CPS. In reading the report, there are indications of all offices being involved, including direction from headquarters in Washington. While there has been no finding of the data being altered for specific political purposes, that had been alleged, and the behavior of the Obama Administration, through its Commerce Department and subsidiary Census Bureau during the investigation, could be described as ‘obstructive.’ The *Staff Report* can be found here: [U.S. Census Bureau: Addressing Data Collection Vulnerabilities](#). The body of the report includes interesting detail.”

Subsequent to the above cited material, John Crudele of the *New York Post* has published two further articles indicating that the reporting issues with the CPS indeed extended to other Census offices, specifically to the Denver and Los Angeles offices. Links to those articles in the *Post* are found here: October 6th, [Crudele on Denver](#); October 22nd, [Crudele on Los Angeles](#).

Other Indicators of Consumer Liquidity--Conditions Still Constrain Sustainable Economic

Recovery. Consumer liquidity conditions are updated fully here from [Commentary No. 825](#). Beyond the real median household income data discussed in the prior section, the detail here incorporates the latest measures of consumer confidence and sentiment (*Graphs 7 to 9*). Also updated are the Federal Reserve's quarterly latest estimate of real household credit market debt outstanding (*Graph 10*) and monthly estimate of consumer credit outstanding, including new graphs of inflation-adjusted credit and annual growth in same (*Graphs 11 to 13*).

Underlying fundamentals to consumer economic activity, such as liquidity, have been severely impaired in the last decade or so, driving economic activity into collapse and preventing meaningful or sustainable economic rebound, recovery or ongoing growth. The level of and growth in sustainable real income, and the ability and willingness of the consumer to take on new debt remain at the root of the liquidity crisis.

Generally, the higher and stronger those measures are, the healthier is consumer spending. Most measures of consumer liquidity and attitudes remain off their lows, and one—real monthly median household income—actually had spiked recently to pre-recession levels, reflecting the temporary collapse in gasoline prices and deflation by the otherwise underestimated headline CPI-U inflation. Real monthly median income, however, generally has begun to move lower, again, along with a pickup in consumer inflation (see the earlier discussion with *Graph 5*).

Still, these underlying economic fundamentals simply have not supported, and do not support a turnaround in broad economic activity. Never truly recovering in the post-Panic of 2008 era, limited growth in household income and credit, and a still generally, faltering consumer outlook, have eviscerated and continue to impair broad, domestic U.S. business activity, which feeds off the financial health and liquidity of consumers

Such has driven the housing-market collapse and ongoing stagnation in consumer-related real estate sales and construction activity, as well as having constrained both nominal and real retail sales activity and the related, personal-consumption-expenditures and residential-construction categories of the Gross Domestic Product (GDP). Together, those sectors account for more than 70% of total GDP activity in the United States.

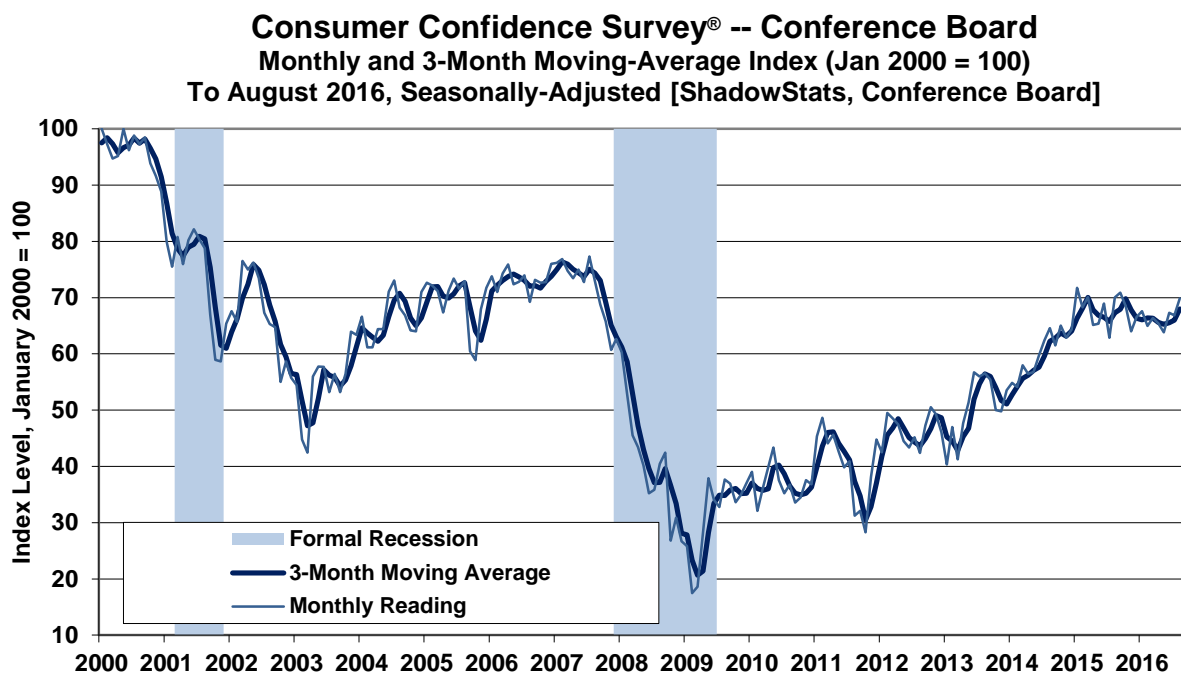
Now, with the economy never having recovered fully from the collapse into 2009, consumers again are pulling back on consumption, as evidenced by a renewed slowdown in broad economic activity (see [Commentary No. 832](#)). There has been no economic recovery, and there remains no chance of significant, broad economic growth, without a meaningful, fundamental upturn in consumer- and banking-liquidity conditions.

Consumer Confidence, Sentiment and Credit. The respective August and early-September 2016 readings for the Conference Board's Consumer-Confidence and University of Michigan's Consumer-Sentiment measures are reflected in *Graphs 7 to 9*, where confidence jumped, but sentiment fell in August.

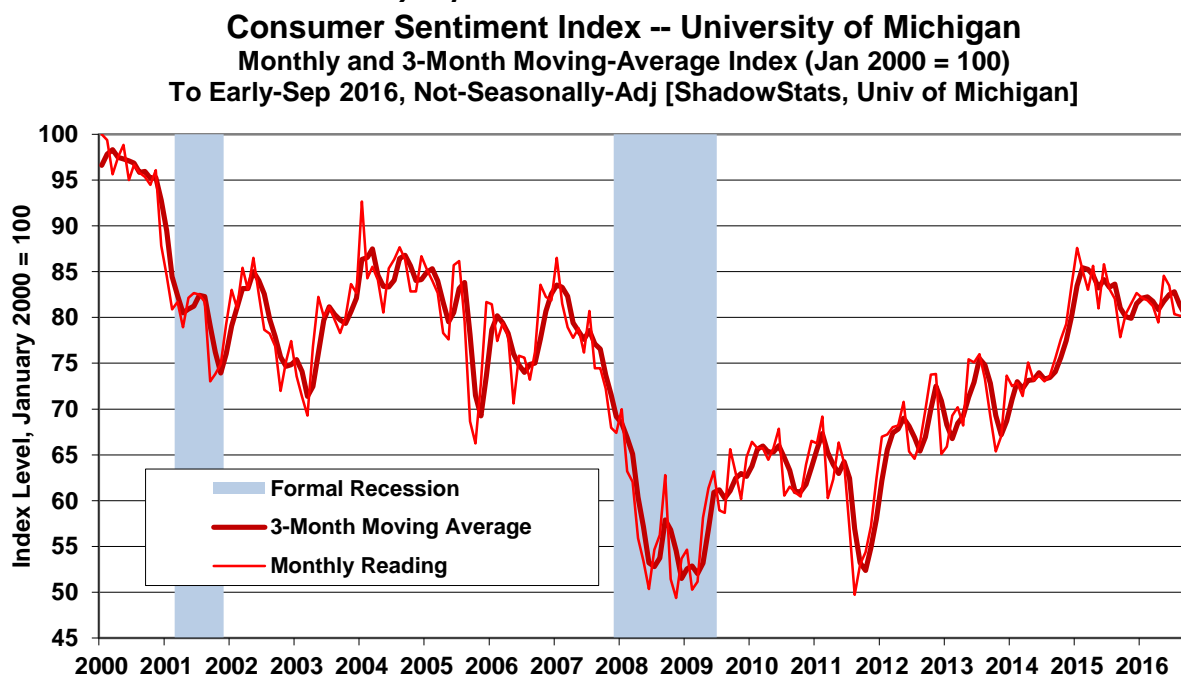
The Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index[®] (*Graph 7*), and the University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph 8*) jumped and eased in their respective August readings. August Consumer Confidence rose, while August Sentiment declined, with the early-September Sentiment (released September 16th) holding

even with August. The three-month moving averages in both series continued to hold below their respective March/February 2015 near-term peaks.

Graph 7: Consumer Confidence to August 2016



Graph 8: Consumer Sentiment to Early-September 2016



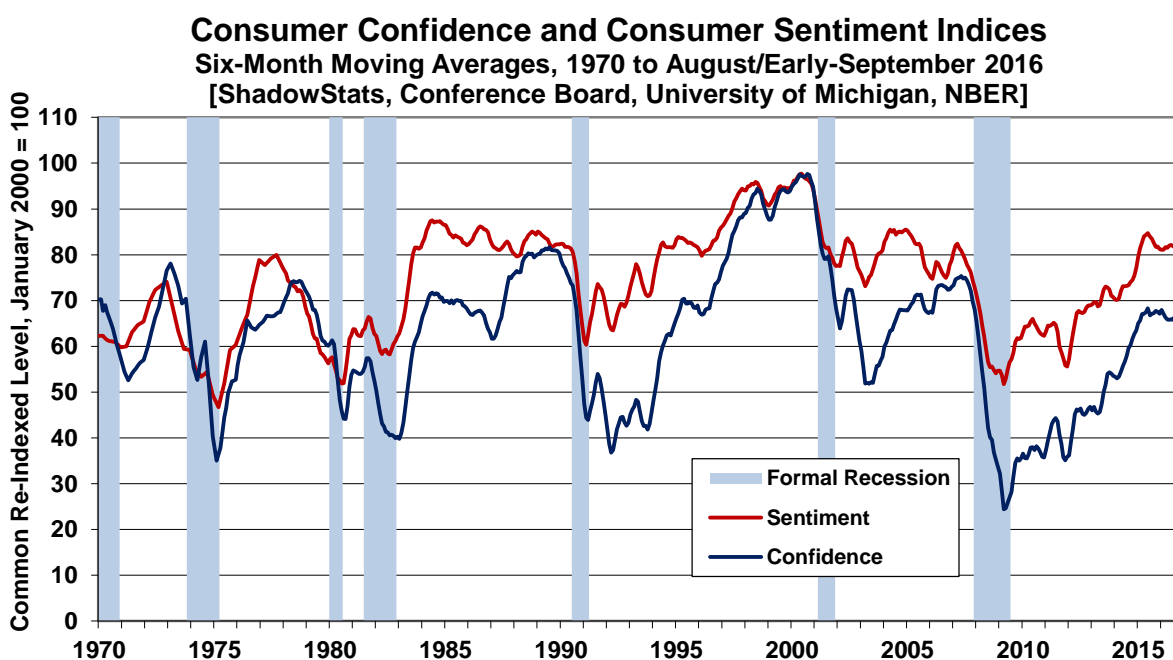
Showing the Consumer Confidence and Consumer Sentiment measures on something of a comparable basis, *Graphs 7 to 9* reflect both measures re-indexed to January 2000 = 100 for the monthly reading.

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.

Both series also have continued to hold off near-term peaks, as smoothed for six-month moving-average readings (*Graph 9*), with both measures down from June 2015 near-term highs.

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. With increasingly-negative, unstable and uncertain headline financial and economic reporting and shifting political developments at hand and ahead, successive negative hits to both the confidence and sentiment readings remain increasingly likely in the months ahead, primarily from the faltering economy.

