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

COMMENTARY NUMBER 954

April 2018 Trade Deficit and Benchmark Revisions

June 8, 2018

Troubled Economic Reporting in the Month or Two Ahead

Benchmark-Revised Patterns of GDP Economic Activity Should Show a Softer 2007 Peak, a Deeper Collapse into 2009 and a Less-Robust Recovery, with Downgraded Growth in 2015 to 2017

U.S. Trade-Balance Benchmark Revisions Indicated a Slower Economy and a Deeper Real Merchandise Trade Deficit than Before

Nominal Balance of Payments Deficit Improved in April 2018

Consumer Liquidity Conditions Continued to Tighten, as Real Household Debt Contracted in First-Quarter 2018, while Slowing Annual Growth in Real Consumer Credit Intensified Sharply in April 2018

PLEASE NOTE: The next regular Commentary, planned for Wednesday, June 13th, will review the May CPI and PPI. The ShadowStats Alternate CPI detail will be posted on the ShadowStats.com Alternate Detail tab, the morning of June 12th, as usual, shortly after the release of the headline CPI-U. Coverage for May 2018 Retail Sales, Industrial Production and Housing Starts is planned for Tuesday, June 19th.

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

Today's (June 8th) ***Opening Comments*** assesses the annual benchmark revision to the Trade Deficit, in the context of other major benchmarkings to Retail Sales, Manufacturers' Shipments, Industrial Production and New Orders for Durable Goods, along with related developing implications for the Comprehensive Benchmark Revision to Gross Domestic Product (back to 1929) scheduled for July 27th.

The ***Reporting Detail*** (beginning on page 5) reviews the April 2018 trade deficit reporting.

The ***Consumer Liquidity Watch*** (page 10) has been updated for first-quarter Household Debt and for April Consumer Credit Outstanding.

The ***Week, Month and Year Ahead*** (page 24) provides background on recent *Commentaries* and previews next week's releases of the May 2018 Consumer Price Index (CPI), Producer Price Index (PPI), Retail Sales and Industrial Production.

OPENING COMMENTS—BENCHMARK REVISIONS

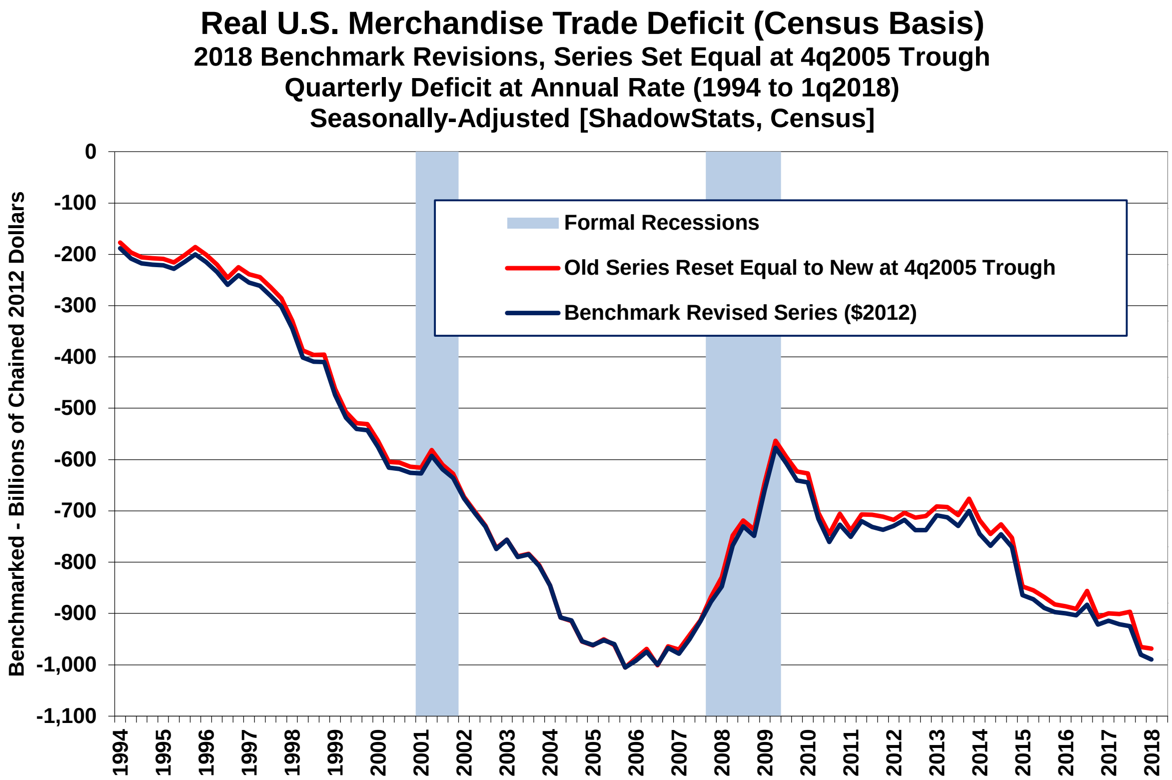
Happy Headlines on the Economy Should Begin to Evaporate by Late-July. The last week has seen two particularly-negative, but still broadly-unrecognized developments on the economic front. First, the grand-scale benchmark revisions to the Real Merchandise Trade Deficit, which restated the inflation-adjusted series to a base-year of 2012, from 2009, in parallel with what will be the "Comprehensive" benchmark revision to the Gross Domestic Product (GDP) on July 27th, had miserable implications for the GDP, past and present.

Second, just released first-quarter 2018 real Household Debt and the April's monthly real Consumer Credit Outstanding, both had seriously negative implications for near-term Personal Consumption Expenditures, which accounts for more than 73% of the GDP, present and future. The deteriorating Consumer Liquidity issues are reviewed and updated into today's *Consumer Liquidity Watch*, beginning on page 10. The discussion on pending GDP benchmark-revision woes follows here.

Benchmark Revisions to the Real Merchandise Trade Deficit Foreshadow Downside Revisions to Real GDP in 2005 to 2009, 2011 to 2013, and in 2017; It Gets Worse With Other Series. The grand-scale *Benchmark Revision* to the Real Merchandise Trade Deficit, back to the 1994 onset of that current series, was published as part of the revisions to the Balance of Trade numbers. The Real Merchandise Trade Deficit detail effectively feeds directly into the GDP calculations, the deeper the deficit, the more negative the aggregate economic impact.

While the July 27th comprehensive benchmark revisions to the GDP back to 1929 will cover a number of economic aspects, including what should have been earlier benchmark revisions to the GDP that were missed on downside revisions to Industrial Production, for example, where available details were delayed by government shutdowns (see *Commentary No. 942-B*), other details, particularly recent revisions should hit hard the GDP series hard.

Graph OC-1: Benchmark-Revised Real Quarterly Merchandise Trade Deficit (1994-2018)



Graph OC-1 plots the new headline series (dark-blue line) for the real level (2012 dollars) for the quarterly real merchandise trade deficit. The red line plots the prior series (2009 dollars), with the two series set equal at the series' trough of fourth-quarter 2005. Given the variety of revisions made here, there is no truly comparable plot. Yet revisions in terms of annual and annualized quarterly growth can be made. Based on those comparisons, the GDP should suffer some parallel negative revisions on an annual basis for the years 1995 to 1996, 2005 to 2009, 2011 to 2013 and in 2017.

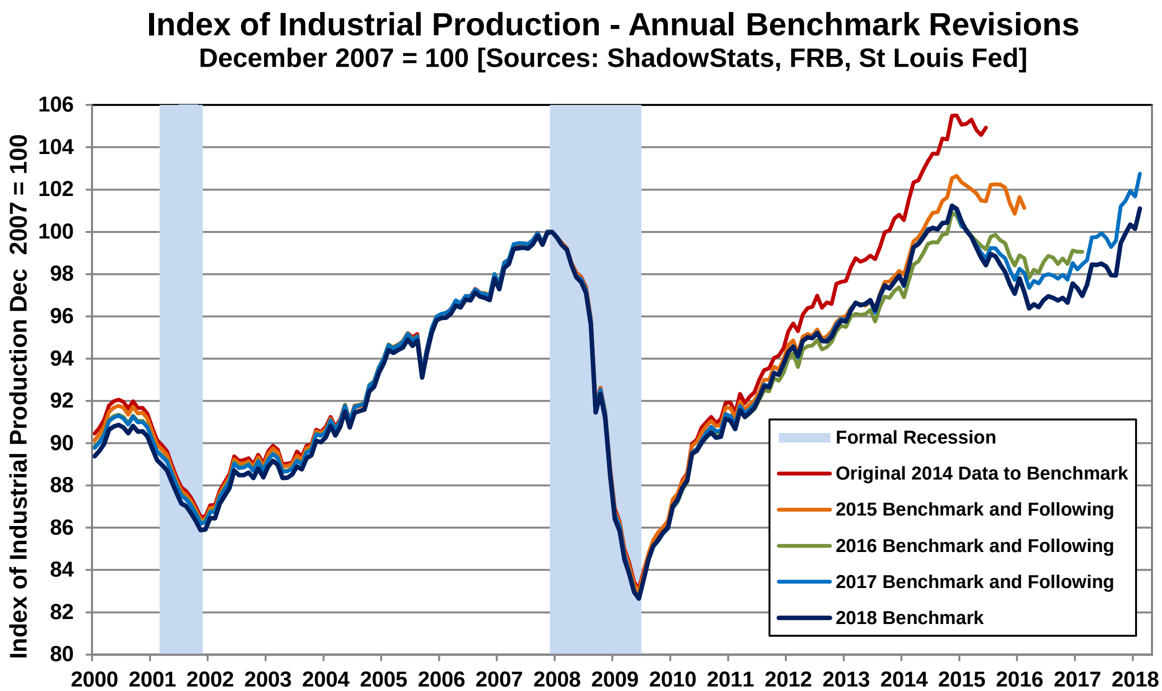
Using a parallel analysis with this year's Industrial Production benchmarking (see *Graph OC-2),* the GDP faces downside revisions in 2010 and 2014 to 2017. Please note that the extended prior revisions in *Graph OC-2* reflect missed benchmarkings, particularly the earliest one (see *Commentary No. 942-B*).

Retail Sales (see *Graph OC-3*) imply minimal downside revisions to the GDP in 2010 and 2014 to 2017 (see *Commentary No. 952*).

