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

COMMENTARY NUMBER 901 June New Orders for Durable Goods, New- and Existing-Home Sales, Freight Index

July 27, 2017

Amidst a Faltering Economy, Political Discord Perils the Dollar and Intensifies Risk of Major Market Turmoil

Freight Index Continued in Low-Level Non-Expansion, Down 11.7% (-11.7%) from Its Pre-Recession Peak

June Gain in and May Upside Revisions to New Orders Reflected Surges in the Irregularly-Unstable Monthly Reporting of Commercial Aircraft Orders, Which Were Up by 131.2% in June and Revised Higher by 11.7% in May

6.5% Gain in June New Orders Was Just 0.2%, Net of Commercial Aircraft

Net of Commercial Aircraft and Inflation, Orders Were Down 10.0% (-10.0%) from Their Pre-Recession Peak

Consumer Related: Motor Vehicle Orders and Shipments Declined in June

Decimated Second-Quarter 2017 Home Sales and Related Construction: Quarterly Contractions in New-Home Sales (-12.3%), Existing-Home Sales (-3.7%), Building Permits (-13.0%), Housing Starts (-21.9%), Single-Unit (-7.0%), Multiple-Unit (-47.3%)

> Monthly Existing-Home Sales Declined in June, Small Gain in New-Home Sales Was Unchanged Net of Revisions

June Existing-Home Sales Were Down by 24.1% (-24.1%) and New-Home Sales Were Down by 56.1% (-56.1%) from Pre-Recession Peaks

PLEASE NOTE: An Advance Commentary, scheduled for tomorrow, Friday, July 28th, will provide summary detail and highlights of the initial reporting of Second-Quarter 2017 Gross Domestic Product and accompanying annual benchmark revisions to GDP, Gross Domestic Income (GDI) and Gross National Product (GNP). More-complete coverage will follow over the weekend in a regular Commentary on Monday, July 31st.

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

Today's *Opening Comments and Executive Summary* (July 27th). The *Opening Comments* discusses implications of intensifying political discord in Washington in conjunction with deteriorating economic conditions, along with detail of the June Cass Freight Index. The *Executive Summary* (page 6) highlights headline details of June 2017 New Orders for Durable Goods and June New- and Existing-Home Sales.

The *Reporting Detail* (page 19) provides extended analysis of the June Orders and Home Sales series.

The *Consumer Liquidity Watch* (26) has been updated for the Conference Board's estimate of July Consumer Confidence.

The *Week, Month and Year Ahead* (36) provides links to recent *Commentaries* and updates the outlook for tomorrow's release of Second-Quarter 2017 GDP and annual benchmark revisions.

OPENING COMMENTS AND EXECUTIVE SUMMARY

Political Discord and Mounting Economic Woes Continue to Threaten Major Financial-Market Instabilities. Six months into the Trump Administration, unusually-harsh political discord continues unabated, with no relief in sight in terms of advancing the Administration's agenda on restoring fundamental economic and fiscal stability (see <u>Special Commentary No. 859</u> and <u>Special Commentary No. 888</u>). Despite some happy economic stories hyped by Wall Street, the Fed and the financial media, underlying reality remains a U.S. economy stuck in a period of protracted non-expansion or renewed downturn, as seen in new orders for durable goods and in housing and construction, as discussed here.

Where hopes and expectations for positive economic and fiscal changes with the new Administration appeared to be primary drivers of the post-election surge in surveyed consumer optimism (see the *Consumer Liquidity Watch*), in the exchange-rate value of the U.S. dollar and in the U.S. stock market, all but the headline equity markets have begun to soften, and those markets should follow shortly. Risk remains extraordinarily high for an imminent, sharp downturn/collapse in all those areas (see *General Commentary No. 894*). This circumstance will be reviewed and updated in *Special Commentary No. 904*, scheduled for August 11th.

Freight Index Holding in Low-Level, Albeit Uptrending Stagnation. The <u>Cass Freight Index</u>TM is an independent, reliable private indicator of real-world economic activity and shifting business patterns. Continued low-level stagnation in the general economy and business activity were reflected once again in the headline detail of the June 2017 Cass Freight IndexTM, released July 19th.

June 2017 CASS Freight Index—Annual Growth Held Positive but Fell Back, With the Series Holding in Low-Level Stagnation, Still Shy by 11.7% (-11.7%) of Its Pre-Recession Peak. For the seventh consecutive month, the eighth month in the last nine, year-over-year monthly growth in the index was positive, but annual growth slowed (see Graph 3), The broad pattern of activity remained one of low-level stagnation, albeit somewhat uptrending. A consecutive string of nineteen months of annual contraction in the Freight Index began in March 2015, was consistent with a "new" recession signal following the Industrial Production peak in November 2014. The industrial production series showed a string of twenty-one consecutive monthly annual contractions beginning April 2015, a pattern never seen outside of formal economic recessions in the 99-year history of the Industrial Production series (see Commentary No. 887).

The recent repeating pattern of year-to-year monthly gains in the Cass Index has excited trucking industry speculation that the recession in freight activity has 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, again, as shown in *Graph 3*. Discussed in *Commentary No. 875* and expanded upon in *Commentary No. 876* on the business cycle, when 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 June 2017 (see *Graph 1*), remained down by 14.5% (-14.5%) from recovering its preliminary pre-recession peak of September 2006, down by 11.7% (-11.7%) from recovering its 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 level has to be overcome before formal, economic "Expansion" begins to be tallied.

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 a bottom.

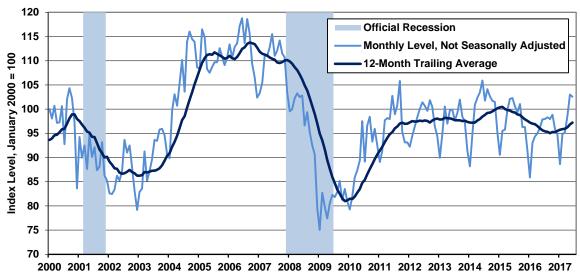
The official contention remains, though, that the headline economy (the real Gross Domestic Product) fully recovered thereafter, entering a period of new and ever-expanding economic growth in second- or third-quarter 2011. ShadowStats contends that the economy never fully recovered, moving instead into 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*), and also as seen in comparative *Graphs 2* and 4.

General Background to the Freight Index. Beginning with <u>Commentary No. 782</u> (further detail 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. *Graph 1* reflects the monthly numbers updated through June 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 has re-indexed the series to January 2000 = 100, to be consistent with other graphs used here. The headline index published by Cass is based at January 1990 = 100.

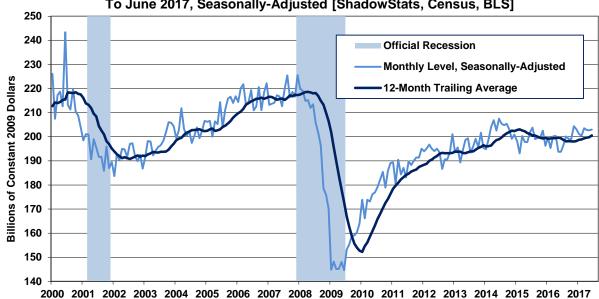
Graph 1: CASS Freight Index ™ Moving-Average Level (2000 to June 2017)

Cass Freight Index[™] (Jan 2000 = 100) To June 2017, Not Seasonally Adjusted [ShadowStats, Cass Information Systems, Inc.]



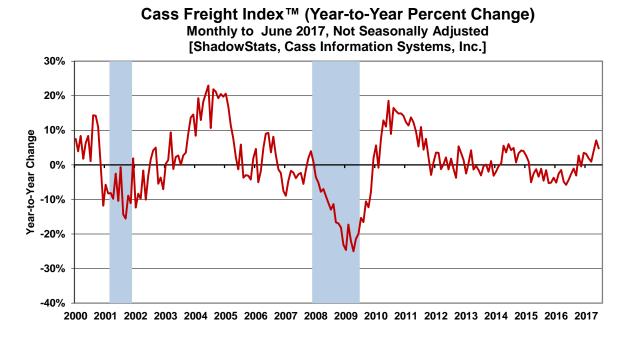
Graph 2: Real Durable Goods, ex-Commercial Aircraft, Moving-Average Level (2000 to June 2017)

Real Durable Goods Orders (Ex-Commercial Aircraft) Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods To June 2017, Seasonally-Adjusted [ShadowStats, Census, BLS]



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 (see *Graph 1*).

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



Graph 4: Real Durable Goods Orders, ex-Commercial Aircraft, Yr-to-Yr Percent Change (2000 to June 2017)

(See also Graphs 7 and 8 in the Executive Summary)





Another approach to assessing not-seasonally-adjusted monthly detail is to look at year-to-year change by individual month, as plotted in *Graph 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.

Once again, with the headline, smoothed reading through June 2017 down by 11.7% (-11.7%) versus its pre-recession high, that is the growth deficit that has to be overcome before formal economic "Expansion" begins.