Graph 9: Comparative Confidence and Sentiment (6-Month Moving Averages) since 1970



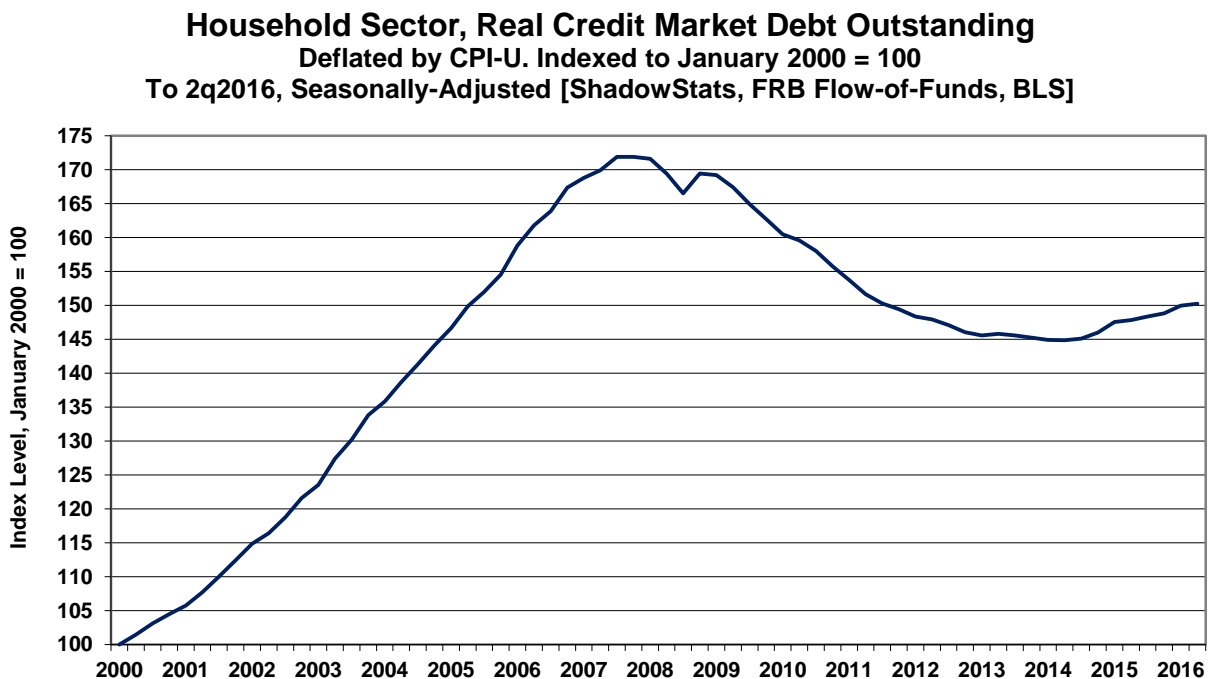
Smoothed for irregular, short-term volatility, the two series remain at levels seen typically in recessions. Suggested in *Graph 9*—plotted for the last 45 years—the latest readings of Confidence and Sentiment generally have not recovered levels preceding most formal recessions of the last four decades. Broadly, the consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth seen in 2014 and as indicated for second-and third-quarter 2015 GDP growth.

The final four graphs address consumer borrowing. Debt expansion can help make up for a shortfall in income growth. Shown in *Graph 10 of Household Sector, Real Credit Market Debt Outstanding*, household debt declined in the period following the Panic of 2008, and it has not recovered, based on the Federal Reserve's flow-of-funds accounting through second-quarter 2016 (published September 16th). Household Sector, Real Credit Market Debt Outstanding in the second-quarter of 2016 had declined by 12.6% (-12.6%) from its pre-recession peak in third-quarter 2007.

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 first-half 2016, as also seen in the patterns of the real monthly median household income survey, was due primarily to gasoline-price-driven, negative CPI inflation, which had continued impact on the system through the second quarter. Current activity has also reflected surging student loans, as shown in the *Graphs 11 to 13*.

Graph 10: Household Sector, Real Credit Market Debt Outstanding through Second-Quarter 2016

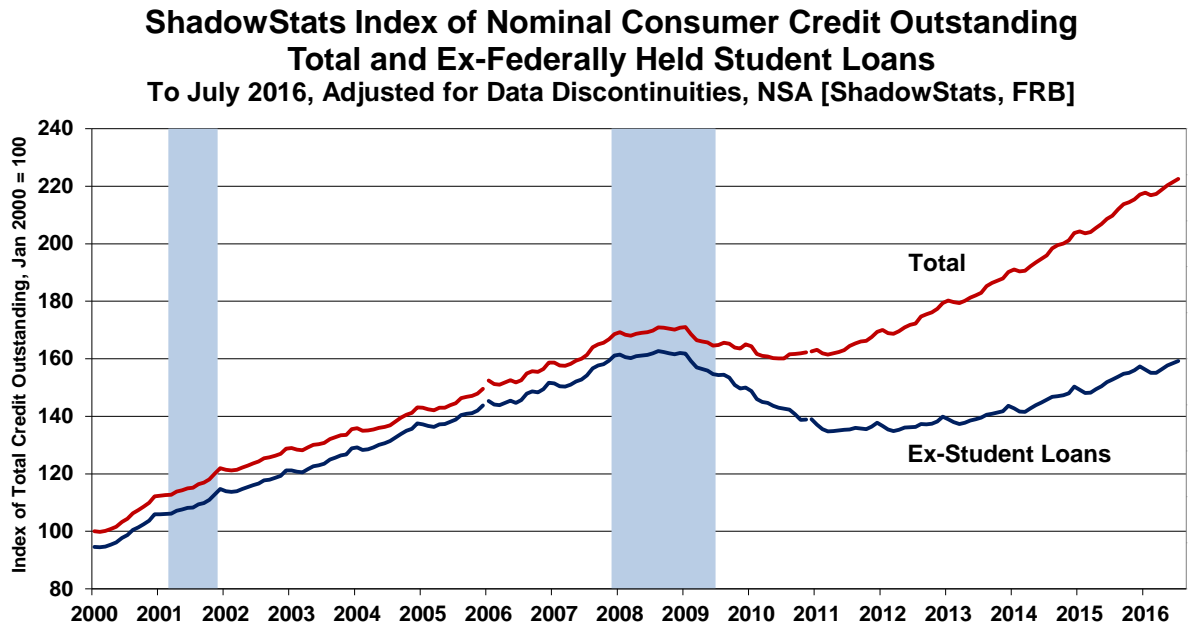


Shown through July 2016 reporting, *Graph 11* of monthly Consumer Credit Outstanding is a subcomponent of *Graph 10* on real Household Sector debt, but *Graph 11* is not adjusted for inflation. ShadowStats is pleased to introduce new graphs of real activity for Consumer Credit Outstanding, both in terms of level (*Graph 12*) and in terms of year-to-year change (*Graph 13*).

Post-2008 Panic, 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.

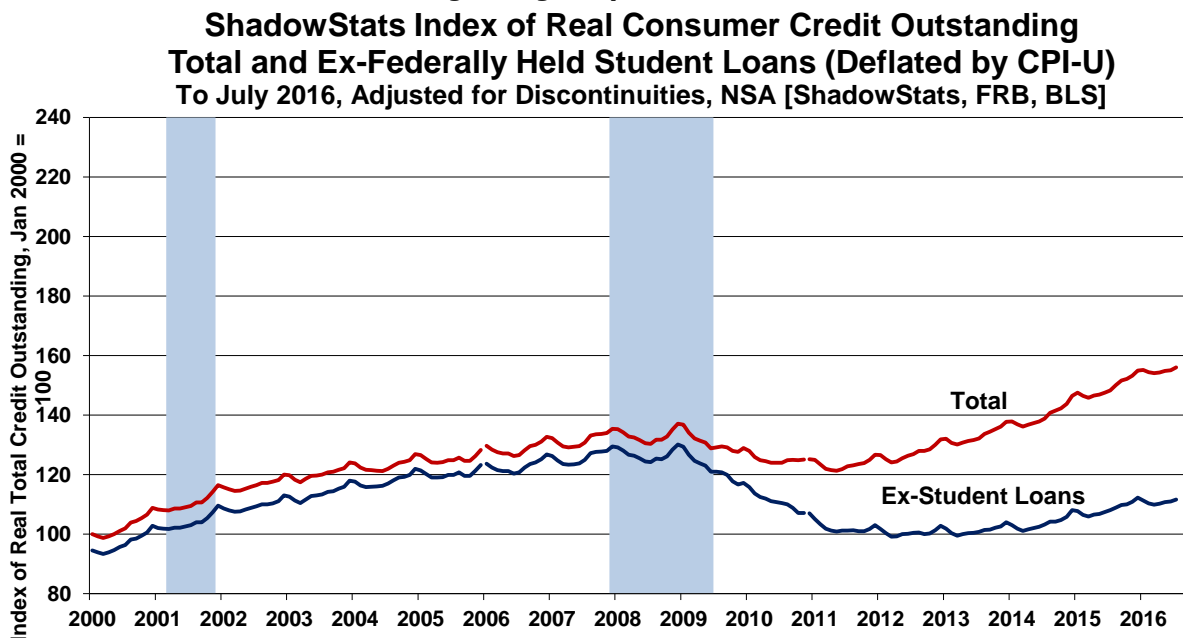
Although in slow uptrend, the nominal level of Consumer Credit Outstanding (ex-student loans) has not recovered since the onset of the recession. These disaggregated data are available and plotted only on a not-seasonally-adjusted basis, with the June 2016 and other recent monthly levels reflecting some irregular, unadjusted seasonal dips or jumps. The series is unstable enough that the Federal Reserve has the apparent inability to post consistent, unadjusted monthly data without revising the last couple of years of monthly data, each month.

Graph 11: Nominal Consumer Credit Outstanding through July 2016

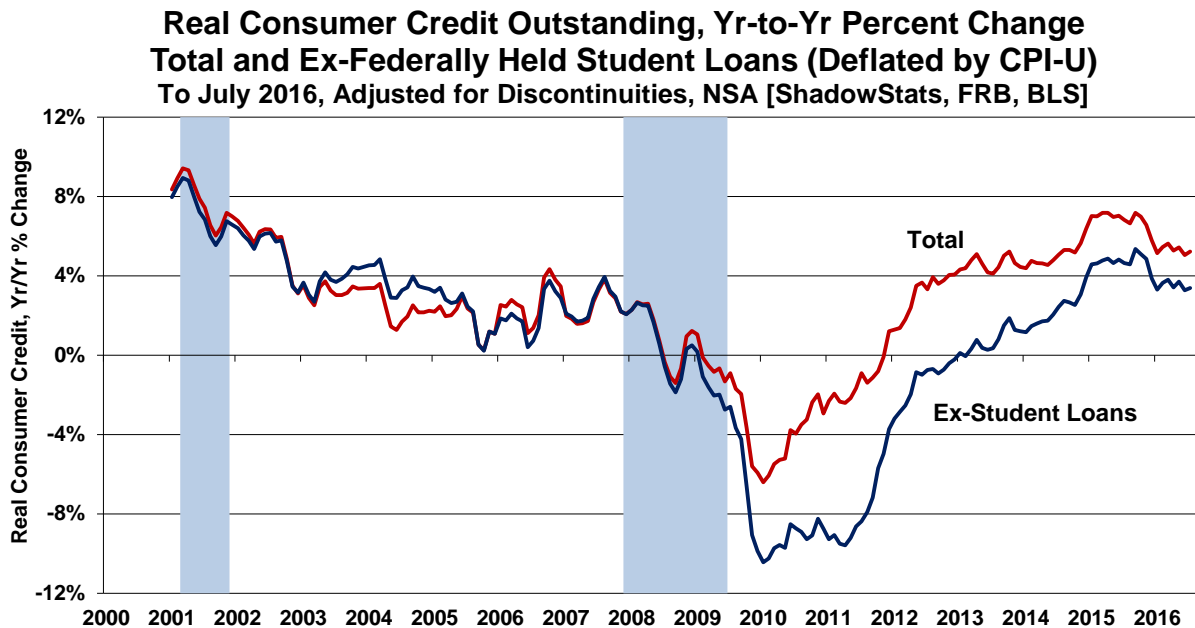


Adjusted for inflation, the lack of recovery in the ex-student loan area is more obvious. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding is down from its December 2007 pre-recession peak by 13.7% (-13.7%).