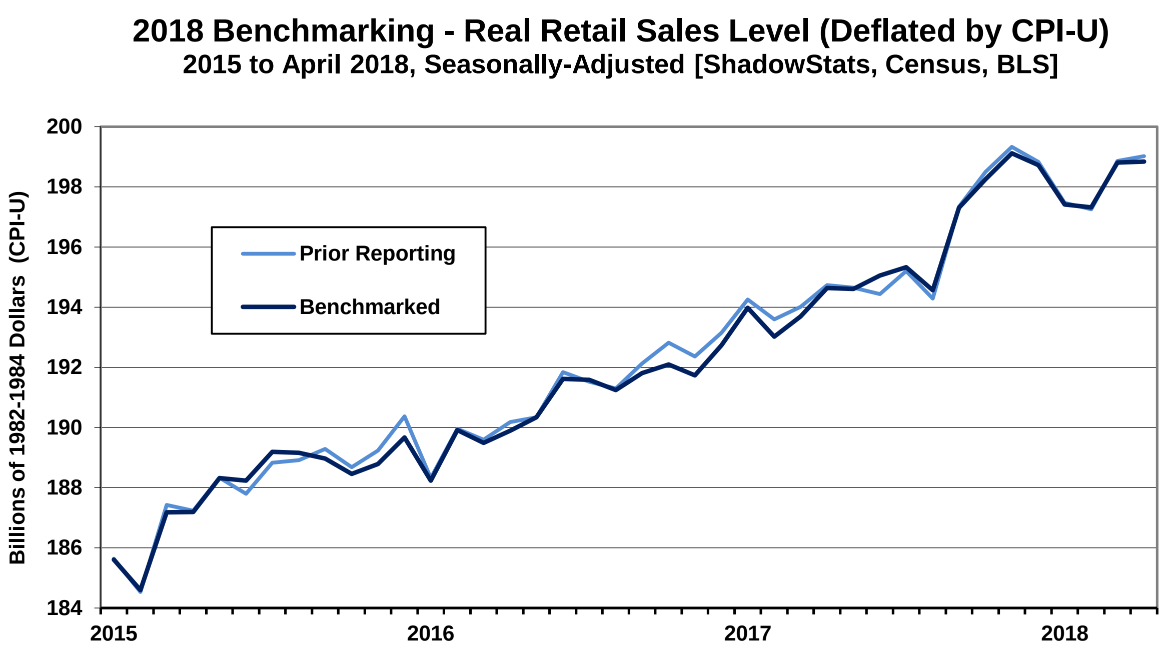
The only major benchmarking still to come before the GDP benchmarking is Construction Spending, which will be published on Monday, July 2nd, coincident with the release of the headline May 2018 detail. A full analysis of likely GDP benchmarking, including other series, earlier missed revisions and specific quarters that could take a hit, will follow shortly thereafter.

Please call me at (707) 763-5786, or send me an e-mail at johnwilliams@shadowstats.com if there is anything here on which you have questions, would like to see, or otherwise would like to discuss.

Graph OC-2: Industrial Production (2000 to Date), Annual Benchmark Revisions of 2014 to 2018



Graph OC-3: Benchmark-Revised Real Retail Sales, Showing 2012 to April 2018



REPORTING DETAIL

U.S. TRADE DEFICIT (April 2018)

April 2018 Nominal Balance of Payments Deficit Narrowed, in the Context of the Annual Benchmarking, While Revisions to Real Trade Activity Had Negative Economic Implications. The **a**nnual benchmark revisions to the U.S. trade data had direct implications for next-month's comprehensive revisions to real U.S. Gross Domestic Product (GDP) activity. The changes to the real merchandise trade deficit, net of inflation, broadly dampened previous, headline real economic growth rates, both coming into and exiting the Great Recession, as well as in the purported economic expansion that followed, particularly in 2015 and 2017.

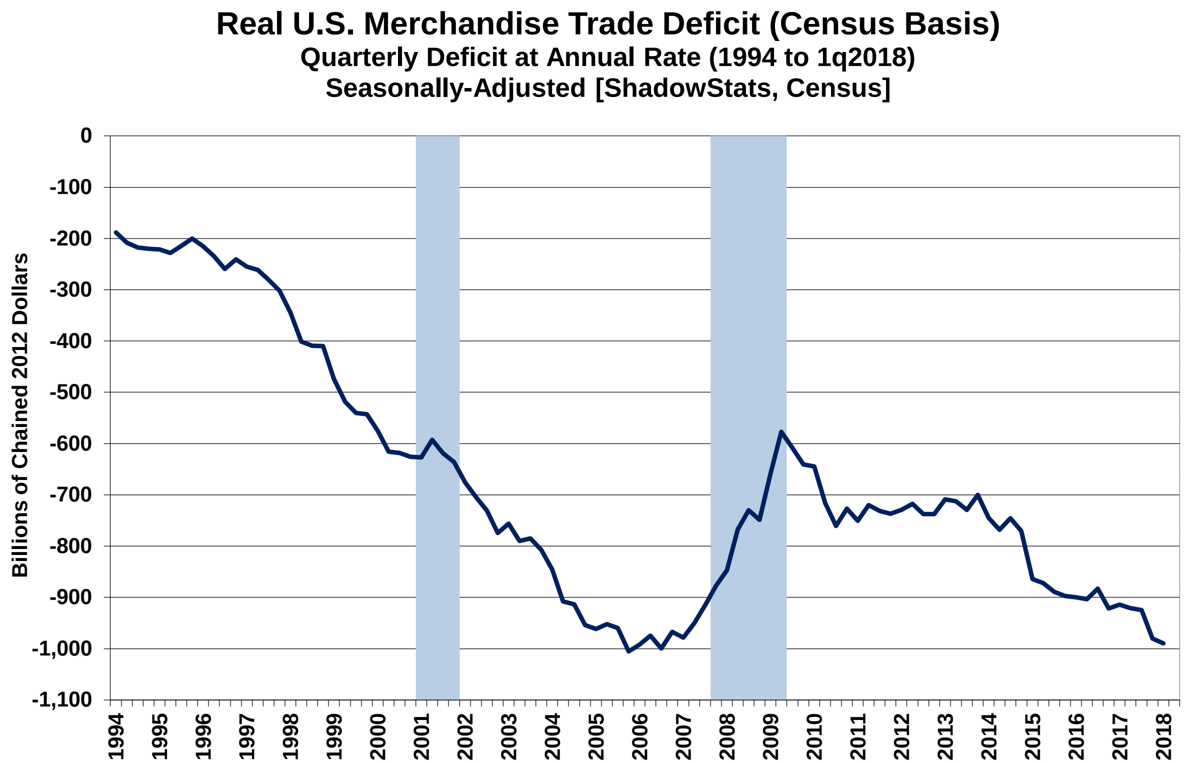
Discussed here, though, are the revised, current nominal numbers, before inflation adjustment, where the headline deficit narrowed in aggregate in the 2017 calendar year, from a pre-benchmark deficit of $568.4 billion to a post–benchmark deficit of $552.3 billion. That largely reflecting relative trade-balance gains in the soft data, of otherwise nebulous and heavily gimmicked "services" area, versus minimal changes to the harder numbers in goods area.

Monthly Narrowing in the Nominal April Balance of Payments Deficit Was Relatively Small, Split Rather Evenly Between Increased Exports Decreased Imports of Goods. In the context of the coincident annual benchmarking, the Bureau of Economic Analysis (BEA) and the Census Bureau (Census) reported Wednesday, June 6th, that the nominal (not adjusted for inflation), seasonally-adjusted April 2018 trade deficit in goods and services narrowed month-to-month on a balance-of-payments basis by $1.011 (-$1.011), or by 2.1% (-2.1%) to $46.188 billion, from $47.210 billion in March. March 2018 previously (pre-benchmarking) had reflected a monthly deficit of $48.956 billion.

The narrowing in the headline April 2018 deficit reflected a monthly gain of $0.585 billion in exports, complemented by a decline in imports of $0.426 (-$0.426) billion. That said, the headline April 2018 deficit widened minimally $0.125 billion, or by 0.2%, versus the year-ago $46.074 billion trade shortfall for April 2017. Imports and exports for the month in the energy-related area largely were offsetting.

Energy-Related Petroleum Products. April 2018 imported oil prices increased by 0.9% month-to-month to $54.50, versus $54.00 barrel in March 2018, but were up by 20.0% from $45.40 per barrel in April 2017. Separately, unadjusted physical oil-import volume in April 2018 averaged 7.865 million barrels per day, up from 7.068 million barrels in March 2018, but down from 7.642 million in April 2017. A heads here as to what had appeared to be a generally unrevised series, over time; the year ago numbers in terms physical volume and oil prices all underwent revisions, generally to the upside.

Graph 1: Benchmarked, Quarterly Real Merchandise Trade Deficit (1994-2018)



Real Merchandise Trade Deficit - April 2018. Reporting detail for the Real Merchandise Trade Deficit is discussed here and plotted (quarterly) in *Graph 1* (see also *Graph OC-1* in the *Opening Comments*). The seasonally-adjusted details are in real terms, net of oil-price swings and other inflation, in revised 2012 (previously 2009) chain-weighted dollars. The 2012 dollars will be used as the deflation base for upcoming, comprehensive GDP benchmark revisions on July 27th.

Unless indicated otherwise, the details here are as reported in the June 6th benchmarked, headline detail, in billions of constant 2012 dollars. Given the shift in the deflation-year base, the headline monthly, quarterly annual and dollar amounts are not directly comparable with prior reporting (see the *Opening Comments*).

The April 2018 real merchandise trade deficit (no services) narrowed to $77.473 billion, from $78.155 billion in March 2018, and narrowed minimally from $77.496 million in April 2017. In turn, the $78.155 billion deficit in March 2018 narrowed by 8.5% (-8.5%) from $85.407 billion in February 2018, but widened by 4.7% from $74.670 billion in March 2017.

In contrast, last month's pre-benchmarked March 2018 real merchandise trade deficit narrowed by 10.0% (-10.0%) from February 2018, and widened by 2.6% from March 2017. The comparison with the year-ago percent changes indicates a more-negative relative deficit for March 2018 after the benchmarking, as opposed to before.

In the context of the June 6th benchmark revisions, the 2016 annual real merchandise trade deficit widened for the year to $902.0 billion, versus $800.7 billion in 2015. The 2016 annual trade shortfall then was the worst since 2007 [pre-benchmarking, it had been the worst since 2008].

On an annual basis, the benchmarked 2017 real merchandise trade deficit widened to $935.3 billion, versus $900.2 billion in 2016. The 2017 deficit was the worst since 2006 [pre-benchmarking, it had been the worst since 2007].