In combination, *Graphs 1* and *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 Orders for Durable Goods—June 2017—Irregularly-Surging Commercial Aircraft Orders Accounted for June's Gain and the Upside Revision to May Activity. New Orders for Durable Goods rebounded to a month-to-month gain of 6.5% in June, after two prior monthly contractions. Where the monthly contractions in May and April were both before and after consideration of inflation and/or order contributions from commercial aircraft, the June gain in orders was due almost entirely to a 131.2% monthly surge in the irregularly-volatile commercial aircraft orders. Net of those orders, the headline monthly jump of 6.5% in June orders was only 0.2%.

Adjusted for inflation, total new orders for durable goods rose by 6.39% in June 2017, following month-to-month declines of 0.13% (-0.13%) in May and 1.02% (-1.02%) in April. Net of the impact of the highly unstable monthly commercial aircraft orders, real monthly activity gained 0.17% in June 2017, having declined by 0.06% (-0.06%) in May and by 0.37% (-0.37%) in April.

Year-to-year real growth patterns also turned increasingly positive, with aggregate orders up by 14.21% in June 2017, versus 2.05% in May 2017 and a decline of 0.99% (-0.99%) in April 2017. Ex-commercial aircraft, annual real growth was 4.77% in June 2017, versus 4.58% in May 2017 and 1.24% in April 2017. More-extensive coverage of these monthly numbers and revisions to same are found in the *Reporting Detail*, while the related graphs follow here.

Graphs of Inflation-Adjusted and Smoothed Durable Goods Orders. Following *Graphs 5* and 6 show the headline monthly detail, as well as the six-month moving-average activity for both the aggregate new orders series and the series net of the irregularly-volatile commercial-aircraft orders.

The moving-average levels in both series turned lower into year-end 2014, and after an uptick in mid-2015—some smoothed bounce-back—the trend turned down anew into late fourth-quarter 2015, with continued minor fluttering into third-quarter 2016, and initially a small uptick in fourth-quarter 2016 activity continuing on the upside into early-2017, which was much reduced in the benchmarking of May 18th, with subsequent softening headline monthly detail into May 2017 new orders, then boosted by irregularly-surging commercial aircraft orders in June 2017.

Graphs 7 and 8 show the annual year-to-year percent change in the real new orders series, net of commercial aircraft orders, on both monthly and six-month-smoothed moving-average bases, along with a comparative plot of parallel year-to-year headline changes in the manufacturing sector of industrial production.

The level of annual growth for the inflation-adjusted June 2017 new orders for durable goods, excommercial aircraft, moved slightly higher versus May 2017, as did the six-month moving average. That broadly was consistent with the fluttering low level of uptrending, non-recovered stagnation seen in the manufacturing series, with both measures in positive territory.

While that might suggest a near-term bottoming in orders (discussed in <u>General Commentary No. 867</u>), such partially is an artefact of roughly two-percentage-points understatement of the inflation used in deflating the headline durable goods series. Nonetheless, as shown in the graphs, the year-to-year change in the series ex-aircraft orders generally has led the broad pattern of annual growth reflected in the headline level of annual change in the manufacturing sector of industrial production, a series that also suffers inflation-reporting distortions.

Broadly, there has been a general pattern of stagnation or bottom-bouncing evident in the orders of recent years —clearly not the booming recovery seen in official GDP reporting. The real monthly and sixmonth moving-average levels of new orders in June 2017 remained below both the pre-2007 recession high, as well as the pre-2000 recession high for the series. The pattern of low-level stagnation and fluctuating trend in the annual inflation-adjusted series since mid-2014—net of the irregular aircraft-order effects—again is one that most commonly precedes and/or coincides with a recession, as is the current circumstance. The series remains in non-recovered, non-expanding, low-level stagnation.

[Graphs 5 to 8 begin on the next page.]

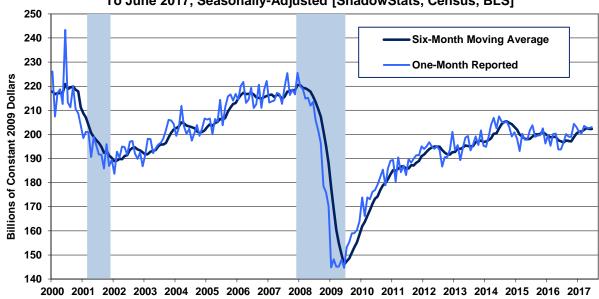
Graph 5: Real Total New Orders for Durable Goods to Date

Real New Orders for Durable Goods Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods To June 2017, Seasonally-Adjusted [ShadowStats, Census, BLS]



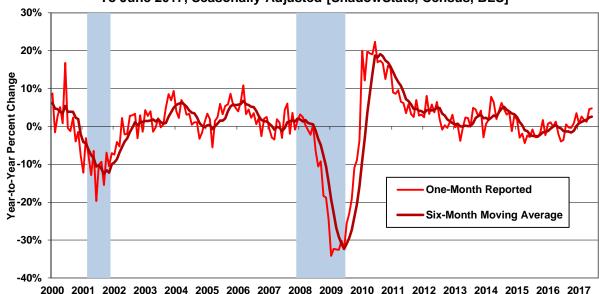
Graph 6: Real New Orders for Durable Goods - Ex-Commercial-Aircraft Orders to Date

Real New Orders for Durable Goods (Ex-Commercial Aircraft) Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods To June 2017, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 7: Year-to-Year Percent Change, Real New Orders for Durable Goods — Ex-Commercial Aircraft to Date
(See also Graphs 3 and 4 in the Opening Comments)

Real New Orders for Durable Goods (Ex-Commercial Aircraft) Year-to-Year Percent Change, Deflated by PPI Durable Manufactured Goods To June 2017, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 8: Industrial Production - Manufacturing, Year-to-Year Percent Change Since 2000 (Graph 27 on page 31 of Commentary No. 899)

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



The Real New Orders Series "Corrected" for Inflation Understatement. As with other economic series deflated by official government inflation measures, headline estimates of inflation-adjusted growth in new orders for durable goods generally are overstated, due to the understatement of official inflation. That understatement comes from the government's use of hedonic-quality adjustments—quality issues usually not perceived by the users or consumers of the involved products—in justifying a reduced pace of headline inflation used in deflating some series (see <u>Public Commentary on Inflation Measurement</u>).

As done for other series such as Industrial Production and Real Retail Sales (see respectively *Graphs 2* and 4 of <u>Commentary No. 899</u>) and GDP (see <u>Commentary No. 896</u>), ShadowStats publishes an experimental, corrected-inflation version of the graph of real New Orders for Durable Goods. Real activity, in this case, is corrected for the understatement of the inflation used in deflating the new orders series with the headline PPI inflation for manufactured durable goods (see the *Reporting Detail*).

Two sets of graphs follow. The first set (*Graph 9* and *Graph 10*) shows the aggregate series or total durable goods orders; the second set (*Graph 11* and *Graph 12*) shows the ex-commercial aircraft series. The aggregate orders series in *Graphs 9* and *10* includes the monthly commercial aircraft orders. Placed years in advance, aircraft orders are a better indicator of long-range production activity, than they are as a near-term leading indicator of production activity. Again, *Graphs 12* and *12* are shown net of those volatile commercial aircraft orders.

The first graph in each of the two sets shows the official six-month moving average, the same heavy dark-blue line shown in $Graph\ 5$ and $Graph\ 6$, along with the light-blue thin line of monthly detail. The second graph in each set is the same six-month, moving-average series shown in the first graph, but it has been re-deflated to correct for the ShadowStats estimate of the understatement of the PPI manufactured durable goods inflation measure used in the headline-deflation process. The "corrected" graphs all are indexed to January 2000 = 100.

Separately, *Graphs 1* to 4 in the *Opening Comments* show the twelve-month moving average of the real series, ex-commercial aircraft side-by-side with parallel activity in the historical Cass Freight IndexTM along with related plots of year-to-year change. Those series show the general economy to be down-trending in recent years, never having recovered fully from the economic collapse into 2009 (see also <u>No. 859 Special Commentary</u>), never entering a post-recession period of economic expansion. Recovering pre-collapse levels of activity remains well into the future, dependent heavily on the Administration and Congress putting some economic stimulus in place.

[Graphs 9 to 14 begin on the next page.]