Graph 12: Real Consumer Credit Outstanding through July 2016



Year-to-year growth in *Graph 13* tends to resolve most of the monthly distortions in not seasonally-adjusted data.

Graph 13: Year-to-Year Percent Change, Real Consumer Credit Outstanding through July 2016

Consumer Price Index (CPI)—August 2016—Inflation Took a Small Jump, Despite Lower Gasoline Prices. Headline August 2016 CPI-U monthly inflation of 0.20% was minimally above consensus expectations. With negligible seasonally-adjusted inflation in either energy or food, the headline gain was generated by price inflation in the broad “core” category, covering everything except food and energy, up by a seasonally-adjusted 0.25%.

Discussed in other, recent CPI *Commentaries* (see [Commentary No. 793](#)), it is the unadjusted, not the seasonally-adjusted detail that tends to match consumer experience most closely, to the extent that these numbers come close to matching actual experience at all. On an unadjusted basis, monthly CPI-U rose by 0.09% in August 2016.

Separately, although official annual CPI-U inflation just jumped to 1.06% in August 2016, versus 0.84% in July 2016, year-to-year inflation is not and has not been quite as soft as indicated, when considered in the context of traditional CPI reporting and common experience. The ShadowStats-Alternate Inflation Measures showed annual inflation in August 2016 of 4.6%, based on 1990 methodologies, and 8.7%, based on 1980 methodologies.

CPI-U. Headline, seasonally-adjusted August 2016 CPI-U was rose by 0.20%, following a decline of 0.04% (-0.04%) in July and monthly increases in both June and May of 0.22%. Not seasonally adjusted, August 2016 year-to-year inflation for the CPI-U rose to 1.06%, from 0.84% in July 2016 and versus 1.01% in June 2016 and 1.02% in May 2016.

Encompassed by the seasonally-adjusted monthly gain of 0.20% in August 2016 [up by an unadjusted 0.09%] in the headline CPI-U, August food inflation was unchanged at 0.00% [up by 0.07% unadjusted], August energy inflation declined by a seasonally-adjusted 0.01% (-0.01%) [down by 1.23% (-1.23%) unadjusted], while the adjusted “core” (ex-food and energy) inflation rate rose by 0.25% [up by 0.21%

unadjusted]. Separately, core CPI-U inflation showed unadjusted year-to-year inflation of 2.32% in August 2016, versus 2.20% in July 2016, 2.23% in June 2016 and 2.24% in May 2016.

CPI-W. The August 2016 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 0.17%, following a monthly decline of 0.09% (-0.09%) in July, and monthly gains of 0.21% June and 0.20% in May. Unadjusted, year-to-year change in August 2016 CPI-W was a gain of 0.66%, up from 0.42% in July 2016 and annual gains of 0.64% in June 2016 and 0.66% in May 2016.

Chained-CPI-U. The headline C-CPI-U is not seasonally adjusted. August 2016 C-CPI-U annual inflation came in at 0.75%, versus 0.53% in July 2016, 0.75% in June 2016 and 0.80% in June 2016.

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 4.6% in August 2016, versus 4.4% in July 2016. The August 2016 ShadowStats-Alternate Consumer Inflation Measure (1980-Base), which reverses gimmicked changes to official CPI reporting methodologies back to 1980, was at about 8.7% year-to-year, versus 8.5% in July 2016,.

Real Retail Sales—August 2016—Down Month-to-Month by 0.5% (-0.5%), Year-to-Year Growth Sank to a 30-Month Low. Discussed in prior [Commentary No. 832](#), nominal monthly retail sales in August 2016 declined by 0.29% (-0.29%), against an upwardly revised 0.06% gain in July, and a downwardly-revised gain of 0.72% in June. The August 2016 year-to-year nominal retail-sales gain slowed to 1.90%, versus an upwardly-revised 2.36% in July 2016 and a downwardly revised gain of 2.85% in June 2016.

Headline Real Detail. The preceding numbers were before any consideration for the effects of inflation. The initial monthly and annual inflation-adjusted real growth rates for August 2016 Retail Sales, and the trend for annualized third-quarter 2016 real change in retail sales follow, reflecting the August CPI-U headline seasonally-adjusted monthly CPI-U changes of a 0.20% gain in August 2016, a decline of 0.04% (-0.04%) in July and an increase of 0.22% in June.

Accordingly, August 2016 real Retail Sales dropped by 0.49% (-0.49%) for the month, following an upwardly-revised monthly gain of 0.10% in July and a downwardly revised monthly gain of 0.50% in June.

Intense Signal of Recession in Annual Real Growth. During normal economic times, annual real growth in Retail Sales at or below 2.0% signals an imminent recession. That signal has been in play since February 2015 (the “new” recession likely will be timed from December 2014, based on industrial production, retail sales and other indicators), suggesting a deepening, broad economic downturn.

Year-to-year, August 2016 real retail sales growth slowed to 0.80%, which was a thirty-month low, a sharp drop from an upwardly-revised 1.47% in July 2016 and a downwardly-revised 1.77% in June 2016. With annual real growth showing an initial third-quarter 2016 annual growth trend of 1.12%, based on just July and August detail, versus 1.56% in second-quarter 2016 and 1.62% in first-quarter 2016, the recession signal remains intense.

Initial Third-Quarter 2016 Annualized Real Growth Trend Slowed versus Second-Quarter 2016, with First-Quarter 2016 Still Flat. Based just on July and August 2016, the early trend for third-quarter 2016 annualized real Retail Sales was 0.67%, down sharply from the downwardly-revised 3.36% annualized growth in second-quarter 2016. Such was against an unrevised estimate of annualized quarterly real growth of 0.10%—effectively flat—in first-quarter 2016.

Real Retail Sales Graphs. *Graphs 23 through 26* in the *Reporting Detail* plot the historical levels of real retail sales activity (deflated by the CPI-U) and year-to-year percent change in same\for the series. Again, real growth tumbled to a 30-month low of 0.80% in August 2016, the weakest showing since February 2014, generating an intense recession signal. *Graph 24* perhaps best shows that circumstance.

Corrected Real Retail Sales—August 2016. The apparent “recovery” of headline real retail sales shown in *Graph 14* (see also *Graph 23* in the *Reporting Detail*) generally continued into late-2014, although headline reporting turned down in December 2014, into first-quarter 2015, turned higher into the third-quarter 2015, slowed to a near-standstill in fourth-quarter 2015 and first-quarter 2016, with an uptick in second-quarter 2016 but with renewed slippage into third-quarter 2016. Nonetheless, headline real growth in retail sales continues to be overstated heavily, due to the understatement of the rate 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.

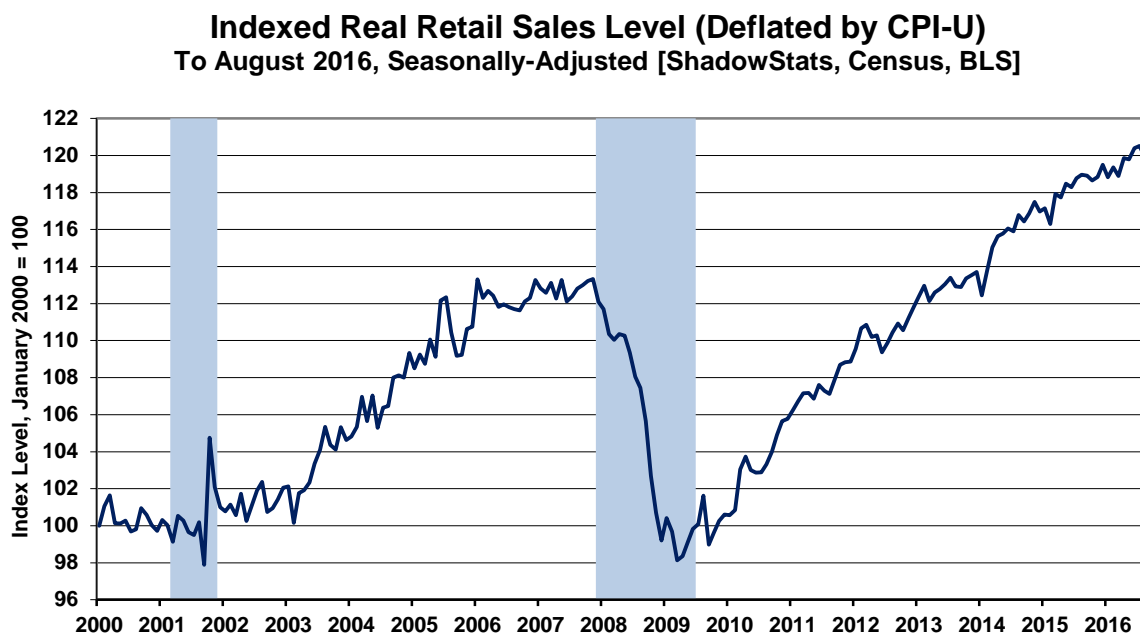
Both of the accompanying graphs are indexed to January 2000 = 100.0 to maintain consistency in the series of graphs related to corrected inflation-adjustment (including the regular plots of the “corrected” industrial production index ([Commentary No. 832](#)), “corrected” new orders for durable goods ([Commentary No. 827](#)) and “corrected” GDP ([Commentary No. 828](#))).

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 same for the official series, whether the series is indexed or expressed in dollars, again, as is evident in a comparison of *Graph 14* with *Graph 23* in the *Reporting Detail* section.

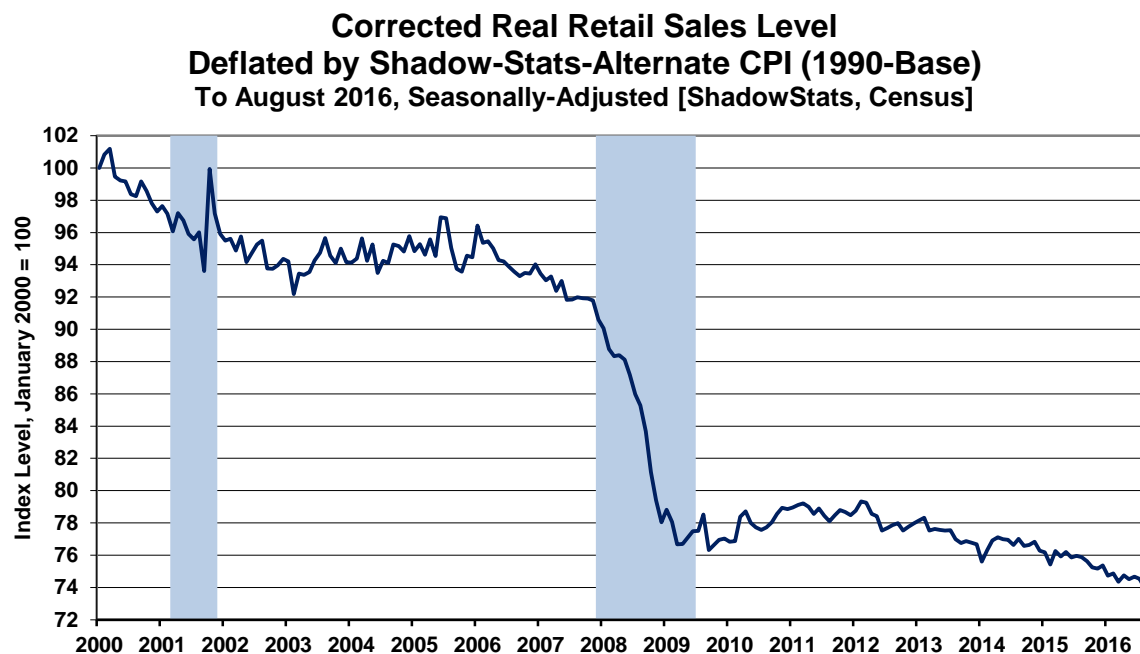
Instead of being deflated by the CPI-U, the “corrected” real retail sales numbers—in *Graph 15*—use the ShadowStats-Alternate Inflation Measure (1990-Base) for deflation. With the higher inflation of the ShadowStats measure, the revamped numbers show a pattern of plunge and stagnation and renewed downturn. That pattern generally is consistent with consumer indicators such as real average weekly earnings (see the next section), faltering consumer liquidity conditions (see the prior *Household Income* and *Consumer Liquidity* sections, the broad unemployment series (see [Commentary No. 829](#)) and most housing statistics such as Housing Starts detail (see [Commentary No. 826](#)).

