COMMENTARY NUMBER 826 July Production, Housing Starts, CPI, Real Retail Sales and Earnings, Freight Index

August 17, 2016

Industrial Production Represents 65% of GDP

Production "Recovery" from the 2007 Recession Lasted All of One Month

Against Pre-2007 Recession Highs, Production and Manufacturing Were Down Respectively in July 2016 by 0.77% (-0.77%) and 5.80% (-5.80%)

Still Never Seen Outside of Formal Recessions in the 98-Year History of Industrial Production, Three Consecutive Quarters of Annual Contraction Now Are Expanding into a Fourth Quarter

July Real Retail Sales Were Unchanged Month-to-Month, with Annual Real Growth Weakening Sharply in an Intensifying Recession Signal

Housing Starts Continued to Hold in Smoothed, Low-Level Stagnation, Never Having Recovered Pre-Recession Highs

Second Quarter GDP Growth Should Face Downside Revision

July 2016 Annual Inflation Softened by 0.2% (-0.2%), with CPI-U at 0.8%, CPI-W at 0.5% and ShadowStats at 8.5%

Weakening Economic Circumstances Increasingly Befuddle Fed Activity, Weakening the Dollar and Strengthening Gold, Silver and Oil Prices PLEASE NOTE: The next regular Commentary, scheduled for Thursday, August 25th, will cover July New Orders for Durable Goods and New- and Existing-Home Sales. A subsequent Commentary on Friday, August 26th, will cover the first revision, second estimate of second-quarter 2016 GDP, and initial estimates of second-quarter Gross National Product (GNP) and Gross Domestic Income (GDI).

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

No Economic Recovery Here. Discussed briefly in these opening paragraphs, the better-quality government and private business surveys continue to show an ongoing and deepening economic downturn. The implications of that circumstance were discussed in prior-*Commentary No. 825* and are expanded upon in the today's (August 17th) *Hyperinflation Watch*. Irrespective of huffing and puffing by some in the Federal Reserve community, who are trying to prop the U.S. dollar with no more than jawboning hints of prospective interest-rate increases, the Fed's most likely next move will be to some form of expanded quantitative easing. Rapidly deteriorating economic and systemic-liquidity conditions should drive such action, likely post-election, if the Fed is not forced otherwise by unfolding crises.

Deteriorating domestic economic conditions are evident in a close examination of the reporting of U.S. Industrial Production, and they are confirmed in the most recent detail from the Cass Freight Index.

Reporting Shenanigans at the Fed? In the midst of a volatile U.S. presidential race, and at a time of intense Federal Open Market Committee (FOMC) waffling on the course of U.S. monetary policy, the headline 0.7% monthly gain in July 2016 industrial production was fraught with unusual twists. Keep in mind that the Fed estimates its Industrial Production series to be the equivalent of 65% of Gross Domestic Product (GDP), which popularly, but inaccurately, is touted as the broadest measure of the U.S. Economy.

With unusual vigor, the Fed hyped the July 2016 headline production increase of 0.7% as "largest" monthly production gain in its series since November 2014 (see the *Reporting Detail*). As an aside, the initial reporting of April 2016 production also was a headline gain of 0.7%. There were no accompanying accolades, however, with that release, and that April gain notched lower in two subsequent revisions to a monthly increase of 0.5%.

Worthy of particular consideration, though, is the Fed's comparison of the headline July 2016 gain with the headline jump in November 2014 Industrial Production of 1.0%, where that latter gain was a product of the broad, downside-benchmark revisions to the series in April 2016 (see <u>Commentary No. 796-A</u>). Frankly, the reporting at that time looked like a gimmicked effort to maintain the illusion of a post-2007 economic recovery.

As currently reported, industrial production hit its pre-recession peak in November 2007, plummeting thereafter in the unfolding economic collapse into mid-2009. Coming into the 2015-benchmark revisions to the series, Industrial Production formally had recovered its pre-recession high as of October 2013.

Coming out of that benchmarking, though, the "recovery" had been revised and postponed to March 2014, but with subsequent production still holding above the recovery level.

The 2016 benchmarking moved the recovery to an even later November 2014, with a still fortuitous monthly spike of 1.0%. Yet, that level of November 2014 activity also proved to be the historical peak in production activity. That one-month "recovery" was followed by continual monthly declines (the onset of the likely timing for the new recession), with headline production dropping back below its pre-recession high in March of 2015, followed by further monthly declines.

In the just-published July 2016 detail, headline Industrial Production stood 0.77% (-0.77%) below its formal pre-recession high and was down by 1.66% (-1.66%) from its one-month "recovery" high level of November 2014, with no subsequent positive monthly growth until after it had dropped well below the pre-recession level, and never having another rebound into economic-recovery territory. The dominant manufacturing sector (78.5% of Industrial Production, 51.0% of GDP) never recovered its pre-recession high, at all, and it remained down by 5.80% (-5.80%) from that pre-2007 recession peak, as of July 2016.

July 2016 Freight Index Again Confirmed Deepening Economic Contraction and Non-Recovery. Patterns of non-recovery in the general economy and renewed downturn in business activity were reconfirmed in the headline detail of the July 2016 Cass Freight IndexTM, published August 15th.

Graph 1: CASS Freight Index, Unadjusted Monthly and Trailing 12-Month Average, through July 2016



Beginning with <u>Commentary No. 782</u> (further background available there), ShadowStats published the graphic 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. As background, 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 2: CASS Freight Index, Year-to-Year Percent Change, Monthly through July 2016

The plot in *Graph 1* reflects the monthly numbers updated through July 2016. 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 reindexed the series to January 2000 = 100, so as to be consistent with other graphs used. The headline index published by Cass is based at January 1990 = 100. The patterns here somewhat resemble those in accompanying *Graph 4* of the "corrected" industrial production series, and as seen in the smoothed, corrected real new orders for durable goods, ex-commercial aircraft in <u>Commentary No. 822</u> (*Graph 8*).

In <u>*Commentary No. 824*</u> (see pages 5 to 9 there), a variation on *Graph 1* was compared with various U.S. unemployment and economic measures. Shown in *Graph 1*, the trailing twelve-month average peaked in February 2015 and has been slowing since, with the twelve-month average level through July 2016 down by 5.0% (-5.0%) from that peak, currently down 3.9% (-3.9%) year-to-year from the July 2015 average.

Another approach to assessing not-seasonally-adjusted monthly detail is to look at year-to-year change by individual month, as plotted in *Graph 2*. The unadjusted monthly detail has been in continual year-to-year decline since March of 2015, down by 2.6% (-2.6%) year-to-year as of July 2016, versus an annual drop of 4.3% (-4.3%) in June 2016.

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In combination, *Graphs 1* and 2 are consistent with a pattern of economic collapse into 2009, low-level stagnation thereafter and renewed downturn effectively coincident with a "new" recession, which likely still will be timed from December 2014.

Other Private Indicators Show an Unfolding Downturn. There is no evidence of an economic rebound or recovery in the works, quite to the contrary, based on this independent freight index (as in non-government) and broadly-based indicator of business activity, or on other independent indicators such as S&P 500 revenues (again, see *Commentary No. 824*).

Noted in <u>*Commentary No. 820*</u>, The Conference Board Help Wanted OnLine[®] Advertising through June was generating a signal for an economic downturn. That general pattern of annual growth can be seen continuing in the data available for July 2016 at <u>The Conference Board Help Wanted OnLine</u>.

Today's *Commentary* (August 17th). The balance of these *Opening Comments* provides summary detail of the July Industrial Production, CPI, real Retail Sales and Earnings, and Housing Starts.

Following the revised comments on Fed activity and the U.S. dollar in the opening paragraphs of prior-<u>Commentary No. 825</u>, today's Hyperinflation Watch expands on evolving circumstance and updates the regular gold- and dollar-related graphs that usually accompany the CPI-based Commentaries. The mostrecent Hyperinflation Outlook Summary is found in <u>Commentary No. 783</u>. The various background Commentaries on the ShadowStats outlook will be updated and consolidated into one Special Report, as detailed at the end of the Week and Month Ahead section.

The *Week and Month Ahead* section previews next week's releases of July CPI New Orders for Durable Goods, New- and Existing Home Sales and the first revision to second-quarter 2016 GDP. Details also are provided on the pending *Special Report* and pending updates to <u>www.ShadowStats.com</u>.

Industrial Production—July 2016—Representing 65% of the GDP—Continued in Annual Contraction Patterns Still Unprecedented Outside of Formal Recessions. As described and touted by the Federal Reserve Board in in its July 2016 Industrial Production <u>Press Release</u>:

"Industrial production rose 0.7 percent in July after moving up 0.4 percent in June. The advance in July was the largest for the index since November 2014. Manufacturing output increased 0.5 percent in July for its largest gain since July 2015. The index for utilities rose 2.1 percent as a result of warmer-than-usual weather in July boosting demand for air conditioning. The output of mining moved up 0.7 percent; the index has increased modestly, on net, over the past three months after having fallen about 17 percent between December 2014 and April 2016. At 104.9 percent of its 2012 average, total industrial production in July was 0.5 percent lower than its year-earlier level."

The big issue of the headline July production gain was covered in the opening paragraphs of these *Opening Comments*, but consider some quick observations on the rest of the Fed's headline story. Seeing July 2016 manufacturing in its strongest gain since the year-ago July 2015 number suggests a possible seasonality issue, consistent with a minimal annual gain of 0.2%. Surging utility usage due to unseasonably warm weather in July (also in June) and related air-conditioning usage is a temporary distortion that gets balanced out over the year with seasonal adjustments or revisions to same. The gain in

mining was more of a dead-cat bounce—a flattening out—with annual mining activity in July 2016 down year-to-year by 10.2% (-10.2%) in July 2016, versus an annual decline of 9.8% (-9.8%) in June 2016. These circumstances are addressed later in some detail.

Slight Shifts in Activity to Due Revisions and the Headline Monthly Gain in July. With July 2016 reporting in place, second-quarter 2016 Industrial Production still showed its third consecutive set of quarter-to-quarter and annual quarterly contractions. In the 98-year history of the production series, two-consecutive quarters of declining year-to-year activity never have been seen outside of formal recessions, let alone three or more. The fourth-quarter of consecutive annual decline was indicated by the eleventh consecutive month of year-to-year decline in the monthly series, as of July 2016.

