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

COMMENTARY NUMBER 911

August 2017 Housing Starts and Building Permits, Freight Index

September 19, 2017

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Still Shy by 11.4% (-11.4%) of Recovering Its Pre-Recession Peak, August 2017 Freight Activity Notched Higher Year-to-Year

August 2017 New Residential Construction Continued in Downtrend

Activity Held Shy of Regaining Pre-Recession Highs by 42.6% (-42.6%) for Building Permits, 48.1% (-48.1%) for Housing Starts and 53.3% (-53.3%) for Single-Unit Starts, While Multi-Unit Starts Have Fallen Back Anew by 26.9% (-26.9%)

Nonsense-Volatility in the August Housing Starts Series: Monthly Declines in Total and Multiple-Unit Starts and a Gain in Single-Unit Starts All Were Artefacts of Much Larger, Opposite Revisions to July 2017 Activity

New Residential Construction Should Receive Some Boost in the Months Ahead from Hurricane Destruction and Damage

PLEASE NOTE: The next regular Commentary, Wednesday, September 27th, will cover August New Orders for Durable Goods and New- and Existing-Home Sales, followed by a Commentary on Thursday, September 28th, covering the third-estimate of, second-revision to Second-Quarter 2017 GDP.

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

Today's *Opening Comments and Executive Summary* (**September 19th**). The *Opening Comments* reviews the Cass Freight Index for August 2017, with the *Executive Summary* covering highlights of this morning's release of August 2017 New Residential Construction, specifically covering Housing Starts and Building Permits.

The *Reporting Detail* (page 13) provides a more-detailed analysis of the August New Residential Construction indicators.

The Consumer Liquidity Watch (page 19) is unchanged, fully repeated from its prior version.

The *Week, Month and Year Ahead* (page 29) provides links to recent *Commentaries* and previews the pending releases later this week and next for Existing- and New-Home Sales, New Orders for Durable Goods and the third estimate of Second-Quarter 2017 GDP.

OPENING COMMENTS AND EXECUTIVE SUMMARY

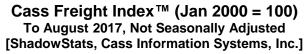
Freight Index Year-to-Year Change Notched Higher, with Annual Activity Still Off Its Pre-Recession High by 14.2% (-14.2%). The Cass Freight IndexTM is an independent, reliable private indicator of real-world economic activity and shifting business patterns. Continued low-level stagnation and non-recovery in the broad economy and general business activity were reflected, once again, in the headline detail of the August 2017 Cass Freight IndexTM, albeit amidst some bounce back in annual growth, as released this morning (September 19th).

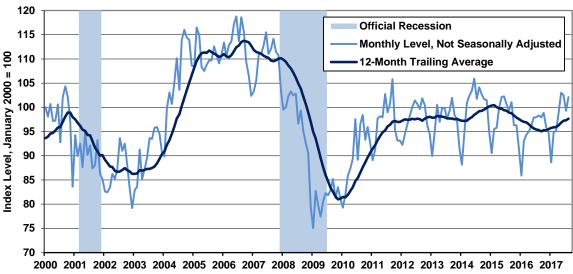
Annual Growth Notched Higher, With the Series Holding in Low-Level Stagnation, Still Shy of Its Pre-Recession Peak by 11.4% (-11.4%). Based on the twelve-month trailing average of the freight index, which is used to eliminate seasonality in the unadjusted series (see the General Background to the Freight Index), activity remained in low-level, albeit minimally-uptrending stagnation, down by 11.4% (-11.4%) from recovering its formal pre-recession high (see Opening Comments Graph OC-1).

For the ninth consecutive month, the tenth month in the last eleven, year-over-year monthly change in the index was positive, but with a notch higher in annual August 2017 growth, following a deeper notch lower in July 2017 (*Opening Comments Graph OC-3*). Annual growth hit a near-term peak of 7.06% in May 2017, falling back to 4.77% in June 2017, slowing to 1.35% in July 2017 and just rebounding to 3.86% in August 2017. A consecutive string of nineteen months of annual contraction in the Freight Index began in March 2015 and was consistent with the "new" recession signal following the Industrial Production peak in November 2014. Headline industrial production showed a string of twenty-one consecutive months of year-to-year contraction beginning April 2015, a pattern never seen outside of formal economic recession in the 99-year history of the Industrial Production series. For comparative growth patterns of freight versus manufacturing and orders, see the *Reporting Detail* sections covering *Production* and *New Orders* respectively in *Commentary No. 910* and *Commentary No. 906*).

Where freight activity also is heavily correlated with Retail Sales activity, it did not confirm the purported headline retail-sales boom reported in July 2017, which just revised away with headline real retail sales reported for August 2017 (also *Commentary No. 910*).

Graph OC-1: CASS Freight Index TM Moving-Average Level (2000 to August 2017)





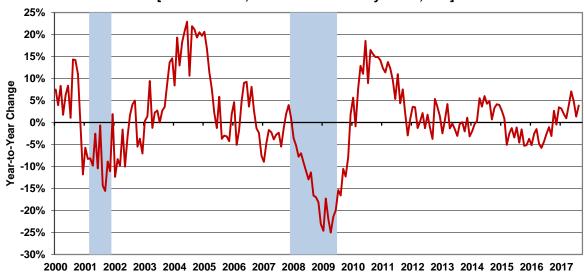
Graph OC-2: Industrial Production - Manufacturing (2000 to August 2017)
(Same as Graph 9, page 14 of Commentary No. 910)

Production - Manufacturing (SIC) (2012 = 100) Level to August 2017, Seasonally-Adjusted [ShadowStats, FRB]



Graph OC-3: CASS Freight Index, Monthly Year-to-Year Percent Change (2000 to August 2017)

Cass Freight Index[™] (Year-to-Year Percent Change) Monthly to August 2017, Not Seasonally Adjusted [ShadowStats, Cass Information Systems, Inc.]



Graph OC-4: Industrial Production - Manufacturing, Year-to-Year Percent Change (2000 to August 2017) (Same as Graph 10, page 14 of Commentary No. 910)

Production - Manufacturing Yr-to-Yr % Change To August 2017, Seasonally-Adjusted [ShadowStats, FRB]



The recent, repeating pattern of year-to-year monthly gains in the Cass Index had excited trucking industry speculation that the recession in freight activity had hit bottom. Nonetheless, the current pattern of year-to-year gains has yet to break out of the non-recovery pattern of the last six years and, again, as shown in *Graph OC-3* annual growth is stagnating.

Discussed in <u>Commentary No. 875</u> and expanded upon in <u>Commentary No. 876</u> on the nature of the business cycle, when economic activity recovers, such happy growth is not clocked formally as new economic expansion, until the series breaks above its pre-recession high.

Specifically, the ShadowStats smoothed headline reading on the Cass Freight Index, through August 2017 (see *Graph OC-1*), remained down by 14.2% (-14.2%) from recovering its preliminary pre-recession peak of September 2006, down by 11.4% (-11.4%) from recovering its formal pre-recession peak of December 2007. While the "Recovery" receives the benefit of growth off low levels of activity, the deficit in activity versus the prior peak has to be overcome before formal, economic "Expansion" begins.

Economic downturns eventually hit bottom, and the current circumstance likely will not be an exception. The economic collapse that formally has been recognized from peak activity in December 2007 to a trough in June 2009 appears to be accurate in terms of timing the trough.

The official contention remains, though, that the headline economy (the real Gross Domestic Product) fully recovered thereafter, entering a period of new and ever-expanding economic growth in second- or third-quarter 2011. ShadowStats contends that the economy never recovered fully, moving instead into a period of protracted, low-level stagnation, which began to turn down anew in December 2014, as reflected in the recent reporting and benchmark revisions to production (*Commentary No. 877*) and durable goods (*Special Commentary No. 888*). This also is seen in *Graph OC-1* in comparison with *Graph OC-2* of Manufacturing Activity through August 2017.