The first-quarter 2017 deficit narrowed minimally to $914.4 billion, the second-quarter 2017 deficit widened to $921.3 billion, the third-quarter 2017 deficit widened to $924.9 billion [had narrowed in its prior incarnation], with the fourth-quarter 2017 real merchandise trade deficit exploding to $980.5 billion, its worst showing since third-quarter 2006 [previously the worst since second-quarter 2007].

The revised headline detail for the annualized first-quarter 2018 merchandise deficit was $989.4 billion, making it now the new worst showing since third-quarter 2007. Such is just an annualized $16 billion shy of the worst-ever quarterly real merchandise trade deficit in U.S. history.

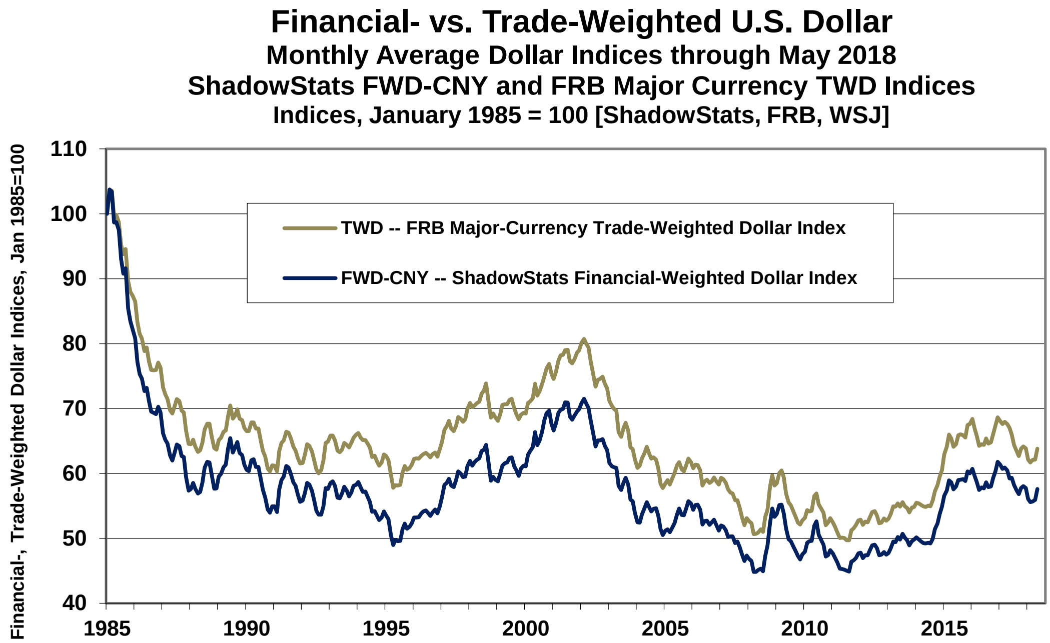
Irrespective of occasional, quarterly aberrations and increasingly irregular, headline month-to-month activity, headline deficits broadly should continue to deteriorate sharply in the months and quarters ahead, revising and intensifying the ongoing and commonly-negative impact on headline GDP reporting,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

U.S. Dollar. Traditionally, mounting trade deficits tend to pummel the domestic currency's foreign exchange rate. While the headline deficit narrowed month-to-month in April 2018, general deterioration remains likely in the months and quarters ahead. A deteriorating trade deficit also can encourage the affected nation to attempt a competitive devaluation of its currency. *Graphs 3* and *4* plot the Federal Reserve Board's (FRB) Major-Market Trade-Weighted Dollar (TWD), which reflects the U.S. dollar exchange rate, weighted versus the Euro, Yen, Pound Sterling, Australian Dollar, Swiss Franc and the Canadian Dollar based on trade volume. The ShadowStats Financial-Weighted Dollar (FWD), which initially reflected the U.S. dollar exchange rate weighted versus the same currencies, based on respective currency trading volume in the markets, instead of merchandise trade. The latest estimates of the level and annual changes for the May 2018 Financial- and Trade-Weighted U.S. Dollar are detailed in the Alternate Data tab of www.ShadowStats.com. These graphs also will be updated to the day in the usual mid-month *Hyperinflation Watch* (pending in *Commentary No. 955*) accompanying the monthly reporting of the Consumer and Producer Price Indices (CPI and PPI).

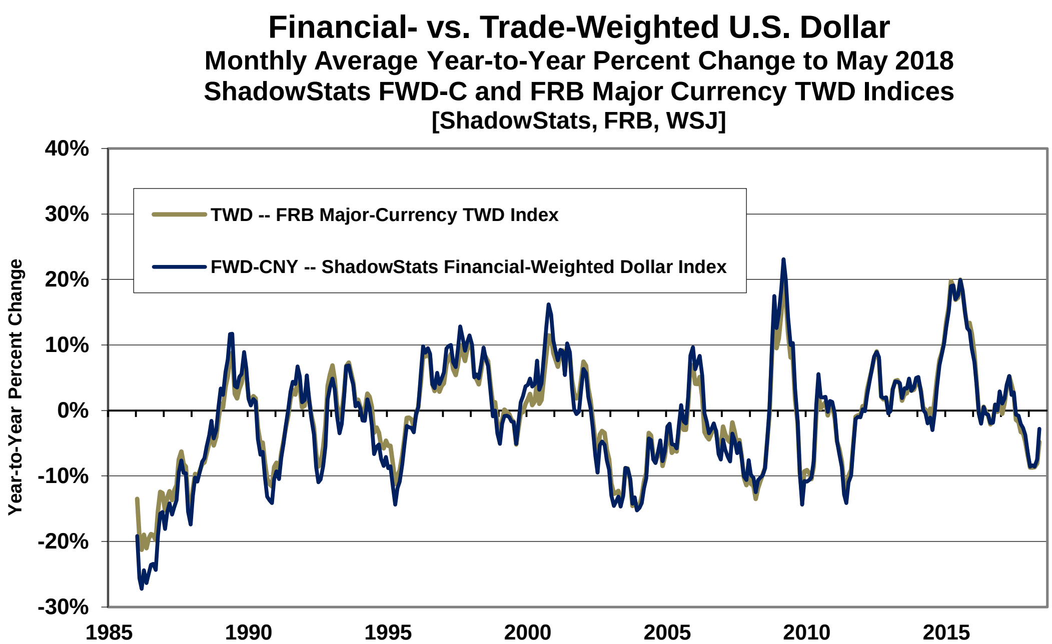
ShadowStats reconstituted and restated the FWD to add the Chinese Yuan (CNY), when the CNY gained recognition as a global reserve currency by the Bank for International Settlements (BIS) in 2015. Yet, there has been minimal resulting visual difference in the ShadowStats measure, given the still relatively low weighting of the CNY. Nonetheless, China is working at present on expanding its impact, with its petro-yuan, for example. Nonetheless, the plots of the FWD versus the TWD both have shown a near-term bottoming in the recent weakness in the U.S. dollar, with the declining year-to-year change off bottom, turning higher, albeit still in annual decline.

Irrespective of any officially desired or designed direction for the U.S. dollar, it generally had been weakening in the last year, and recent near-term strength has begun to falter anew in the last week or so, as will be discussed in next week's planned *Commentary No. 955*.

Graph 2: Financial- versus Trade-Weighted U.S. Dollar to May 2018



Graph 3: Financial- versus Trade-Weighted U.S. Dollar, Year-to-Year Change to May 2018



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

Supplemental Labor-Detail Background, page 29 of prior *Commentary No. 953-B*, covering "Headline Distortions from Shifting Concurrent Seasonal-Adjustment Factors.")

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

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

CONSUMER LIQUIDITY WATCH

CONSUMER LIQUIDITY, INCOME, CREDIT AND RELATIVE OPTIMISM. *[Updated for first-quarter 2018 Household Credit Market and April 2018 Consumer Credit Outstanding.]*

Updated Consumer/Household Credit Numbers Show Intensifying Consumer Liquidity Squeeze; Consumer Optimism Has Peaked, Pulling Back At Least Temporarily. Today's *Consumer Liquidity Watch* incorporates by reference the *Opening Comments* of the May 9th *Commentary No. 948*, which reviewed various economic signals ranging from tightening systemic liquidity tied to sinking, inflation-adjusted real annual growth in M3 money supply, to Sentier Research's reintroduction of monthly Real Median Household Income, highlighted later in this text. Updated today are faltering measures of quarterly and monthly real household debt and consumer credit outstanding, discussed in the *Household Debt and Consumer Credit Outstanding* section.

May 2018 details for the Conference Board's Consumer Confidence Index (May 29th) and the University of Michigan's final estimate for May Consumer Sentiment (May 25th) showed a faltering outlook. While headline Consumer Confidence took a hefty jump in May, that was in the context of a downside revision of 2.4% (-2.4%) to the previously-estimated level of April Confidence, which the new initial May estimate did not top. The final May Sentiment number revised lower by 0.8% (-0.8%) from its initial estimate. While both measures remain at high levels, both remain shy of levels seen in November 2017.

Mounting financial stress on the U.S. consumer bodes poorly for pending domestic economic growth. Noted in today's *Opening Comments* and the *Opening Comments* of *Commentary No. 952*, mounting liquidity issues likely already have taken some hit on headline real first-quarter 2018 GDP activity, where consumer real consumption of goods actually and real investment growth in residential real estate actually declined in the quarter. See also *Commentary No. 948* and *Commentary No. 949*.

Liquidity conditions have been tightening for consumers, with Real Consumer Credit Outstanding having continued to falter in March 2018, with headline Real Average Weekly Earnings contracting quarter-to-quarter in first-quarter 2018, with continued faltering in April, and with monthly Real Median Household Income in April 2018 slowing anew in terms of annual growth. These factors are among the likely elements driving the early signs of a downturn in consumer optimism and consumer consumption and residential investment (a shrinking 72.9% of First-Quarter 2018 GDP). In combination, these various factors should exacerbate financial-market, policy-maker and FOMC concerns as to any ongoing, positive direction in broad U.S. economic activity (see the *Hyperinflation Watch* of *Commentary No. 953-A*).

Weakening consumer liquidity conditions previously had been mirrored in weakening, headline economic activity coming into the series of major natural disasters that disrupted the economy, beginning in August

2017. Intensifying weakness had included Payroll-Employment, Real Retail Sales, Housing and Construction, and the Manufacturing/Production sector, generally pre-natural disaster activity.