The jump in headline month-to-month July activity, in the context of some small upside revision to the level of second-quarter 2016 activity, also has set an early trend for a quarter-to-quarter gain in third-quarter 2016 production.

An overriding issue that has continued to stymie policies of the Fed is that the U.S. economy never really recovered from the "2007 Recession." The unfolding "new" downturn remains no more than another down-leg in an economic collapse that began to show itself in 2005 and 2006. The headline (not the ShadowStats-corrected) production series, recovered its pre-recession high only in November 2014, and it has been in fairly-consistent monthly decline ever since, falling month-to-month in 14 out of the 20 subsequent months.

Headline Industrial Production—July 2016. In the context of upside revisions to the levels of April and May activity, but with the level of June 2016 activity effectively unchanged, the headline monthly gain in July 2016 Industrial Production was 0.74%. That was against a downwardly-revised 0.42% monthly gain in June, a narrowed monthly contraction in May of 0.16% (-0.16%), and a minimally revised gain of 0.46% in April. Net of prior-period revisions, July 2016 rose by 0.75%, instead of the headline 0.74%.

By major industry group (as shown in *Graphs 23, 25, 30* and *32* in the *Reporting Detail*), the headline July 2016 monthly aggregate production increase of 0.74% [a June 2016 gain of 0.42%] was composed of a monthly July gain of 0.55% [a June gain of 0.27%] in manufacturing activity; a July gain of 0.71% [a June contraction of 0.34% (-0.34%)] in mining activity (including oil and gas production); and a July gain of 2.15% [a June gain of 2.07%] in utilities activity.

Year-to-year change in July 2016 Industrial Production was a decline of 0.53% (-0.53%), the eleventh consecutive monthly year-to-year decline. That is a circumstance unprecedented outside of a formal recession, in the 98-year history of the series. That followed a minimally-revised annual decline of 0.68% (-0.68%) in June 2016, a revised, shallower, revised annual decline in May 2016 of 1.25% (-1.25%), and a minimally-shallower revised annual decline of 1.33% (-1.33%) in April 2016.

Quarterly and Annual Production Contractions. Annual growth in aggregate production held in negative territory for the eleventh straight month, again, down by 0.53% (-0.53%) in July 2016, with an early trend set for an annual contraction of 0.51% (-0.51%) in third-quarter 2016, based solely on that July estimate. Such would be the fourth consecutive quarter of such activity. Two such quarters are unprecedented outside of formal recessions.

Year-to-year growth rates in quarterly production have continued to slow and then decline, ranging from a positive 2.43% in first-quarter 2015, to 0.36% in second-quarter 2015, to 0.12% in third-quarter 2015, to

an annual decline of 1.62% (-1.62%) in fourth-quarter 2015, a revised annual decline of 1.58% (-1.58%) in first-quarter 2016, and a revised annual contraction of 1.09% (-1.09%) in second-quarter 2016.

Going back a year, first-quarter 2015 industrial production contracted at an annualized quarterly pace of 1.85% (-1.85%), followed by a second-quarter 2015 contraction of 2.75% (-2.75%), with a third-quarter 2015 production gain of 1.53%, followed by a fourth-quarter 2015 contraction of 3.33% (-3.33%). The first-quarter 2016 quarterly decline narrowed to 1.69% (-1.69%) in revision, with the second-quarter 2016 quarterly decline narrowing to 0.81% (-0.81%). Based solely on the headline July 2016, third-quarter 2016 activity is on early track for an annualized quarterly gain of 3.92%.

Production Graphs—Corrected and Otherwise—July 2016. The regular graphs of headline production level and annual growth detail are found in the *Reporting Detail* (*Graphs 21* to 24), along with the drill-down graphs of major subcomponents of the production series (*Graphs 25* to 38). The level of headline production showed a topping-out process late in 2014, followed by a deepening downturn into first- and second-quarter 2015. Third-quarter 2015 showed some bounce, but activity in fourth-quarter 2015 and in first- and second-quarter 2016 turned down anew, dropping sharply into negative year-to-year growth and quarter-to-quarter growth, patterns never seen outside of what have become designated as formal recessions. Such faltering patterns of monthly, quarterly and annual decline last were seen in the depths of the economic collapse from 2007 into 2009. Headline reporting for July 2016 took the early stages of third-quarter 2016 production activity into continued year-to-year decline, but with an indication of a quarter-to-quarter gain.

Graphs 3 and 4, which follow in this section, address reporting quality issues tied just to the overstatement of headline growth in the total series that results directly from the Federal Reserve Board using too-low an estimate of inflation in deflating some components of its production estimates into real dollar terms, for inclusion in the Index of Industrial Production. Hedonic quality adjustments to the inflation estimates understate the inflation rates used in deflating those components; thus overstating the resulting inflation-adjusted growth in the headline industrial production series (see <u>Public Comment on</u> <u>Inflation</u> and Chapter 9 of <u>2014 Hyperinflation Report—Great Economic Tumble</u>).

Graph 3 shows official, headline industrial production reporting, but indexed to January 2000 = 100, instead of the Fed's formal index that is set at 2012 = 100. The 2000 indexing simply provides for some consistency in the series of revamped "corrected" graphics including real retail sales (see the following section), new orders for durable goods (see <u>*Commentary No. 822*</u>) and the GDP (see <u>*Commentary No. 823*</u>). It does not affect the appearance of the graph or reported growth rates (as can be seen with a comparison of *Graph 3* to *Graph 23* in the *Reporting Detail* section).

Graph 4 is a recast version of *Graph 3*, corrected for the estimated understatement of the inflation used in deflating certain components of the production index. Estimated hedonic-inflation adjustments have been backed-out of the official industrial-production deflators used for headline reporting.

[Graphs 3 and 4 are found on the following page]

Graph 3: Indexed Headline Level of Industrial Production (Jan 2000 = 100)



Graph 4: Headline ShadowStats-Corrected Level of Industrial Production (Jan 2000 = 100)



This "corrected" *Graph 4* shows some growth in the period subsequent to the official June 2009 trough in production activity, but that upturn has been far shy of the short-lived full recovery and the renewed expansion reported in official GDP estimation (again, see <u>*Commentary No. 823*</u> and <u>*No. 777 Year-End*</u>

<u>Special Commentary</u>). Unlike the headline industrial production data and the headline GDP numbers, corrected production levels never recovered pre-recession highs, although the aggregate production index now has backed off its one-month "recovery" in November 2014, and the manufacturing sector never recovered fully. Instead, the "corrected" series entered a period of protracted low-level, but up-trending, stagnation in 2010, with irregular quarterly contractions seen through 2014, and an irregular uptrend into 2014, a topping-out in late-2014 and generally turning lower through 2015 and into second-quarter 2016.

Where the corrected series has remained well shy of a formal recovery, both the official and corrected series suffered an outright contraction in both first- and second-quarter 2015; that is a pattern of severe economic weakness last seen during the economic collapse. Despite the brief third-quarter 2015 uptick, headline fourth-quarter 2015 and first- and second-quarter 2016 industrial production have continued in annual and quarter-to-quarter contractions, again, a pattern never seen outside of formal recessions.

Consumer Price Index (CPI)—July 2016—Inflation Took a Small Hit with Lower Gasoline Prices, Despite Positive Seasonal Adjustments. The headline July 2016 CPI-U monthly inflation of 0.0% [down by 0.04% (-0.04%) at the second decimal point] largely was as expected. Where negative energy seasonal adjustments in the first half of the calendar year, turned positive in July, the "adjusted" decline in unadjusted gasoline prices was enough still to dominate the "lack" of other inflation in the food and "core" sectors to keep the headline number minimally negative. Moving into August, despite a continued downside movement in unadjusted gasoline prices, the August upside seasonal adjustments should be enough to boost headline monthly CPI-U to a gain.

As discussed in other, recent CPI *Commentaries* (see <u>*Commentary No. 793*</u>), it is the unadjusted, not the seasonally-adjusted detail that tends to match consumer experience most closely, to the extent that these numbers come close to matching actual experience at all. On an unadjusted basis, monthly CPI-U declined by 0.2% (-0.2%) [-0.16% (-0.16%) at two decimal points] in July 2016.

Separately, although official annual CPI-U inflation just has been lowered to about 0.8% in July 2016, versus 1.0% in June 2016, year-to-year inflation is not and has not been quite as soft as indicated, when considered in the context of traditional CPI reporting and common experience. The ShadowStats-Alternate Inflation Measures showed annual inflation in July 2016 of 4.4%, based on 1990 methodologies, and 8.5%, based on 1980 methodologies.

Longer-Range Inflation Outlook. Reviewed in today's Hyperinflation Watch and discussed in the Opening Comments of Commentary No. 825 and No. 777 Year-End Special Commentary, high risk of extreme flight from the U.S. dollar—a massive dollar debasement—continues to threaten an increasingly-rapid upturn in energy and dollar-based commodity inflation, which would drive headline U.S. consumer inflation much higher. That process continues, and it should accelerate in tandem with renewed tumbling in U.S. economic activity, and what should be an increasing realization in the global markets that the U.S. Federal Reserve and other major central banks have no effective idea as to how to boost current economic activity, or to stabilize global banking-system solvency. That circumstance is exacerbated regularly by the Fed's continual bluffing on raising rates. Accordingly, the Fed likely will fall back on its basic mission of propping the U.S. banking system and the funding liquidity of the U.S. Treasury, moving to expanded quantitative easing post-election, not to tighter monetary policy.

CPI-U. The headline, seasonally-adjusted July 2016 CPI-U was down by 0.04% (-0.04%) at the second decimal point. That followed headline monthly increases in both June and May of up by 0.22% at the second decimal point.