General Background to the Freight Index. [This section largely is repeated from its prior version.]
Beginning with Commentary No. 782 (further information is available there), ShadowStats published the detail on the Cass Index, a measure of North American freight volume as calculated by, and used with the permission of Cass Information Systems, Inc. Freight activity is a basic, underlying indicator of commercial activity and broad GDP. Of the combined U.S. and Canadian (North American) GDP in 2014, roughly 91% was attributable to the United States. The Graph OC-1 reflects the monthly freight numbers updated through August 2017. While adjusted for factors such as days in a month, the headline monthly detail is not adjusted for broad seasonality patterns, such as retailers stocking for the holiday shopping season. Accordingly, ShadowStats plots the series using a trailing twelve-month average, which tends to neutralize regular seasonal patterns over the period of a year, along with the unadjusted monthly detail plotted in the background. ShadowStats also re-indexed the series to January 2000 = 100, to be consistent with other graphs used here. The headline Cass index is based at January 1990 = 100.

The plot of the trailing twelve-month average of the freight index shows that it hit a near-term peak in February 2015, consistent with the onset of a "new recession" in December 2014, and had been slowing since, through September 2016, then flattening out and turning minimally to the upside (*Graph OC-1*).

Another approach to assessing not-seasonally-adjusted monthly detail is to look at year-to-year change by individual month, as plotted in *Graph OC-3*. The unadjusted monthly detail had been in continual year-to-year decline since March of 2015, down at an intensified annual rate of 3.05% (-3.05%) in September 2016. It rallied to an annual gain of 2.66% in October 2016, but fell back into year-to-year contraction of 0.05% (-0.05%) in November 2016, coming back to the plus-side by 3.46% in December 2016, but easing

anew to 3.18% in January 2017, to 1.89% in February 2017 to 0.93% in March 2017, and then turned higher to 3.99% in April 2017 and 7.06% in May 2017, falling back to 4.77% in June 2017, slowing to 1.35% in July 2017 and rebounding to 3.86% in August 2017.

Consider for comparison purposes *Graph OC-4* of the year-to-year change in the dominant Manufacturing sector of Industrial Production. Comparative detail, discussed in <u>Commentary No. 906</u>), where New Orders for Durable Goods tends to lead Manufacturing Sector production activity, which is closely tied to and correlated with freight volume. Once again, with the headline, smoothed freight numbers through August 2017 down by 11.4% (-11.4%) versus its December 2007 pre-recession high, that is the growth deficit that has to be overcome before formal economic "Expansion" begins.

In combination, *Graphs OC-1* and *OC-3* remain consistent with a pattern of collapsing economic and business activity into 2009, low-level stagnation thereafter and a renewed downturn effectively coincident with a "new" recession, which, again, likely will be timed from December 2014, whether or not it has bottomed.

EXECUTIVE SUMMARY: New Residential Construction—August 2017—Despite Nonsense Revisions and Unstable Reporting, Smoothed Activity Continued in Downtrend. Noted here frequently, near-term reporting of the monthly housing starts series is unreliable and often extremely volatile, with frequent, massive, prior-period revisions. Today's (September 19th) headline August 2017 reporting detail for the series was a classic example of such unstable and otherwise meaningless headline month-to-month reporting. Consider that total housing starts declined by 0.8% (-0.8%) in August, with single-unit starts up by 1.6% and with multiple-unit starts (5 units or more) down by 5.8% (-5.8%), with all those changes not-statistically-significant at the 95% confidence interval.

Yet those headline August changes were in the context of an upside revision to last month's initial level (not growth) of headline July activity by 3.0% for total starts, a downside revision of 2.1% (-2.1%) to single-unit starts and an upside revision of 19.5% to multiple-unit starts.

Accordingly, net of prior-period revisions, August 2017 total housing starts gained 2.2% [versus a headline decline of 0.8% (-0.8%)], single-unit starts declined by 0.6% (-0.6%) [versus a headline gain of 1.6%], and multiple-unit starts jumped by 12.5% [versus a headline decline of 5.8% (-5.8%)].

Irrespective of near-term reporting instabilities, the six-month trends in the series remained meaningful, continuing to turn lower.

Building Permits is considered a leading indicator—albeit not a high-quality one—to Housing Starts, and although it is a more-stable series than Housing Starts, it is not reported on an historically-consistent basis. Permits showed a statistically-significant, strong monthly gain of 5.7% in August 2017, which was a gain of 6.3%, net of a 0.6% upside revision to the previously-reported level of July activity. There remains the potential for a near-term boost in activity, here, reflecting recovery repairs, rebuilding and new construction resulting from hurricane damage and destruction in the wake of Hurricanes Harvey and Irma, all in the context of a still heavily-active hurricane season.

Given continued negative trends in home sales activity, however, the headline broad trend in Housing Starts activity should continue otherwise on the downside. August 2017 Existing-Home Sales will be

reported tomorrow, September 20th, with New-Home Sales reported on September 26th. ShadowStats will review both series in the next *Commentary No. 912* of September 27th.

The six-month smoothed trends remain negative, across-the-board for the housing starts series, with a minimal notch higher in an otherwise negative-to-flattened trend in building permits. Monthly activity for the various measures remained shy of regaining their 2005/2006 pre-recession peaks. Building Permits was down by 42.6% (-42.6%), for example as reflected in *Graphs 9* and *11* in of the *Reporting Detail*.

Reflected in accompanying *Graphs 1* to 4, and *Graphs 10* and *12 to 14* in the *Reporting Detail*, August 2017 total housing starts was down 48.1% (-48.1%) from recovering its pre-recession high. Within the housing starts monthly detail, the dominant (72.1% of total starts) single-unit housing starts sector of that series (*Graphs 5* and 6) was down from its January 2006 pre-recession peak by 53.3% (-53.3%).

In contrast the smaller count in the multiple-unit category (two units or more), 25.9% of the total, hit its recent high in June 2015, topping its pre-recession January 2006 peak then by 12.7%. It had dropped back below that 2006 high by 26.9% (-26.9%) as of August 2017.

Reflected in the smoothed graphs of this *Executive Summary*, the various housing-starts series generally are flat or downtrending, at a low level of stagnation (*Graph 4* for the aggregate). That reflected a blend of the low-level, minimally-downtrending stagnation in the six-month-smoothed single-unit activity (*Graph 6*), with the more-volatile, smoothed multiple-unit starts (*Graph 8*), which had regained its pre-recession peak but now has turned lower in an intensifying downtrend.

Housing Starts, Headline Detail. In the context of upside revisions to July and June monthly activity, August 2017 housing starts declined by 0.8% (-0.8%), following a revised, narrowed decline in July of 2.2% (-2.2%) and an upwardly-revised monthly gain of 7.8% in June. Net of the prior-period revisions, August Housing Starts gained in the month by 2.2%, instead of the headline decline of 0.8% (-0.8%). A variety of level-of-activity aggregate detail is plotted in the accompanying *Graphs 1* to 4, and in *Graphs 10*, 12, 13 and 14 at the end of the *Reporting Detail*.

Year-to-year change in the seasonally-adjusted, August 2017 aggregate housing-starts measure was a gain of 1.4%, versus a revised, narrowed decline of 2.7% (-2.7%) in July 2017 and an upwardly-revised annual gain of 2.3% in June 2017.

The August 2017 headline decline of 0.8% (-0.8%) in total Housing Starts encompassed a monthly gain of 1.6% in the "one unit" category and a decline of 5.8% (-5.8%) in the "five units or more" category. There is a missing balance in the "two to four units" category, which declined month-to-month in August by 33.3% (-33.3%). Where that category is considered too small to be meaningful, it did affect the aggregates minimally, discussed in the *Reporting Detail*. Graphs of the different sectors follow in accompanying *Graphs 1* to 8, again, with extended detail and graphs provided in the *Reporting Detail*.