A topping out in late-2011 and early-2012 reverted to renewed decline in second-quarter 2012 in this series (*Graph 15*), which had been bottom-bouncing at a low-level plateau of economic activity since the economic collapse into 2009. The renewed contraction has trended into and deepened on a monthly basis throughout 2015, and now into third-quarter 2016, allowing for occasional and temporary upside blips.

Graph 14: Headline Real Retail Sales Level, Indexed to January 2000 = 100



Graph 15: "Corrected" Real Retail Sales Level, Indexed to January 2000 = 100



Real Average Weekly Earnings—August 2016—Fell for the Month in the Context of Ongoing Unstable Reporting. The BLS published its estimates for August 2016 real average weekly earnings, coincident with the release of the August CPI-W. In the production and nonsupervisory employees category—the only series for which there is a meaningful history, real average weekly earnings fell

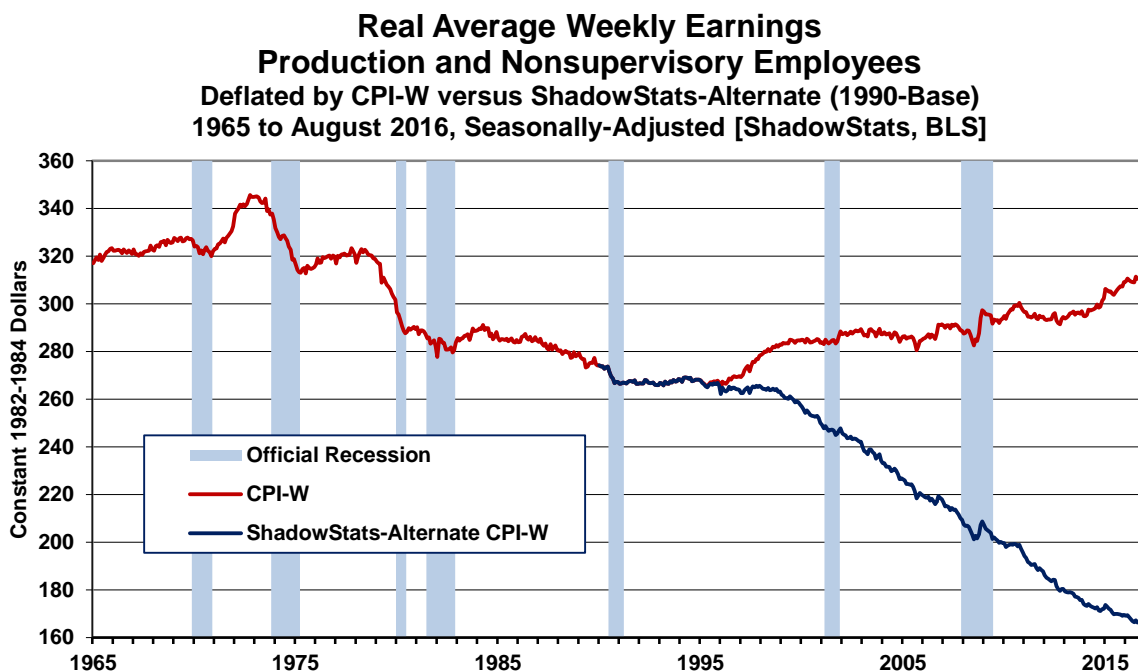
month-to-month by 0.28% (-0.28%) in August 2016, following a revised monthly increase of an upwardly-revised 0.76% in July and an unrevised monthly decline of 0.03% (-0.03%) in June.

Those readings maintained an unrevised second-quarter 2016 annualized quarter-to-quarter contraction of 0.97% (-0.97%), with an early-trend for third-quarter 2016 (based just on July and August reporting) at annualized real growth pace of 2.27%.

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 data here are not comparable due to reporting issues with concurrent seasonal factor adjustments (see *Headline Distortions from Shifting Concurrent-Seasonal Factors* in [Commentary No. 829](#)). The reporting in this series remains particularly unstable.

Separately, the CPI-W deflated reporting here also is distorted 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. Such was true again for the headline August 2016 detail.

Graph 16: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date



Preceding *Graph 16* 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.

***[The Reporting Detail Contains Significant Additional Graphs and Content
Covering the CPI-U and Related Material.]***

HYPERINFLATION WATCH

GOLD AND DOLLAR GRAPHS, AND THE FOMC

Markets Increasingly Expect a Near-Term Interest-Rate Hike. Any interest rate hike out of the Federal Reserve's Federal Open Market Committee (FOMC) September 2016 meeting would be announced this coming Wednesday (September 21st), at about 2 p.m. New York time. With significant jawboning for a rate hike by some meaningful Federal Reserve spokespeople, the markets responded to the weaker-than-expected economic data this last week in a manner suggestive of that jawboning having some impact. The U.S. dollar has strengthened minimally in response, with related weakness in precious metals and oil. Normally the dollar would have declined, along with the weaker-than-expected reporting of headline industrial production and real retail sales.

My betting remains that there will be no FOMC rate hike on Wednesday (see [Commentary No. 831](#)), primarily due to the close proximity in time to the U.S. presidential election and to Fed traditions around such events. While anything is possible—why not boost rates by 50 basis points and forestall another round of continual agony in markets that are trying to predict Fed behavior—the Fed should be forced back into expanded quantitative easing in the not-too-distant future, regardless of any near-term rate hike.

Irrespective of near-term Fed action or inaction, the U.S. economy is tanking, and it will continue to decline into the foreseeable future. That threatens banking- and financial-system liquidity. It is the systemic-liquidity concerns, not the economic news (still political cover for liquidity actions) that would force the Fed to fall back to its basic mission of propping the U.S. banking system. That is the effect of the commitment that the Fed and the U.S. Treasury made in 2008, when they decided to save the banking system at any and all costs. The required action would be to expand quantitative easing post-election, not to tighten monetary policy meaningfully.

Under those circumstances, unexpected economic weakness increasingly should trigger flight from the U.S. dollar, rallying prices in gold, silver and oil. The pattern of bad economic news and intensifying

flight from the dollar should intensify sharply in the weeks and months ahead, once near-term FOMC waffling resettles and the downturn in U.S. economic activity intensifies anew.

The *ShadowStats* general outlook remains unchanged, but it continues to evolve with underlying circumstances. The U.S. economy remains in intensifying crisis, with no chance of near-term recovery. A U.S. dollar collapse looms as the Fed inches closer to a highly likely, renewed and expanded quantitative easing, post-election. The dollar collapse and related dumping of dollar-denominated assets should trigger the early stages of serious domestic inflation, with spiking commodity prices. Heavily bloated U.S. equity markets should suffer along with heavy flight from the U.S. dollar and related assets. Flight-to-safety will spike the dollar prices of store-of-wealth assets such as physical gold and silver, the ultimate hedges for those living in a U.S. dollar-denominated world.

The U.S. economy collapsed into 2009 and never fully recovered, holding in low-level stagnation until it began turning down anew in December 2014. Facing horrendous long-term solvency issues, the U.S. government currently is committed to total net obligations—including federal debt and the net-present value of unfunded liabilities—well in excess of \$100 trillion dollars, at more than 160% of current global GDP and at more than 650% of U.S. GDP.

Faced with the threat of a banking-system collapse in the Panic of 2008, the U.S. Treasury and the Federal Reserve took whatever stopgap measures were needed to buy time, to push the crisis into the future, irrespective of cost. Those stopgap measures, however, did nothing to address the underlying U.S. economic or long-term solvency issues.

With a primary mission of propping and salvaging the banking system, the Fed launched its active quantitative easing programs to liquefy the banks, not to save the economy. At the same time, the Fed's actions had the convenient effect of monetizing the equivalent of about 75% of new public debt issuance from the U.S. Treasury, providing the Treasury with needed liquidity.

Continued talk, jawboning and hype by the Fed in recent years of moving to reverse the quantitative easing, was limited to the actual activity of stopping new purchases of securities (other than rolling over existing holdings at maturity) and a one-time 0.25% rate hike in December 2015. All the other talk, hype and jawboning, up through today, have been crafted primarily as gimmicked and short-lived props to the U.S. dollar. Yet any resulting dollar strength has been, and increasingly will be fleeting, as the markets increasingly dump the dollar, even with another round of actual tightening.

Again, as the renewed and deepening economic downturn hits banking-system stresses and U.S. Treasury funding needs with intensified severity, the Fed most likely will have little choice but to renew and expand its active quantitative easing and, in the process, pummeling the U.S. dollar in the global markets.

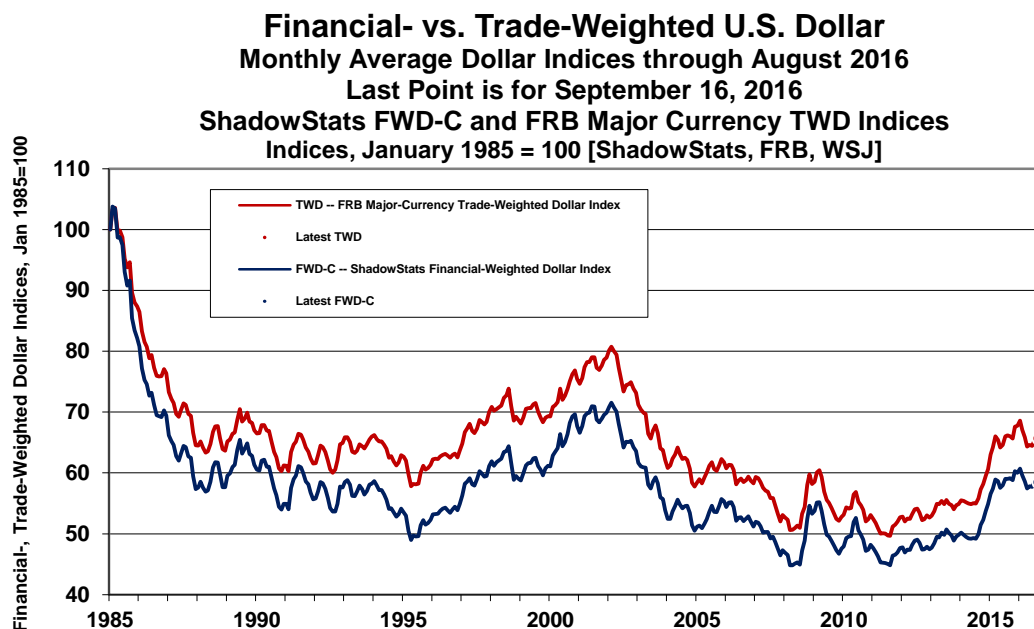
Once heavy flight from the dollar and dollar-denominated assets comes into play, commodity prices, such as for oil and gasoline, will spike sharply, triggering a jump in domestic inflation and setting the stage for an evolving inflationary spiral into hyperinflation.

The more troubled the U.S. economy and the more intense will be the selling pressure on the U.S. currency, and the more difficult circumstances will become for the U.S. equity markets. The broad impact from weakness in the U.S. dollar should be seen in higher domestic inflation, including rising oil prices, as well as continued and rapidly increasing flight to the precious metals of gold and silver.