Encompassed by the seasonally-adjusted monthly decline of 0.04% (-0.04%) in July 2016 [down by an unadjusted 0.16 (-0.16%) in the headline CPI-U, July food inflation declined minimally by a seasonally-adjusted 0.01% (-0.01%) [up by 0.03% unadjusted], July energy inflation declined by a seasonally-adjusted 1.58% (-1.58%) [down by 2.05% (-2.05%) unadjusted], while the adjusted "core" (ex-food and energy) inflation rate rose by 0.09% [down by 0.02% (-0.02%) unadjusted]. Separately, core CPI-U inflation showed unadjusted year-to-year inflation of 2.20% in July 2016, versus 2.23% in June 2016 and 2.24% in May 2016.

Not seasonally adjusted, July 2016 year-to-year inflation for the CPI-U eased to 0.84% versus 1.01% in June 2016 and 1.02% in May 2016.

CPI-W. The July 2016 seasonally-adjusted, headline CPI-W, which is a narrower series and has greater weighting for gasoline than does the CPI-U, fell month-to-month by 0.09% (-0.09%), having gained month-to-month by 0.21% June and 0.20% in May. On an unadjusted basis, the monthly CPI-W declined by 0.22% (-0.22%) in July 2016, having gained 0.37% in June 2016 and 0.43% in May.

Unadjusted, year-to-year change in July 2016 CPI-W was a gain of 0.42%, versus annual gains of 0.64% in Jun 2016 and 0.66% in May 2016.

Chained-CPI-U. The headline C-CPI-U is not seasonally adjusted. in the context of quarterly revisions the July 2016 C-CPI-U annual inflation came in at 0.53%, versus an upwardly revised 0.75% [previously up by 0.66%] June 2016. Annual inflation rates for each month from September 2015 through June 2016 were adjusted upward by 0.09%, with the upside revisions to the prior annual gains in July and August 2015 respectively at 0.02% and 0.04%.

Alternate Consumer Inflation Measures. The ShadowStats-Alternate Consumer Inflation Measures are constructed on top of the unadjusted CPI-U series. Adjusted to 1990 methodologies—the ShadowStats-Alternate Consumer Inflation Measure (1990-Base)—year-to-year annual inflation was roughly 4.4% in July 2016, versus 4.6% in June 2016 and 4.6% in May 2016.

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

Retail Sales (Real and Nominal)—July 2016—Unchanged Month-to-Month, Collapsing Growth Year-to-Year. Discussed in <u>Commentary No. 825</u>, nominal July 2016 Retail Sales declined by 0.04% (-0.04%), against an upwardly revised 0.83% in June 2016 and a downwardly revised monthly gain of 0.16% in May 2016. July 2016 year-to-year nominal retail-sales change was an increase of 2.26%, versus an upwardly-revised gain of 2.96% in June 2016 and a downwardly-revised gain of 2.19% in May 2016.

Headline Real Detail. The preceding numbers were before any consideration for the effects of inflation. The initial monthly and annual inflation-adjusted real growth rates for July 2016 Retail Sales, and the trend for annualized second-quarter 2016 real change in retail sales follow, based on the coincident and

accompanying detail of the August 16th headline release of the July 2016 CPI-U (see the *Reporting Detail*). Based on headline seasonally-adjusted monthly CPI-U changes of a 0.04% (-0.04%) decline in July 2016 and increases of 0.22% in June 2016 and 0.22% in May 2016, July 2016 real Retail Sales were "unchanged" at 0.00% for the month, following an upwardly-revised June 2016 gain of 0.61% and a revised, deeper monthly contraction in May of 0.05% (-0.05%).

Net of prior-period revisions, real Retail Sale in July 2016 rose month-to-month by 0.21%, instead of the headline "unchanged."

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

Year-to-year, July 2016 real retail sales rose by 1.37%, a sharp slowing from the revised June 2016 real annual growth level of 1.88% in June 2016, and versus a downwardly-revised 1.11% annual gain in May 2016. With annual real growth showing an initial third-quarter 2016 annual growth trend of 1.41%, versus 1.60% in second-quarter 2016, 1.62% in first-quarter 2016 and 1.61% in fourth-quarter 2015, the recession signal remains intense, consistent with an unfolding recession. *Graphs 41* and *43* in the *Reporting Detail*, show the latest patterns of headline annual growth.

Initial Third-Quarter 2016 Annualized Real Growth Trend Slowed Sharply versus Second-Quarter 2016, with First-Quarter 2016 Still Flat. Based just on July 2016, the early trend for third-quarter 2016 real Retail Sales was 1.58%, down sharply from the upwardly revised 3.51% annualized growth in second-quarter 2016. Such was against an unrevised estimate of annualized quarterly real growth of 0.10%— effectively flat—in first-quarter 2016.

Structural Liquidity Issues Continue to Impair Retail Sales. An extreme consumer-liquidity bind continues to constrain retail sales activity, as fully updated in the *Opening Comments* of prior-*Commentary No. 825*. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including retail sales, real or otherwise.

Corrected Real Retail Sales—July 2016. The apparent "recovery" of headline real retail sales shown in *Graph 5* (see also *Graph 40* in the *Reporting Detail*) generally continued into late-2014, although headline reporting turned down in December 2014, into first-quarter 2015, turned higher into the third-quarter 2015, slowed to a near-standstill in fourth-quarter 2015 and first-quarter 2016, with an uptick in second-quarter 2016. Nonetheless, headline real growth in retail sales continues to be overstated heavily, due to the understatement of the rate of CPI-U inflation used in deflating the retail sales series. Discussed more fully in *Chapter 9* of 2014 Hyperinflation Report—Great Economic Tumble – Second Installment and *Public Commentary on Inflation Measurement*, deflation by too-low an inflation number (such as the CPI-U) results in the deflated series overstating inflation-adjusted economic growth.

Both of the accompanying graphs are indexed to January 2000 = 100.0 to maintain consistency in the series of graphs related to corrected inflation-adjustment (including the regular plots of the "corrected"

industrial production index shown in the prior *Industrial Production* section, as "corrected" new orders for durable goods "corrected" GDP, also linked in the prior section.

Graph 5: Headline Real Retail Sales Level, Indexed to January 2000 = 100



Graph 6: "Corrected" Real Retail Sales Level, Indexed to January 2000 = 100



The first graph here reflects the official real retail sales series, except that it is indexed, instead of being expressed in dollars. The plotted patterns of activity and rates of growth are exactly same for the official series, whether the series is indexed or expressed in dollars, again, as is evident in a comparison of *Graph* 5 with *Graph* 40 in the *Reporting Detail* section.

Instead of being deflated by the CPI-U, the "corrected" real retail sales numbers—in *Graph 6*—use the ShadowStats-Alternate Inflation Measure (1990-Base) for deflation. With the higher inflation of the ShadowStats measure, the revamped numbers show a pattern of plunge and stagnation and renewed downturn. That pattern generally is consistent with consumer indicators such as real average weekly earnings (see the following section), faltering consumer liquidity conditions (see <u>Commentary No. 825</u>, the broad unemployment series (see <u>Commentary No. 824</u>) and most housing statistics such as Housing Starts detail (see the later Housing Starts section).

A topping out in late-2011 and early-2012 reverted to renewed decline in second-quarter 2012 in this series (*Graph 4*), which had been bottom-bouncing at a low-level plateau of economic activity since the economic collapse into 2009. The renewed contraction has trended into and deepened on a monthly basis throughout 2015, and now into third-quarter 2016 beyond, allowing for occasional and temporary upside blips.

Real Average Weekly Earnings—July 2016—Second-Quarter Contraction Held, July Activity Jumped with Declining Gasoline Inflation. The BLS published its estimates for July 2016 real average weekly earnings, coincident with the release of the July CPI-W. In the production and nonsupervisory employees category—the only series for which there is a meaningful history, real average weekly earnings in July 2016 rose by 0.72%, with June 2016 still having declined by an unrevised 0.03% (-0.03%), versus a revised, monthly contraction of 0.11% (-0.11%), initially down by 0.06% (-0.06%)] in May, and an unrevised monthly decline of 0.17% (-0.17%) in April.

Those negative readings were sufficient to maintain a revised, second-quarter 2016 annualized quarter-toquarter contraction of 0.97% (-0.97%) in real average weekly earnings. The previous quarter-to-quarter real contractions in this series had been 0.46% (-0.46%) and 0.49% (-0.49%), respectively in third- and second-quarter 2015. The otherwise meaningless headline detail of a 0.72% headline real monthly gain for July 2016 was enough to establish an early, positive trend for a 2.67% annualized real gain for the series in third-quarter 2016.

While these usually heavily revised and seasonally-adjusted monthly changes are without much, if any, meaning in the near-term—effectively reporting garbage—over the longer term and quarterly, and particularly the benchmarked trends tend to be of some substance. As with the BLS reporting tied to the nonfarm payrolls, the headline seasonally-adjusted data here are not comparable due to reporting issues with concurrent seasonal factor adjustments.

For those not living in a seasonally-adjusted world, after declining month-to-month since November 2015, real average weekly earnings turned higher month-to-month in April and May 2016, and plunging down anew in June, with a minimal bonce in July. Separately, where year-to-year change should be reasonably consistent on a monthly basis, regardless of seasonal adjustment, consider that annual changes May to July 2016 respectively were up by 3.06%, 1.49% and 2.24%, not seasonally adjusted, while those same annual growth rates were 1.59%, 1.74% and 2.06% seasonally adjusted.

Separately, the CPI-W deflated reporting here also is distorted versus the CPI-U-deflated series, where the CPI-W—more heavily weighted with gasoline prices—tends to have much deeper, negative headline inflation, with resulting stronger headline, real growth than would be seen with the CPI-U, when gasoline prices are falling. Such was the case for the headline July 2016 detail.





The preceding *Graph 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.

Residential Construction—July 2016—Holding in Smoothed, Low-Level Stagnation and Non-Recovery, Headline Starts Jumped for the Month, but Negative Revisions Slowed-Quarter Growth. National activity in July 2016 rose across-the-board for total housing starts and the single- and multiple-unit subsidiary categories. As usual, though, all the monthly and annual changes were statistically-insignificant. They were in the context of minimal, prior-period downside revisions, and also in the continuing circumstance where the six-month moving average in the highly-volatile aggregate series held in low-level stagnation—never having recovered its pre-recession high—as flat as ever seen in the series (see *Graph 11*).