A Note on the Housing Starts Graphs. Headline reporting of Housing Starts activity is expressed by the Census Bureau as an annualized monthly pace of starts, which was 1,180,000 in August 2017, versus an upwardly-revised 1,190,000 [previously 1,115,000] in July 2017. The scaling used in the aggregate housing starts and building permits *Graphs 9* to 14 in the *Reporting Detail* reflects those annualized numbers in millions.

Nonetheless, given the nonsensical monthly volatility in reporting and the exaggerated effect of annualizing the monthly numbers in this unstable series, the magnitude of monthly activity and the changes in same, more realistically are reflected at the non-annualized monthly rate. Consider that the headline, month-to-month gain at an annualized rate of 266,000 in October 2016 was larger than any actual level of (not change in) monthly starts, ever (in units per month, not annualized), for a single month. That is since related starts detail first was published after World War II.

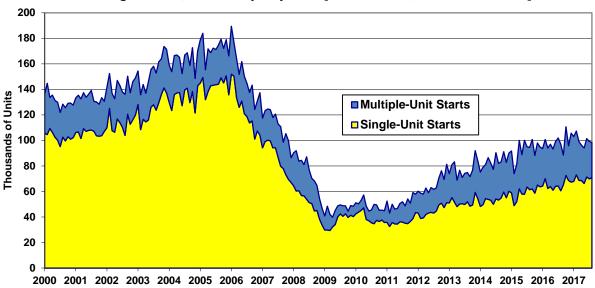
Accordingly, the monthly rate of 98,333 units in August 2017, instead of the annualized headline level of 1,180,000 units, is used in the scaling (monthly units in thousands) of accompanying *Graphs 1* to 8. With the use of either scale of units, though, appearances of the graphs and the relative monthly, quarterly and annual percentage changes are otherwise identical, as seen in a comparison of *Graph 3* versus *Graph 10* in the *Reporting Detail*.

The record monthly low level of activity seen for the present aggregate series was in April 2009, where the annualized monthly pace of housing starts then was down by 79% (-79%) from the January 2006 prerecession peak for the series. Against that downside-spiked low in April 2009, the August 2017 headline monthly number was up by 147%, but it still was down by 48% (-48%) from the January 2006 prerecession high. Shown in the historical perspective of the post-World War II era, current aggregate-starts activity is in relative stagnation, still at low levels that otherwise have been seen at or near the historical troughs of other recession activity of the last 70 years, as reflected in *Graphs 13* and *14* at the end of the *Reporting Detail*. In fact, as can be seen there in *Graph 14*, current housing starts activity not only has failed to recover the current pre-recession (pre-collapse into 2009) peak, but also has yet to recover to the level of any pre-recession peak activity seen in the entire post-World War II era.

[Graphs 1 to 8 begin on the next page.]

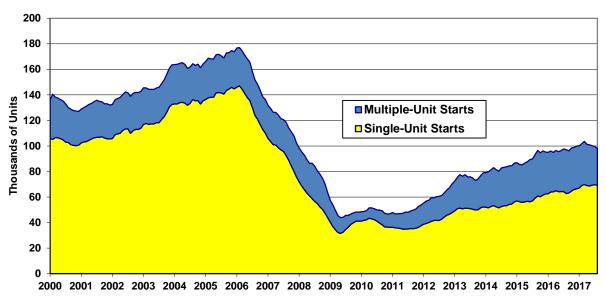
Graph 1: Single- and Multiple-Unit Housing Starts (Monthly Rate of Activity)

Revised Single- and Multiple-Unit Housing Starts (Monthly Rate) To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



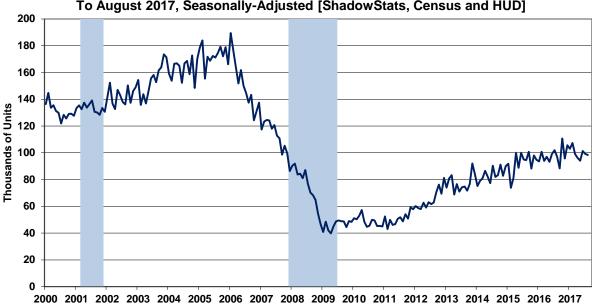
Graph 2: Single- and Multiple-Unit Starts (Six-Month Moving Average, Monthly Rate of Activity)

Revised Single- and Multiple-Unit Starts (6-Month Moving Avg) To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



Graph 3: Aggregate Housing Starts (Monthly Rate of Activity)

Aggregate Housing Starts (Monthly Rate) Single- and Multiple-Unit Starts To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



Graph 4: Aggregate Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)

Aggregate Housing Starts (Six-Month Moving Average) To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



Graph 5: Single-Unit Housing Starts (Monthly Rate of Activity)

Single-Unit Housing Starts (Monthly Rate) To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



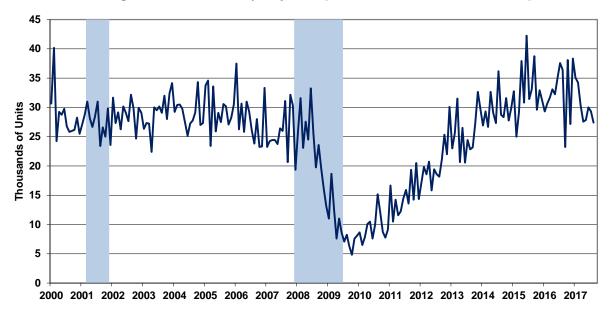
Graph 6: Single-Unit Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)

Single-Unit Housing Starts (Six-Month Moving Average) To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



Graph 7: Multiple-Unit Housing Starts (Monthly Rate of Activity)

Multiple-Unit Housing Starts (Monthly Rate) To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



Graph 8: Multiple-Unit Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)

Multiple-Unit Housing Starts (Six-Month Moving Avg)

To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



[The Reporting Detail follows, with graphs and extended analysis.]

REPORTING DETAIL

NEW RESIDENTIAL CONSTRUCTION (August 2017)

Downtrending Activity Amidst Nonsense Monthly Headlines and Revisions. Headline August 2017 Housing Starts detail was a classic example of regularly unstable and otherwise meaningless headline month-to-month reporting in the context of large prior-period revisions. Where headline aggregate starts declined by 0.8% (-0.8%) in August, single-unit starts gained by 1.6%, with headline multiple-unit starts (5 units or more) falling by 5.8% (-5.8%), none of those changes was statistically-significant. As discussed in the *Executive Summary*, the headline direction of each of those monthly changes resulted from even greater prior-period revisions in the opposite direction of the headline August change.

Irrespective of near-term reporting instabilities, however, the six-month trends in the key series continued in downtrend, as seen in *Graphs 4*, 6 and 8 in the *Executive Summary*, along with the headline level of August 2017 monthly activity holding well below the pre-recession high for each series.

Indeed, the broad pattern of collapsing residential construction activity from its 2006 pre-recession peak, to a trough in 2009, was followed by a protracted period of up-trending but non-recovering, low-level activity. That flattened out in the last year or two in ongoing, low-level stagnation and now has turned lower with the recent detail, as seen in accompanying *Graphs 9* to *14* (also in *Graphs 1* to 8 in the *Executive Summary*), covering all of the Housing Starts series.

Although that pattern of non-recovery also broadly was seen with Building Permits activity, the headline, statistically-significant monthly gain of 5.7% +/- 2.3% seen in August 2017 had the effect of notching the six-month moving average of that series minimally higher (see *Graph 11*).

Plotted with just the seasonally-adjusted monthly data, the pattern of low-level, broadly downtrending stagnation, showed headline August 2017 building permits activity down by 42.6% (-42.6%) from recovering its pre-recession peak activity, with housing starts activity down similarly by 48.1% (-48.1%). Again, as usual, none of the related headline month-to-month in changes within the housing-starts series was statistically significant. Lack of statistical significance remains a common denominator to nearly all the headline the month-to-month changes, and to most of the year-to-year changes as well.