Graph 9: Index of Real Total New Orders for Durable Goods, 6-Month Moving Average

Total Real New Orders for Durable Goods Six-Month Moving Average, Deflated by PPI Durable Manufactured Goods To June 2017, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 10: Corrected Index of Real Total New Orders for Durable Goods, 6-Month Moving Average

Corrected Total Real New Orders for Durable Goods Six-Month Moving Average, Deflation Corrected for Hedonic Adjustments To June 2017, Seasonally-Adjusted [ShadowStats, Census, BLS]



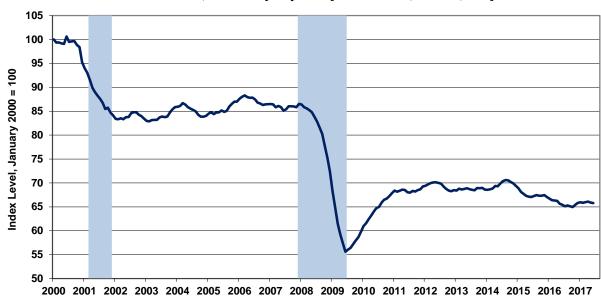
Graph 11: Index of Durable Goods Orders – Ex-Commercial Aircraft, 6-Month Moving Average

Real New Orders for Durable Goods (Ex-Commercial Aircraft)
Six-Month Moving Average, Deflated by PPI Durable Manufactured Goods
To June 2017, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 12: Corrected Index of Durable Goods Orders - Ex-Commercial Aircraft, 6-Month Moving Average

Corrected Real New Orders for Durable Goods (Ex-Commercial Aircraft)
Six-Month Moving Average, Deflation Corrected for Hedonic-Adjustments
To June 2017, Seasonally-Adjusted [ShadowStats, Census, BLS]



NEW- AND EXISTING-HOME SALES (June 2017)

Monthly Sales Were Mixed, but Quarterly Activity Contracted, all in the Context of Continuing Low-Level, Non-Recovering Stagnation. The June 2017 New- and Existing-Home Sales series both remained in "great depression" or "depression" (see *Commentary No. 754*), down respectively by 56.1% (-56.1%) and 24.1% (-24.1%) from their pre-recession peak levels of activity. Although New-Home Sales rose, thanks to negative revisions, and with Existing-Home Sales in monthly contraction, both series showed sharp quarter-to-quarter declines in second-quarter 2017 activity.

Industry Activity Remains Non-Expanding, Non-Recovered and Turning Down Anew. None of the home sales or housing construction series has come close to recovering fully from the economic collapse into 2009, and are turning down anew. Contrary to headline GDP reporting, which stands at 12.5% above its pre-recession high, before tomorrow's benchmark revisions, general housing construction and related residential-real-estate sales broadly have shown patterns of protracted, low-level, non-recovering stagnation, to date. Separate from the respective declines, again, of 56.1% (-56.1%) and 24.1% (-24.1%) in June 2017 New- and Existing-home sales, consider also that versus pre-recession peaks, the headline June 2017 levels of activity were down for Building Permits by 44.6% (-44.6%), for aggregate Housing Starts by 46.5% (-46.5%), as discussed in prior Commentary No. 900. Separately aggregate real Construction Spending in the United States was down by 20.7% (-20.7%) in May 2017 from its pre-recession peak (see Commentary No. 897).

Annualized quarter-to-quarter contractions for second-quarter 2017 in these home sales and related construction series were 12.3% (-12.3%) for New-Home Sales, 3.7% (-3.7%) for Existing-Home Sales, 13.0% (-13.0%) for Building Permits, and 21.9% (-21.9%) for Housing Starts, which was composed of declines of 7.0% (-7.0%) in Single-Unit Starts, and 47.3% (-47.3%) in Multiple-Unit Starts.

Consumer Liquidity Constraints. The extreme liquidity bind besetting consumers continues to constrain residential real estate activity, as discussed the Consumer Liquidity Watch (see also the Consumer Liquidity section of No. 859 Special Commentary). Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including 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.

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.

New-Home Sales—June 2017—In the Context of Downside Revisions, a Monthly Gain Left Second-Quarter Activity in Contraction, with the Smoothed Series Holding 56.1% (-56.1%) Below Its Pre-Recession Peak. Headline monthly reporting of New-Home Sales remained of no substance, short term, as seen most frequently here with massive, unstable and continuously shifting revisions to recent history, along with statistically-insignificant monthly and annual changes that just as easily could be gains or losses. In latest June reporting, the monthly reporting was to the upside, but only in the context of an equivalent downside revision to May. Net of revisions, the monthly change in June 2017 was "unchanged."

ShadowStats assesses such unstable series by considering the gyrations in monthly activity in the context of a six-month moving-average of the headline numbers. With the otherwise meaningless monthly swings in these numbers smoothed out, New-Home Sales activity continued in a broad pattern of low-level—albeit minimally up-trending—stagnation (*Graph 15*), never having recovered its pre-recession high. The ongoing, short-term extreme monthly volatility in the headline monthly detail (see *Graph 13*), reflected June 2017 activity.

Headline New-Home Sales. The headline gain of 0.8% sales (based on contract signings) followed a revised monthly gain of 4.9% in May, a revised monthly decline of 9.5% (-9.5%) in April and a revised monthly gain of 3.7% in March. Net of prior-period revisions, the month-to-month change in June 2017 was "unchanged" at 0.0%, instead of the headline gain of 0.8%, also well shy of being statistically significant.

More reflective of relative monthly revisions, year-to-year June 2017 sales rose by a statistically-insignificant 9.1%, following revised annual gains of 8.0% in May 2017, 1.9% in April 2017 and 19.7% in March 2017. This series is extraordinarily unstable and consistently unreliable on a near-term, month-to-month basis and usually on a long-term basis, as to whether headline sales actually increased or decreased.

New-Home Sales Graphs. Accompanying *Graph 13* plots the headline New-Home Sales monthly detail through June 2017, supplemented by *Graph 15* of the six-month moving average. Added for comparison purposes are parallel graphs of the headline and six-month moving-average versions of June 2017 Housing Starts for single-unit construction, from prior *Commentary No. 899* (*Graphs 14* and *16*), along with comparative graphs of the Existing-Home Sales and related series (see *Graphs 17* to *20*).

Existing-Home Sales—June 2017—Monthly Contraction Confirmed Quarterly Downturn, Activity Still Held in Non-Recovering Stagnation, 24.1% (-24.1%) Shy of Recovering Its Pre-Recession Peak. Based on actual closings of home sales, the National Association of Realtors® reported a seasonally-adjusted, headline monthly decline of 1.78% (-1.78%) in June 2017 Existing Home Sales, following an unrevised gain 1.08% in May and an unrevised decline of 2.46% (-2.46%) in April. Year-to-year growth in June 2017 existing sales slowed to 0.73%, versus annual gains of 2.74% in May 2017 and 1.46% in April 2017.

Going back a year on quarter-to-quarter activity, first-quarter 2016 sales expanded at an annualized 12.6% pace of growth, followed by 9.3% in second-quarter 2016, with an annualized quarterly contraction of 6.9% (-6.9%) in third-quarter 2016 activity and a 13.0% gain in fourth-quarter 2016 activity. Where first-quarter 2017 annualized growth slowed to a unrevised gain of 5.4%, second-quarter 2017 activity turned negative, down at an annualized pace of 3.7% (-3.7%), based on initial full reporting for the quarter.

Existing-Home Sales Graphs. The accompanying Graph 17 plots the traditional headline Existing-Home Sales monthly detail, supplemented by Graph 19 of the six-month moving average of Existing-Home Sales. Accompanying the Existing-Home Sales plots are comparative graphs of June 2017 aggregate Housing Starts activity, from prior Commentary No. 899, where both series reflect activity in terms of single- and multiple-housing units (see Graphs 18 and 20). Graphs 13 to 16 show comparative graphs of New-Home Sales and related series.

Graph 13: New-Homes Sales - Monthly Rate of Activity

New-Home Sales (Monthly Rate) To June 2017, Seasonally-Adjusted [ShadowStats, Census]



Graph 14: Single-Unit Housing Starts, Monthly Rate of Activity

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



Graph 15: New-Homes Sales - Six-Month Moving Average, Monthly Rate of Activity

New-Home Sales (Six-Month Moving Average) To June 2017, Seasonally-Adjusted [ShadowStats, Census]



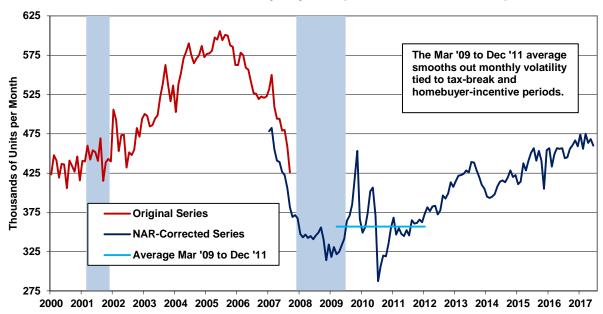
Graph 16: Single-Unit Housing Starts, Six-Month Moving Average, Monthly Rate of Activity

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



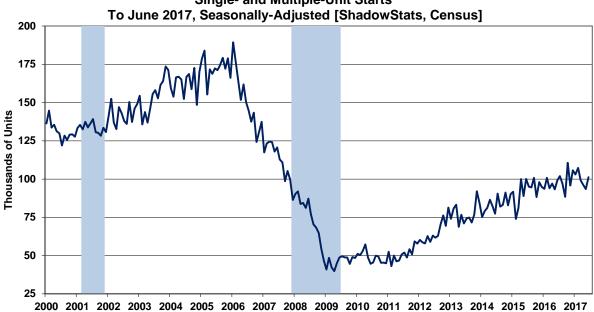
Graph 17: Existing-Home Sales – Monthly Level

Existing-Home Sales (Monthly Rate) Single- and Multiple-Unit Sales, Non-Annualized Monthly Level To June 2017, Seasonally-Adjusted [ShadowStats, NAR, HUD]



Graph 18: Total Housing Starts – Monthly Level

Aggregate Housing Starts (Monthly Rate) Single- and Multiple-Unit Starts



Graph 19: Existing-Home Sales (Six-Month Moving Average)

Existing-Home Sales (Six-Month Moving Average) Single- and Multiple-Unit Sales, Non-Annualized Monthly Rate To June 2017, Seasonally-Adjusted [ShadowStats, NAR, HUD]



Graph 20: Total Housing Starts (Six-Month Moving Average)

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



[Where most of the current graphs are shown in this Executive Summary, extended analysis follows in the Reporting Detail.]