Growth in Second-Quarter 2016 Starts Continued to Slow; Third-Quarter Signaled a Nonexistent Boom. In terms of annualized quarter-to-quarter change, the regularly-unstable aggregate housing-starts count fell at annualized pace of 24.1% (-24.1%) in first-quarter 2015, rose at an annualized 96.3% pace in second-quarter 2015, flattened out to 0.0% in third-quarter 2015, and then contracted at an annualized 7.2% (-7.2%) in fourth-quarter 2015.

First-quarter 2016 activity, which had turned down in pre-benchmark (April) reporting, had revised into positive territory, thanks largely to upside benchmark revisions to multiple-structure starts in the May 2016 detail, but it did not revise with headline July 2016 reporting, holding at 6.0%.

Second-quarter 2016 activity revised lower, to an annualized pace of 1.7% growth. Based solely on the volatile headline July detail, third-quarter housing starts are on an early track for an annualized 20.3% gain.

Smoothed Numbers. Despite the regular volatility and instabilities in the Housing Starts series, the general pattern of low-level stagnation continued. The six-month moving-average pattern for the aggregate series continued to flatten—as flat as one ever sees in such a series—in low-level stagnation, reflecting the most-recent headline detail (*Graph 11*), with the same pattern of stability also seen broadly in raw monthly data of (*Graph 10*). That general pattern also can be viewed in terms of the longer-range historical graph of aggregate activity (*Graph 46*) in the *Reporting Detail*. Given the broad pattern of stagnation in the aggregate series, total July 2016 housing-starts remained well below any recovery level, down from its January 2006 pre-recession high by 47% (-47%).

Separately, in July 2016, the dominant, single-unit housing starts component of the series (*Graphs 12* and *13*) remained down by 57% (-57%) from its January 2006 pre-recession peak.

Reflected in the smoothed graphs, the various housing-starts series generally were flat, at a low level of stagnation (*Graph 11* for the aggregate), with recent up-trending, low-level stagnation in the six-month-smoothed single-unit activity (*Graph 13*) turning lower in July. That was offset by down-trending, smoothed multiple-unit starts (*Graph 15*), which had continued to fall back from pre-recession levels, although it has turned in the last several months, including July.

Consumer Liquidity Problems Continue to Impair Housing Activity. As with retail sales, an extreme consumer-liquidity bind continues to constrain the residential real estate sales and related construction activity, as fully updated in the *Opening Comments* of prior-*Commentary No. 825*. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including aggregate real estate activity.

July 2016 Housing Starts, Headline Reporting. The broadly unstable and highly volatile aggregate Housing Starts series rose month-to-month, in the context of downside revisions to the two prior months, with a statistically-insignificant, seasonally-adjusted, headline gain of 2.1% in July 2016. Such followed a revised 5.1% monthly gain in June, and a revised monthly decline of 2.3% (2.3%) in May. Net of prior-period revisions, July 2016 housing starts rose by 1.9%, instead of the headline gain of 2.1%. Level-of-activity aggregate detail is plotted in *Graphs 8* to *11*, and in *Graphs 45* and *46* in the *Reporting Detail*.

Year-to-year change in the seasonally-adjusted, July 2016 aggregate housing-starts measure was a statistically-insignificant gain of 5.6%, versus a revised decline of 2.2% (-2.2%) in June 2016, and downwardly-revised gain of 6.1% in May 2016.

The July 2016 headline gain of 2.1% in total housing starts encompassed headline monthly gains of 0.5% in the "one unit" category and 8.3% in the "five units or more" category; with a missing balance in the "two to four units" category discussed later in the broader, aggregate "multiple unit" category. As most commonly is the case with this extraordinarily volatile series, not one of the monthly or annual headline changes was statistically meaningful.

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

Housing starts for single-unit structures in July 2016 rose month-to-month by a statistically-insignificant 0.5%, following a downwardly revised monthly gain of 3.9% in June, and a revised deeper decline of 3.5% (-3.5%) in May. Net of prior-period revisions, single-unit starts declined by 1.0% in July 2016, instead of the headline 0.5% monthly gain. July 2016 single-unit starts showed a statistically-insignificant annual gain of 1.3%, versus a downwardly-revised annual gain of 11.7% in June 2016, and a downwardly-revised 6.2% gain in May (see *Graphs 8, 9, 12* and *13*).

Housing starts for apartment buildings (generally 5-units-or-more) in July 2016 rose month-to-month by a statistically-insignificant 8.3%, versus an upwardly-revised 3.6% gain in June, and an unrevised 2.1% gain in May. Net of prior-period revisions, July 2016 starts here gained 10.5%, instead of increasing by the headline 8.3%. The statistically-insignificant year-to-year gain of 15.2% in July 2016, followed a revised annual decline of 22.0% (-22.0%) in June 2016, and an unrevised 7.2% annual gain in May 2016.

Expanding the multi-unit housing starts category to include 2-to-4-units plus 5-units-or-more usually reflects the bulk of rental- and apartment-unit activity. The Census Bureau does not publish estimates of the 2-to-4-units category, due to statistical significance problems (a general issue for the aggregate series). Nonetheless, the total multi-unit category can be estimated by subtracting the single-unit category from the total category (see *Graphs 8, 9, 14* and *15*).

Accordingly, the statistically-insignificant July 2016 monthly gain of 2.1% in aggregate starts was composed of a statistically-insignificant gain of 0.5% in one-unit structures and a statistically-insignificant gain of 5.0% in the multiple-unit structures categories (2-units-or-more, including the 5-units-or-more category).

Regular Housing Starts Graphs. Headline reporting of Housing Starts activity is expressed by the Census Bureau as an annualized monthly pace of starts, which was 1,211,000 in July 2016, versus a downwardly-revised 1,186,000 (previously 1,189,000) in June 2016. The scaling detail used in the aggregate *Graphs 45* and *46* at the end of the *Reporting Detail* reflects those annualized numbers.

Nonetheless, given the nonsensical monthly volatility in reporting and the exaggerated effect of annualizing the monthly numbers in this unstable series, the magnitude of monthly activity and the changes in same, more realistically are reflected at the non-annualized monthly rate. Consider that the headline 228,000 month-to-month gain reported in the annualized April 2015 housing starts was larger

than any actual total (non-annualized) level of monthly starts ever, for a single month. That is since related starts detail first was published after World War II.

Accordingly, the monthly rate of 100,092 units in July 2016, instead of the annualized 1,211,000-headline number, is used in the scaling of the *Graphs 8* to 15 in these *Opening Comments*. With the use of either scale of units, though, appearances of the graphs and the relative monthly, quarterly and annual percentage changes are otherwise identical, as can be seen in a comparison of *Graph 10* versus *Graph 45* in the *Reporting Detail*.

The record monthly low level of activity seen for the present aggregate series was in April 2009, where the annualized monthly pace of housing starts then was down by 79% (-79%) from the January 2006 pre-recession peak. Against that downside-spiked low in April 2009, the June 2016 headline number was up by 153%, but it still was down by 47% (-47%) from the January 2006 pre-recession high for the series. Shown in the historical perspective of the post-World War II era, current aggregate-starts activity is in stagnation at low levels that otherwise have been at or near the historical troughs of other recession activity of the last 70 years, as reflected in *Graph 46* of the *Reporting Detail*.

[Graphs 8 to 15 begin on the next page.]





Graph 9: Single- and Multiple-Unit Starts (Six-Month Moving Average, Monthly Rate of Activity)



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Graph 11: Aggregate Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)



Aggregate Housing Starts (Six-Month Moving Average)





Graph 13: Single-Unit Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)



Single-Unit Housing Starts (Six-Month Moving Average)





Graph 15: Multiple-Unit Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)



Multiple-Unit Housing Starts (Six-Mo Moving Avg) To July 2016, Seasonally-Adjusted [ShadowStats, Census]

[The Reporting Detail section contains significant additional detail on the various series.]

HYPERINFLATION WATCH

GOLD AND DOLLAR GRAPHS, AND THE FOMC

Despite Rumors and Renewed Speculation, a Pre-Election Change in Fed Policy Is Highly Unlikely. Barring a crisis that would force the U.S. Federal Reserve and its Federal Open Market Committee (FOMC) to change monetary policy before the November 8th election, renewed waffling and hype of hiking interest rates at the September FOMC meeting appear to be no more than the regular jawboning and games-playing seen here literally for years, as gimmicked, artificial props for the U.S. dollar.

In the event of a crisis that would force immediate FOMC action, such a circumstance likely would require intensified liquefaction, not hiking rates. Such action would involve some form of renewed or expanded quantitative easing, not Fed tightening.

Discussed in <u>Commentary No. 825</u>, with a dimming outlook for the economy and for systemic and financial-market stability, expanded quantitative easing remains the Fed's likely fallback position, irrespective of dollar and inflation concerns. The U.S. central bank already has lost control of the system, and it should have a pretty good sense of that.

The markets appear to be sensing this, too, where unexpected economic weakness increasingly triggers flight from the U.S. dollar, rallying prices in gold, silver and oil. The pattern of bad economic news and intensifying flight from the dollar should intensify sharply in the weeks and months ahead, as the current downturn in U.S. economic activity spirals to the downside.

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

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

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

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

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

As the renewed and deepening economic downturn hits banking-system stresses and U.S. Treasury funding needs with intensified severity, the Fed most likely will have little choice but to renew and expand its active quantitative easing and, in the process, pummeling the U.S. dollar in the global markets. Again, if it is able to do so—shy of an emergency action—the U.S. central bank likely will avoid taking such measures until after the U.S. election.

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

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

The U.S. Dollar Remains the Primary Point of Vulnerability for the Global Financial Markets and System. Irrespective of near-term social or political upheaval around the globe, terrorist attacks or disintegrating trade blocs and currency unions, the big issue facing the global financial system remains the inability of the Federal Reserve and the U.S. government to stabilize the U.S. economy, the U.S. banking system, the federal government's fiscal operations and, ultimately, global willingness to hold dollars.