Net of what have been mixed, but significant, hurricane and later-wildfire distortions, initial hits to activity were followed by related and transient economic boosts from recovery, replacement and restoration activity, particular in fourth-quarter 2017. Funded by insurance payments and savings liquidation, those distortions increasingly had passed into the recent headline economic data and now begun to recede. Against artificially bloated third- and fourth-quarter 2017 activity of 3.2% and 2.9%, first-quarter 2018 economic activity slowed to a revised 2.2% and likely will revise still lower as better-quality numbers become available. Such effects are discussed in the separate analyses of relevant series in covered in the regular *ShadowStats Commentaries*. Where there are current signals of faltering consumer liquidity (again see Consumer Credit Outstanding and Real Earnings), headline consumer optimism has begun to falter, as discussed earlier. Net of a sharp downside revision to April, the May 2018 releases of the Conference Board's Consumer-Confidence Index® and the advance-estimate of the University of Michigan Consumer Sentiment for May 2018, again, both were off recent peak activity.

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

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

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

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

The combined issues here have driven the housing-market collapse and ongoing, long-term stagnation in consumer-related real estate sales and construction activity, and have constrained both nominal and real retail sales. Related, personal-consumption-expenditure and residential-construction categories accounted for 73.1% of the headline real, Fourth-Quarter 2017 U.S. GDP, now down to 72.9% in First-Quarter 2018.

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

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

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

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

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

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

Consumer Optimism: Consumer Sentiment and Confidence Have Backed Off Recent Peaks. Reflected in *Graphs CLW-1* and *CLW-2*, May 2018 details for the Conference Board's Consumer-Confidence Index® (May 29th) and the University of Michigan's final estimate for May Consumer Sentiment (May 25th) reflected faltering consumer optimism. While headline Consumer Confidence took a hefty jump in May, such was in the context of a downside revision of 2.4% (-2.4%) to the previously-estimated level of April Confidence, which the new initial May estimate did not top. The final May Sentiment number revised lower, by 0.8% (-0.8%). While both measures remain at high levels, both remain shy of levels seen in November 2017.

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 monthly and three-month moving averages remain above pre-2007 recession highs, yet the still-high moving averages have slowed in their gains, having begun to falter along with the softening detail and related headline consumer activity on a monthly basis.

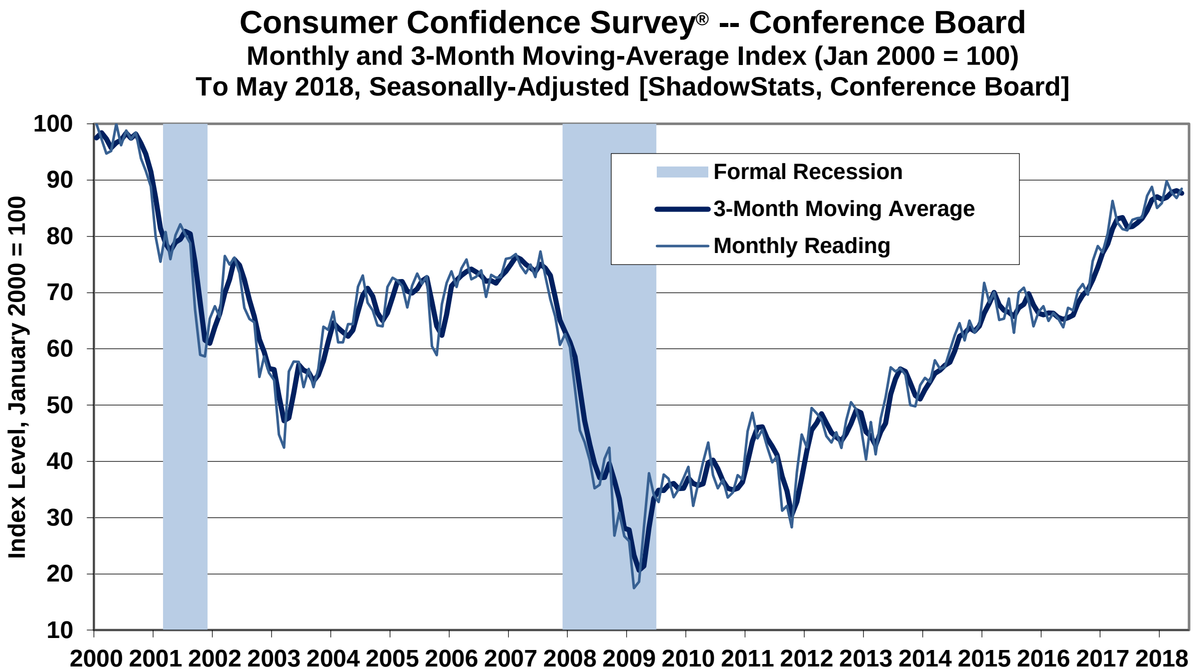
Pre-election, September 2016 Confidence and Sentiment jumped and then plunged in October 2016, likely reflecting concerns as to the direction of the presidential race. Post-election, both measures rallied sharply, reflecting surges in consumer optimism into early-2017. Both series then topped and pulled 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.

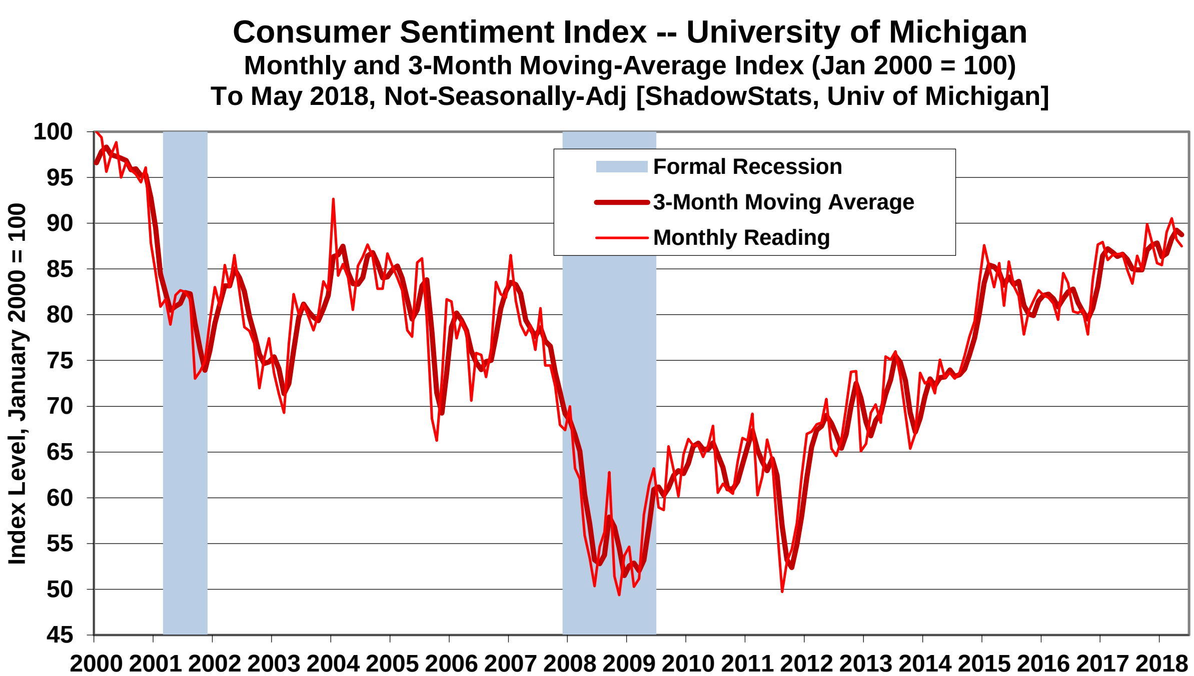
The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in *Commentary No. 764*), and often are highly volatile month-to-month, as a result. Recent press has been highly positive on the headline economic and employment news, reflecting short-lived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

Broadly, though, the harder, financial consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth as suggested by headline GDP growth into fourth-quarter 2017, although various consumer measures to hits in the initial first-quarter 2018 GDP. In the current environment of what had been surging optimism, beyond having happy feelings about the future, consumers still need actual income, cash-in-hand or credit in order to increase their spending.

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

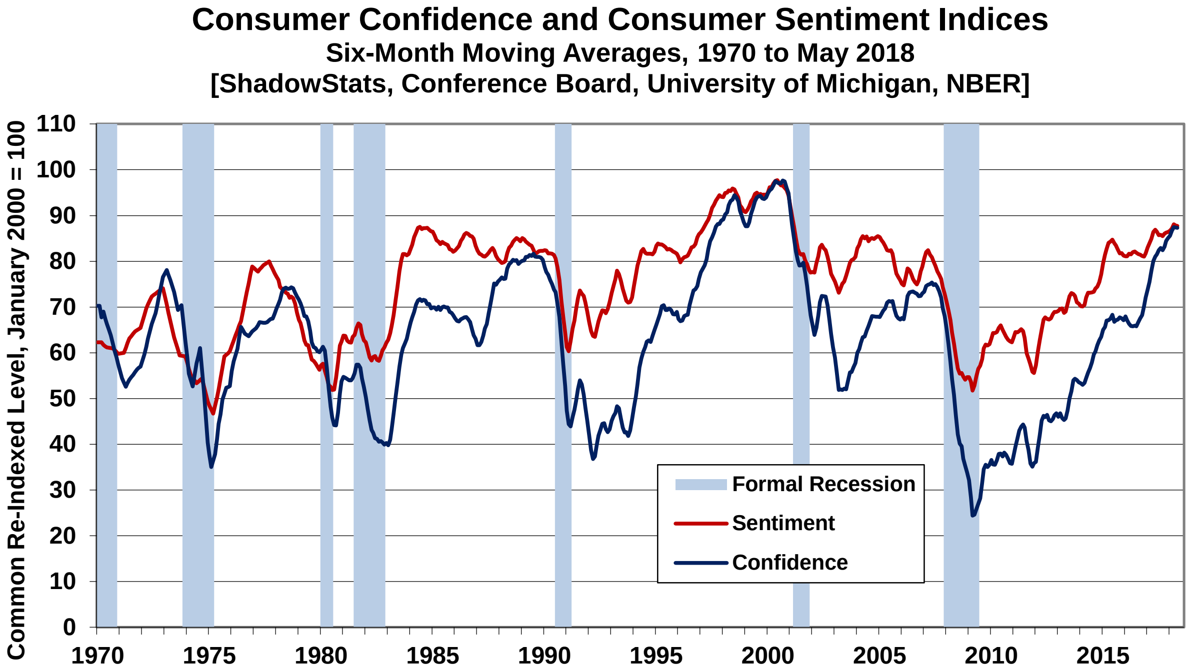


Graph CLW-2: Consumer Sentiment (2000 to 2018)