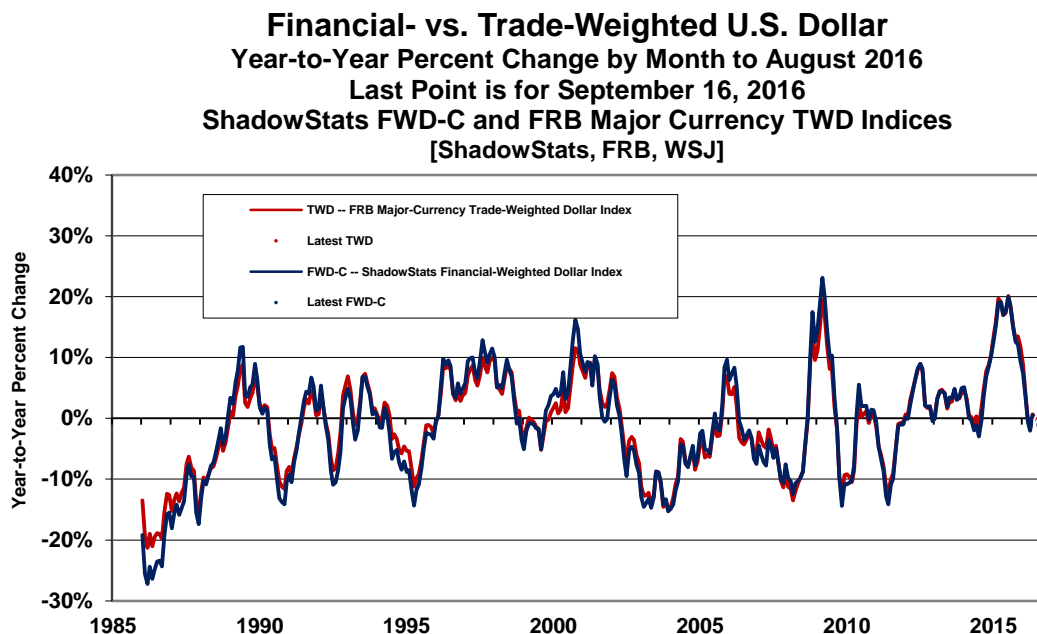
Could a meaningful change in government change the circumstance? Possibly. Whoever is President in 2017, though, likely still would have a great deal of political difficulty bringing the long-term solvency issues of the United States under control. The new President also would be saddled with a Federal Reserve that had lost control, or effectively was out of control of the system.

Monthly plots follow of the U.S. Dollar (*Graphs 17 and 18*), along with the three gold graphs (*Graphs 19, 20 and 21*), are updated through late-day New York prices for August 16th.

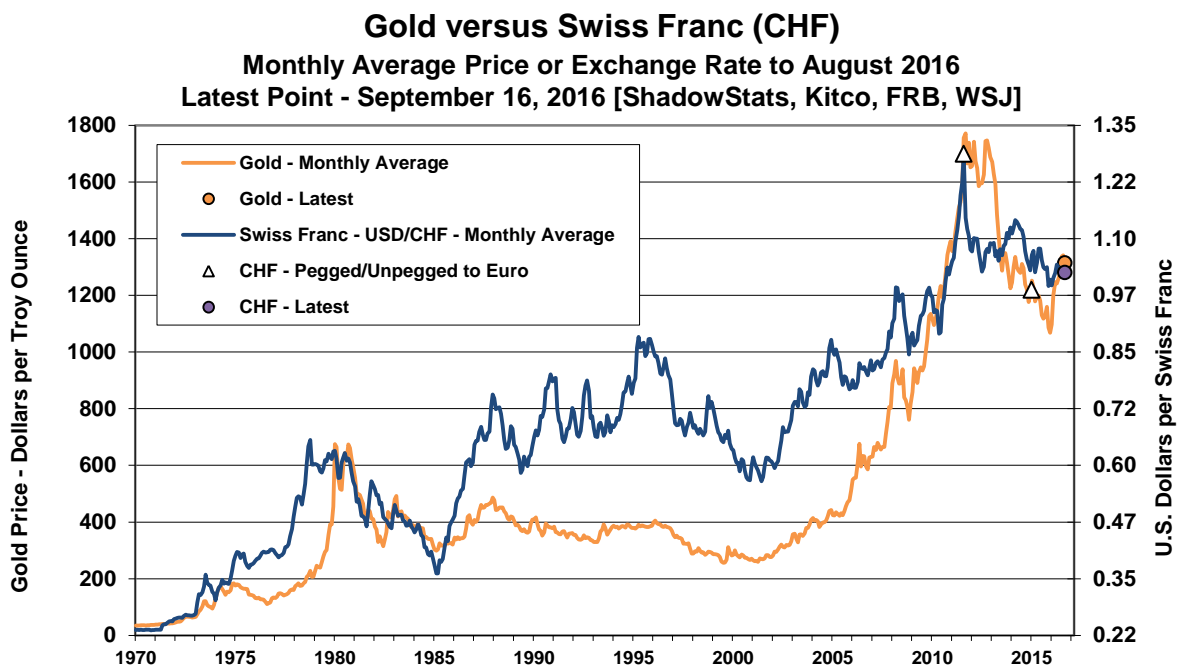
Graph 17: Financial- versus Trade-Weighted U.S. Dollar



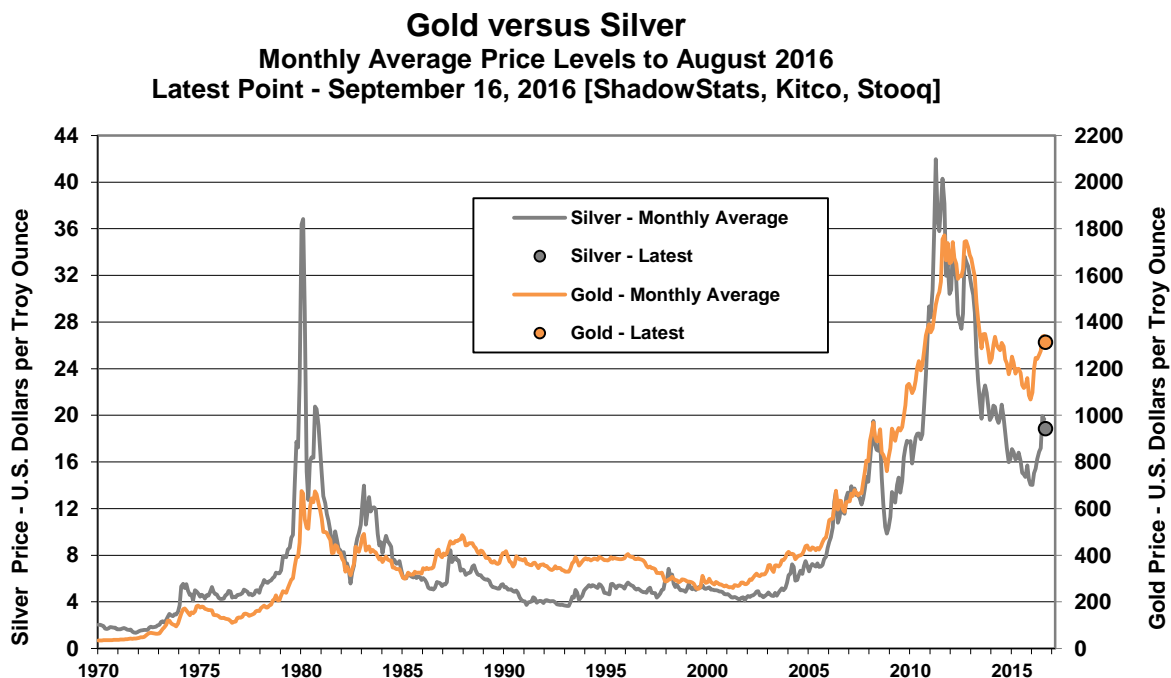
Graph 18: Year-to-Year Change, Financial- versus Trade-Weighted U.S. Dollar



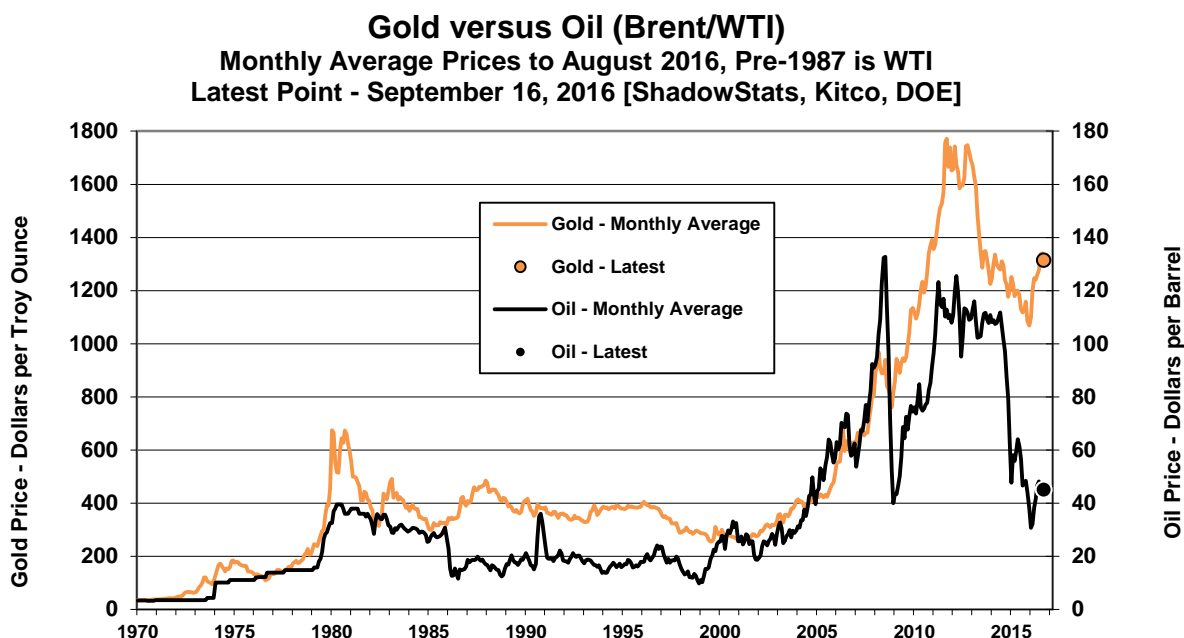
Graph 19: Gold versus the Swiss Franc



Graph 20: Gold versus Silver



Graph 21: Gold versus Oil



Evolving economic, financial, political and central-banking issues circumstances will be updated regularly, and in the pending *Special Commentary* (see the *Week and Month Ahead* section).

—Always happy to talk about issues at hand, or otherwise. – John Williams (707) 763-5786.

REPORTING DETAIL

CONSUMER PRICE INDEX—CPI (August 2016)

Headline CPI-U Inflation Took a Small Jump, Despite Lower Gasoline Prices. [These first three paragraphs largely are repeated from the Opening Comments.] The headline August 2016 CPI-U monthly inflation of 0.2% [up by 0.20% at the second decimal point] was minimally above consensus expectations. With negligible seasonally-adjusted inflation in either energy or food, the headline gain was generated by price inflation in the broad “core” category, covering everything except food and energy, up by a seasonally-adjusted 0.25%.

As discussed in other, recent CPI *Commentaries* (see [Commentary No. 793](#)), it is the unadjusted, not the seasonally-adjusted detail that tends to match consumer experience most closely, to the extent that these numbers come close to matching actual experience at all. On an unadjusted basis, monthly CPI-U rose by 0.1% [up by 0.09%] in August 2016.

Separately, although official annual CPI-U inflation just jumped to 1.1% in August 2016, versus 0.8% in July 2016, year-to-year inflation is not and has not been quite as soft as indicated, when considered in the context of traditional CPI reporting and common experience. The ShadowStats-Alternate Inflation Measures showed annual inflation in August 2016 of 4.6%, based on 1990 methodologies, and 8.7%, based on 1980 methodologies.