Again, the U.S. economy is tanking quickly, with sharply negative implications for areas ranging from banking-system stresses and U.S. Treasury funding needs, to the financial markets. Impact on the U.S. presidential race also should be significant. Any one of those areas, let alone a combination of factors, could force the Federal Reserve into some expanded form of quantitative easing.

The U.S. central bank gave up its other options back in 2008, when in it moved to maintain the current banking system at all costs. In response, the world increasingly is dumping U.S. Treasuries and other dollar holdings. Intensifying weakness in the U.S. dollar should result in a self-feeding cycle of flight from the dollar and the dumping of Treasuries, as sovereign treasuries look to self-defense in increasingly unstable global circumstances.

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

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

Graph 16: Financial- versus Trade-Weighted U.S. Dollar



Graph 17: Year-to-Year Change, Financial- versus Trade-Weighted U.S. Dollar







Graph 19: Gold versus Silver



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Graph 20: Gold versus Oil



Evolving economic, financial, political and central-banking issues circumstances will be updated regularly, and in the pending *Special Commentary* (see the *Week and Month Ahead* section). —Always happy to talk about issues at hand, or otherwise. - John Williams (707) 763-5786.

REPORTING DETAIL

INDEX OF INDUSTRIAL PRODUCTION (July 2016)

Industrial Production—Representing 65% of the GDP—Continued in Annual Contraction, Still Unprecedented Outside of Formal Recessions. As described and touted by the Federal Reserve Board in in its July 2016 Industrial Production <u>Press Release</u>:

"Industrial production rose 0.7 percent in July after moving up 0.4 percent in June. The advance in July was the largest for the index since November 2014. Manufacturing output increased 0.5 percent in July for its

largest gain since July 2015. The index for utilities rose 2.1 percent as a result of warmer-than-usual weather in July boosting demand for air conditioning. The output of mining moved up 0.7 percent; the index has increased modestly, on net, over the past three months after having fallen about 17 percent between December 2014 and April 2016. At 104.9 percent of its 2012 average, total industrial production in July was 0.5 percent lower than its year-earlier level."

Before getting into the big issue, consider some quick observations on the rest of the Fed's headline story. Seeing July 2016 manufacturing in its strongest gain since the year-ago July 2015 number suggests a possible seasonality issue, consistent with a minimal annual gain of 0.2%. Surging utility usage due to unseasonably warm weather in July (also in June) and related air-conditioning usage is a temporary distortion that gets balanced out over the year with seasonal adjustments or revisions to same. The gain in mining was more of a dead-cat bounce—a flattening out—with annual mining activity in July 2016 down year-to-year by 10.2% (-10.2%) in July 2016, versus an annual decline of 9.8% (-9.8%) in June 2016. These circumstances are addressed later in some detail.

Reporting Shenanigans at the Fed? [This section down to the "Slight Shifts.." largely has been repeated in the opening paragraphs of the Opening Comments.] The area fraught with the more unusual twists— potentially political—is the headline 0.7% monthly gain in total July production. That "largest" monthly gain since November 2014, however, also was the level of the headline 0.7% gain reported for April 2016, which notched lower in two subsequent monthly revisions to 0.5%. That initial April 2016 reporting included no glowing comparisons with the November 2014 circumstance.

Worthy now of such particular consideration, though, the Fed's comparative headline jump in November 2014 Industrial Production of 1.0%, came out of the broad, downside-benchmark revisions to the series in April 2016 (see <u>Commentary No. 796-A</u>). Frankly, that reporting looked like a gimmicked effort to maintain the illusion and myth of a post-2007 economic recovery.

Currently reported, industrial production hit its pre-recession peak of 105.729 in November 2007, plummeting thereafter in the unfolding economic collapse into mid-2009. Coming into the 2015 benchmark revisions to the series, industrial production formally had recovered its pre-recession high as of October 2013. Coming out of the 2015 benchmarking, the "recovery" had been revised to a later date, March 2014, but with subsequent production still holding above the recovery level.

The 2016 benchmarking (again <u>No. 796-A</u>), moved the production recovery to an even later November 2014, with a still fortuitous spike of 1.0% monthly. Yet, that level of November 2014 activity—the recovery level—also became the historical peak in production activity. That one-month "recovery" was followed by continual monthly declines (the onset of likely timing for the new recession), so that production had dropped back below its pre-recession high as of March 2015.

As of July 2016, headline Industrial Production stood 0.77% (-0.77%) below its formal pre-recession high and was down by 1.66% (-1.66%) from its one-month "recovery" level of November 2014, never having had subsequent positive monthly growth until it dropped again below the pre-recession high, and never having another rebound into recovery territory. The dominant manufacturing sector (78.5% of Industrial Production, 51.0% of GDP) never recovered its pre-recession high, at all, and it remains down by 5.80% (-5.80%) from that pre-2007 recession peak.

Slight Shifts in Activity to Due Revisions and a Headline Monthly Gain in July. With July 2016 reporting in place, second-quarter 2016 Industrial Production still showed its third consecutive set of

quarter-to-quarter and annual quarterly contractions. In the 98-year history of the production series, twoconsecutive quarters of declining year-to-year activity never have been seen outside of formal recessions, let alone three or more. The fourth-quarter of consecutive annual decline was indicated by the eleventh consecutive month of year-to-year decline in the monthly series, as of July 2016.

The jump in headline month-to-month July activity, in the context of some small upside revision to the level of second-quarter 2016 activity, also has set an early trend for a quarter-to-quarter gain in third-quarter 2016 production.

An overriding issue that has continued to stymie policies of the Fed is that the U.S. economy never really recovered from the "2007 Recession." The unfolding "new" downturn remains no more than another down-leg in an economic collapse that began to show itself in 2005 and 2006 (see <u>No. 777 Year-End</u> <u>Special Commentary</u>). In the post-benchmark revision era for Industrial Production, the headline (not the ShadowStats-corrected) series, again, recovered its pre-recession high only in November 2014, and it has been in fairly-consistent monthly decline ever since, falling month-to-month in 14 out of the 20 subsequent months.

Headline Industrial Production—July 2016. The Federal Reserve Board released its first estimate of seasonally-adjusted, July 2016 industrial production on August 16th. In the context of upside revisions to the levels of April and May production activity, but with the level of June 2016 activity effectively unchanged, the monthly gain in July 2016 production was 0.74%. That was against a downwardly-revised 0.42% monthly gain [previously up by 0.60%] in June, a narrowed monthly contraction in May of 0.16% (-0.16%) [previously down by 0.30% (-0.30%), initially down by 0.42% (-0.42%)], and a minimally revised gain of 0.46% [previously up by 0.45%, up by 0.57%, initially up by 0.66%] in April.

Net of prior-period revisions, July 2016 rose by 0.75%, instead of the headline 0.74% gain.

Detailed by major industry group (see *Graphs 23, 25, 30* and *32*), the headline July 2016 monthly aggregate production increase of 0.74% [a June 2016 gain of 0.42%] was composed of a monthly July gain of 0.55% [a June gain of 0.27%] in manufacturing activity; a July gain of 0.71% [a June contraction of 0.34% (-0.34%)] in mining activity (including oil and gas production); and a July gain of 2.15% [a June gain of 2.07%] in utilities activity.

Year-to-year change in July 2016 Industrial Production was a decline of 0.53% (-0.53%), the eleventh consecutive monthly year-to-year decline and a circumstance that is unprecedented outside of a formal recession, in the 98-year history of the series. That followed a minimally revised decline of 0.68% (-0.68%) [previously down by 0.69% (-0.69%)] in June 2016, a revised, shallower annual decline in May 2016 of 1.25% (-1.25%) [previously down by 1.44% (-1.44%), initially down by 1.40% (-1.40%)], and a minimally shallower annual decline of 1.33% (-1.33%) [previously down by 1.38% (-1.38%), down by 1.22% (-1.22%), initially down by 1.07% (-1.07%)] in April 2016.

Quarterly and Annual Production Contractions. Annual growth in aggregate production held in negative territory for the eleventh straight month, again, down by 0.53% (-0.53%) in July 2016, with an early trend set for an annual contraction of 0.51% (-0.51%) in third-quarter 2016, based solely on that July estimate. Such would be the fourth consecutive quarter of such activity. Two such quarters are unprecedented outside of formal recessions.

Year-to-year growth rates in quarterly production have continued to slow and then decline, ranging from a positive 2.43% in first-quarter 2015, to 0.36% in second-quarter 2015, to 0.12% in third-quarter 2015, to an annual decline of 1.62% (-1.62%) in fourth-quarter 2015, a revised annual decline of 1.58% (-1.58%) [previously 1.60% (-1.60%)] in first-quarter 2016, and a revised annual contraction of 1.09% (-1.09%) [previously 1.17% (-1.17%)] in second-quarter 2016.

Going back a year, first-quarter 2015 industrial production contracted at an annualized quarterly pace of 1.85% (-1.85%), followed by a second-quarter 2015 contraction of 2.75% (-2.75%), with a third-quarter 2015 production gain of 1.53%, followed by a fourth-quarter 2015 contraction of 3.33% (-3.33%). The first-quarter 2016 quarterly decline narrowed to 1.69% (-1.69%) [previously down by 1.80% (-1.80%)], with the second-quarter 2016 quarterly decline narrowing to 0.81% (-0.81%) [previously down by 1.03% (-1.03%)]. Based solely on the headline July 2016, third-quarter 2016 activity is on early track for an annualized quarterly gain of 3.92%.

Production Graphs. The regular two sets of plots for long- and short-term industrial production levels and annual growth rates (*Graphs 21* to 24) set the background for the drill-down detail graphs of various components of the aggregate industrial series (*Graphs 25* to 38).

Graphs 21 and 22, and *Graphs 23* and 24 show headline industrial production activity to date. *Graph 22* shows the monthly year-to-year percent change in the aggregate series, in historical context since World War II. With the headline annual decline in monthly production currently at 0.53% (-0.53%) in July 2016, and with headline annual contractions in place for the last eleven months, the pattern is one that never has been seen outside of formal recessions.