REPORTING DETAIL

NEW ORDERS FOR DURABLE GOODS (June 2017)

Irregularly-Surging Commercial Aircraft Orders Accounted for the Headline Gain in June, and for the Upside Revisions to May New Orders for Durable Goods. After two months of headline contractions, New Orders for Durable Goods rose by 6.5%, boosted by a 131.2% monthly surge in the irregularly-volatile commercial aircraft orders. The narrowed, revised headline decline in May new orders of 0.1% (-0.1%) [previously down by 1.1% (-1.1%)] included an upside revision of 10.7% to commercial aircraft orders in May. Ex-commercial aircraft, new orders rose by 0.2% in June, instead of the headline 6.5%. With negligible related month-to-month related inflation, a component of the Producer Price Index, the real month-to-month changes were the same as the as the nominal changes in May and June at the first decimal point.

Separately, indications consumer demand softened some, with monthly shipments and new orders for motor vehicles turning down in June and May respectively by 0.7% (-0.7%) and 0.6% (-0.6%). They still would have contracted for the month irrespective of upside revisions to May activity.

Nonetheless, with full reporting in hand for second-quarter 2017, annualized real quarterly growth, excommercial aircraft, rose at an annualized quarterly pace of 2.3%, following an annualized pace of decline in first-quarter 2017 activity of 0.9% (-0.9%). That said, the June real new orders for durable goods series was down by 7.6% (-7.6%) versus their pre-recession high, despite the irregularly-surging aircraft orders, while real new orders for durable goods series, ex-commercial aircraft, was down by 10.0% (-10.0%) from its pre-recession peak.

In the context of the May 18th annual benchmark revisions, which lowered the general level of headline activity in recent years (see <u>Special Commentary No. 888</u> and accompanying <u>Graph 21</u>), today's headline detail shows the broad economy in ongoing non-expansion, as has been the case for the manufacturing sector in industrial production (see <u>Commentary No. 899</u>). Real new orders, ex-commercial aircraft, remains the best leading indicator to industrial production (*i.e.*, manufacturing, see <u>Graphs 7</u> and 8 in the <u>Executive Summary</u>) and to the general economy.

Viewed smoothed on a quarterly basis, the third-quarter 2016 annualized real series, ex-aircraft, showed an annualized quarterly gain of 5.46% [down by 1.10% (-1.10%) year-to-year], fourth-quarter 2016 showed an annualized quarterly gain of 7.35% [up by 1.33% year-to-year].

First-quarter 2017 showed a revised, annualized contraction of 0.86% (-0.86%), previously down by 0.70% (-0.70%) [up by a revised 1.69%, previously 1.73%, year-to-year], with second-quarter activity now fully reported up at an annualized 2.26% quarterly pace [up by 3.50% year-to-year].

Smoothed with six-month moving averages, and adjusted for inflation, both of the highly volatile new orders series (total and ex-commercial aircraft) generally have remained in long-term, non-recovering, low-level, downtrending stagnation, which recently had started to show some minimal uptrend but now has started to soften anew. Those patterns have remained consistent in signaling ongoing or non-recovering recession (see *Graphs 9* to *12* in the *Executive Summary*).

Headline Nominal Detail—June 2017. The Census Bureau reported this morning, July 27th, that the regularly-volatile, seasonally-adjusted, nominal level of aggregate new orders for durable goods rose by 6.45% in June 2017, having declined by an upwardly revised 0.13% (-0.13%) [previously down by 1.08% (-1.08%)] in May 2017 a narrowed decline of 0.79% (-0.79%) [previously 0.92% (-0.92%), initially down by 0.67% (-0.67%)] in April.

Year-to-year, June 2017 nominal durable goods rose by 16.13%, against upwardly revised gains of 3.84% [previously 2.71%] in May 2017 and 0.86% [previously 0.72%, initially 0.94%] in April 2017. That headline detail, though, was before consideration of the irregular volatility in commercial-aircraft orders, let alone inflation.

Before and after consideration of commercial-aircraft orders and other monthly irregularities in the headline reporting of new orders, the smoothed trends of broad activity generally continued to be flat, consistent with a downturn that had been holding in a continuing pattern of broad stagnation, albeit somewhat fluttering. The inflation-adjusted real series, and that same series corrected for the understatement of official inflation, are discussed and graphed in the *Executive Summary*.

The corrected series—net of commercial aircraft orders—has remained relatively flat, now somewhat downtrending, in a pattern of low-level stagnation. In parallel with the other plotted series, the corrected series still shows an unfolding economic contraction of a nature that usually precedes or coincides with a recession or deepening business downturn.

Detail Net of Volatility in Commercial-Aircraft Orders. The reporting of extreme contractions and surges in commercial-aircraft orders is seen in an irregularly-repeating process throughout the year, and that often dominates changes in headline monthly durable goods orders. These extremely volatile aircraft orders are booked years into the future and are indicative more of longer-term, rather than shorter-term prospects for manufacturing activity. In June 2017, a monthly surge of 131.24% in aircraft orders boosted the headline aggregate orders gain to a gain of 6.45% from what otherwise would have been a monthly gain of 0.23%, such followed a revised monthly decline of 1.44% (-1.44%) in May aircraft orders, and a revised monthly decline of 12.17% (-12.17%) in April aircraft orders.

Year-to-year and seasonally-adjusted, June 2017 new orders (net of commercial aircraft) rose by 6.53%, having gained 6.41% in May 2017 and 3.14% in April 2017.

Real Durable Goods Orders—June 2017. ShadowStats uses the PPI component inflation measure "Durable Manufactured Goods" for deflating the new orders for durable goods series. Published only on a not-seasonally-adjusted basis, the related June 2017 PPI series showed 0.06% headline month-to-month inflation, having shown no [0.00%] monthly inflation in May and having gained 0.24% in April. Related year-to-year annual inflation was 1.60% in June 2017, versus 1.75% in May 2017 and 1.87% in April 2017 (see <u>Commentary No. 899</u>).

Adjusted for that minimal 0.06% month-to-month inflation reading in June 2017, and as reflected in the graphs in the *Executive Summary* section, real aggregate orders in June 2017 rose by 6.39%, having declined by 0.13% (0.13%) in May 2017 and by 1.02% (-1.02%) in April. Ex-commercial aircraft, real month-to-month orders rose by 0.17% in June 2017, having declined by 0.06% (-0.06%) in May and by 0.37% (-0.37%) in April.

Real total new orders rose year-to-year by 14.21% in June 2017, having gained 2.05% in May 2017 and having declined year-to-year in April 2017 by 0.99% (-0.99%). Ex-commercial aircraft, June 2017 real orders rose year-to-year by 4.77%, having gained 4.58% in May 2017 and 1.24% in April 2017.

Real Quarterly Change, Ex-Commercial Aircraft. Where the inflation-adjusted series, ex-commercial aircraft, is the best leading economic indicator out of these data, following are the annualized real quarterly changes in that series. Beginning at the onset of eventually what should become recognized as a formal recession or renewed downturn, the real ex-commercial aircraft orders series showed annualized quarterly declines of 7.92% (-7.92%) in fourth-quarter 2014 and 7.36% (-7.36%) in first-quarter 2015. Annualized real change was a gain of 3.87% for second-quarter 2015, a gain of 3.46% in third-quarter 2015 and an annualized contraction of 2.59% (-2.59%) in fourth-quarter 2015 activity.

First-quarter 2016 orders showed an annualized real contraction of 2.22% (-2.22%), with the series declining at an annualized real pace of 4.74% (-4.74%) in second-quarter 2016. For third-quarter 2016, the annualized real series, ex-aircraft, showed an annualized quarterly gain of 5.46%, fourth-quarter 2016 activity showed an annualized quarterly gain of 7.35%, followed by a minimally revised first-quarter 2017 annualized contraction of 0.86% (-0.86%), with second-quarter activity up by 2.26%.