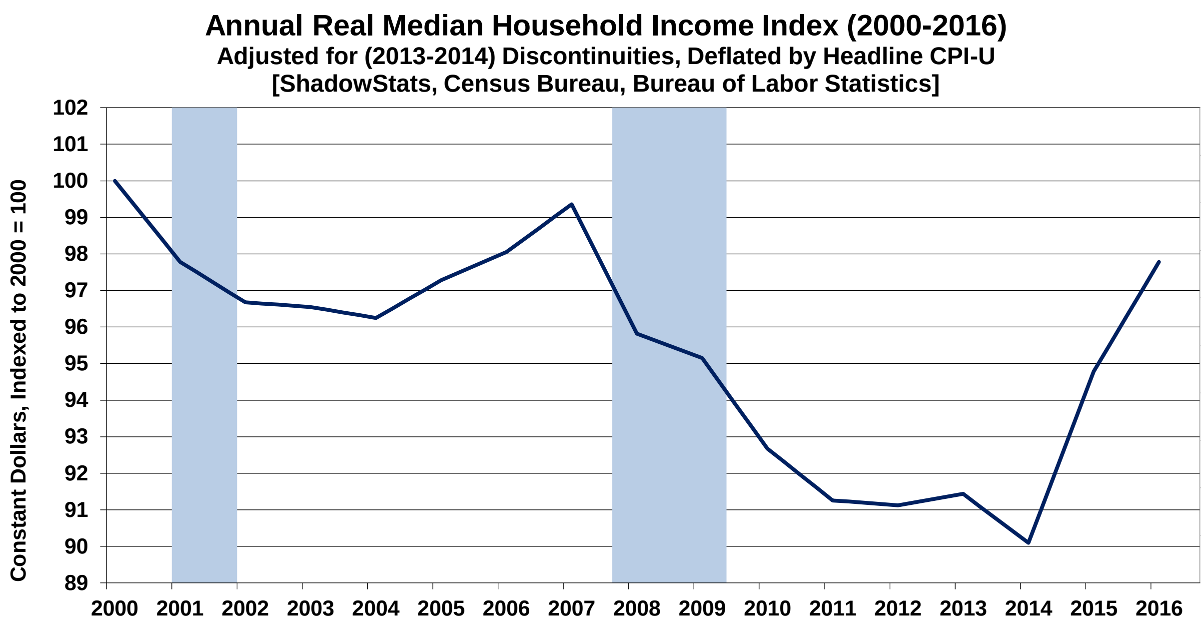
Smoothed for irregular, short-term volatility, the two series still generally had held at levels seen typically in recessions, until the post-2016 election circumstance. Suggested in *Graph CLW-3*—plotted for the last 48 years—the latest readings of Confidence and Sentiment recently have recovered levels seen in periods of normal, positive economic activity of the last four decades, with their six-month moving averages at levels last seen going into the 2001 recession, although increasingly, they appear to be topping out.

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



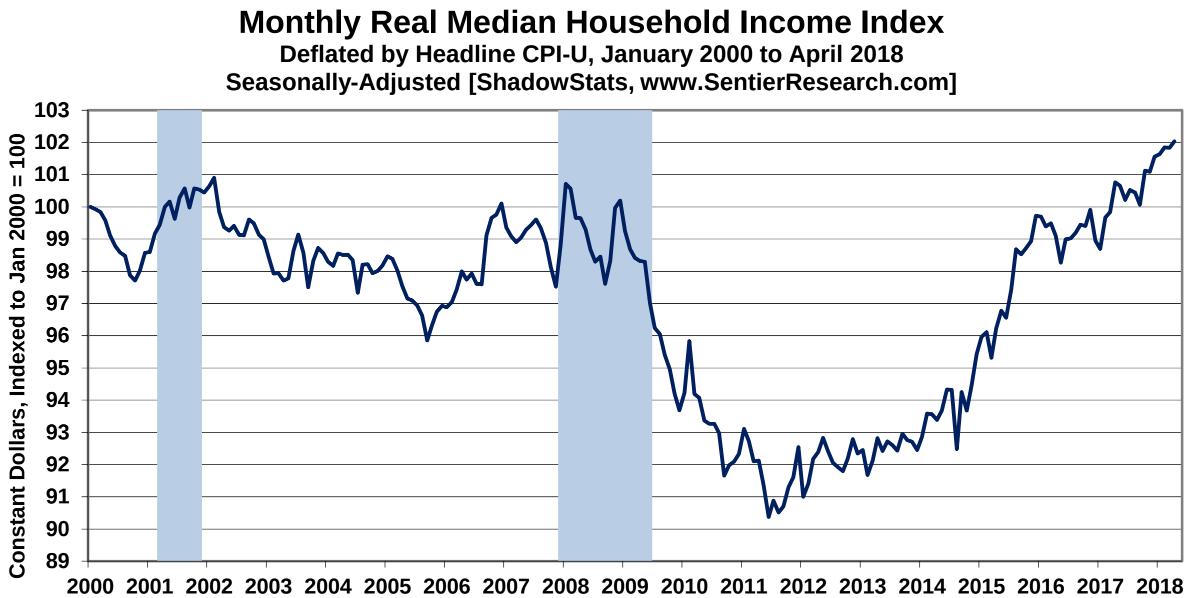
Annual Real Median Household Income in 2016 Held Below Its 2007 Pre-Recession Peak, Below Late-1990s Activity and About Even with the Mid-1970s, Monthly Activity Has Been Broadly Stagnant. *Graphs CLW-4* and *CLW-5* show the latest plots of annual and monthly Real Median Household Income.

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



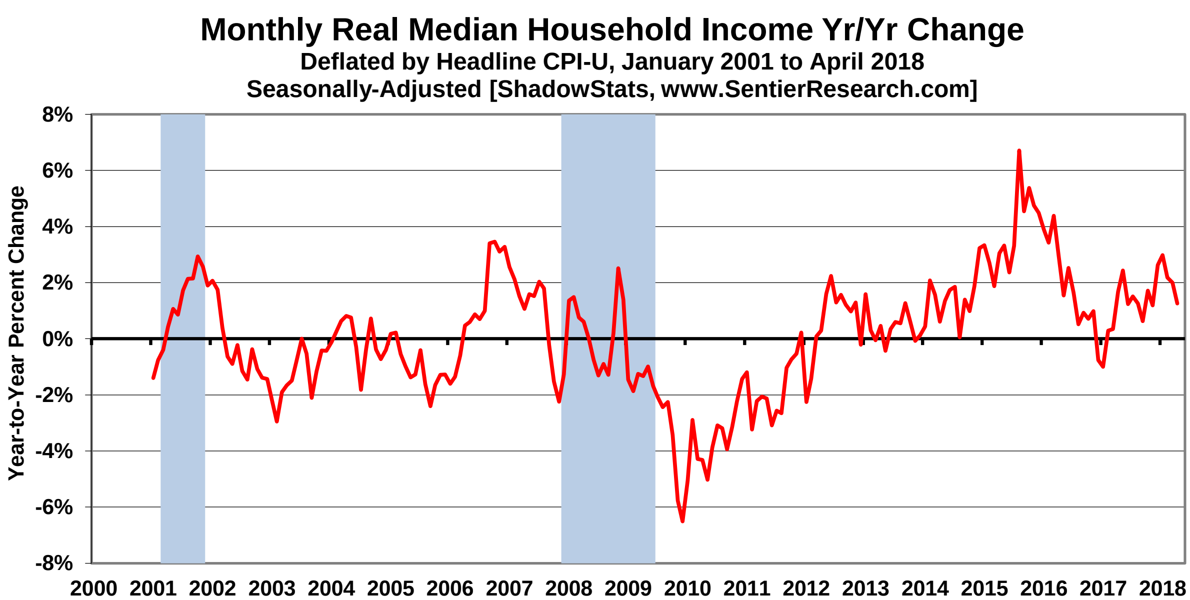
The Sentier Research Series of Monthly Real Median Household Income, Notched Higher in April, With Slowing Annual Growth, Broadly Showing Stagnant Activity. Discussed in the Opening Comments of *Commentary No. 948*, Sentier Research (www.SentierResearch.com) reinstituted its monthly reporting of Real Median Household Income (the Household Income Index or HII), where publication had been suspended, temporarily, following the release of May 2017 detail.

Graph CLW-5: Monthly Real Median Household Income (2000 to April 2018) Index, January 2000 = 100



The series was updated for the April 2018 detail on May 21st, showing a small monthly gain, along with sharply-slowing annual growth, and a continuing long-range pattern of stagnation in median household income, adjusted for CPI-U inflation. The current monthly series is plotted here, both as to level (*Graph CLW-5*) and as to year-to-year change (*Graph CLW-6*).

Graph CLW-6: Monthly Real Median Household Income (2000 to April 2018) Year-to-Year Change



Monthly Real Median Household Income, provided by Sentier Research generally can be considered a monthly version of the annual detail shown in preceding *Graph CLW-4*, based on the most-recent (2016) release by the Census Bureau in September 2017, and, again as discussed in the *Opening Comments* of *Commentary No. 948* (see also *Commentary No. 909*).

Methodological understatement of the CPI-U by the Bureau of Labor Statistics broadly has had the effect of overstating the growth in headline real or inflation-adjusted income series (see the *Public Commentary on Inflation Measurement*). In a related area, recent extreme volatility in monthly gasoline prices has had varying impact on the headline data. Details were reviewed the *Opening Comments* of *Commentary No. 948*, where annual average growth in the series since its January 2000 onset has been roughly 0.1% per year. Given the independence and quality of the Sentier research, and the known definitional biases and gimmicks used by Bureau of Economic Analysis (BEA) in its income and economic measures, the Sentier numbers suggest that actual domestic economic activity is not and has not been as robust as suggested by the BEA's headline reporting of Gross Domestic Product (GDP), for example.

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.