Graph 21 shows the monthly level of the production index post-World War II, with a topping-out and renewed downturn—deepening quarterly contractions in first- and second-quarter 2015, with a bounce in third-quarter 2015, followed by renewed and deeper contractions in fourth-quarter 2015 and first- and second-quarter 2016, and a gain in July 2016. Such patterns of monthly and quarterly and annual declines were seen last in the economic collapse into 2009. *Graphs 23* and 24 show the same series in near-term detail, beginning in January 2000.

Seen most clearly in *Graph 24*, the pattern of year-to-year activity dipped anew in 2013, again, to levels usually seen at the onset of recent recessions, bounced higher into mid-2014, fluctuated thereafter, now turning sharply negative, again, as seen only in formal recessions. Year-to-year growth remains well off the recent relative peak for the series, which was 8.48% in June 2010, going against the official June 2009 trough of the economic collapse. Indeed, as shown in *Graph 22*, the June 2009 (the end of second-quarter 2009) year-to-year contraction of 15.40% (-15.40%) was the steepest annual decline in production since the shutdown of wartime production following World War II.

Although generally now-faltering, official production levels had moved higher since the June 2009 trough, corrected for the understatement of inflation used in deflating portions of the industrial production index (see the *Opening Comments* section, *Graph 4*) the series has shown more of a pattern of stagnation with a slow upside trend, since 2009, with irregular quarterly contractions interspersed. The slow uptrend continued into a topping out pattern in late-2014. Headline growth—purportedly already neutered of any inflation impact—contracted in both first- and second-quarter 2015, rallied into third-quarter 2015, then contracted into second quarter 2016, with an irregular monthly jump in July 2016. The "corrected" series has done the same but remains well shy of ever approaching a recovery.





Index of Industrial Production (2012 = 100) 1945 to July 2016, Seasonally-Adjusted [ShadowStats, FRB]

Graph 22: Industrial Production, Year-to-Year Percent Change since 1945



Industrial Production Yr-to-Yr % Change 1945 to July 2016, Seasonally-Adjusted [ShadowStats, FRB]





Graph 24: Aggregate Industrial Production, Year-to-Year Percent Change since 2000



Industrial Production Yr-to-Yr % Change To July 2016, Seasonally-Adjusted [ShadowStats, FRB]

Graph 25: Industrial Production - Manufacturing (78.48% of the Aggregate in 2015)



Industrial Production - Manufacturing (SIC) (2012 = 100) Level to July 2016, Seasonally-Adjusted [ShadowStats, FRB]

Graph 26: Industrial Production - Manufacturing, Year-to-Year Percent Change Since 2000



Manufacturing Production Yr-to-Yr % Change To July 2016, Seasonally-Adjusted [ShadowStats, FRB]

Drilling Down into the July 2016 U.S. Industrial Production Detail. Graphs 23, 25, 30 and *32* show headline reporting of industrial production and its major components. The broad, aggregate index (*Graph 23*) contracted in both first- and second-quarter 2015, with a third-quarter 2015 bounce, followed by

ongoing, consecutive quarterly and annual contractions in fourth-quarter 2015, first-quarter 2016 and second-quarter 2016. Such circumstances simply are not seen outside of recessions, discussed earlier.

In headline July 2016 reporting, each of the three major industry groups, manufacturing, mining and utilities showed a monthly gain, as reflected in *Graphs 25*, *30* and *32*, respectively. Where manufacturing likely was boosted by seasonality issues, and utilities jumped due the second month of "one-time" weather distortions, the gain in mining continued to reverse, or more-appropriately halt, a recent downtrend. Mining showed a second straight monthly gain, albeit still minimal, having been up and down since August 2015. That reflected an upturn in coal production, with relatively flat oil and gas extraction and gold and silver mining, and an upside notch in oil and gas exploration.

Graph 25 of the dominant manufacturing sector showed a month-to-month gain of 0.55% in July 2016, which was a gain of 0.45% net of prior-period revisions. The headline detail was against a narrowed monthly gain of 0.25% [previously up by 0.40%] in June. The series remains down by 5.80% (-5.80%) from reclaiming its pre-recession high of December 2007. *Graph 26* reflects annual growth patterns in manufacturing, which have been fluttering at low levels since an initial bounce off the 2009 trough, minimally higher year-to-year by 0.15% in July 2016, versus a downwardly-revised annual gain of 0.30% [previously up by 0.39%] in June 2016.

The story with consumer goods generally remains bleak, in line with troubled real retail sales, discussed later in this *Commentary*. Seen in *Graphs* 27 to 28, total consumer goods have remained in low-level stagnation since the economic collapse, with all the series showing relative monthly gains for July 2016, up month-to-month in July by 0.58%, versus a revised gain of 0.55% [previously 1.13%] for total consumer goods; with durables up by 0.69%, versus a downwardly revised 3.07% [previously 3.42%]; and nondurables up by 0.55%, versus a revised contraction of 0.24% (-0.24%) [previously up by 0.41%]. The Annual gain in the aggregate consumer series generally has held well below 1.0% (0.74% in July 2016), with purported gains in durable goods (2.55% in July, including in auto production), well offset by negligible annual growth in nondurables (0.18% in July, including bread).









Graph 29: Nondurable Consumer Goods (20.73% of the Aggregate in 2015)



Manufacturing - Consumer Nondurable Goods (2012 = 100) Level to July 2016, Seasonally-Adjusted [ShadowStats, FRB]

Monthly volatility seen the utilities sector (*Graph 30*) most often reflects unseasonable shifts in weather conditions and reversals of same, and such was the case, again, with the 2.15% gain in July 2016, versus a revised 2.07% (previously 2.42%) gain in June 2016 activity, following a revised headline decline of 0.42% (-0.42%) [previously 0.90% (-0.90%)] in May 2016.

Graph 30: Industrial Production - Utilities (10.76% of the Aggregate in 2015)



Graph 31: Industrial Production - Utilities, Year-to-Year Percent Change Since 2000



Industrial Production - Utilities Yr-to-Yr % Change To July 2016, Seasonally-Adjusted [ShadowStats, FRB]





Graph 33: Industrial Production - Mining, Year-to-Year Percent Change



Industrial Production - Mining Yr-to-Yr % Change To July 2016, Seasonally-Adjusted [ShadowStats, FRB]

Activity in the mining (*Graph 32*), particularly in oil and gas exploration and production, and in coal production, remains the near-term focus of this analysis. This sector easily recovered its pre-recession high and accounted for the full "recovery," albeit extremely short-lived, seen in the aggregate production

detail since the economic collapse. Since then, however, mining production has turned down sharply, reflecting a number of factors, including the impact of largely orchestrated lower oil prices (and related recent, now-faltering U.S. dollar strength), as well as U.S. government actions to limit coal consumption and production. Year-to-year July 2016 mining activity still was down by 10.20% (-10.20%) in July 2016, versus a revised decline of 9.83% (-9.83%) [previously down by 10.50% (-10.50%)] in June 2016, versus a revised annual drop of 11.47% (-11.47%) in May 2016.

That said, mining-sector activity showed its first monthly uptick in ten months in May 2016, now up by 0.79% [previously 0.30%], but the uptick in June 2016 of 0.17%, now is a downtick of 0.34% (-0.34%), with July 2016 now showing a monthly uptick of 0.71%. Year-to-year decline in this sector (*Graph 33*) has continued to hold around a minus 10% (-10%).

The recent 2016 breathers in mining activity largely reflected respective monthly gains (May to July) of 8.42%, 11.37% and 15.39% in monthly coal production (*Graph 35*), and reasonably stable gold and silver mining, oil and gas extraction, along with a monthly uptick in drilling and exploration (*Graphs 34, 36* and *37*) in the month

Graph 34 reflects monthly production continuing off the near-term-trough in activity for gold and silver, irrespective of the pummeling given the prices of precious metals in recent years by central-bank orchestrated market as well as recent pricing gains in the markets. Discussed in the *Hyperinflation Watch*, pricing circumstances indeed may be shifting to the upside for gold and silver, as well as for oil.





Graph 35 still shows an extraordinarily sharp drop in monthly coal production, despite the May to July 2016 rebound. July 2016 activity was down by 11.32% (-11.32%) year-to-year, versus annual declines of

16.23% (-16.23%) in June 2016 and 31.04% (-31.04%) in May 2016. Versus the near-term May 2014 peak in coal production, July 2016 activity was down by 24.83% (-24.83%).





Graph 36: Mining – U.S. Oil & Gas Extraction (Since 2000)



Mining - Oil & Gas Extraction (2012 = 100) Level to July 2016, Seasonally-Adjusted [ShadowStats, FRB] With oil prices continuing to move off recent lows, oil and gas extraction still has remained well off its all-time high, but where it appeared to have stagnated initially in May and June, the latest data show it down by 1.67% (-1.67%) for the July 2016, with a similar decline of 1.66% (-1.66%) in June, also down year-to-year by 7.44% (-7.44%) in July 2016, as seen in *Graph 36*. Exploration in terms of oil and gas drilling (*Graph 37*) rose by 4.93% month-to-month in July, having gained 0.34% June, but it still was down year-to-year by 46.91% (-49.61%) in July 2016.

Regularly discussed, the collapse in drilling largely is an artefact of the massive U.S. dollar rally and oilprice plunge that began in July 2014. Those shifts appeared, at least initially, to be U.S.-orchestrated covert actions designed to stress Russia, financially, in response the circumstance in Ukraine. Since the related September 2014 peak in oil drilling, activity there has collapsed by 72.64% (-72.64%).

Graph 37: U.S. Drilling for Oil & Gas (Since 2000)



Shown in *Graph 38*, with some lag following the sharp movements in oil prices, oil and gas exploration tends to move in tandem, and an upswing may be in the early stages. The oil price index used is for the West Texas Intermediate (WTI) monthly average spot price, deflated using the ShadowStats Alternate CPI measure (1990 Base).

With the dollar having started to weaken anew, dollar-denominated oil prices also have begun to strengthen, even in a circumstance with excess supply conditions. At such time as the U.S. dollar declines meaningfully—ShadowStats is looking for a massive sell-off in the dollar in the year ahead—U.S. dollar-denominated oil prices should rally (see the *Hyperinflation Watch* and <u>General Commentary No. 811</u>).