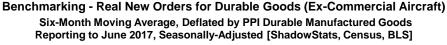
Graphs of Inflation-Adjusted and "Corrected" Smoothed Durable Goods Orders. Three sets of inflation-adjusted graphs (Graphs 5 to 12) are displayed in the Executive Summary. The first set (Graphs 5 to 8) shows the headline monthly detail, as well as the six-month moving-average activity for both the aggregate new orders series and the series net of the irregular commercial-aircraft orders, as well as annual growth for the real series net of commercial aircraft, plus a plot of annual growth in the manufacturing sector, for comparison. The moving-average levels in both series had turned lower into year-end 2014 and the first two quarters of 2015, with some smoothed bounce-back into third-quarter 2015, followed by renewed downturn into 2016 with a late-year uptick continuing into March 2017, which largely revised away with the benchmarking and now has started to notch lower.

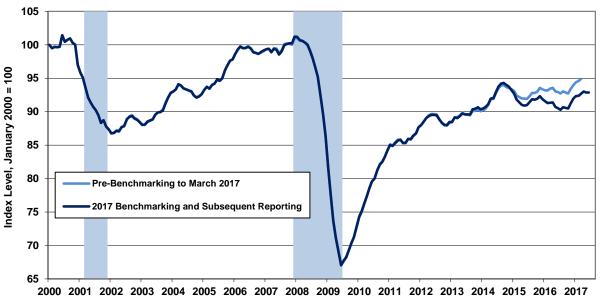
The second set of graphs (*Graphs 9* and *10*) shows the patterns of six-month moving averages of historical, headline real new orders for durable goods, net of official inflation, as well as that pattern "corrected" for understatement of that inflation (and for the corresponding overstatement of official, inflation-adjusted growth). The third set of graphs (*Graphs 11* and *12*) shows the same patterns, but for the aggregate durable goods orders series, net of commercial aircraft orders.

Separately *Graphs 1* to 4 in the *Opening Comments* show the twelve-month moving average of the real series, ex-commercial aircraft side-by-side with parallel activity in the historical Cass Freight IndexTM along with related plots of year-to-year change. Those series show the general economy to be down-trending in recent years, never having recovered fully from the economic collapse into 2009 (see also <u>No. 859 Special Commentary</u>), never entering a post-recession period of economic expansion.

Caution: Non-Comparability of the Regular Headline Month-to-Month Data. As an example of the downside restatement of recent activity, consider accompanying Graph 21. It shows the net revisions to the six-month moving average of real New Orders for Durable Goods, ex-commercial aircraft from the May 18th benchmarking and subsequent reporting through today's headline detail, versus the prebenchmarking detail (for a more substantive review of the recent revisions to historical New Orders for Durable Goods, and the parent Manufacturers' Shipments series, see <u>Special Commentary No. 888</u>).

Graph 21: Benchmark Revisions to Real Total New Orders for Durable Goods, Ex-Commercial Aircraft.





Current durable goods reporting remains subject to many of the same upwardly-biased sampling assumptions and concurrent-seasonal-adjustment problems seen in the pre-revision reporting as well as with retail sales, and payroll and unemployment reporting. Unusual seasonal-factor volatility raises issues as to the significance of reported seasonally-adjusted monthly and annual changes. While those issues were brought into balance, for a period of eight days, with the annual benchmark revision to durable goods orders through March 2017 on May 18, 2017 (again see *No.* 888), that consistency ceased with the May 26th realease of headline April 2107 detail.

For all monthly reporting from the April 2017 detail until the next benchmarking in May 2018, unpublished historical revisions calculated along with current headline month's seasonal adjustments, and with each month to follow, make all historical reporting prior to the current headline month (June 2017) inconsistent with the currently published headline historical numbers.

NEW-HOME SALES (June 2017)

Monthly Sales Gained, Only Due to Prior Revisions; Annual Growth Notched Higher, but Quarterly Activity Contracted, All in the Context of Continuing Low-Level, Non-Recovering Stagnation. The June 2017 New-Home Sales series remained in "great depression" territory (see *Commentary No. 754*), down by 56.1% (-56.1%) from its pre-recession peak level of activity, a condition found commonly in the home sales and housing construction series (see the *Executive Summary*). Although headline sales showed a 0.8% monthly gain (unchanged at 0.0% net of prior-period revisions), second-quarter 2017 activity contracted at an annualized pace of 12.3% (-12.3%).

None of the home sales or housing construction series has come close to recovering fully from the economic collapse into 2009. Consumer liquidity restraints continue to impair industry activity as discussed in the *Executive Summary* and in the *Consumer Liquidity Watch*.

New-Home Sales—Continued Unstable Reporting, with the Smoothed Series Still at 56.1% (-56.1%) Below Its Pre-Recession Peak. Headline monthly reporting of New-Home Sales remained of no substance, short term, as seen most frequently here with massive, unstable and continuously shifting revisions to recent history, along with statistically-insignificant monthly and annual changes that just as easily could be gains or losses. In the latest reporting, the monthly reporting was to the upside, on top of the prior-month's reporting revising higher.

ShadowStats assesses such unstable series by considering the gyrations in monthly activity in the context of a six-month moving-average of the headline numbers. With the otherwise meaningless monthly swings in these numbers smoothed out, New-Home Sales activity continued in a broad pattern of low-level—albeit minimally up-trending—stagnation (*Graph 15*), never having recovered its pre-recession high. The ongoing, short-term extreme monthly volatility in the headline monthly detail (see *Graph 13*), reflected June 2017 activity, again, holding below its never-recovered 2005 pre-recession peak by 56.1% (-56.1%), still deep in "great-depression" territory (see *Commentary No. 754*).

Headline June 2017 New-Home Sales Reporting. Reported by the Census Bureau, July 26th, the June 2017 headline reporting of 610,000 units in annualized sales (a 50.833 monthly rate as used in the accompanying graphs) was up month-to-month by a headline, seasonally-adjusted and statistically-insignificant 0.8% +/- 14.2% (all confidence intervals are at the 95% level). That monthly gain was no more than a reporting mirage, where May 2017, previously was reported at 610,000 units, was revised lower to 605,000 units, which resulted in the headline "gain." Downside revisions were seen consistently in the levels of each of the previous three months.

The headline June gain of 0.8%, followed a revised monthly gain of 4.9% [previously 2.9%] in May, a revised monthly decline of 9.5% (-9.5%) [previously 7.9% (-7.9%), initially down by 11.4% (-11.4%)] in April and a revised monthly gain of 3.7% [previously 4.7%, initially 5.8%] in March. Net of prior-period revisions, the month-to-month change in June 2017 was "unchanged" at 0.0%, instead of the headline gain of 0.8%, which also was well shy of being statistically significant.

More reflective of relative monthly revisions, year-to-year June 2017 sales rose by a statistically-insignificant 9.1% +/- 16.8%. That followed revised annual gains of 8.0% [previously 8.9%] in May 2017, 1.9% [previously 4.8%, initially 0.5%] in April 2017 and 19.7% [previously 20.8%, initially 20.5%] in March 2017. This series is extraordinarily unstable and consistently unreliable on a near-term, month-

to-month basis and usually on a long-term basis, as to whether headline sales actually increased or decreased.

In the arena of continued extreme volatility, the quarterly changes remain meaningless as indicators of stable trends in activity. With initial full reporting, second-quarter 2017 contracted at an annualized pace of 12.3% (-12.3%), following a revised annualized boom of 39.5% [previously 41.4%, initially 38.3%] in first-quarter 2017, an annualized decline of 12.9% (-12.9%) in fourth-quarter 2016, and an annualized gain of 20.1% in third-quarter 2016. Unfortunately for the housing sector, all other areas are reflecting meaningful quarter-to-quarter contraction in the just-ended second-quarter 2017.

New-Home Sales Graphs. Graph 3 in the *Executive Summary* plots the headline New-Home Sales monthly detail through June 2017, supplemented by *Graph 15* of the six-month moving average. Added for comparison purposes are parallel graphs of the headline and six-month moving-average versions of June 2017 Housing Starts for single-unit construction, from prior *Commentary No. 900* (see *Graphs 14* and *16*), along with comparative graphs of the Existing-Home Sales and related series (*Graphs 17* to 20).

EXISTING-HOME SALES (June 2017)

Existing-Home Sales—June 2017—Monthly Decline of 1.8% (-1.8%), Quarterly Contraction of 3.7% (-3.7%), Shy of Recovering Its Pre-Recession Peak by 24.1% (-24.1%). Existing-Home Sales declined by 1.8% in June 2017, against an unrevised monthly gain of 1.1%. That was against a revised, deeper decline of 2.5% (-2.5%) in April. June 2017 year-to-year growth eased to rose to 1.3%, from 2.7% in May 2017.