Longer-Range Inflation Outlook. Reviewed in today's *Hyperinflation Watch* and discussed in [Commentary No. 831](#) and [No. 777 Year-End Special Commentary](#), high risk of extreme flight from the U.S. dollar—a massive dollar debasement—continues to threaten an increasingly-rapid upturn in energy and dollar-based commodity inflation, which would drive headline U.S. consumer inflation much higher. That process should continue. It should accelerate in tandem with renewed tumbling in U.S. economic activity and increased realization in the global markets that the U.S. Federal Reserve and other major central banks have no effective idea as to how to boost current economic activity, or to stabilize global banking-system solvency. Despite recent bluffing in terms of rate increases, and even if rates are raised in the near future, the economy is tanking. That threatens banking- and financial-system liquidity. It is the liquidity, not the economic concerns that would force the Fed to fall back to its basic mission, that of propping the U.S. banking system, and funding the liquidity of the U.S. Treasury. The Fed should move to expand quantitative easing post-election, not to tighten monetary policy meaningfully.

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)** is an experimental measure, 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.*

CPI-U. The Bureau of Labor Statistics reported on September 16th that the headline, seasonally-adjusted August 2016 CPI-U was rose by 0.2% month-to-month, up by 0.20% at the second decimal point. That followed a headline “unchanged” at 0.0%, down by 0.04% (-0.04%) at the second decimal point July 2016, and increases in both June and May of 0.2%, up by 0.22% at the second decimal point.

The adjusted headline August 2016 inflation increased was boosted by positive seasonal adjustments to the energy and “core” (ex-food and energy) sectors, but otherwise was softened by negative seasonal-adjustment contributions to foods sector. On an unadjusted basis, monthly August 2016 CPI-U rose by 0.00%, having declined by 0.16% (-0.16%) in July and following unadjusted monthly gains of 0.33% in June 0.41% in May.

August 2016 seasonal adjustments for monthly gasoline inflation were positive, “boosting” an unadjusted headline decline of 3.01% (3.01%) in gas prices into an adjusted decline of 0.89% (-0.89%). The Department of Energy (DOE) had estimated an unadjusted monthly decline of 2.60% (-2.60%).

Major CPI-U Groups. Encompassed by the seasonally-adjusted monthly gain of 0.20% in August 2016 [up by an unadjusted 0.09%] in the headline CPI-U, August food inflation was unchanged at 0.00% [up by 0.07% unadjusted], August energy inflation declined by a seasonally-adjusted 0.01% (-0.01%) [down by 1.23% (-1.23%) unadjusted], while the adjusted “core” (ex-food and energy) inflation rate rose by 0.25% [up by 0.21% unadjusted].

Separately, core CPI-U inflation showed unadjusted year-to-year inflation of 2.32% in August 2016, versus 2.20% in July 2016, 2.23% in June 2016 and 2.24% in May 2016.

Year-to-Year CPI-U. Not seasonally adjusted, August 2016 year-to-year inflation for the CPI-U rose to 1.1% (1.06% at the second decimal point, versus 0.8% (0.84% at the second decimal point) in July 2016, 1.0% (1.01% at the second decimal point) in June 2016 and 1.0% (1.02% at the second decimal point) in May 2016.

Year-to-year, CPI-U inflation would increase or decrease in next month’s September 2016 reporting, dependent on the seasonally-adjusted month-to-month change, versus the adjusted, headline decline of 0.09% (-0.09%) in September 2015 CPI-U. The adjusted change is used here, since that is how consensus expectations are expressed. To approximate the annual unadjusted inflation rate for September 2016, the difference in September’s headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the August 2016 annual inflation rate of 1.06%. For example, a seasonally-adjusted, gain of 0.1% in the monthly September 2016 CPI-U, would move the annual CPI-U inflation rate for September 2016 up to about 1.3%, plus-or-minus, depending on rounding.

CPI-W. The August 2016 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 0.17%, following a monthly decline of 0.09% (-0.09%) in July, and monthly gains of 0.21% June and 0.20% in May. On an unadjusted basis, the monthly CPI-W rose by 0.05%, having declined by 0.22% (-0.22%) in July 2016, and having gained 0.37% in June 2016 and 0.43% in May.

Year-to-Year CPI-W. Unadjusted, year-to-year change in August 2016 CPI-W was a gain of 0.66%, up from 0.42% in July 2016 and annual gains of 0.64% in June 2016 and 0.66% in May 2016.

Chained-CPI-U. The headline C-CPI-U is not seasonally adjusted. August 2016 C-CPI-U annual inflation came in at 0.75%, versus 0.53% in July 2016, 0.75% in June 2016 and 0.80% in June 2016.

See discussions in the earlier CPI [Commentary No. 721](#) and in the opening notes in the *CPI Section* of [Commentary No. 699](#) as to recent changes in the series. More-frequent revisions and earlier finalization of monthly detail are 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 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 4.6% in August 2016, versus 4.4% in July 2016, 4.6% in June 2016 and 4.6% in May 2016.

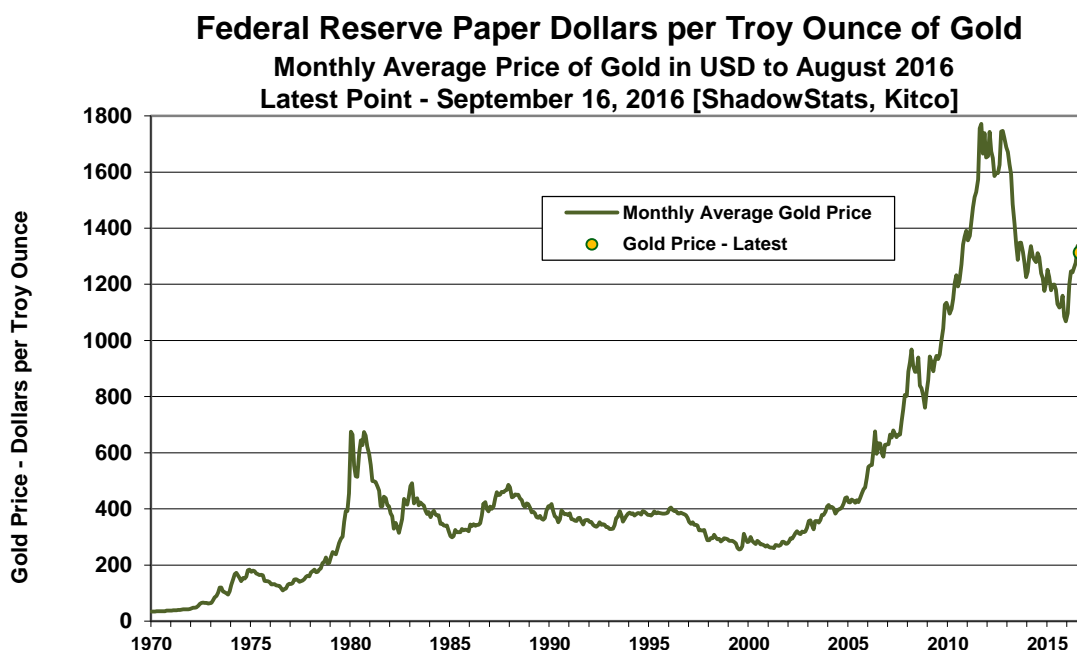
The August 2016 ShadowStats-Alternate Consumer Inflation Measure (1980-Base), which reverses gimmicked changes to official CPI reporting methodologies back to 1980, was at about 8.7% (8.72% for those using the second decimal point) year-to-year, versus 8.5% in July 2016, 8.7% in June 2016 and 8.7% in May 2016.

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 22: Monthly Average Gold Price in Dollars (Federal Reserve Notes)



Gold and Silver Historic High Prices Adjusted for August 2016 CPI-U/ShadowStats Inflation—

CPI-U: GOLD at \$2,631 per Troy Ounce, SILVER at \$153 per Troy Ounce
ShadowStats: GOLD at \$13,224 per Troy Ounce, SILVER at \$769 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 \$2,631 per troy ounce, based on August 2016 CPI-U-adjusted dollars, and \$13,224 per troy ounce, based on August 2016 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 August 2016 CPI-U inflation, the 1980 silver-price peak would be \$153 per troy ounce and would be \$769 per troy ounce in terms of August 2016 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (again, all series not seasonally adjusted).

As shown in Table 1, on page 31 of [2014 Hyperinflation Report—The End Game Begins](#) – *First Installment Revised*, 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 (Inflation-Adjusted) Retail Sales—August 2016—Down Month-to-Month by 0.5% (-0.5%), Year-to-Year Growth Sank to 30-Month Low. Discussed in prior-[Commentary No. 832](#), nominal monthly retail sales in August 2016 declined by 0.29% (-0.29%), against an upwardly revised 0.06% gain in July, and a downwardly revised gain of 0.72% in June. The August 2016 year-to-year nominal retail-sales gain slowed to 1.90%, versus an upwardly-revised 2.36% in July 2016 and a downwardly revised gain of 2.85% in June 2016.

Headline Real Detail. All the preceding numbers were before any consideration for the effects of inflation. The initial monthly and annual inflation-adjusted real growth rates for August 2016 Retail Sales, and the trend for annualized third-quarter 2016 real change in retail sales follow, based on the accompanying detail of the September 16th headline release of the August 2016 CPI-U.

Based on headline seasonally-adjusted monthly CPI-U changes of a 0.20% gain in August 2016, a decline of 0.04% (-0.04%) in July and an increase of 0.22% in June, August 2016 real Retail Sales dropped by 0.49% (-0.49%) for the month, following an upwardly-revised monthly gain of 0.10% in July and a downwardly revised monthly gain of 0.50% in June.

Intense Signal of Recession in Annual Real Growth. During normal economic times, annual real growth in Retail Sales at or below 2.0% signals an imminent recession. That signal has been in play since February 2015 (the “new” recession likely will be timed from December 2014, based on industrial production, retail sales and other indicators), suggesting a deepening, broad economic downturn.

Year-to-year, August 2016 real retail sales growth slowed to 0.80%, which was a thirty-month low, a sharp drop from an upwardly-revised 1.47% in July 2016 and a downwardly-revised 1.77% in June 2016. With annual real growth showing an initial third-quarter 2016 annual growth trend of 1.12%, based on just July and August detail, versus 1.56% in second-quarter 2016 and 1.62% in first-quarter 2016, the recession signal remains intense, consistent with an unfolding recession. *Graphs 24 and 26*, following, show the latest patterns of headline annual real retail sales growth.

Initial Third-Quarter 2016 Annualized Real Growth Trend Slowed Sharply versus Second-Quarter 2016, with First-Quarter 2016 Still Flat. Based just on July and August 2016, the early trend for third-quarter 2016 real Retail Sales was 0.67%, down sharply from the downwardly-revised 3.36% annualized growth in second-quarter 2016. Such was against an unrevised estimate of annualized quarterly real growth of 0.10%—effectively flat—in first-quarter 2016.