CONSUMER PRICE INDEX—CPI (July 2016)

Headline CPI-U Inflation Took a Small Hit with Lower Gasoline Prices, Despite Positive Seasonal Adjustments. [These first three paragraphs largely are repeated from the Opening Comments section.] The headline July 2016 CPI-U monthly inflation of 0.0% [down by 0.04% (-0.04%) at the second decimal point] largely was as expected. Where negative energy seasonal adjustments in the first half of the calendar year, turned positive in July, the "adjusted" decline in unadjusted gasoline prices was enough still to dominate the "lack" of other inflation in the food and "core" sectors to keep the headline number minimally negative. Moving into August, despite a continued downside movement in unadjusted gasoline prices, the August upside seasonal adjustments should be enough to boost headline monthly CPI-U to a gain.

As discussed in other, recent CPI *Commentaries* (see <u>*Commentary No.* 793</u>), it is the unadjusted, not the seasonally-adjusted detail that tends to match consumer experience most closely, to the extent that these numbers come close to matching actual experience at all. On an unadjusted basis, monthly CPI-U declined by 0.2% (-0.2%) [-0.16% (-0.16%)] in July 2016.

Separately, although official annual CPI-U inflation just has been lowered to about 0.8% in July 2016, versus 1.0% in June 2016, year-to-year inflation is not and has not been quite as soft as indicated, when considered in the context of traditional CPI reporting and common experience. The ShadowStats-Alternate Inflation Measures showed annual inflation in July 2016 of 4.4%, based on 1990 methodologies, and 8.5%, based on 1980 methodologies.

Longer-Range Inflation Outlook. Reviewed in today's *Hyperinflation Watch* and discussed in the *Opening Comments* of *Commentary No. 825* and *No. 777 Year-End Special Commentary*, high risk of extreme flight from the U.S. dollar—a massive dollar debasement—continues to threaten an increasingly-rapid upturn in energy and dollar-based commodity inflation, which would drive headline U.S. consumer inflation much higher. That process continues, and it should accelerate in tandem with renewed tumbling in U.S. economic activity, and what should be an increasing realization in the global markets that the U.S. Federal Reserve and other major central banks have no effective idea as to how to boost current economic activity, or to stabilize global banking-system solvency. That circumstance is exacerbated regularly by the Fed's continual bluffing on raising rates. Accordingly, the Fed likely will fall back on its basic mission of propping the U.S. banking system and the funding liquidity of the U.S. Treasury, moving to expanded quantitative easing post-election, not to tighter monetary policy.

Notes on Different Measures of the Consumer Price Index

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

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

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

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

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

CPI-U. The Bureau of Labor Statistics reported on August 16th that the headline, seasonally-adjusted July 2016 CPI-U was "unchanged" at 0.0%, down by 0.04% (-0.04%) at the second decimal point. That

followed headline monthly increases in both June and May of 0.2%, up by 0.22% at the second decimal point.

The adjusted headline July 2016 inflation decline was minimized by positive seasonal adjustments to the energy and "core" (ex-food and energy) sectors, but otherwise was intensified by negative seasonal-adjustment contributions to foods sector. On an unadjusted basis, monthly July 2016 CPI-U declined by 0.16% (-0.16%), following unadjusted monthly gains of 0.33% in June 0.41% in May.

July 2016 seasonal adjustments for monthly gasoline inflation turned positive, "boosting" an unadjusted headline decline of 5.53% (-5.53%) in gas prices into an adjusted decline of 4.67% (-4.67%). The Department of Energy (DOE) had estimated an unadjusted monthly decline of 4.95% (-4.95%).

<u>Major CPI-U Groups</u>. Encompassed by the seasonally-adjusted monthly decline of 0.04% (-0.04%) in July 2016 [down by an unadjusted 0.16 (-0.16%)] in the headline CPI-U, July food inflation declined minimally by a seasonally-adjusted 0.01% (-0.01%) [up by 0.03% unadjusted], July energy inflation declined by a seasonally-adjusted 1.58% (-1.58%) [down by 2.05% (-2.05%) unadjusted], while the adjusted "core" (ex-food and energy) inflation rate rose by 0.09% [down by 0.02% (-0.02%) unadjusted].

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

<u>Year-to-Year CPI-U</u>. Not seasonally adjusted, July 2016 year-to-year inflation for the CPI-U eased to 0.8% (0.84% at the second decimal point) versus 1.0% (1.01% at the second decimal point) in June 2016 and 1.0% (1.02% at the second decimal point) in May 2016.

Year-to-year, CPI-U inflation would increase or decrease in next month's August 2016 reporting, dependent on the seasonally-adjusted monthly change, versus the adjusted, headline decline of 0.01% in August 2015 CPI-U. The adjusted change is used here, since that is how consensus expectations are expressed. To approximate the annual unadjusted inflation rate for August 2016, the difference in August's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the July 2016 annual inflation rate of 0.84%. For example, another seasonally-adjusted, "unchanged" monthly August 2016 CPI-U, would hold the annual CPI-U inflation rate for August 2016 at around 0.8%, plus-or-minus, depending on rounding.

CPI-W. The July 2016 seasonally-adjusted, headline CPI-W, which is a narrower series and has greater weighting for gasoline than does the CPI-U, fell month-to-month by 0.09% (-0.09%), having gained month-to-month by 0.21% June and 0.20% in May. On an unadjusted basis, the monthly CPI-W declined by 0.22% (-0.22%) in July 2016, having gained 0.37% in June 2016 and 0.43% in May.

<u>Year-to-Year CPI-W.</u> Unadjusted, year-to-year change in July 2016 CPI-W was a gain of 0.42%, versus annual gains of 0.64% in Jun 2016 and 0.66% in May 2016.

Chained-CPI-U. The headline C-CPI-U is not seasonally adjusted. in the context of quarterly revisions the July 2016 C-CPI-U annual inflation came in at 0.53%, versus an upwardly revised 0.75% [previously up by 0.66%] June 2016. Annual inflation rates for each month from September 2015 through June 2016 were adjusted upward by 0.09%, with the upside revisions to the prior annual gains in July and August 2015 respectively at 0.02% and 0.04%.

See discussions in the earlier CPI <u>Commentary No. 721</u> and in the opening notes in the CPI Section of <u>Commentary No. 699</u> as to recent changes in the series. More-frequent revisions and earlier finalization of monthly detail are designed to groom the C-CPI-U series as the new Cost of Living Adjustment (COLA) index of choice for the budget-deficit-strapped federal government, as discussed in the <u>Public</u> <u>Commentary on Inflation Measurement</u>.

Caution: Artificially-low inflation numbers estimated by the U.S. Government and used in fields ranging from Social Security COLAs to determining income-tax brackets, have been redesigned in recent decades specifically to help reduce the federal deficit. They are harmfully misleading to anyone using a government CPI estimate as a meaningful cost-of-living measure for guidance on income or investment purposes.

Alternate Consumer Inflation Measures. The ShadowStats-Alternate Consumer Inflation Measures are constructed on top of the unadjusted CPI-U series. Adjusted to 1990 methodologies—the ShadowStats-Alternate Consumer Inflation Measure (1990-Base)—year-to-year annual inflation was roughly 4.4% in July 2016, versus 4.6% in June 2016 and 4.6% in May 2016.

The July 2016 ShadowStats-Alternate Consumer Inflation Measure (1980-Base), which reverses gimmicked changes to official CPI reporting methodologies back to 1980, was at about 8.5% (8.48% for those using a second decimal point) year-to-year, versus 8.7% in June 2016 and 8.7% in May 2016.

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

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

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



Graph 39: Monthly Average Gold Price in Dollars (Federal Reserve Notes)

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

CPI-U: GOLD at \$2,629 per Troy Ounce, SILVER at \$153 per Troy Ounce ShadowStats: GOLD at \$13,176 per Troy Ounce, SILVER at \$767 per Troy Ounce

Despite the September 5, 2011 historic-high gold price of \$1,895.00 per troy ounce (London afternoon fix), and despite the multi-decade-high silver price of \$48.70 per troy ounce (London fix of April 28, 2011), gold and silver prices have yet to re-hit their 1980 historic levels, adjusted for inflation. The earlier all-time high of \$850.00 (London afternoon fix, per Kitco.com) for gold on January 21, 1980 would be \$2,629 per troy ounce, based on July 2016 CPI-U-adjusted dollars, and \$13,176 per troy ounce, based on July 2016 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (all series here are not seasonally adjusted).

In like manner, the all-time high nominal price for silver in January 1980 of \$49.45 per troy ounce (London afternoon fix, per silverinstitute.org)—although approached in 2011—still has not been hit since 1980, including in terms of inflation-adjusted dollars. Based on July 2016 CPI-U inflation, the 1980 silver-price peak would be \$153 per troy ounce and would be \$767 per troy ounce in terms of July 2016 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (again, all series not seasonally adjusted).

As shown in Table 1, on page 31 of <u>2014 Hyperinflation Report—The End Game Begins</u> – First Installment Revised, over the decades, the increases in gold and silver prices have compensated for more than the loss of the purchasing power of the U.S. dollar as reflected by CPI inflation. They also effectively have come close to fully compensating for the loss of purchasing power of the dollar based on the ShadowStats-Alternate Consumer Price Measure (1980-Methodologies Base). *Real (Inflation-Adjusted) Retail Sales—July 2016—Unchanged Month-to-Month, Collapsing Growth Year-to-Year.* Discussed in prior-*Commentary No. 825*, nominal July 2016 Retail Sales declined by 0.04% (-0.04%), against an upwardly revised 0.83% in June 2016 and a downwardly revised monthly gain of 0.16% in May 2016. July 2016 year-to-year nominal retail-sales change was an increase of 2.26%, versus an upwardly-revised gain of 2.96% in June 2016 and a downwardly-revised gain of 2.19% in May 2016.