Recent March 2017 activity has been the highest monthly sales level since February 2007, with the headline June 2017 activity continuing to falter, now down by 24.1% (-24.1%) from its pre-recession peak of the series [March 2017 activity had been down by 21.6% (-21.6%)], both measures still in "depression" territory, as discussed in *Commentary No. 754*). Smoothed with a six-month moving average, Existing-Home Sales activity has held in low-level stagnation, fluctuating at present around a relatively flat downtrend. All that said, the National Association of Realtors (NAR) has touted the aggregate 2016 sales level as the strongest since 2006. Yet the 2016 annual sales rate was down by 15.9% (-15.9%) from 2006 and by 22.8% (-22.8%) from the pre-recession peak annual-average sales rate of 2005.

As previously noted, none of the home sales or housing construction series has come close to recovering fully from the economic collapse into 2009. Consumer liquidity constraints continue to impair industry activity as discussed in the *Executive Summary* and in the *Consumer Liquidity Watch*.

Headline June 2017 Detail for Existing-Home Sales. Based on actual closings of home sales, the National Association of Realtors® reported July 24th a seasonally-adjusted, headline monthly decline of 1.78% (-1.78%) in June 2017 Existing Home Sales, following an unrevised gain 1.08% in May and an unrevised decline of 2.46% (-2.46%) in April. Year-to-year growth in June 2017 May 2017 existing sales slowed to 0.73%, versus annual gains of 2.74% in May 2017 and 1.46% in April 2017.

Going back a two years on quarter-to-quarter activity, first-quarter 2015 Existing-Home Sales showed an annualized quarterly sales decline of 2.6% (-2.6%), with the second-quarter 2015 pace of annualized growth at 19.5%. Third-quarter 2015 growth slowed to an annualized pace of 9.7%, with fourth-quarter 2015 activity contracting at an annualized pace of 14.2% (-14.2%).

First-quarter 2016 sales expanded at an annualized 12.6% pace of growth, followed by 9.3% in second-quarter 2016, with an annualized contraction of 6.9% (-6.9%) in third-quarter 2016 activity and a 13.0% gain in fourth-quarter 2016 activity.

First-quarter 2017 annualized growth slowed to a unrevised gain of 5.4%, with second-quarter 2017 turning negative, down at an annualized pace of 3.7% (-3.7%), based on initial full reporting for the quarter.

The quality of data underlying this series remains questionable, as seen in erratic reporting over the years (*Graph 17*). All that said, smoothed for irregular distortions, the reporting remained statistically consistent with a period of low-level, broad stagnation, moving from slightly up-trending to flat, as indicated in *Graph 19*.

Proportion of Distressed Sales Dropped to 4% in June, While All-Cash Sales Rose to 22%. The NAR estimated the portion of June 2017 sales in "distress" at 4% (3% in foreclosure, 1% short sales), down from 5% (4% foreclosure, 1% short sales) in May, and versus 6% (4% foreclosure, 2% short sales) in June 2016.

The "distressed" portion of June 2017 sales levels matched those seen in September 2016, which then had been the lowest level seen since the NAR began such surveying such numbers in October 2008. Consider, though, that October 2008 already was more than three years into the housing-market collapse.

Reflecting ongoing lending problems and stresses within the financial system, including related banking-industry and consumer-solvency issues, as well as the ongoing influx of speculative investment money into the existing-housing market, the NAR estimated that all-cash sales eased to 18%, versus 22% in May 2017, and versus 22% in June 2016.

Existing-Home Sales Graphs. Graph 17 in the Executive Summary plots the traditional headline Existing-Home Sales monthly detail, supplemented by Graph 19 of the six-month moving average of Existing-Home Sales. Accompanying the Existing-Home Sales plots are comparative graphs of June 2017 aggregate Housing Starts activity, from prior Commentary No. 900, where both series reflect activity in terms of single- and multiple-housing units (see Graphs 18 and 20). Graphs 13 to 16 show comparative graphs of New-Home Sales and related series.

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

CONSUMER LIQUIDITY WATCH

CONSUMER LIQUIDITY CONDITIONS: INCOME, CREDIT AND RELATIVE OPTIMISM.

[Today's Consumer Liquidity section updates The Conference Board's Consumer-Confidence Index[®] for June 2017.]

Liquidity Stresses Mounted Amidst Faltering Optimism. The U.S. consumer faces continuing financial stress, increasingly reflected in the renewed softening of headline economic activity, including Real Retail Sales and New Residential Construction (see today's New- and Existing Home Sales discussion and prior *Commentary No. 899*), along with related, negative impact on the broad economy.

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>, the broad underlying consumer liquidity fundamentals simply have not supported, and still do not support a turnaround in general economic activity 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 73.0% of the headline real, first-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. 896*.

Consumer Optimism: July/Early-July Consumer Confidence and Sentiment Measures Mixed. This detail incorporates July 2017 reporting (updated July 25th) for The Conference Board's Consumer-Confidence Index® (Confidence) reading for July 2017, and reflects the previously discussed early-July 2017 reporting (updated July 14th) for the University of Michigan's Consumer-Sentiment Index (Sentiment), which will be updated in the July 31st Commentary No. 902-B. Reflected in Graphs CL-1 and CL-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 just rebounded anew, albeit on top of a downwardly-revised reading for June. Nonetheless, the confidence/sentiment levels remained off their respective post-election, euphoric peaks of March 2017 (Confidence) and January 2017 (Sentiment).

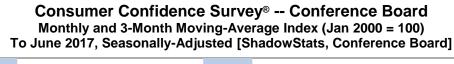
The Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index® (*Graph CL-1*), and the University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph CL-2*), again, both soared post-election, into early 2017, with Confidence booming into and topping in March and with sentiment booming into and topping in January 2017. The three-month moving averages in both series broke to pre-recession highs, with the Confidence hitting levels not seen since before the 2001 recession. The moving averages also have begun to falter, although still at high levels.

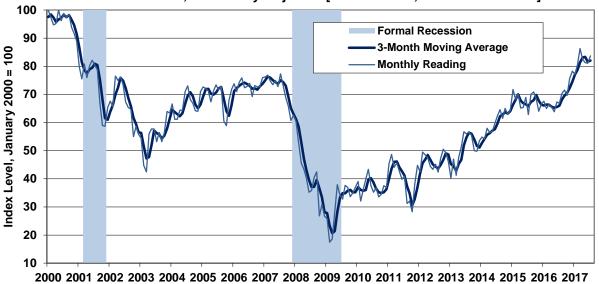
Showing the Consumer Confidence and Consumer Sentiment measures on something of a comparable basis, *Graphs CL-1* to *CL-3* reflect both measures re-indexed to January 2000 = 100 for the monthly reading. Standardly reported, the Conference Board's Consumer Confidence Index® is set with 1985 = 100, while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

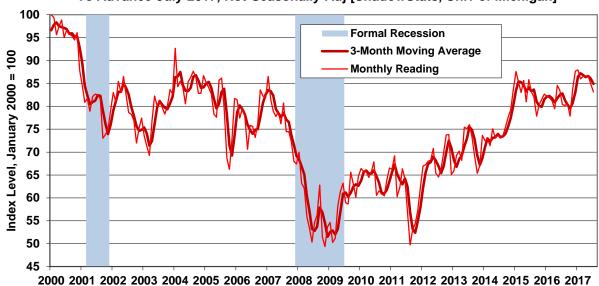
Graph CL-1: Consumer Confidence (2000 to 2017)



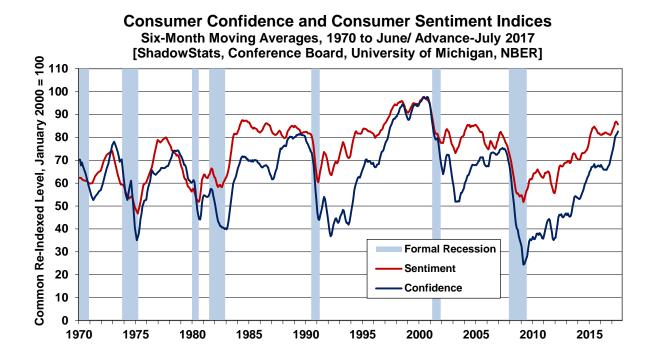


Graph CL-2: Consumer Sentiment (2000 to 2017)

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



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



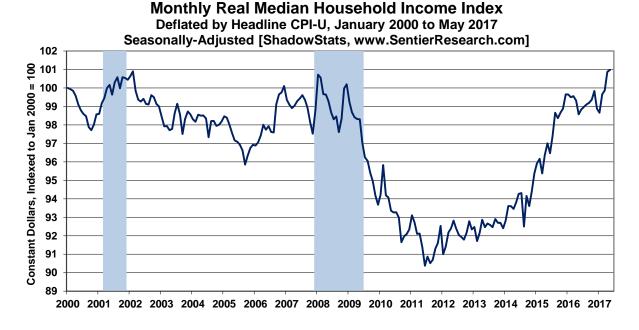
Consumer Income: May 2017 Real Median Household Income Was Statistically Unchanged, Despite a Boost from Falling Gasoline Prices. Previously discussed in General Commentary No. 894, and in the contexts of continued, faltering gains in post-election consumer optimism, and inflation-adjusted activity boosted 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%), as reported by www.SentierResearch.com. That followed a statistically-significant monthly gain of 1.00% in April 2017. As shown in Graph CL-4, such enabled May 2017 real monthly median household income to hold a level regained last month and otherwise last seen fifteen years ago, in February 2002. Year-to-year real median household income rose to 2.44% in May 2017, the highest level since last June, following an annual gain of 1.57% in April 2017 (see Graph CL-5).