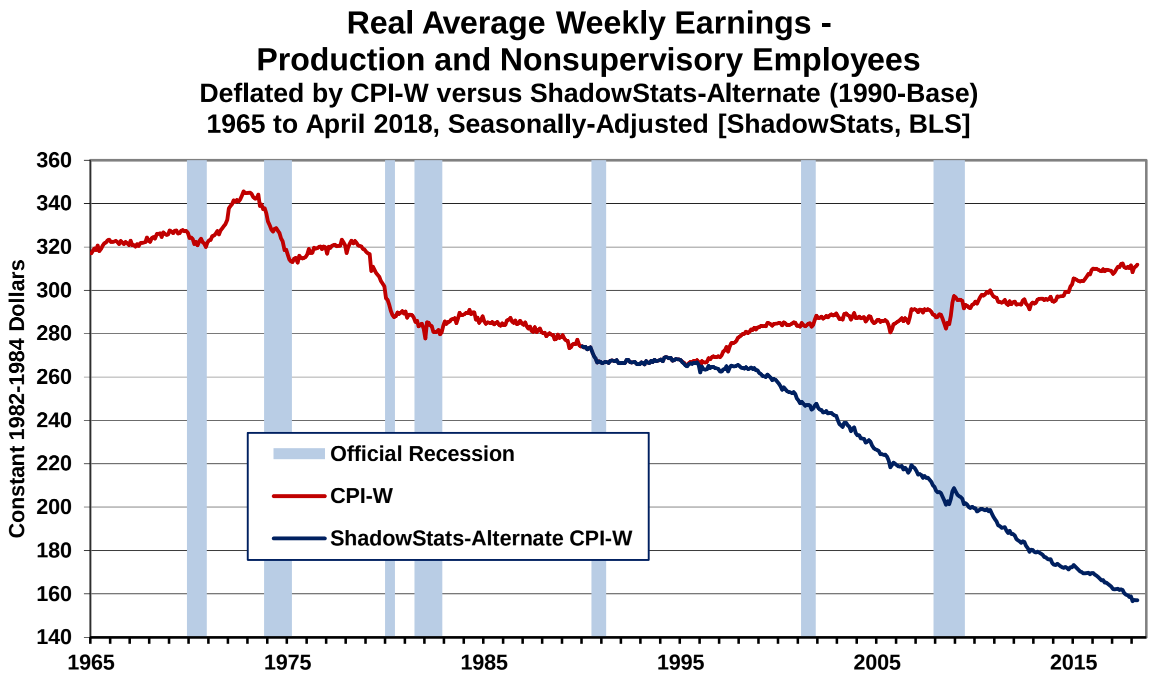
The Sentier numbers have suggested a small increase in 2014 versus 2013 levels, low-inflation induced real increases in 2015 and 2016. Allowing for the direction difference in 2014, and continual redefinitions and gimmicks in the annual series (again, see the *Opening Comments* of *Commentary No. 909*) 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 uses monthly questions surveying current annual household income, the headline annual Census Bureau detail is generated by a once-per-year question in the March CPS survey, as to the prior year's annual household income. The Median Household Income surveying results are broadly consistent with Real Average Weekly Earnings.

Real Average Weekly Earnings—April 2018—Third-Consecutive Quarterly Contraction Held in Place. For the production and nonsupervisory employees category—the only series for which there is a meaningful history (discussed in *Commentary No. 949* and plotted here in *Graph CLW-7*), real average weekly earnings rose in April. Despite near-term monthly volatility, often triggered by unstable monthly inflation numbers, real earnings contracted quarter-to-quarter in first-quarter 2018 for the third-consecutive quarterly decline in real earnings for the production and nonsupervisory employees category, the fifth real quarterly contraction of the last six quarters. Separately, real quarterly earnings for the broader all-employees category had contracted in first-quarter 2018, for the second consecutive quarterly contraction, but it also was down in April 2018

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

Graph CLW-7: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date
(Same as Graph 1 in Commentary No. 949)

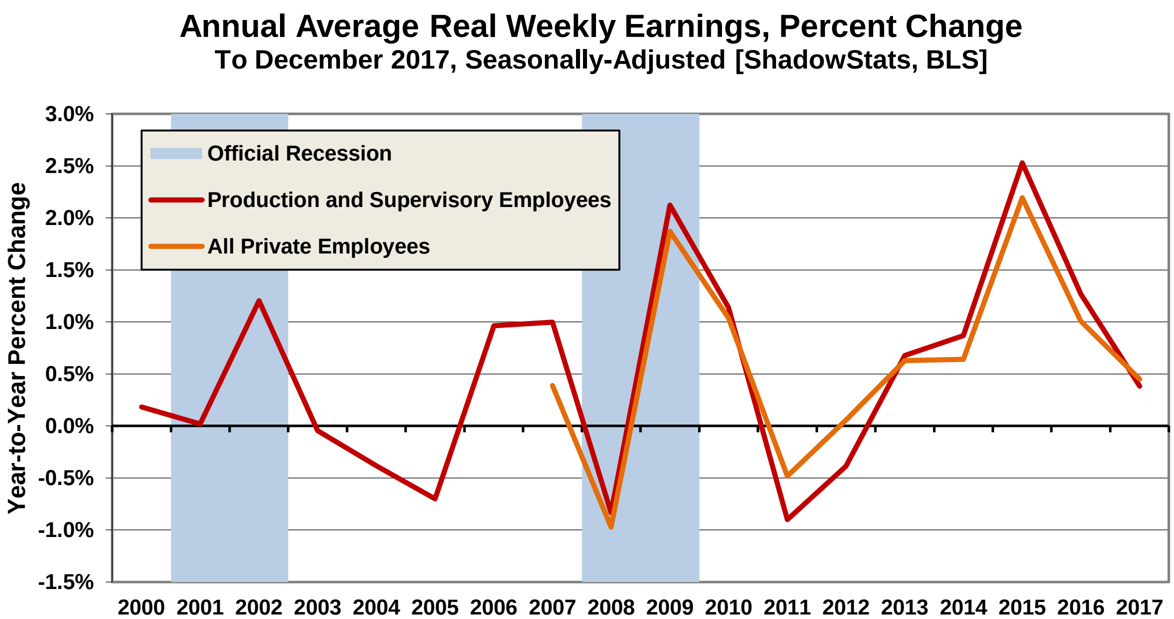


Graph CLW-7 plots the seasonally-adjusted earnings as officially deflated by the BLS (red-line), and as adjusted for the ShadowStats-Alternate CPI Measure, 1990-Base (blue-line). When inflation-depressing methodologies of the 1990s began to kick-in, the artificially-weakened CPI-W (also used in calculating 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.

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

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

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



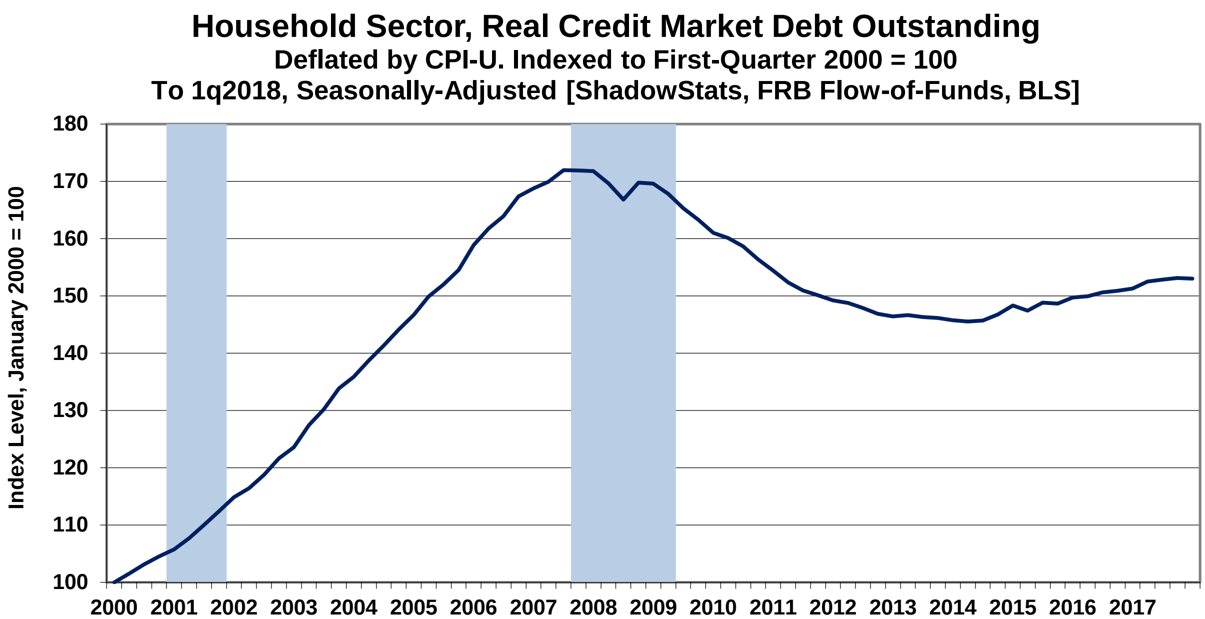
When income growth is inadequate to support consumption growth, consumers often make up the difference in debt expansion. Yet, real Consumer Credit Outstanding has shown a patterns of declining annual real growth for the last several quarters, irrespective of the specific series, as reflected in the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

Household Debt and Consumer Credit Outstanding: Contraction/Lack of Expansion in Real Consumer Credit Constrains Economic Growth. The final five graphs on consumer conditions address consumer borrowing. In the absence of real income growth, debt expansion can help to fuel growth in personal consumption, but debt expansion has been nonexistent. On top of downside revisions to the last several years of quarterly activity, seasonally-adjusted, first-quarter 2018 real household credit-market debt outstanding just contracted for the first time since 2015. In terms of unadjusted monthly data through April 2018, there were minimal downside revisions to prior months, with decelerating real annual growth.