The six-month smoothed trends remain negative, across-the-board for the housing starts, again, with a minimal notch higher in an otherwise negative-to-flattened trend in building permits. Monthly activity for the various measures remained shy of regaining 2005 pre-recession peaks by 42.6% (-42.6%) for Building Permits, by 48.1% (-48.1%) for Housing Starts and by 53.3% (-53.3%) for Single-Unit Starts. At present, Multi-Unit Starts has fallen back, down by 26.9% (-26.9%), having recovered its 2005 pre-recession peak in early-2015.

First- and Second-Quarter 2017 Housing Starts Held in Deepening Quarterly Contraction; Early Third-Quarter Trend Just Turned to Positive. In this highly volatile and unstable series of recent years, the total housing-starts count fell at an annualized quarter-to-quarter pace of 23.7% (-23.7%) in first-

quarter 2015, rose at an annualized 87.7% pace in second-quarter 2015, rose by 1.9% in third-quarter 2015 and then contracted at an annualized pace of 12.0% (-12.0%) in fourth-quarter 2015.

First-quarter 2016 activity showed an annualized quarterly gain of 10.7%, while second-quarter 2016 rose by 1.5%. Third-quarter 2016 activity contracted on both an annual and quarterly basis, down year-to-year by 1.0% (-1.0%), the first annual decline since first-quarter 2014, and down at an annualized quarterly pace of 2.7% (-2.7%). Fourth-quarter 2016 housing starts showed annualized quarterly growth of 39.0%, up by 11.0% year-to-year.

First-quarter 2017 annualized quarterly change was an unrevised contraction of 3.4% (-3.4%), with year-to-year change slowing to 7.3%. Third reporting for second-quarter 2017 showed a revised annualized quarterly contraction of 21.0% (-21.0%) [previously 21.4% (-21.4%), initially 21.9% (-21.9%)], with year-to-year change slowing to 0.8% [previously 0.7%, initially 0.5%].

Based on initial headline reporting for July and August 2017, third-quarter 2017 Housing Starts activity is in an early trend for an annualized quarterly gain of 6.4%, up by 3.1% year-to-year. Based just initial July detail, the initial third-quarter trend had been for an annualized quarterly contraction of 3.5% (-3.5%), up by 0.5% year-to-year.

In comparison/contrast, Building Permits, the theoretically-leading series to Housing Starts, showed an annualized quarterly contraction of 2.8% (-2.8%) in first-quarter 2017, with year-to-year change of 7.9%. The second estimate of second-quarter 2017 showed an annualized contraction of 11.0% (-11.0%), with year-to-year growth slowing to 3.9%. Based solely on initial headline reporting for July and August 2017 Building Permits, third-quarter 2017 activity is in an early trend for an annualized quarterly gain of 14.2%. That had been for an early-trend contraction of 0.2% (-0.2%), based on initial July reporting.

Consumer Liquidity Problems Continue to Impair Residential Construction Activity. The extreme liquidity bind besetting consumers continues to constrain residential real estate activity, as discussed in the Consumer Liquidity Watch. 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 remains unable to sustain positive growth in domestic personal consumption, including aggregate real estate activity. That circumstance—in the last ten-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity, 73.1% of which is dependent on real personal spending, including residential construction.

August 2017 Housing Starts, Headline Detail. The always-unstable and highly-volatile aggregate Housing Starts series declined month-to-month in August 2017, in the context of an hefty upside revision to July activity and upside revision to June. The Census Bureau and Department of Housing and Urban Development (HUD) reported this morning September 19th, a statistically-insignificant, seasonally-adjusted, headline monthly decline in August 2017 housing starts of 0.8% (-0.8%) +/- 11.2% (all confidence intervals are expressed at the 95% level). That followed a revised decline of 2.2% (-2.2%) [previously down by 4.8% (-4.8%)] in July and a revised monthly gain of 7.8% [previously 7.4%, initially 8.3%] in June. Net of the prior-period revisions, headline August Housing Starts gained in the month by a still-statistically-insignificant 2.2%, instead of the headline decline of 0.8% (-0.8%). Level-of-activity aggregate detail is plotted in *Graphs 1* to 4 of the *Executive Summary*, and in *Graphs 10*, 12, 13 and 14 at the end of this section.

Year-to-year change in the seasonally-adjusted, August 2017 aggregate housing-starts measure was a statistically-insignificant gain of 1.4% +/- 10.4%, versus a revised decline of 2.7% (-2.7%) [previously down by 5.6% (-5.6%)] in July 2017 and a revised annual gain of 2.3% [previously 1.9%, initially 2.1%] in June 2017.

The August 2017 headline decline of 0.8% (-0.8%) in total Housing Starts encompassed a monthly gain of 1.6% in the "one unit" category and a decline of 5.8% (-5.8%) in the "five units or more" category. There is a missing balance in the "two to four units" category, which declined month-to-month in August by 33.3% (-33.3%). Where that category is considered too small to be meaningful, it did affect the aggregates minimally, as discussed later in the broader, aggregate "multiple unit" category. As most commonly is the circumstance, not one of the monthly headline changes was statistically significant.

Housing Starts By-Unit Category. [See Graphs 1 to 8 in the Executive Summary.] Where the irregular housing starts series can show varying patterns, that partially is due to a reporting mix of residential construction products, with the largest physical-count category of one-unit structure housing starts—generally for individual consumption, resulting in new home sales—versus multiple-unit structure starts that generally reflect the building of condominiums, rental and apartment units.

Housing starts for single-unit structures in August 2017 gained month-to-month by a statistically-insignificant 1.6% +/- 10.5%, following a revised July decline of 2.2% (-2.2%) [previously down by 0.5% (-0.5%)], versus a revised monthly gain of 7.8% [previously 8.2%, initially 6.3%] in June. August 2017 single-unit starts showed a statistically-significant annual gain of 17.1% +/- 9.7%, versus a revised gain of 8.5% [previously 10.9%] in July 2017 and a revised annual gain of 11.3% [previously 11.7%, initially 10.3%] in June 2017 (see *Graphs 1*, 2, 5 and 6 in the *Executive Summary*).

Housing starts for apartment buildings, condominiums, etc. (generally 5-units-or-more) in August 2017 declined month-to-month by a statistically-insignificant 5.8% (-5.8%) +/- 31.8%, versus a revised decline of 3.1% (-3.1%) [previously down by 17.1% (-17.1%)] in July and a revised monthly gain of 10.6% [previously up by 8.1%, initially 15.4%] in June. A statistically-insignificant year-to-year decline of 23.1% (-23.1%) +/- 25.2% in August 2017, followed a revised annual decline of 22.6% (-22.6%) [previously down by 35.2% (-35.2%)] in July 2017 and a revised annual decline of 11.9% (-11.9%) [previously down by 13.9% (-13.9%), initially down 10.7% (-10.7%)] in June 2017.

Expanding the multi-unit housing starts category to include 2-to-4-units plus 5-units-or-more usually reflects the bulk of rental- and apartment-unit activity. The Census Bureau does not publish estimates of the 2-to-4-units category, due to statistical significance problems (a general issue for the aggregate series). Nonetheless, the total multi-unit category can be estimated by subtracting the single-unit category from the total category (see *Graphs 1*, *2*, *7* and *8* in the *Executive Summary*).

Accordingly, the statistically-insignificant August 2017 monthly decline of 0.8% (-0.8%) in aggregate starts was composed of a statistically-insignificant gain of 1.6% in one-unit structures and a statistically-insignificant decline of gain of 6.5% (-6.5%) in the multiple-unit structures categories (two-units-or-more, including the five-units-or-more category). In contrast, again, ex-two-units-or-more, the multiple-unit category contracted by 5.8% (-5.8%). Again, these series are graphed in the *Executive Summary*.