Where real 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 should resume turning down anew, as headline pace of monthly consumer inflation picks up anew, perhaps as early as the July CPI.

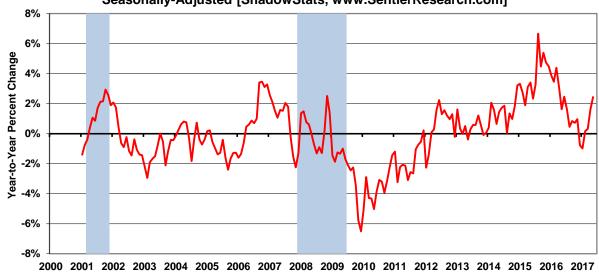
Nonetheless, the recent "rebound" in the series still has left consumers financially strapped. Where lower gasoline prices had provided some minimal liquidity relief to the consumer, indications are that any effective extra cash largely has been used to help pay down unsustainable debt or other obligations, 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.

Graph CL-4: Monthly Real Median Household Income (2000 to 2017) Index, January 2000 = 100



Graph CL-5: 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
Seasonally-Adjusted [ShadowStats, www.SentierResearch.com]

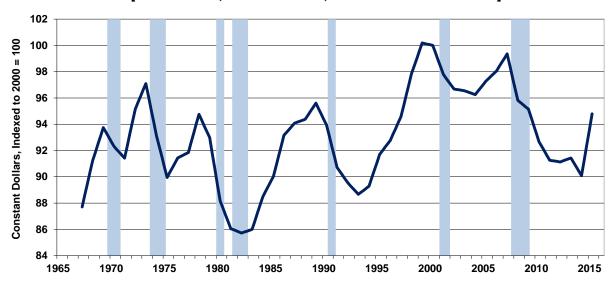


This measure of real monthly median household income generally can be considered as a monthly version of the annual detail shown in *Graph CL-6*, which was updated ten months ago for 2015 detail (see the full analysis of the 2015 annual household income reporting in *Commentary No. 833*, including an analysis of annual detail on income variance or "inequality"). The relative jump seen in the headline annual 2015

median income, despite formal adjustment for discontinuities in the recent annual reporting, was due largely to series redefinitions, not due to a sudden change in consumer liquidity, other than as tied to the collapse in gasoline prices and a related spike in the inflation-adjusted numbers. The level of real annual median household income for 2015, not only was below that seen at the purported trough of the economic collapse into 2009, but also it was below levels seen in the early-1970s and the late 1980s.

Graph CL-6: Annual Real Median U.S. Household Income (1967 to 2015)

Annual Real Median Household Income Index (1967-2015) Adjusted for 2013-2014 Discontinuities, Deflated by the Bureau of Labor Statistics' Headline CPI-U [ShadowStats, Census Bureau, Bureau of Labor Statistics]



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. At present, the Census Bureau publishes a broadly-similar series on an annual basis, but with an extraordinary time lag. The official Census annual version for 2016 is due for release and publication in September 2017. Again, see *Commentary No. 833* for the 2015 detail published in September 2016.

Differences in the Monthly versus Annual Median Household Income. The general pattern of relative historical weakness also has been seen in the headline reporting of the annual Census Bureau numbers, again, shown in preceding *Graph CL-6*, with 2014 real annual median household income having hit a tenyear low, and, again, with the historically-consistent 2015 annual number still holding below that seen when the collapsing economy hit its purported trough in 2009. The Sentier numbers had suggested a small increase in 2014 versus 2013 levels. Still, the monthly and annual series remain broadly consistent, although based on separate questions within the monthly Consumer Population Series (CPS), as conducted by the Census Bureau.

Where Sentier has 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.

Real Average Weekly Earnings—June 2017—Month-to-Month Real Earnings Spiked by Declining Inflation. For the production and nonsupervisory employees category—the only series for which there is a meaningful history (see the full discussion in the *CPI* section of the *Reporting Detail* in <u>Commentary No. 899</u>), spiked monthly by lower inflation in the context of headline, seasonally-adjusted declines in gasoline prices, the regularly-volatile real average weekly earnings were up by 0.53% in June 2017 (as reported by the Bureau of Labor Statistics on July 14th. That was against an unrevised gain of 0.04% in May 2017 and a revised monthly gain of 0.39% in April 2017. Year-to-year, the adjusted June 2017 real change rose to 1.10%, versus revised annual gains of 0.59% in May 2017 and 0.49% in April 2017.

Initial reporting of second-quarter 2017 activity reflected an annualized real quarterly gain of 4.01%, following an unrevised first-quarter 2017 contraction of 1.13% (-1.13%), a fourth-quarter 2016 contraction of 1.36% (-1.36%), 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%.

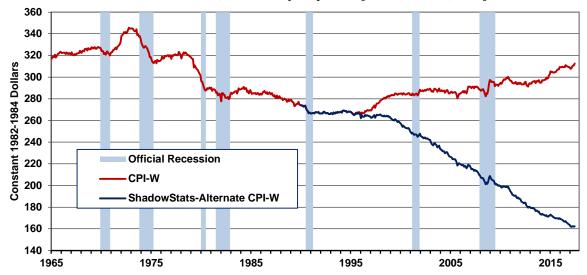
Year-to-year change in second-quarter 2017 real earnings rose by 0.73%, following an unrevised annual contraction of 0.29% (-0.29%) in first-quarter 2017, the first annual or year-to-year quarterly contraction since fourth-quarter 2012, when the real GDP effectively was unchanged quarter-to-quarter. The signal there highlighted financial stresses on the consumer and major downside risk to headline real GDP reporting.

Graph CL-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 CL-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)

1965 to June 2017, Seasonally-Adjusted [ShadowStats, BLS]



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.

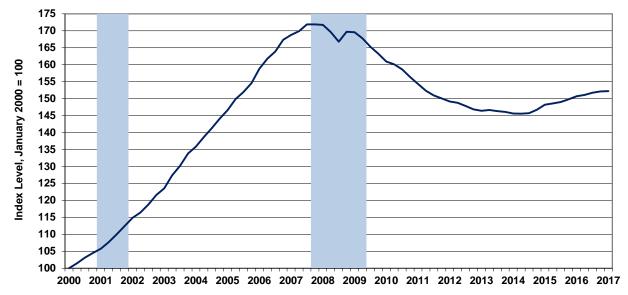
Consider *Graph CL-8* of *Household Sector*, *Real Credit Market Debt Outstanding*. The level of real household debt declined in the period following the Panic of 2008, reflecting loan defaults and reduced banking lending, and it has not recovered fully, based on the Federal Reserve's flow-of-funds accounting 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 CL-9* to *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.

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

Household Sector, Real Credit Market Debt Outstanding Deflated by CPI-U. Indexed to January 2000 = 100 To 1q2017, Seasonally-Adjusted [ShadowStats, FRB Flow-of-Funds, BLS]



Shown through the latest reporting (May 2017), *Graph CL-9* of monthly Consumer Credit Outstanding is a subcomponent of *Graph CL-8* on real Household Sector debt. Where *Graph CL-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 CL-10) and year-to-year change (*Graph CL-11*).

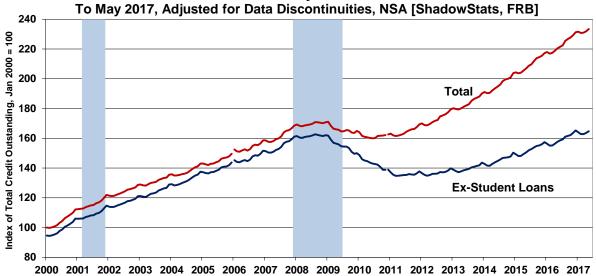
Post-2008 Panic, growth in outstanding consumer credit has continued to be dominated by growth in federally-held student loans, not in bank loans to consumers that otherwise would fuel broad consumption or housing growth. Although in slow uptrend, the nominal level of Consumer Credit Outstanding (exstudent 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 dips in the not-seasonally-adjusted consumer credit reflect a seasonal pattern, the pace of year-to-year growth continues to slow, suggesting some tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in May 2017 was down from its December 2007 pre-recession peak by 15.5% (-15.5%). Year-to-year growth in *Graph CL-11* tends to resolve most of the monthly distortions in the not-seasonally-adjusted data.