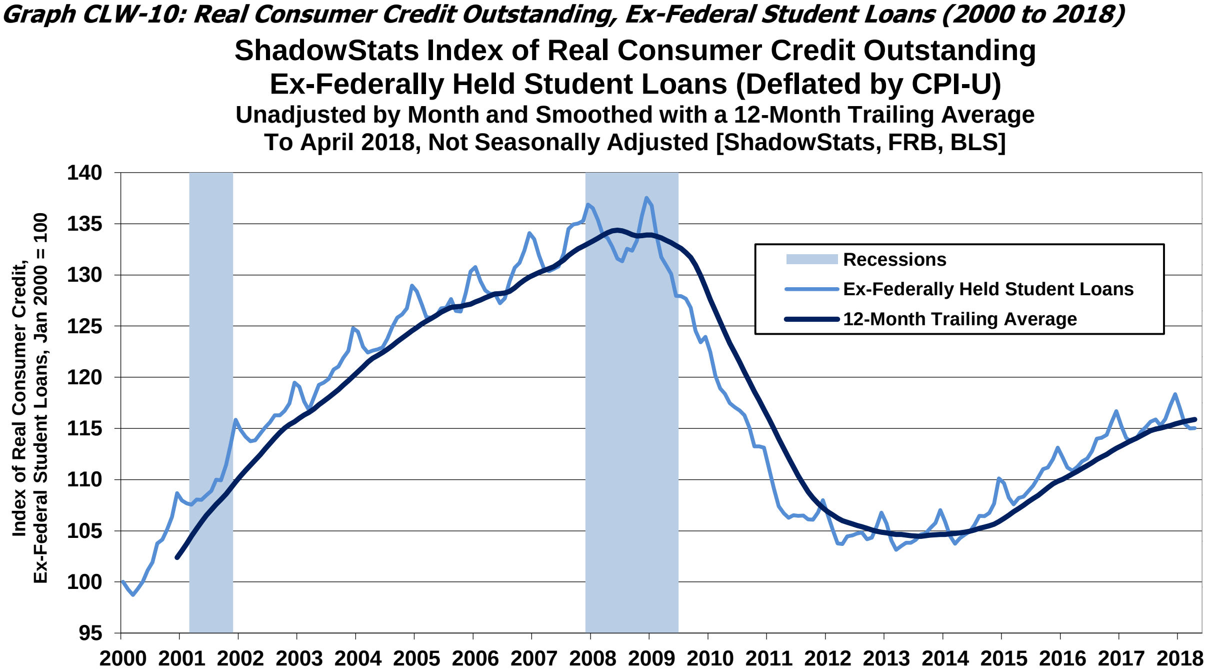
Quarterly Series. Consider *Graph CLW-9* of *Household Sector, Real Credit Market Debt Outstanding*. The level of real household debt declined in the period following the Panic of 2008, reflecting loan defaults and reduced bank lending, and it has not coming close to recovering fully, based on the Federal Reserve's flow-of-funds accounting through first-quarter 2018 (released June 7th). Household Sector, Real Credit Market Debt Outstanding in first-quarter 2018 still was down by 11.0% (-11.0%) from its pre-recession peak of third-quarter 2007. That was against a fourth-quarter 2017 decline of 10.9% (-10.9%). The visually flattened-to-down latest point in *Graph CLW-9* reflected a slowing in real year-to-year change to 1.1% in first-quarter 2018, versus 1.5% in fourth quarter 2017, along with the first seasonally-adjusted quarterly contraction in real consumer debt since fourth-quarter 2015, down at an annualized 0.3% (-0.3%) in first-quarter 2018, versus a real gain of 0.9% in fourth-quarter 2017. Such completes 42 straight quarters—a full decade-plus—of credit non-expansion, versus its pre-recession peak.

This 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 (FOMC Quantitative-Easing Policy). 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 first-quarter 2018. Activity also reflects relative strength from student loans, as shown in the *Graphs CLW-10* to *13*.

Graph CLW-9: Household Sector, Real Credit Market Debt Outstanding (2000 through First-Quarter 2018)



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



Shown for comparative purposes is *Graph CLW-10,* real, not-seasonally-adjusted Consumer Credit Outstanding, Ex-Federally-Held Student Loans, has not recovered on a monthly, let alone the 12-month trailing-average basis used as a surrogate here or seasonal adjustment. Discussed in the next section, this measure of consumer credit now has been through 124 months 41-plus quarters of non-expansion. That is reflected on a parallel basis through first-quarter 2018 reporting shown in *CLW-9*. Please note that the scale in *Graph CLW-10* is indexed to Consumer Credit Outstanding Ex-Federal Student Loans equal to 100 in January 2000. In *Graphs CLW-11* to *13*, that indexing is applied to the total Consumer Credit Outstanding number, which is greater than the dominant Ex-Federal Student Loans subcomponent.

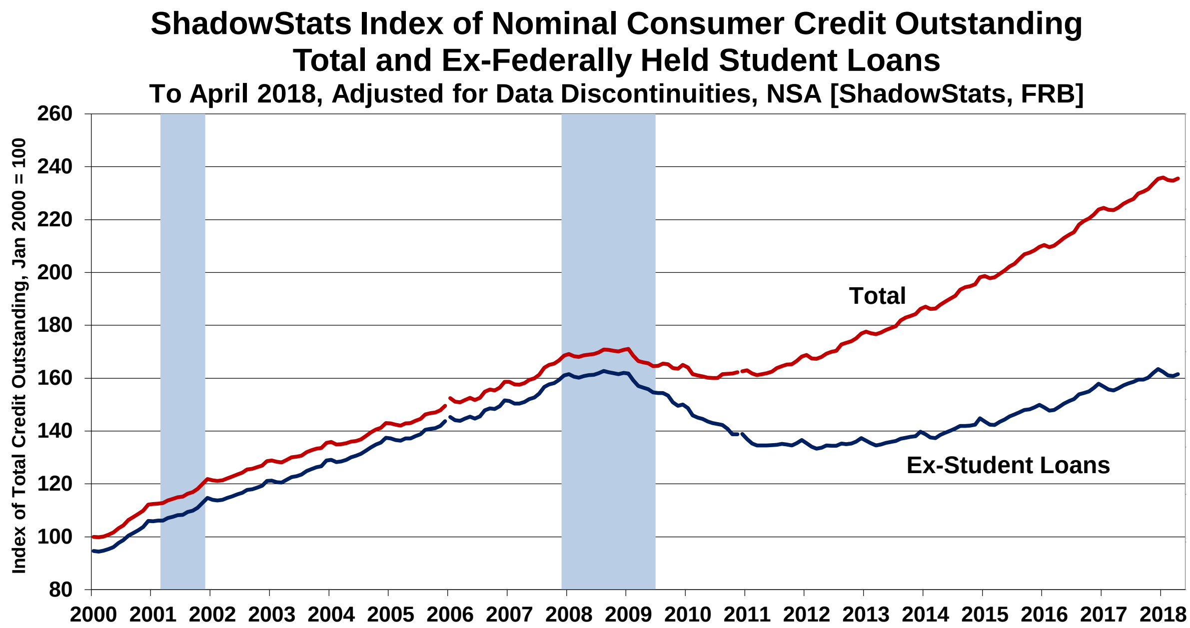
Monthly Series. Indeed, the ShadowStats analysis usually focuses on the particular current and continuing weakness in monthly levels of consumer credit, net of what has been rapidly expanding government-sponsored student loans. Where detail on that series only is available not-seasonally-adjusted, the following three related graphs and the preceding *Graph CLW-10* are so plotted.
Shown through the April 2018 reading (released June 7th), the headline nominal monthly Consumer Credit Outstanding (*CLW-11*) is a subcomponent of the nominal Household Sector debt. Where *Graph CLW-12* reflects the real or inflation-adjusted activity for monthly Consumer Credit Outstanding terms of both level (*Graph CLW-12*) and year-to-year change (*Graph CLW-13*). *Graphs CLW-12* and *CLW-10* are comparable to the inflation-adjusted Household Sector plot in *Graph CLW-9*.

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

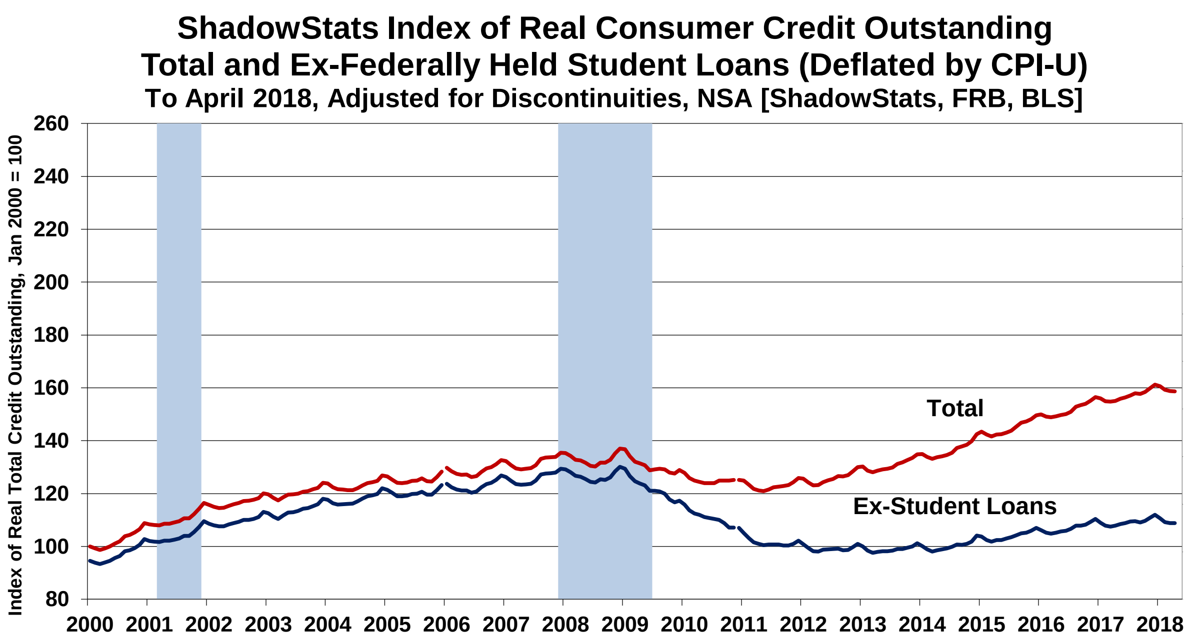
Adjusted for inflation, the lack of recovery in the ex-student loan area is more obvious. Where the recent monthly downside move in the not-seasonally-adjusted real consumer credit reflected something of a seasonal pattern, the pattern of year-to-year growth has been in an intensifying downtrend, suggesting tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in April 2018 was down from recovering its pre-recession peak of December 2007 by 15.9% (-15.9%). That is 124 months, 41-plus quarters or ten-plus years of non-expansion of credit. Year-to-year real growth shown in *Graph CLW-13* tends to resolve most monthly seasonal distortions in the not-seasonally-adjusted data.