[Graphs 9 to 14 begin on the next page. Please see the *Note on the Housing Starts Graphs* on page 7.]

Graph 9: Building Permits (Annualized Monthly Rate of Activity), 2000 to Date

Building Permits for Housing Units (Annual Rate by Month) To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



Graph 10: Housing Starts (Annualized Monthly Rate of Activity), 2000 to Date

Housing Starts (Annual Rate by Month) To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



Graph 11: Building Permits (Six-Month Moving Average), 2000 to Date

Building Permits for Housing Units (Six-Month Moving Average) To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



Graph 12: Housing Starts (Six-Month Moving Average), 2000 to Date

Aggregate Housing Starts (Six-Month Moving Average) To August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



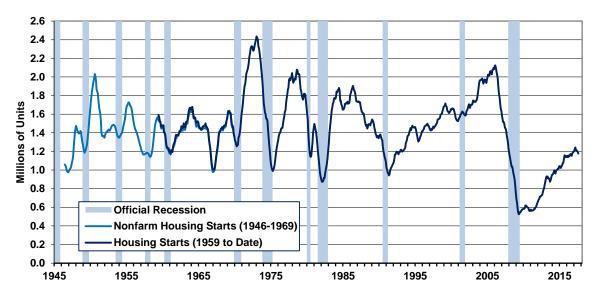
Graph 13: Housing Starts (Annualized Monthly Rate of Activity), 1946 to Date

Housing Starts (Annual Rate by Month) 1946 to August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



Graph 14: Housing Starts (Annualized Monthly Rate of Activity, 6-Month Moving Avg), 1946 to Date

Housing Starts (Annual Rate by Month, 6-Month Moving Avg) 1946 to August 2017, Seasonally-Adjusted [ShadowStats, Census and HUD]



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

CONSUMER LIQUIDITY WATCH

CONSUMER LIQUIDITY CONDITIONS: INCOME, CREDIT AND RELATIVE OPTIMISM. [The CLW has not been revised from its prior version in Commentary No. 910 of September 15th.]

Liquidity Stresses Continue to Mount Amidst Faltering Optimism. The U.S. consumer faces continuing financial stress, increasingly reflected in the renewed softening of headline economic activity, including Employment conditions, Real Retail Sales, Home Sales and impacted construction series and as reflected ultimately in affected broader-based economic series such as Industrial Production.

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 same pocket-book 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 2002, let alone 2007. Yet, underlying liquidity conditions, economic reality and lack of positive actions out of the government to turn the economy meaningfully, all have continued to remain shy of consumer hopes. Not surprisingly, consumer optimism has begun to falter anew.

Including the various consumer income stresses discussed in <u>Special Commentary No. 888</u>, broad, underlying consumer-liquidity fundamentals simply have not supported, and still do not support a 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 consumer hopes and needs.

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 (73.0% of nominal), second-quarter 2017 U.S. GDP.

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, gimmicked boosts to, and current headline slowing in, that most worthless of economic series, discussed most recently in *Commentary No. 907*.

Consumer Optimism: August Consumer Confidence and Sentiment Measures Had Jumped, but Sentiment Has Pulled in Its "Advance" September Estimate. This detail includes the August 2017 reading of The Conference Board's Consumer-Confidence Index® (Confidence) of August 29th, as well as the September 15th advance-September 2017 reading for the University of Michigan's Consumer Sentiment Index (Sentiment). Reflected in Graphs CLW-1 and CLW-2, both Confidence and Sentiment rose in September 2016 and plunged in October, likely reflecting concerns as to the direction of the presidential race. Post-election, both measures rallied sharply, reflecting a surge in consumer optimism into early 2017. Both series appeared to have topped and pulled back in June, but the July Confidence number rebounded anew, with August continuing to rebound, yet with each rebound being on top of a lesser downside revision to the prior month. Where the July Sentiment number pulled back, the August Sentiment rose anew, with the advance-estimate for September 2017 pulling back once more.

Nonetheless, both the latest Confidence and Sentiment levels have remained off their respective post-election, euphoric peaks of March 2017 (Confidence) and January 2017 (Sentiment).

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*), again, both soared post-election, into early 2017, with Confidence booming into and topping in March and with sentiment booming into and topping in January 2017. The three-month moving averages in both series also had broken to pre-recession highs, with the Confidence hitting levels not seen since before the 2001 recession, yet the still-high moving averages also have begun to falter.

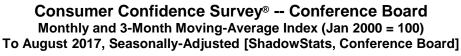
Showing the Consumer Confidence and Consumer Sentiment measures on something of a comparable basis, *Graphs CLW-1* to *CLW-3* reflect both measures re-indexed to January 2000 = 100 for the monthly reading. Standardly reported, the Conference Board's Consumer Confidence Index[®] is set with 1985 = 100,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

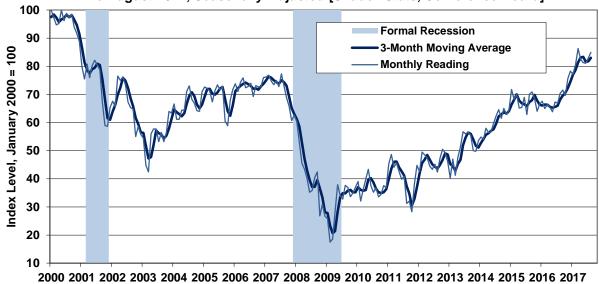
The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in <u>Commentary No. 764</u>), and often are highly volatile month-to-month, as a result. With what should become increasingly-negative, unstable and uncertain headline financial and economic reporting in the months ahead—beyond the early change-in-government euphoria—continued, successive negative hits to both the confidence and sentiment readings remain increasingly likely in the near future.

Smoothed for irregular, short-term volatility, the two series still generally had held at levels seen typically in recessions, until the post-2016 election circumstance. Suggested in *Graph CLW-3*—plotted for the last 47 years—the latest readings of Confidence and Sentiment recently have recovered levels seen in periods of normal, positive economic activity of the last four decades, with their six-month moving averages at levels last seen going into the 2001 recession, although they appear to be topping out.

Broadly, though, the harder, financial consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth as suggested by headline GDP growth in 2014, for second-and third-quarter 2015 and for third-quarter 2016. Beyond having happy feelings about the future, consumers still need actual income, cash-in-hand or credit in order to increase their spending.

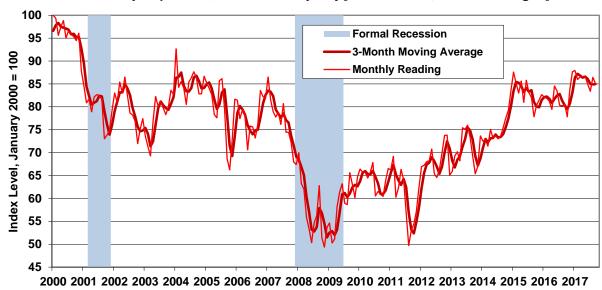
Graph CLW-1: Consumer Confidence (2000 to 2017)



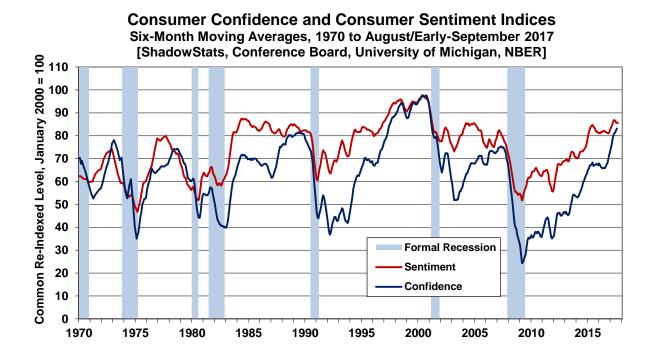


Graph CLW-2: Consumer Sentiment (2000 to 2017)