Structural Liquidity Issues Continue to Impair Retail Sales. An extreme consumer-liquidity bind continues to constrain retail sales activity, as fully updated in the *Opening Comments*. Without

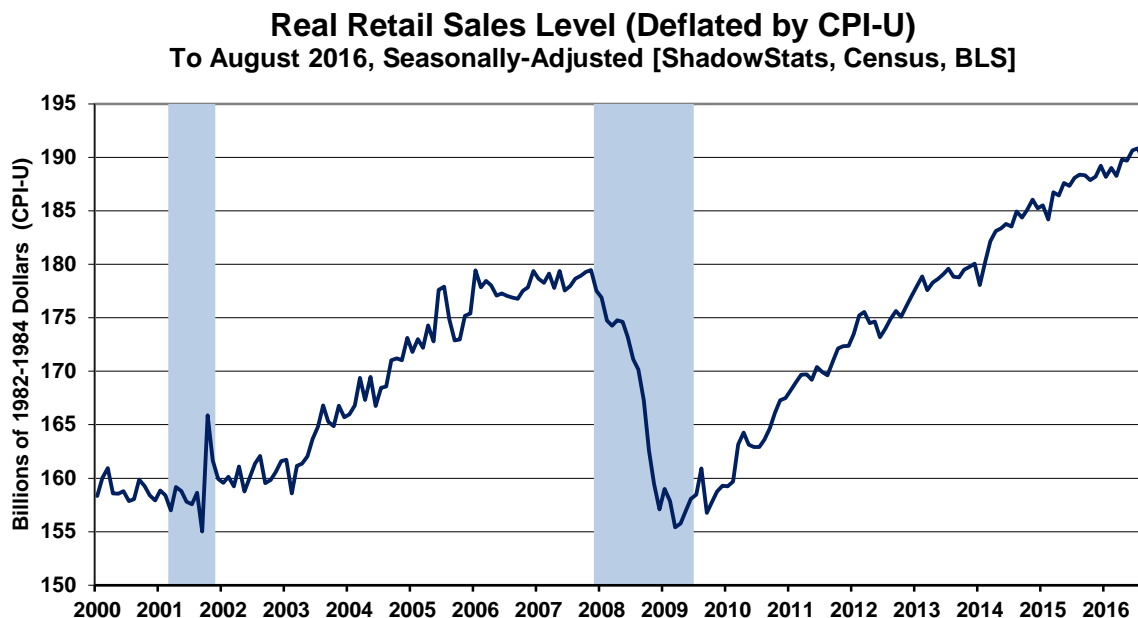
sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including retail sales, real or otherwise. That circumstance—in the last eight-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity, 70% of which is dependent on personal spending.

As official consumer inflation resumes its upside climb in the year ahead, and as overall retail sales continue to suffer from the ongoing consumer liquidity squeeze, these data should continue trending meaningfully lower, in what should gain recognition in the very near future as a formal “new” recession.

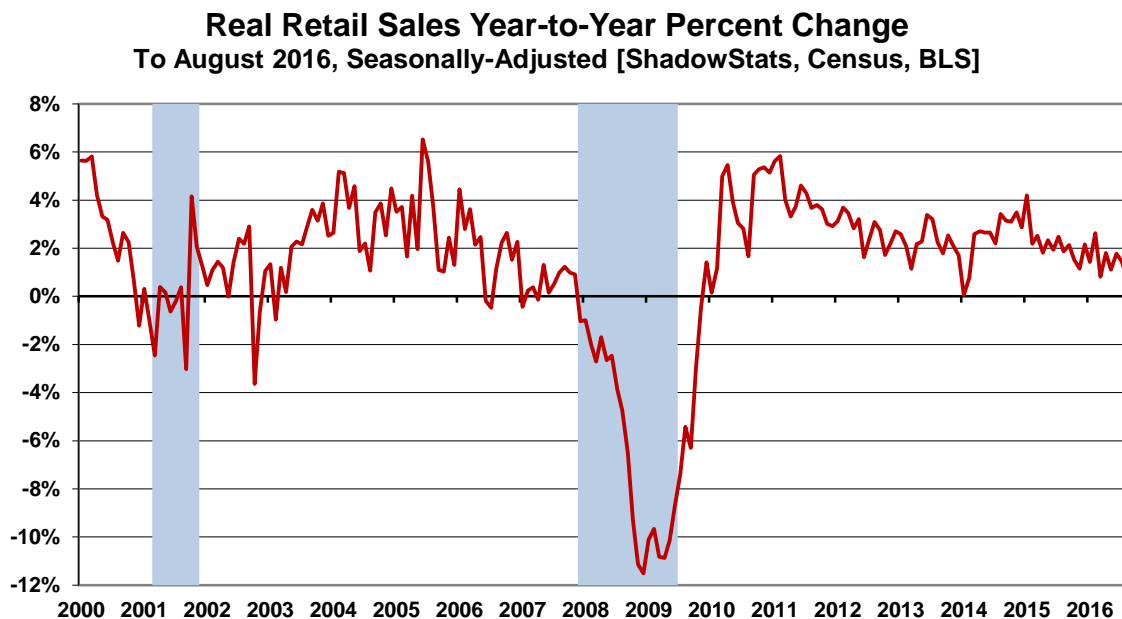
Real Retail Sales Graphs. *Graph 23*, the first of the four graphs following, shows the level of real retail sales activity (deflated by the CPI-U) since 2000; *Graph 24* shows the year-to-year percent change for the same period. Annual real growth had slowed markedly into fourth-quarter 2015 and 2016, and tumbling to a 30-month low of 0.80% in August 2016, the weakest showing since February 2014, generating an intense recession signal. *Graphs 25* and *26* show the level of, and annual growth in, real retail sales (and its predecessor series) in full post-World War II detail.

[Graphs 23 to 26 begin on the next page.]

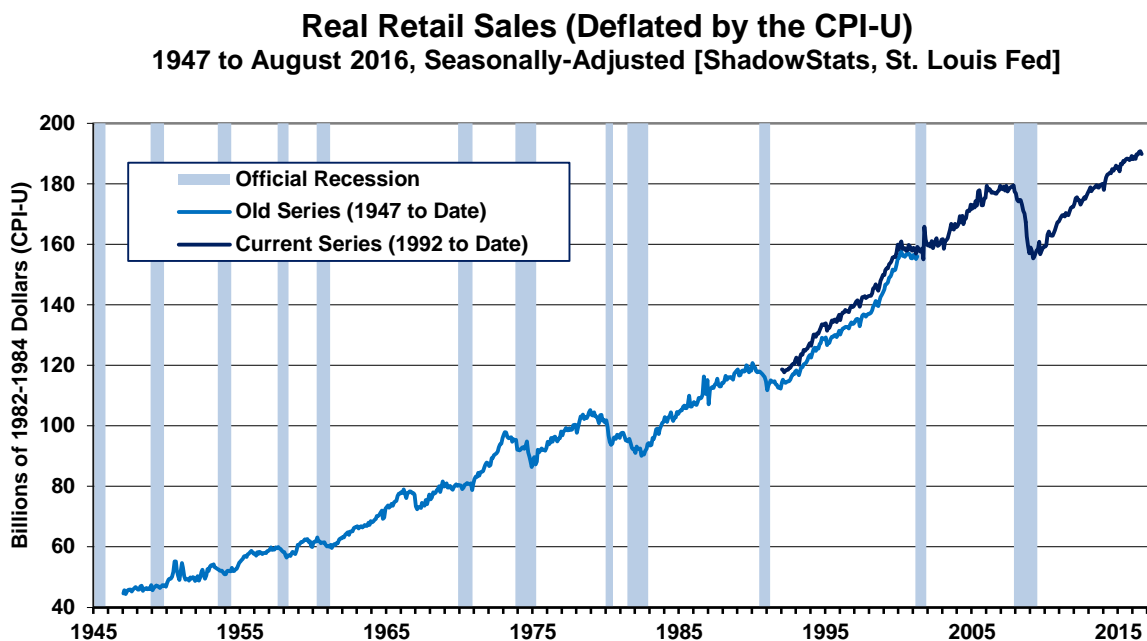
Graph 23: Level of Real Retail Sales (2000 to 2016)



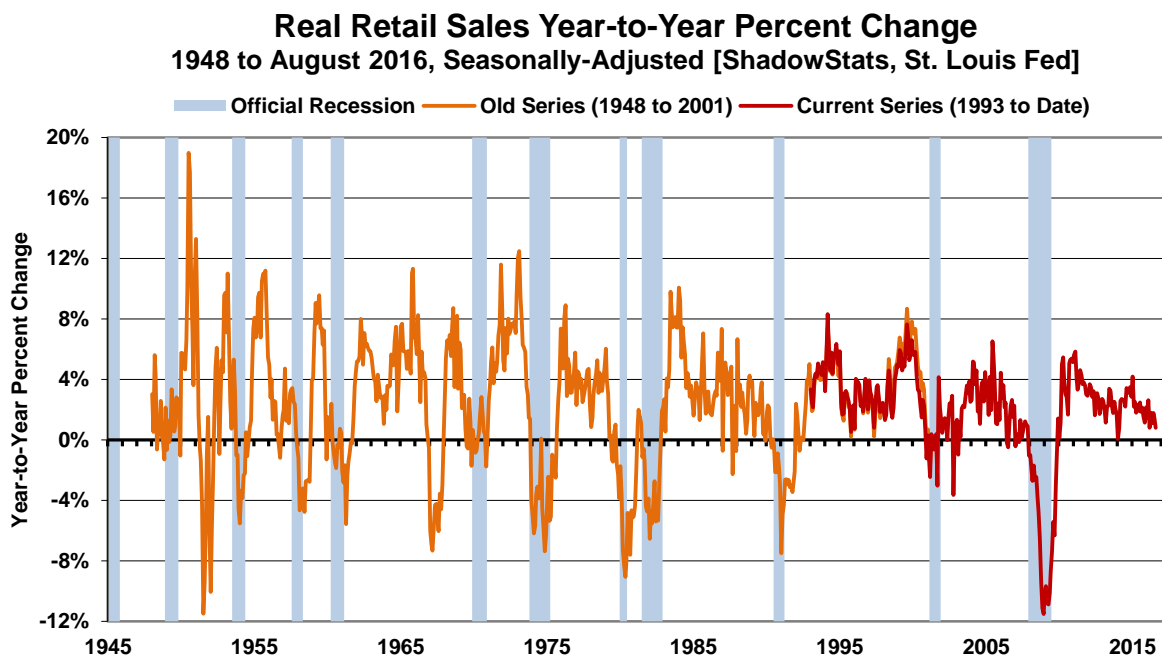
Graph 24: Real Retail Sales (2000 to 2016), Year-to-Year Percent Change



Graph 25: Level of Real Retail Sales (1947 to 2016)



Graph 26: Real Retail Sales (1948 to 2016), 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 15* in the *Opening Comments* section—with the deflation rates corrected for the understated inflation reporting of the CPI-U, the recent pattern of real sales activity has turned increasingly negative. 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.

Real (Inflation-Adjusted) Average Weekly Earnings—August 2016—Real Earnings Fell for the Month in the Context of Ongoing Unstable Reporting. The BLS published its estimates for August 2016 real average weekly earnings, coincident with the release of the August CPI-W. In the production and nonsupervisory employees category—the only series for which there is a meaningful history, real average weekly earnings in August 2016 fell by 0.28% (-0.28%) month-to-month, following a revised monthly increase of an upwardly-revised 0.76% in July, and an unrevised monthly decline of 0.03% (-0.03%) in June.

Those readings maintained an unrevised second-quarter 2016 annualized quarter-to-quarter contraction of 0.97% (-0.97%), with an early-trend for third-quarter 2016 (based just on July and August) at an annualized real growth pace of 2.27%.