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

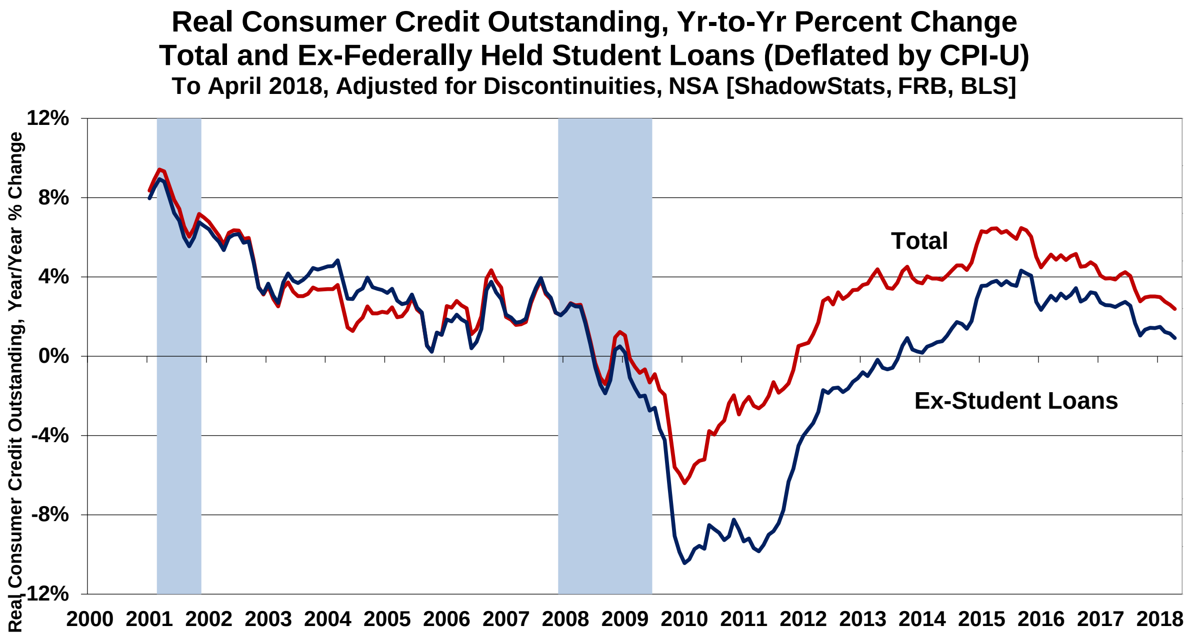
Graph CLW-11: Nominal Consumer Credit Outstanding (2000 to 2018)



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



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



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

WEEK, MONTH AND YEAR AHEAD

U.S. Dollar and Financial-Market Turmoil Continue at High Risk, Amidst Mounting Fiscal Concerns, Consumer Liquidity Issues and Non-Expanding, Real-World Economic Activity. *[Other than for links or references, the text in these opening paragraphs is little changed from Commentary No. 953-B]* In the context of intensified weakening of underlying fundamental drivers of broad economic activity and negative stresses on basic consumer-liquidity conditions, discussed respectively in the *Opening Comments* and *Consumer Liquidity Watch* of *No. 950* and *No. 952* (and particularly today's section on consumer credit), the revised first-quarter GDP reflected difficult economic times beginning to hit U.S. consumer activity. The U.S. consumer remains the fundamental driving force behind domestic business conditions. Continuing negative surprises likely will follow in the regular economic reporting and remaining annual benchmark revisions of key economic series in the next couple of weeks and month. The broad outlook has not changed. Weaker economic growth and renewed, faltering economic headlines should follow, as discussed in today's *Opening Comments*.

Broad outlooks for the U.S. economy, the U.S. dollar, gold, silver and the financial markets were reviewed in *Special Commentary No. 935*, covered there in the *Executive Summary* beginning on page 2, with *Contents* and links to *Major Sections* and *Graphs* beginning there on page 6. The faltering economic outlook also was reviewed in the *Opening Comments* and *Industrial Production Benchmark Revisions* sections of *Commentary No. 942-B*. The circumstances broadly have not changed from the related financial market vulnerabilities discussed in the *Hyperinflation Watch* of *Commentary No. 945*, incorporated here by reference. U.S. dollar and related market conditions were updated in the *Opening Comments* and *Hyperinflation Watch* of *Commentary No. 949*, and will be reviewed anew in next week's planned *Commentary No. 955*.

The U.S. dollar and financial markets remain at extraordinarily-high risk of intense, panicked declines, still likely in the very near term. Holding physical gold and silver remain the ultimate hedges—stores of wealth—for preserving the purchasing power of one's U.S. dollar assets, during times of high inflation and currency debasement, and/or political- and financial-system upheaval, Please call (707) 763-5786, if you would like to discuss current circumstances, or otherwise.

Best wishes – John Williams

PENDING ECONOMIC RELEASES: Consumer Price Index—CPI (May 2018). The Bureau of Labor Statistics (BLS) will release its May 2018 CPI, on Tuesday, June 12th, which will be covered in *Commentary No. 955* planned for June 13th. The ShadowStats Alternate CPI detail will be posted on the ShadowStats.com Alternate Detail tab, the morning of June 12th, as usual, shortly after the release of the data. The headline May CPI-U likely will show a monthly gain of about 0.3%, plus-or-minus, in the context of a large monthly gain in unadjusted gasoline prices, offset largely by negative seasonal adjustments. Unadjusted year-to-year annual inflation for May 2018 should come in around 2.8%, enough higher that the 2.5% level seen in April 2018 to begin rattling the bond markets. Any increase in headline inflation here is not due to strong economic activity, though, but rather due to distorted commodity (oil) price increases, driven largely by non-economic factors.

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

Negative seasonal adjustments, however, likely will deflate that monthly gain of 4.0% in May 2018 (what people pay at the pump) to about 0.1% (what is reported in the CPI-U). That still translates into a minimally-positive, gasoline-price contribution of about 0.04% to the headline, seasonally-adjusted monthly CPI-U inflation. Likely boosted further by higher food and "core" (net of food and energy) inflation, the headline monthly CPI-U reading still could come in around 0.3% for May 2018.

Annual Inflation Rate. Noted in *Commentary No. 949*, year-to-year CPI-U inflation can be estimated for May 2018 reporting, dependent on the seasonally-adjusted month-to-month change, versus the adjusted, headline monthly contraction of 0.07% (-0.07%) in the May 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 May 2018, the difference in May's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the unadjusted April 2018 annual inflation rate of 2.46%. With an early guess of an adjusted monthly gain of about 0.3% in May 2018 CPI-U, that would leave unadjusted May 2018 annual CPI-U inflation around 2.8%.

Producer Price Index—PPI (May 2018). The Bureau of Labor Statistics (BLS) will release the May 2018 PPI, Wednesday, June 13th. The headline Final-Demand Producer Price Index (PPI-FD) likely will be positive on the goods side, given less-severe, negative seasonal-adjustment factors in the PPI-related energy costs, than seen in the CPI. Odds favor positive, wholesale inflation on the goods side of the reporting, reflecting a combination of large monthly gains in wholesale gasoline and crude oil prices in May, likely less than fully offset by negative seasonal adjustments in energy-sector inflation.

The dominant services-sector "inflation," often provides a headline counter-move to the hard-inflation estimate on the goods side, where services could be a negative in the current circumstance. Such comes particularly from counterintuitive "inflation" or "deflation," reflecting rising or falling "margins," in turn reflecting falling or rising costs. Guesstimation in that services sector remains highly problematic, as discussed in *Inflation that Is More Theoretical than Real World?* in *Commentary No. 949*, where, again, the services component could offset some of the still-positive pressures in the headline goods inflation.

Per the Department of Energy (DOE), unadjusted crude oil prices and wholesale gasoline prices moved higher in May 2018. Based on the two most-widely-followed crude oil contracts, monthly-average oil prices increased by 5.6% for WTI and 6.7% for Brent. That was accompanied by gains in unadjusted, monthly-average wholesale gasoline prices of 6.8% [NY Harbor] and 6.4% [Gulf Coast]. Where PPI seasonal adjustments for energy are negative in May, petroleum-related unadjusted monthly price gains still should have some positive impact on the month-to-month, seasonally-adjusted Final Demand Goods component of the PPI. Detail will be covered in *Commentary No. 955* planned for June 13th.

Retail Sales—Nominal and Real (May 2018). The Census Bureau will release its "advance" estimate of May 2018 nominal (not-adjusted-for-inflation) Retail Sales on Thursday, June 14th. Given the June 12th release of the May CPI-U, both nominal and real (adjusted for inflation) Retail Sales will be reviewed in *Commentary No. 956* planned for Tuesday, June 19th. In the context of the annual benchmark revisions of May 25th (see *Commentary No. 952*), the first-quarter's real quarterly contraction and tumbling year-to-year real growth survived. Despite what likely will be happy expectations, watch out for a downside surprise in the May detail.

In the context of intensifying consumer liquidity issues and rising inflation (see today's *Opening Comments* and *Consumer Liquidity Watch*), and without sustainable growth in real income or the ability and willingness to take on meaningful new debt to counter same, the liquidity-strapped U.S. consumer remains unable to sustain regular, broad growth in economic activity, including Retail Sales, real or otherwise.

Headline May retail sales are good bet to disappoint on the downside of what likely will be moderately-positive, consensus expectations.

Industrial Production (May 2018). The Federal Reserve Board will publish its estimate of May 2018 Industrial Production on Friday, June 15th, with *ShadowStats* coverage in *Commentary No. 956* of Tuesday, June 19th. The May 2018 detail will be in the context of the generally-downside annual benchmark revisions to the series on March 23rd, as detailed in *Commentary No. 942-B*, and the downside benchmark revisions to New Orders for Durable Goods (see *Commentary No. 950* and *Commentary No. 951*) and downside revisions, of benchmarking magnitudes, to the production series detailed in *No. 950*. While oil production still may push the aggregate series higher in May, manufacturing likely will soften anew, resuming its drag on the broad index. Consensus expectations likely will be for a strong monthly gain, but they also should be sharply disappointed.

New Residential Construction—Building Permits and Housing Starts (May 2018). The Census Bureau and the Department of Housing and Urban Development will release their May 2018 estimate of New Residential Construction, including Housing Starts and Building Permits, on Tuesday, June 19th. The benchmark revisions, in the series overhaul of May 16th, were negligible and showed little improvement in terms of the initial reporting significance (see *Commentary No. 950*). As usual, the reporting here is unstable and irregularly volatile. Results could come in anywhere, irrespective consensus expectations. Smoothed over six months, the series should continue be flat, in relatively low-level, non-recovering stagnation.

The liquidity bind besetting consumers continues to constrain residential real estate activity, as reviewed in the *Consumer Liquidity Watch*. Without sustainable growth in real income, and without the ability or willingness to take on meaningful new debt in order to make up for an income shortfall, the U.S.

consumer remains unable to sustain positive growth in domestic personal consumption, including residential real estate activity and related demand for residential construction. That circumstance—in the last twelve-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity.

LINKS TO PRIOR COMMENTARIES AND SPECIAL REPORTS

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

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

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

Recent Commentaries. *[Listed here are* Commentaries *of the last several months or so, plus recent* Special Commentaries *and others covering a variety of non-monthly issues, including annual benchmark revisions, dating back through the beginning of 2017. Please Note: Complete ShadowStats archives back to 2004 are found at www.ShadowStats.com (left-hand column of home page).]* These regular *Commentaries* usually are published at least weekly and update the general economic and financial-market outlook, as circumstances develop.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