Consumer Sentiment Index -- University of Michigan Monthly and 3-Month Moving-Average Index (Jan 2000 = 100) To Early-Sept. 2017, Not-Seasonally-Adj [ShadowStats, Univ of Michigan]



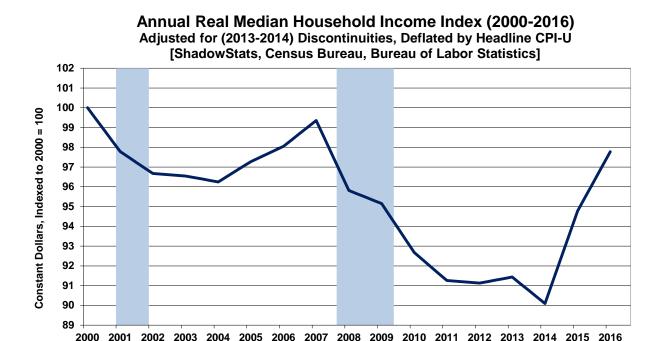
Graph CLW-3: Comparative Confidence and Sentiment (6-Month Moving Averages, 1970 to 2017)



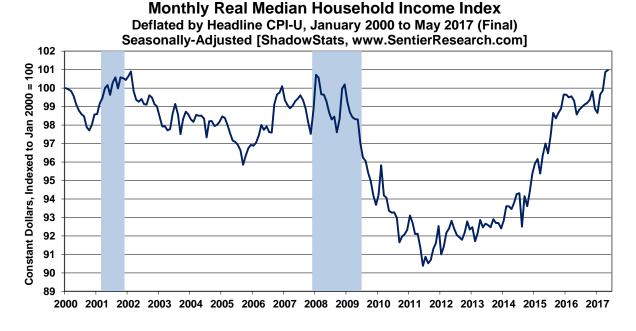
2016 Annual Real Median Household Income Still Was Below Its 2007 Pre-Recession High, Below Activity in the Late-1990s, About Even with the Mid-1970s. The measure of real monthly median household income, which has been provided by www.SentierResearch.com, generally can be considered as a monthly version of the annual detail shown in Graph CLW-4, based on the annual detail recently released by the Census Bureau and as discussed the Opening Comments of commentary No. 909. The 3.16% headline gain in 2016 real annual median household income for 2016 left the level of income not only below that seen at the purported pre-recession peak of 2007, but also below levels seen in the late-1990s, and minimally above activity see in the mid-1970s (see Graph OC-1 in No. 909). The Sentier details, as far as they go, from January 2000 to May 2017, suggested annual real median income was on track for further increase in 2017, having also indicated the 2015 and 2016 annual increases.

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

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



Graph CLW-5: Monthly Real Median Household Income (2000 to 2017) Index, January 2000 = 100



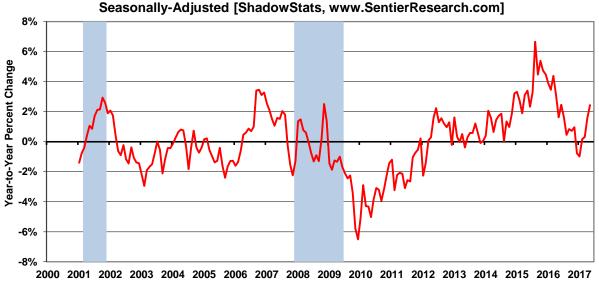
Where real monthly median income plunged into the headline trough of the economic collapse in 2009, it did not then rebound in tandem with the headline GDP activity. When the GDP purportedly started its

solid economic recovery in mid-2009, the monthly household income numbers nonetheless plunged to new lows, hitting bottom in 2011. The income series then held in low-level stagnation, until collapsing gasoline prices and the resulting negative CPI-U inflation drove a post-2014 uptrend in the inflation-adjusted monthly income index. The index approached pre-recession levels in the December 2015 reporting, but it remained minimally below the pre-recession highs for both the formal 2007 and 2001 recessions until recent months. Real median household income had the potential to resume turning down anew, as the headline pace of monthly consumer inflation picked up anew, with the August 2017 CPI.

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

Monthly Real Median Household Income Yr/Yr Change

Deflated by Headline CPI-U, January 2001 to May 2017



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

Differences in the Monthly versus Annual Median Household Income. The general pattern of relative monthly historical weakness has been seen in the headline reporting of the annual Census Bureau numbers, again, shown in *Graph CLW-4*, with 2014 real annual median household income having hit a ten-year low, and, again, with the historically-consistent 2015 and 2016 annual number still holding below the 2007 pre-recession high. The Sentier numbers had suggested a small increase in 2014 versus 2013 levels, low-inflation induced real increases in 2015 and 2016. Allowing for the direction difference in 2014, and continual redefinitions and gimmicks in the annual series (again, see the *Opening Comments* of *Commentary No. 909*) the monthly and annual series had remained broadly consistent, although based on separate questions within the Consumer Population Series (CPS), as conducted by the Census Bureau.

Where Sentier used monthly questions surveying current annual household income, the headline annual Census Bureau detail is generated by a once-per-year question in the March CPS survey, as to the prior

year's annual household income. The Median Household Income surveying results are broadly consistent with Real Average Weekly Earnings.

Special Note: Accompanying the release of the May 2017 data by Sentier Research was this <u>Notice of Final Report</u>:

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

ShadowStats hopes a circumstance will unfold that enables continued reporting of this extraordinarily valuable and timely indicator of consumer liquidity. Gordon Green and John Coder, the authors of the monthly report, both are former senior officials at the U.S. Census Bureau and have a unique understanding of the underlying monthly data. The Census Bureau publishes a broadly-similar series on an annual basis, but with an extraordinary time lag. The 2016 Census annual detail is due for release and publication in September 2017. Again, see *Commentary No. 833* for the 2015 detail published in 2016.

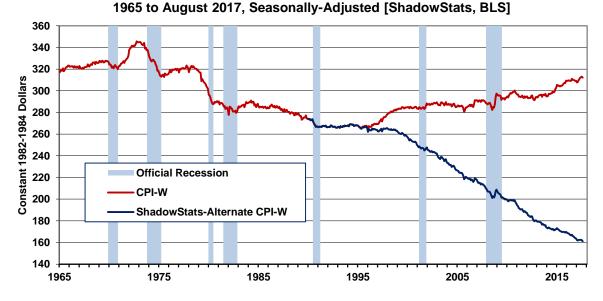
Real Average Weekly Earnings—August 2017—Month-to-Month Real Earnings Declined. For the production and nonsupervisory employees category—the only series for which there is a meaningful history (see the full discussion on page 16 of Commentary No. 909), the regularly-volatile real average weekly earnings fell month-to-month by 0.28% (-0.28%) in August 2017, versus downwardly-revised gains of 0.13% in July and 0.23% in June. Year-to-year, the adjusted August 2017 real change rose to 0.68%, versus a downwardly revised gains of 0.62% in July 2017 and 1.10% in June 2017.

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

Real Average Weekly Earnings (Benchmark Revised)

Production and Nonsupervisory Employees

Deflated by CPI-W versus ShadowStats-Alternate (1990-Base)



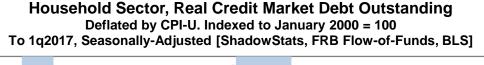
Based solely on volatile initial reporting for July and August 2017, the early-trend for real third-quarter 2017 activity is for an annualized quarterly gain of 1.01%. Second-quarter 2017 activity reflected a revised, annualized real quarter-to-quarter gain of 4.43%, following contractions in first-quarter 2017 of 1.13% (-1.13%), in fourth-quarter 2016 of 1.36% (-1.36%), and third-quarter 2016 growth of 1.48%, a second-quarter 2016 contraction of 0.11% (-0.11%) and first-quarter 2016 annualized growth of 1.81%.