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

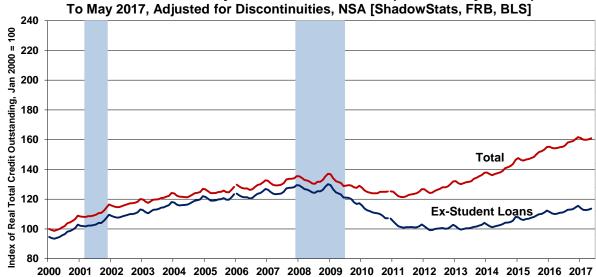
Graph CL-9: Nominal Consumer Credit Outstanding (2000 to 2017)





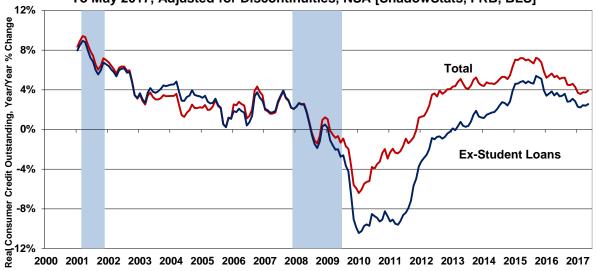
Graph CL-10: Real Consumer Credit Outstanding (2000 to 2017)

ShadowStats Index of Real Consumer Credit Outstanding Total and Ex-Federally Held Student Loans (Deflated by CPI-U) To May 2017, Additional for Biographic Mich. 1014 (ShedowState FBB, BLS)



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





WEEK, MONTH AND YEAR AHEAD

Continued Softening in Headline Economic Reporting Increasingly Should Compromise Fed Policies, Pummel the Dollar, Boost the Price of Gold and Foster Other Financial-Market Tumult. In the context of the mounting political discord discussed in today's *Opening Comments* (see also *Special Commentary No. 888*) odds are mounting rapidly of financial-market turmoil in the near future, particularly as likely will triggered by a heavy sell-off in the U.S. Dollar. This circumstance will be reviewed and updated in *Special Commentary No. 904*, scheduled for August 11th. The balance of the text here is little changed from prior *Commentary No. 900*, other than for the *Pending Release* section.

Discussed the *Hyperinflation Watches* of <u>Commentary No. 899</u> and <u>General Commentary No. 894</u>, and further to the discussions in the <u>Opening Comments</u> and <u>Hyperinflation Watch</u> of <u>Commentary No. 892</u>, headline economic reporting during June showed a marked downturn versus consensus forecasts. Though not as severe as the June shocks, similar patterns have continued to unfold in related reporting in July. While such circumstances usually signal an unfolding, major downshift in underlying economic reality, in

the current circumstance that also forewarns of a potential shift in FOMC activity, a circumstance still well removed from consensus expectations, at this time. In terms of Fed policy, that would be a cessation of incremental rate hikes and a shift back towards expanded quantitative easing.

The immediate effect of such a policy change by the U.S. central bank likely would be 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. Consensus economic forecasts have begun to soften, as has the exchange rate for the U.S. dollar.

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>) 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. Such 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. Again, reporting patterns 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 <u>Special Commentary No. 888</u>. 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 economic expansion of 12.5% (see the *Executive Summary* of *Commentary No.* 896 and *Commentary No.* 869).

Discussed in *No. 859 Special Commentary*, the Trump Administration continues to face extraordinarily difficult times, but 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. 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 <u>No. 859</u>), but cannot happen without the meaningful participation and cooperation of Congress. The financial crisis at hand likely will break 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 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: *General Commentary No. 894*, *Special Commentary No. 885*, *Commentary No. 869*, *No. 859 Special Commentary*, *No. 777 Year-End Special Commentary* (December 2015), *No. 742 Special Commentary: A World Increasingly Out of Balance* (August 2015) and *No. 692 Special Commentary: 2015 - A World Out of Balance* (February 2015). Those publications updated 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 (Covering Headline Details and/or Special Features). [Pease Note: The complete ShadowStats archives, from 2004 forward, are found at www.ShadowStats.com (left-hand column of home page).]

<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. 898</u> (July 7, 2017) covered the headline employment and unemployment detail for June 2017, along with the initial estimate of annual growth in the ShadowStats Ongoing M3 for June.

<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.

Commentary No. 895 (June 26, 2017) covered May 2017 New Orders for Durable Goods.

<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. 893</u> (June 16, 2017) assessed May 2017 New Residential Construction (Housing Starts) and updated <u>Consumer Liquidity Conditions</u>.

<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. 891</u> (June 14, 2017) covered the May 2017 CPI and PPI, along with real and nominal retail sales, along with a quick comment on the FOMC rate hike.

<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>Commentary No. 889</u> (May 26, 2017) reviewed the second-estimate, first-revision to first-quarter 2017 GDP, and the April 2017 estimates of New Orders for Durable Goods and New- and Existing Home Sales and Sentier Research's April Real Median Household income.

<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>Commentary No. 886</u> (May 16, 2017) reviewed the headline details of the April 2017 CPI and PPI detail, along with headline reporting of nominal and real Retail Sales, real Average Weekly Earnings and regular monthly review of U.S. dollar conditions and prospects.

<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. 884</u> (May 4, 2017) reviewed the March 2017 details for the U.S. Trade Deficit and Construction Spending and the Conference Boards' reporting of April 2017 Help Wanted OnLine.

<u>Commentary No. 883</u> (April 29, 2017) covered the headline detail for the "advance" or first-estimate of first-quarter GDP, along with an update to *Consumer Liquidity Conditions*.

<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. 881</u> (April 19, 2017) reviewed the prior March 2017 Industrial Production, Housing Starts and the Cass Freight IndexTM, along with an economic update in advance of the initial first-quarter 2017 GDP estimate.

<u>Commentary No. 880</u> (April 15, 2017) detailed the prior March 2017 headline reporting the of both Real and Nominal Retail Sales, Real Earnings, the CPI, the PPI and updated Consumer Liquidity, where mounting stresses on consumer income and credit are signaling major economic issues ahead.

<u>Commentary No. 879</u> (April 7, 2017) covered March 2007 Employment and Unemployment, Help-Wanted Advertising and an update on monetary policy and Money Supply M3 (the ShadowStats Ongoing Measure).

<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>Commentary No. 873</u> (March 16, 2017) discussed prospects for future tightening and/or a return to quantitative easing by the FOMC, along with the prior review of the February 2017 Residential Construction reporting.

<u>Commentary No. 872</u> (March 15, 2017) offered some initial comment on the FOMC rate hike, in conjunction with the review of last month's February 2017 Retail Sales (real and nominal), Real Earnings and the CPI and PPI.

<u>Commentary No. 871</u> (March 10, 2017) covered reporting of February Labor Conditions, updated Consumer Liquidity and the ShadowStats Ongoing M3 Measure for February 2017, and a revised FOMC outlook.

<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. The GAAP-detail will be reviewed in a *Special Commentary*.

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</u> *No.* 784-A and Commentary No. 695.

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 RELEASE: Gross Domestic Product (GDP)—Second-Quarter 2017, First or "Advance" Estimate, Annual Benchmarking. The Bureau of Economic Analysis (BEA) will publish its "advance" or first guesstimate of second-quarter 2017 Gross Domestic Product (GDP), tomorrow, Friday, July 28th, accompanying, and in the context of, the annual benchmark revisions to GDP series back to 2014. Summary detail will be covered in *Commentary No. 902-A* of that date, with a full *Commentary* covering extended headline GDP and benchmark detail following on Monday, July 31st.

The *Opening Comments* of <u>Commentary No. 900</u>, incorporated here by reference, previewed in some detail, tomorrow's annual GDP benchmark and the "advance" estimate of Second-Quarter 2017 GDP, easily could come in well on the downside of consensus expectations, currently around 2.6% to 2.7%, having softened recently, and which could be moving lower in the context of late, weaker-than-expected housing detail. Annualized real headline second-quarter growth at 1.0% or below still has a fair shot.

Pending Annual Benchmark Revisions. The outlook for the annual benchmark GDP revisions again was previewed <u>Commentary No. 900</u> (see the <u>Opening Comments</u> there). In the context of recent benchmark revisions to related or underlying series, the GDP benchmarking likely will deflate the pace of currently-estimated broad economic growth, particularly in 2014 and 2015 (2014 being the earliest year subject to revisions at this time). The more-significant, next "comprehensive" revision to the GDP series, back to 1929, is planned for next year in July 2018.

GNP and GDI. Gross Domestic Income (GDI), which is the theoretical income-side equivalent to the GDP's consumption side, and Gross National Product (GNP), which encompasses the narrower GDP measure, adding in the effects of trade flows in factor income (interest and dividend payments), will be included in the benchmarking. Yet, initial estimates of second-quarter 2017 GDI and GNP will not be published until August 30th, along with the second estimate of, first revision to second-quarter GDP. That delayed release is standard, due to the lack of significance in available, underlying detail, a problem that also would argue for eliminating or delaying the particularly unreliable "advance" GDP detail.