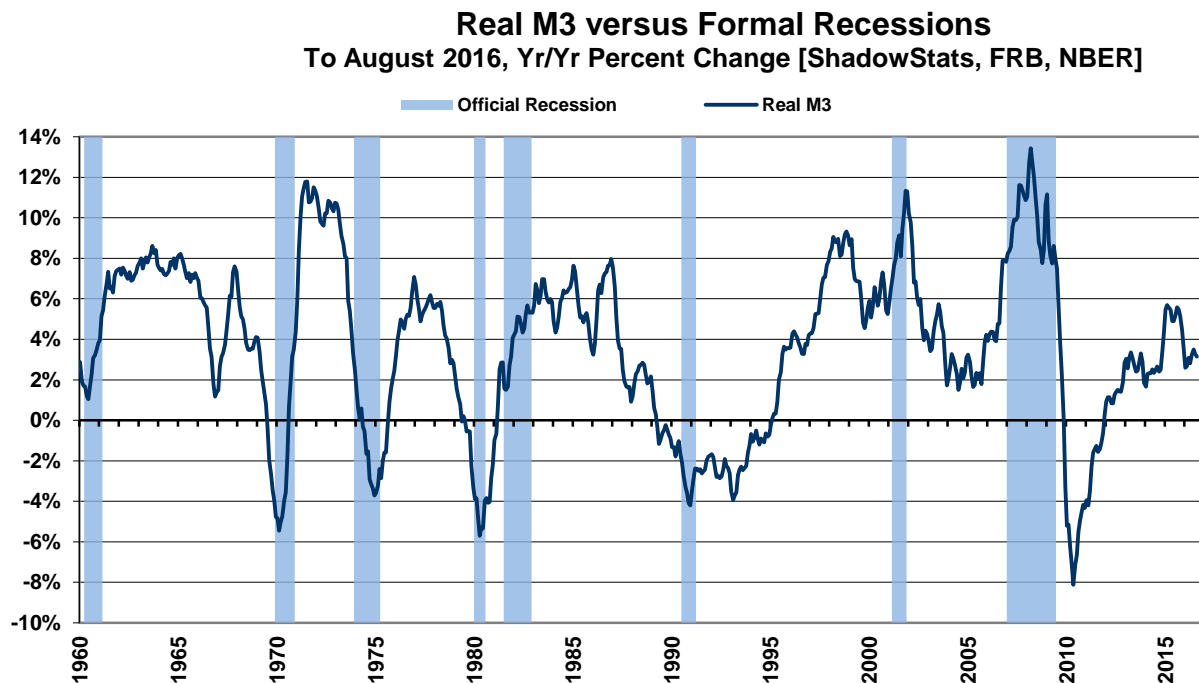
While these usually heavily revised and seasonally-adjusted monthly changes are without much, if any, meaning in the near-term—effectively reporting garbage—over the longer term and quarterly, and particularly the benchmarked trends tend to be of some substance. As with the BLS reporting tied to the nonfarm payrolls, the headline seasonally-adjusted data here are not comparable due to reporting issues with concurrent seasonal factor adjustments (see *Headline Distortions from Shifting Concurrent-Seasonal Factors* in [Commentary No. 829](#)). The reporting in this series remains particularly unstable.

Separately, the CPI-W deflated reporting here also is distorted 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. Such was true again for the headline August 2016 detail.

Found in the *Opening Comments* section, *Graph 16* plots 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 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—August 2016—Annual Growth Continued to Notch Lower. 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), remains in place, despite real annual M3 growth having rallied in positive territory for a number of years. The economic downturn never evolved into a sustainable recovery. As shown in the accompanying graph—based on August 2016 CPI-U reporting and the latest ShadowStats-Ongoing M3 Estimate (including annual Federal Reserve Board money supply revisions)—annual inflation-adjusted growth in August 2016 M3 moved lower to 3.2% in August 2016, versus 3.3% in July 2016 and 3.5% in June 2016, and versus 3.2% in May 2016 and a near-term trough of 2.8% in April 2016. The 0.1% (-0.1%) decline in the monthly rate of year-to-year change reflected a 0.1% gain in the level of nominal, annual M3 growth and with a partially offsetting gain of 0.2% in annual CPI-U inflation (see [Commentary No. 829](#)).

Graph 27: Real M3 Annual Growth versus Formal Recessions



The signal for a downturn or an intensified downturn is generated when annual growth in real M3 first 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 current “new” downturn signal was generated in December 2009, even though there had been no upturn since the economy purportedly hit bottom in mid-2009. Again, when real M3 growth breaks above zero, there is no signal; the signal is generated only when annual growth moves into negative territory. 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. Actual post-2009 economic activity has remained at relatively low levels of activity—in protracted stagnation, with no actual recovery (see *Graphs 15 and 16 in the Opening Comments* and [No. 777 Year-End Special Commentary](#)).

Despite the purported, ongoing recovery shown in headline GDP activity, a renewed downturn in official data is underway that still should gain official recognition, likely post-election, as a “new” or multiple-dip recession. Underlying reality remains that the economic collapse into 2009 was followed by a plateau of low-level economic activity—no meaningful upturn, no recovery from or end to the official 2007 recession—and the unfolding renewed downturn remains nothing more than a continuation and re-intensification of the downturn that began unofficially in 2006 (see [Commentary No. 828](#)).

WEEK AND MONTH AHEAD

Near-Term Headline Economic Deterioration Should Intensify, Increasingly Frustrating Fed Provocateurs, Pummeling the U.S. Dollar and Boosting Gold, Silver and Eventually Oil Prices.

Market expectations for business activity should continue to deteriorate, amidst intensifying, negative headline economic reporting. Irrespective of any near-term rate hike or talk of same by the FOMC, Fed-policy retrenchment likely should remain very much alive, shifting towards renewed quantitative easing in the months ahead.

The general trend in weakening expectations for business activity and movement towards looming recession recognition, reflect an ongoing broad spectrum of market-disappointing headline data, such as seen on September 15th ([Commentary No. 832](#)). FOMC considerations were covered in [Commentary No. 831](#) and reviewed in today’s *Hyperinflation Watch*; the initial payroll benchmark revision for 2016 was discussed in [Commentary No. 830](#), following the latest headline detail on payrolls, trade and construction spending in [Commentary No. 829](#).

Headline Gross Domestic Product (GDP) and related series were discussed in [Commentary No. 828](#), with broad detail otherwise reviewed in [Commentary No. 827](#), [Commentary No. 826](#), [Commentary No. 825](#), [Commentary No. 824](#), [Commentary No. 823](#), [Commentary No. 822](#), [Commentary No. 821](#), [Commentary No. 820](#), [Commentary No. 818](#), [Commentary No. 817](#), [General Commentary No. 811](#), [Supplemental Commentary No. 807-A](#), [Commentary No. 800](#), [Commentary No. 799](#), [Commentary No. 796-A](#), [Commentary No. 796](#) and [No. 777 Year-End Special Commentary](#).

Negative market reactions had surfaced in trading of the U.S. dollar and in related financial markets, with some upside pressure on gold, silver and oil prices, subsequent to recent, weaker-than-expected headline economic data or suggestions of a less-aggressive tightening stance by the Fed. Fed rate-hike jawboning, however, has put a temporary flutter into those market movements, placing some Fed-desired support under the U.S. currency. The fundamental liquidity issues facing the Fed, however, remain dominated by the impact of perpetual U.S. economic non-recovery and a renewed, intensifying downturn. If the Fed

should raise rates in the near future, ongoing negative economic pressures still will mount, forcing the U.S. central bank back into a position of having to support domestic financial- and banking-system liquidity needs. Effectively, the Fed will have no way out other than to return to some form of expanded quantitative easing.

Temporary jawboning aside, market reactions increasingly should reflect a renewed sense of Federal Reserve impotence, with bleak longer-term implications for the U.S. dollar. While anything is possible, Fed tightening prior to the election still remains unlikely, with renewed quantitative easing becoming the likely target of post-election speculation, as the deepening recession unfolds. This should become increasingly obvious in the next several months (see [Commentary No. 831](#) and [Commentary No. 832](#)).

Rapidly weakening, regular monthly economic reporting should result in much worse-than-expected—increasingly negative—reporting for at least the next several quarters of GDP (and GDI and GNP).

CPI-U consumer inflation—intermittently driven lower in 2015 and early-2016 by collapsing prices for gasoline and other oil-price related commodities—likely has seen its near-term, year-to-year low. Headline monthly March to June 2016 detail moved into positive headline territory, in tandem with rising gasoline prices. CPI inflation was “unchanged”—minimally negative—with a switch to positive seasonal adjustments for gasoline prices only partially offsetting the unadjusted monthly drop in gasoline prices in July. August CPI was boosted by “core” inflation. Going forward, a weakening U.S. dollar increasingly should boost inflation, with a related upturn in oil prices, gasoline and other commodities. The [Public Commentary on Inflation Measurement](#) reviews fundamental reporting issues with the headline CPI.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. Significant reporting-quality problems remain with most major economic series. Beyond the pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended to understate actual inflation and to overstate actual economic activity, ongoing headline reporting issues are tied largely to systemic distortions of monthly seasonal adjustments.

Data instabilities—induced partially by the still-evolving economic turmoil of the last nine-to-eleven years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn provide particularly unstable headline economic results, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). That issue is discussed and explored in the labor-numbers related [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 recent 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 recently-published 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 year or two of Census Bureau falsification of data in its monthly Current Population Survey (the source for the BLS Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular

economic series (see [Commentary No. 669](#)). John Crudele of the *New York Post* continues his investigations in reporting irregularities: [Crudele Investigation](#). In the 1990s, the Census Bureau and BLS played political-reporting games with the nature of statistical sampling size in “inner cities” in the Census Bureau surveying tied to the monthly Household Surveys and the annual piggy-backed Poverty Survey. Such had major distorting impact on the headline data, and it may be in the works, again.

PENDING RELEASE:

Residential Construction—Housing Starts (August 2016). The Census Bureau will release August 2016 residential construction detail, particularly Housing Starts, on Tuesday, September 20th, which will be covered in *Commentary No. 834* of that date. In line with common-reporting experience of recent years, monthly results are likely to be unstable and not statistically meaningful, holding in a general pattern of down-trending stagnation. Wherever consensus estimates settle—most frequently on the upside—they are virtually certain be well shy of any meaningful, statistically-significant change.

Irrespective of the generally meaningless headline detail, the broad pattern of housing starts should remain consistent with the low-level, stagnant activity, seen at present, where July 2016 activity remained down by 47% (-47%) from the pre-recession high of the series. Such is particularly evident with the headline detail viewed in the context of a six-month moving average. Again, this series remains subject to regular and extremely-large, prior-period revisions.

Discussed in [Commentary No. 660](#) on the August 2014 version of this most-unstable of major monthly economic series, the headline detail here simply is worthless. The series best is viewed in terms of a six-month moving average. Again, not only is month-to-month reporting volatility frequently extreme, but also those headline monthly growth rates rarely come close to being statistically significant.

The extreme liquidity bind besetting consumers continues to constrain residential real estate sales and construction activity. Updated fully and discussed in today’s *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 an income shortfall, the U.S. consumer is unable to sustain growth in broad economic activity, including sustainable growth in demand for residential construction.

PLANNED UPDATES: Comprehensive Special Report and ShadowStats Website. The plan is to update fully, into one, massive background piece—a *Special Report (Commentary)*—the latest broad outlook for the U.S. and global economies, financial markets and systems, and inflation (U.S. hyperinflation). All of that will be in the context of incorporating and fully revising, wherever necessary, the materials in the [2014 Hyperinflation Report—The End Game Begins](#), [2014 Hyperinflation Report—Great Economic Tumble](#), [No. 777 Year-End Special Commentary](#) and other intervening missives, including the most-recent *Hyperinflation Outlook Summary* as found in [Commentary No. 783](#).

The various background articles available at the www.ShadowStats.com site also will be updated in the process, including those first published in 2004 as introductory articles to the site. As usual, all original

material will remain available to subscribers (all original public material also will remain available to anyone visiting the site).

As to timing, the *Special Report* already is in the works and should be published in early-October. It will incorporate fully up-to-date economic detail, including the mid-September 2016 release by the Census Bureau of its 2015 income survey, the Bureau of Labor Statistics' just-released preliminary benchmark revisions to 2016 payroll employment (see [Commentary No. 830](#)). It also will include updated, consistent GAAP-based financial detail on the U.S. government's financial condition through September 30, 2015 and initial prospects for the fiscal year ended September 30, 2016.

Updates to the various public materials on the Web site will be staggered through year-end. The introduction of the [2004 Primer Series](#) will be first (the link is to the initial background article that addressed among other issues political manipulation of data).

We also will introduce, in conjunction with the *Special Report*, a section with links to books and articles that we have found of particular interest and substance. Anyone with materials they would like to have considered for inclusion should send details in an e-mail to johnwilliams@shadowstats.com or call John Williams directly at (707) 763-5786.