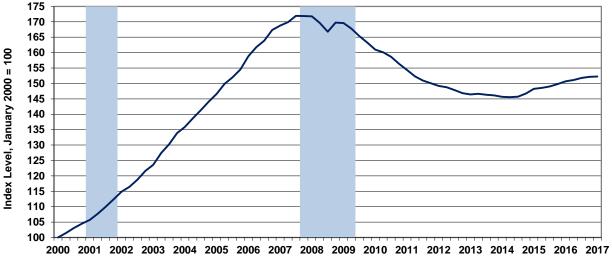
Year-to-year change in third-quarter 2017 was on early track for 0.71%, where second-quarter 2017 real earnings rose by a revised 0.83%, following an annual contraction of 0.29% (-0.29%) in first-quarter 2017, the first annual or year-to-year quarterly contraction since fourth-quarter 2012. The 2015 rally in real annual income and the subsequent slowdown in latter 2016 and pickup in 2017 pickup all were tied and continue to be tied directly to the impact of irregularly-collapsing/rising gasoline prices, with subsequent rebound/decline in inflation-adjusted income.

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

Consumer Credit: Lack of Meaningful Real Consumer Credit Growth Remains an Economic Constraint. The final four graphs on consumer conditions address consumer borrowing. Where debt expansion can help make up for a shortfall in income growth, adequate expansion of consumer debt, which would help fuel growth in personal consumption, has been lacking.

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





Consider *Graph CLW-8* of *Household Sector*, *Real Credit Market Debt Outstanding*. The level of real household debt declined in the period following the Panic of 2008, reflecting loan defaults and reduced banking lending, and it has not recovered fully, based on the Federal Reserve's flow-of-funds accounting through first-quarter 2017. Household Sector, Real Credit Market Debt Outstanding in first-quarter of 2017 still was down by 11.5% (-11.5%) from its pre-recession peak of third-quarter 2007, the same as in fourth-quarter 2016.

The series includes mortgages, automobile and student loans, credit cards, secured and unsecured loans, etc., all deflated by the headline quarterly CPI-U. The level of real debt outstanding has remained stagnant for several years, reflecting, among other issues, lack of normal lending by the banking system into the regular flow of commerce. The slight upturn seen in the series through 2015 and into 2016 was due primarily to gasoline-price-driven, negative CPI inflation, which continued to impact the system through second-quarter 2016. Current activity also has reflected continued relative strength from student loans, as shown in the *Graphs CLW-9* to *CLW-11*.

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

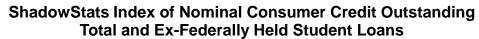
Shown through the July 2017 reporting, *Graph CLW-9* of monthly Consumer Credit Outstanding is a subcomponent of *Graph CLW-8* on real Household Sector debt. Where *Graph CLW-9* reflects the nominal reporting, not adjusted for inflation, inflation-adjusted real activity for monthly Consumer Credit Outstanding is shown in terms of both level (Graph CLW-10) and year-to-year change (*Graph CLW-11*). The August detail includes a downside revision to the last five years of total credit outstanding.

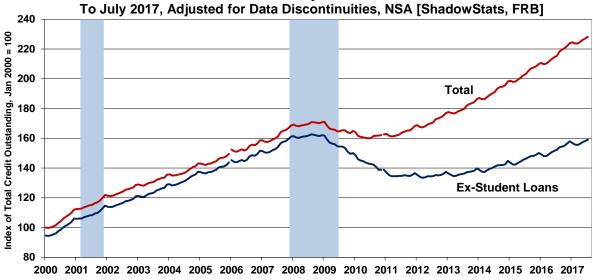
Post-2008 Panic, growth in outstanding consumer credit has continued to be dominated by growth in federally-held student loans, not in bank loans to consumers that otherwise would fuel broad consumption or housing growth. Although in slow uptrend, the nominal level of Consumer Credit Outstanding (exstudent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

Adjusted for inflation, the lack of recovery in the ex-student loan area is more obvious. Although the recent monthly upside move in the not-seasonally-adjusted consumer credit reflected a seasonal pattern, the pace of year-to-year growth continued to slow, suggesting some tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in July 2017 (released September 8th) was down from its December 2007 pre-recession peak by 15.3% (-15.3%) [that previously had been down by 12.3% (-12.3%) in June 2017, before the recent downside revisions to the last five years of activity]. Year-to-year real growth shown in *Graph CLW-11* tends to resolve most of the monthly distortions in the not-seasonally-adjusted data.

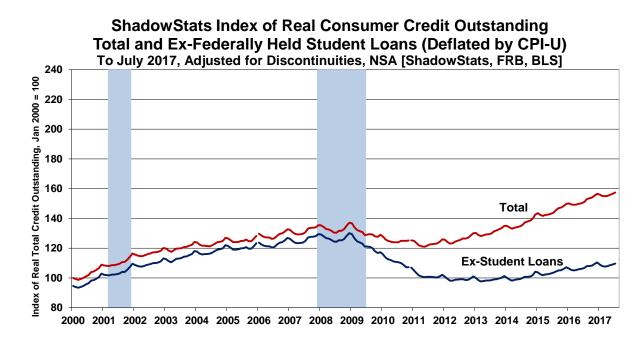
[Graphs CLW-9 to CLW-11 begin on the next page.]

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

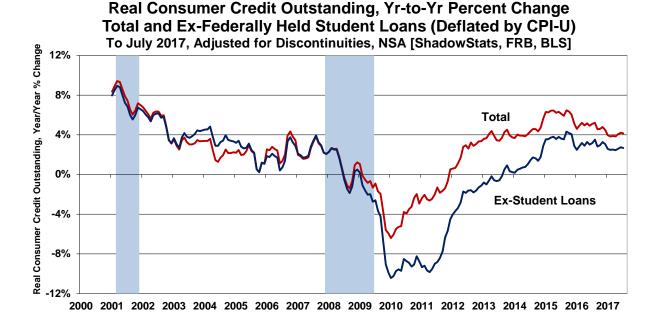




Graph CLW-10: Real Consumer Credit Outstanding (2000 to 2017)



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



WEEK, MONTH AND YEAR AHEAD

Deteriorating Domestic and Global Political Circumstances and Continued Softening of the Economy Increasingly Should Pummel the Dollar, Boost the Price of Gold and Foster Financial-Market Turmoil. The *Hyperinflation Watch* of *Commentary No. 909* speaks for itself. Given the continuing and broadening weakness in the U.S. economy, given the still-uncertain impact of a disastrous hurricane season, given shifting political instabilities in Washington and likely shifting officials on the Federal Reserve's Federal Open Market Committee (FOMC), sharp, near-term rate hikes and aggressive balance-sheet liquidation increasingly are unlikely, in the near-term. Accordingly, selling pressure against the U.S. dollar should intensify, pressuring inflation and the prices of precious metals on the upside. Increasingly, foreign capital should flee the U.S. equity and credit markets at an accelerating pace.

In brief, the economy is getting worse, rapidly. The financial markets are at high risk of panicked declines. Holding physical gold and silver remain the ultimate hedges—stores of wealth—for preserving purchasing power of your assets, in the context liquidity and portability. More will follow in the next

Commentary. The text here otherwise is little changed, other than for the *Pending Releases* section. Please call me at (707) 763-5786 if you would like to discuss current circumstances, or otherwise.

-Best wishes – John Williams

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

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

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

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

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

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

Separately, recent benchmark revisions to Construction Spending (see <u>Commentary No. 897</u>), the Trade Deficit (<u>Commentary No. 890</u>), Industrial Production (<u>Commentary No. 877</u>), Manufacturers' Shipments

(<u>Special Commentary No. 888</u>), Housing Starts (<u>Commentary No. 887</u>) and Retail Sales (<u>Commentary No. 882</u>), and reporting subsequent to the benchmarks, broadly have confirmed that historical activity in recent years has been overstated and/or that it is turning down anew, particularly in 2015, with the availability of better-quality historical detail. Again, that is despite recent near-term improvement in some headline details, such as the headline unemployment rate, which increasingly suffers from dysfunctional definitional and sampling issues, and the latest headline GDP detail.

The reporting patterns of the better-quality, less-gimmicked series likely will continue to weaken with increasing intensity in the weeks and months ahead. Adding a negative uncertainty to unfolding financial-market risks remains potential political surprise, discussed in *Special Commentary No.* 888. Otherwise, the broad outlook has not changed. Reflected in common experience, actual U.S. economic activity generally continues in stagnation or downturn, never having recovered its level of pre-economic-collapse (its pre-2007-recession peak), while the latest GDP reporting shows an otherwise unconfirmed economic expansion of 13.7%.

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

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

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

Coincident with and tied to the economic crash and the Panic of 2008, the U.S. banking system moved to the brink of collapse, a circumstance from which U.S. and global central-bank policies never have recovered. Unwilling to admit its loss of systemic control, the Federal Reserve has made loud noises in the last year or so of needing to raise interest rates, in order to contain an "overheating" economy, but that "overheating" activity—never recognized by Main Street, U.S.A.—has been fading quickly. As this ongoing crisis evolves towards its unhappy end, the U.S. dollar ultimately should face unprecedented debasement with a resulting runaway domestic inflation.

Broad economic and systemic conditions are reviewed regularly, with the following *Commentaries* of particular note: <u>Commentary No. 902-B</u>, <u>General Commentary No. 894</u>, <u>Special Commentary No. 885</u>, <u>Commentary No. 869</u>, <u>No. 859 Special Commentary</u>, <u>No. 777 Year-End Special Commentary</u> (December 2015), <u>No. 742 Special Commentary: A World Increasingly Out of Balance</u> (August 2015) and <u>No. 692 Special Commentary: 2015 - A World Out of Balance</u> (February 2015). Those publications updated hyperinflation and economic outlooks published in <u>2014 Hyperinflation Report—The End Game Begins</u> – First Installment Revised (April 2014) and <u>2014 Hyperinflation Report—Great Economic Tumble</u> – Second Installment (April 2014). The two Hyperinflation installments remain the primary background material for the hyperinflation circumstance. Other references on underlying economic reality are the <u>Public Commentary on Inflation Measurement</u> and the <u>Public Commentary on Unemployment</u> <u>Measurement</u>

Recent Commentaries. [Listed here are Commentaries of the last month, 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).]

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

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

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

<u>Advance Commentary No. 908-A</u> (September 1st) provided summary coverage of the headline reporting on August 2017 Labor and Monetary conditions and July 2017 Construction Spending.

<u>Commentary No. 907</u> (August 30th) reviewed the second estimate of, first revision to Second-Quarter 2017 GDP and initial quarterly reporting of the related GDI and GNP series.

<u>Commentary No. 906</u> (August 25th) covered July 2017 New Orders for Durable Goods and New- and Existing-Home Sales, with further discussion of the unfolding "new" downturn in economic activity.

<u>Commentary No. 905</u> (August 17th) reviewed the headline detail of for July 2017 Industrial Production, Retail Sales (Nominal and Real), New Residential Construction and the Cass Freight Index TM.

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

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

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

<u>Commentary No. 901</u> (July 27, 2017) discussed possible financial-market impact on continuing political discord in Washington, and reviewed the June 2017 Cass Freight Index, New Orders for Durable Goods and New- and Existing Home Sales.

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

<u>Commentary No. 899</u> (July 17, 2017) covered headline June 2017 Retail Sales, Industrial Production, the Consumer Price Index (CPI) and the Producer Price Index (PPI), along with a review of current circumstances affecting the markets, U.S. dollar, gold and silver and the FOMC.

<u>Commentary No. 897</u> (July 6, 2017) reviewed the headline May 2017 Construction Spending and the annual revisions to same, along the May Trade Deficit, and June The Conference Board Help Wanted OnLine[®] Advertising and the May Cass Freight IndexTM.

Commentary No. 896 (June 29, 2017) reviewed the third estimate of first-quarter 2017 GDP.

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

<u>Commentary No. 892</u> (June 15, 2017) reviewed May 2017 Industrial Production and assessed current circumstances and likely pending shifts in FOMC policy, in the context of rapidly-deteriorating, headline economic data.

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

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

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

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

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

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

<u>Commentary No. 876</u> (March 30, 2017) current headline economic activity in the context of formal definitions of the business cycle (no other major series come close to the booming GDP, which is covered

in its third revision to fourth-quarter activity. Also the February 2017 SentierResearch reading on real median household income was highlighted.

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

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

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

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

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

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

Data instabilities—induced partially by the still-evolving economic turmoil of the last eleven years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn provide particularly unstable headline economic results, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). While historical seasonal-factor adjustments are revised every month, based on the latest, headline monthly data, the consistent, revamped historical data are not released or reported at the same time. That issue is discussed and explored in the labor-numbers related <u>Supplemental Commentary No. 784-A</u> and <u>Commentary No. 695</u>.

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

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

PENDING ECONOMIC RELEASES: New- and Existing-Home Sales (August 2017). Reporting of August 2017 Existing-Home Sales is due for release tomorrow, Wednesday, September 20th, from the National Association of Realtors (NAR), followed by release of August 2017 New-Home Sales on Tuesday, September 26th, from the Census Bureau. Both home sales series will be covered in *Commentary No. 912* of September 27th.

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

Where the private housing sector never recovered from the business collapse of 2006 into 2009, there remains no chance of a near-term, sustainable turnaround in home-sales activity, without a fundamental upturn in consumer and banking-liquidity conditions. That does not appear to be in the offing.

Smoothed for regular extreme and nonsensical monthly gyrations, patterns of low-level stagnation should remain in play for both series. Monthly changes in New Home Sales activity rarely are statistically-significant, amidst otherwise unstable headline reporting and revisions.

Minimal negative impact is possible for both series as a result of Hurricane Harvey.

New Orders for Durable Goods (August 2017). The Census Bureau will report August New Orders for Durable Goods on Wednesday, September 27th, to be covered in *Commentary No. 912* of that date. Net of irregular activity in commercial aircraft orders, aggregate orders likely continued a pattern of downtrending real stagnation, with some possible, minimally-negative impact from Hurricane Harvey in August. To the extent that durable goods ranging from automobiles and furniture to business equipment were damaged or destroyed in Hurricanes Harvey and Irma, there should be some related boost to orders activity in September and October.

Where commercial aircraft orders are booked for the long-term—years in advance—they have only limited impact on near-term production. Further, by their nature, these types of orders do not lend themselves to seasonal adjustment. As a result, the durable goods measure that best serves as a leading indicator to broad production—a near-term leading indicator of broad economic activity and the GDP—is the activity in new orders, ex-commercial aircraft, adjusted for inflation.

In inflation-adjusted real terms, reflecting PPI-related inflation for "manufactured durable goods," relative month-to-month and year-to-year order activity will be dampened in August. Monthly inflation for August 2017 was 0.06%, following an "unchanged" 0.00% in July and a gain of 0.06% in June, while year-to-year annual inflation held at 1.56% in August 2017, versus 1.56% in July 2017 and down from 1.69% in June 2017 (see *Commentary No. 909*).

Gross Domestic Product—GDP—(Third Estimate, Second-Quarter 2017). The Bureau of Economic Analysis (BEA) will release its third-estimate of, second-revision to Second-Quarter 2017 GDP on Thursday, September 28th, along with the second estimates of Second-Quarter 2017 Gross Domestic Income (GDI) and Gross National Product (GNP). The latest detail will be covered in *Commentary No.* 913 of that date.

Given, in particular, the recent sharp downside revisions to monthly retail sales (<u>Commentary No. 905</u>), expectations likely will be for a downside revision to last month's upwardly revised, annualized real growth of 3.03%, from the initial "advance" estimate of 2.57% for the second-quarter GDP.

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