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

Based on headline seasonally-adjusted monthly CPI-U changes of a 0.04% (-0.04%) decline in July 2016 and increases of 0.22% in June 2016 and 0.22% in May 2016, July 2016 real Retail Sales were "unchanged" at 0.00% for the month, following an upwardly-revised June 2016 gain of 0.61% [previously up by 0.36%] and a revised, deeper monthly contraction in May of 0.05% (-0.05%) [previously down by 0.01% (-0.01%), initially up by 0.23%].

Net of prior-period revisions, real Retail Sale in July 2016 rose month-to-month by 0.21%, instead of the headline "unchanged."

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

Year-to-year, July 2016 real retail sales rose by 1.37%, a sharp slowing from the revised June 2016 real annual growth level of 1.88% [previously 1.65%] in June 2016, and versus a downwardly-revised 1.11% [previously a 1.16%, initially a 1.46%] annual gain in May 2016. With annual real growth showing an initial third-quarter 2016 annual growth trend of 1.41%, versus 1.60% in second-quarter 2016, 1.62% in first-quarter 2016 and 1.61% in fourth-quarter 2015, the recession signal remains intense, consistent with an unfolding recession. *Graphs 41* and *43*, following, show the latest patterns of headline annual real growth.

Initial Third-Quarter 2016 Annualized Real Growth Trend Slowed Sharply versus Second-Quarter 2016, with First-Quarter 2016 Still Flat. Based just on July 2016, the early trend for third-quarter 2016 real Retail Sales was 1.58%, down sharply from the upwardly revised 3.51% [previously 3.30%] annualized growth in second-quarter 2016. Such was against an unrevised estimate of annualized quarterly real growth of 0.10%—effectively flat—in first-quarter 2016.

Structural Liquidity Issues Continue to Impair Retail Sales. An extreme consumer-liquidity bind continues to constrain retail sales activity, as fully updated in the *Opening Comments* of prior-<u>Commentary No. 825</u>. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including retail sales, real or otherwise. That circumstance—in the last eight-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity, 70% of which is dependent on personal spending.

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

Real Retail Sales Graphs. Graph 40, the first of the four graphs following, shows the level of real retail sales activity (deflated by the CPI-U) since 2000; Graph 41 shows the year-to-year percent change for the same period. Where the aggregate headline fourth-quarter 2015 growth largely had dissipated in various revisions, and flattened out, real first-quarter 2016 activity also did the same, and the preliminary second-quarter increase likely will move in that direction in its next revision.

Annual real growth had slowed markedly into fourth-quarter 2015, and tumbled to a 25-month low of 0.81% in March 2016, the weakest showing since February 2014, generating an intense recession signal. Annual growth slowed sharply to 1.37% in July 2016, versus a heavily spiked 1.88% in June 2016. *Graphs 42* and *43* show the level of, and annual growth in, real retail sales (and its predecessor series) in full post-World War II detail.

[Graphs 40 to 43 begin on the next page.]

Graph 40: Level of Real Retail Sales (2000 to 2016)



Graph 41: Real Retail Sales (2000 to 2016), Year-to-Year Percent Change



Real Retail Sales Year-to-Year Percent Change To July 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]

Graph 42: Level of Real Retail Sales (1947 to 2016)



Real Retail Sales (Deflated by the CPI-U) 1947 to July 2016, Seasonally-Adjusted [ShadowStats, St. Louis Fed]

Graph 43: Real Retail Sales (1948 to 2016), Year-to-Year Percent Change



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

inflation number (such as the CPI-U) results in the deflated series overstating inflation-adjusted, real economic growth.

Shown in the latest "corrected" real retail sales—*Graph 6* in the *Opening Comments* section—with the deflation rates corrected for the understated inflation reporting of the CPI-U, the recent pattern of real sales activity has turned increasingly negative. The corrected graph shows that the post-2009 period of protracted stagnation ended, and a period of renewed and ongoing contraction began in second-quarter 2012 and continues to date. The corrected real retail sales numbers use the ShadowStats-Alternate Inflation Measure (1990-Base) for deflation instead of the CPI-U.

Real (Inflation-Adjusted) Average Weekly Earnings—July 2016—Second-Quarter Contraction Held, July Activity Jumped with Declining Gasoline Inflation. The BLS published its estimates for July 2016 real average weekly earnings, coincident with the release of the July CPI-W. In the production and nonsupervisory employees category—the only series for which there is a meaningful history, real average weekly earnings in July 2016 rose by 0.72%, with June 2016 still having declined by an unrevised 0.03% (-0.03%), versus a revised, monthly contraction of 0.11% (-0.11%) [previously down by 0.16% (-0.16%), initially down by 0.06% (-0.06%)] in May, and an unrevised monthly decline 0.17% (-0.17%) in April.

Those negative readings were sufficient to maintain a revised, second-quarter 2016 annualized quarter-toquarter contraction of 0.97% (-0.97%) [previously down by 1.09% (-1.09%)] in real average weekly earnings. The previous quarter-to-quarter real contractions in this series had been 0.46% (-0.46%) and 0.49% (-0.49%), respectively in third- and second-quarter 2015.

The otherwise meaningless headline detail of a 0.72% headline real monthly gain for July 2016 was enough to establish an early, positive trend for a 2.67% annualized real gain for the series in third-quarter 2016.

While these usually heavily revised and seasonally-adjusted monthly changes are without much, if any, meaning in the near-term—effectively reporting garbage—over the longer term and quarterly, and particularly the benchmarked trends tend to be of some substance. As with the BLS reporting tied to the nonfarm payrolls, the headline seasonally-adjusted data here are not comparable due to reporting issues with concurrent seasonal factor adjustments (see *Headline Distortions from Shifting Concurrent-Seasonal Factors* in *Commentary No. 824*).

For those not living in a seasonally-adjusted world, after declining month-to-month since November 2015, real average weekly earnings turned higher month-to-month in April and May 2016, and plunging down anew in June, with a minimal bonce in July. Separately, where year-to-year change should be reasonably consistent on a monthly basis, regardless of seasonal adjustment, consider that annual changes May to July 2016 respectively were up by 3.06%, 1.49% and 2.24%, not seasonally adjusted, while those same annual growth rates were 1.59%, 1.74% and 2.06% seasonally adjusted.

Separately, the CPI-W deflated reporting here also is distorted versus the CPI-U-deflated series, where the CPI-W—more heavily weighted with gasoline prices—tends to have much deeper, negative headline inflation, with resulting stronger headline, real growth than would be seen with the CPI-U, when gasoline prices are falling. Such was true for the headline July 2016 detail.

Found in the *Opening Comments* section, *Graph* 7 plots this series, showing the seasonally-adjusted earnings as officially deflated by the BLS (red-line), and as adjusted for the ShadowStats-Alternate CPI

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

Real (Inflation-Adjusted) Money Supply M3—July 2016—Annual Growth Notched Lower. The signal for a double-dip, multiple-dip or simply protracted, ongoing recession, based on annual contraction in the real (inflation-adjusted) broad money supply (M3), remains in place, despite real annual M3 growth having rallied in positive territory for a number of years. The economic downturn never evolved into a sustainable recovery. As shown in the accompanying graph—based on July 2016 CPI-U reporting and the latest ShadowStats-Ongoing M3 Estimate (including annual Federal Reserve Board money supply revisions)—annual inflation-adjusted growth in July 2016 M3 moved lower to 3.3% in July 2016, from 3.5%, in June 2016 and versus 3.2% in May 2016 and a near-term trough of 2.8% in April 2016. The 0.2% drop in the monthly rate of year-to-year change reflected a 0.4% (-0.4%) decline in the level of nominal, annual M3 growth and with a partially offsetting decline of 0.2% (-0.2%) in annual CPI-U inflation (see *Commentary No. 824*).



Graph 44: Real M3 Annual Growth versus Formal Recessions

The signal for a downturn or an intensified downturn is generated when annual growth in real M3 first turns negative in a given cycle; the signal is not dependent on the depth of the downturn or its duration. Breaking into positive territory does not generate a meaningful signal one way or the other for the broad economy. The current "new" downturn signal was generated in December 2009, even though there had

been no upturn since the economy purportedly hit bottom in mid-2009. Again, when real M3 growth breaks above zero, there is no signal; the signal is generated only when annual growth moves into negative territory. The broad economy tends to follow in downturn or renewed deterioration roughly sixto-nine months after the signal. Weaknesses in a number of economic series have continued to the present, with significant new softness in recent reporting. Actual post-2009 economic activity has remained at relatively low levels of activity—in protracted stagnation, with no actual recovery (see *Graphs 1, 2, 4* and *6* in the *Opening Comments* and *No. 777 Year-End Special Commentary*).

Despite the purported, ongoing recovery shown in headline GDP activity, a renewed downturn in official data is underway that still should gain official recognition, likely post-election, as a "new" or multiple-dip recession. Underlying reality remains that the economic collapse into 2009 was followed by a plateau of low-level economic activity—no meaningful upturn, no recovery from or end to the official 2007 recession—and the unfolding renewed downturn remains nothing more than a continuation and re-intensification of the downturn that began unofficially in 2006 (see <u>Commentary No. 823</u>).

NEW RESIDENTIAL CONSTRUCTION (July 2016)

Holding in Smoothed, Low-Level Stagnation and Non-Recovery, Headline July 2016 Housing Starts Jumped for the Month, but Negative Revisions Slowed Second-Quarter Growth. National activity in July 2016 rose across-the-board for total housing starts and the single- and multiple-unit subsidiary categories. As usual, though, all the monthly and annual changes were statistically-insignificant. They were in the context of minimal, prior-period downside revisions, and also in the circumstance where the six-month moving average in the highly-volatile aggregate series held in low-level stagnation—never having recovered its pre-recession high—as flat as ever seen in the series (see *Graph 11* in the *Opening Comments* section).

Growth in Second-Quarter 2016 Starts Continued to Slow; Third-Quarter Signaled a Nonexistent Boom. In terms of annualized quarter-to-quarter change, the regularly-unstable aggregate housing-starts count fell at annualized pace of 24.1% (-24.1%) in first-quarter 2015, rose at an annualized 96.3% pace in second-quarter 2015, flattened out to 0.0% in third-quarter 2015, and then contracted at an annualized 7.2% (-7.2%) in fourth-quarter 2015.

First-quarter 2016 activity, which had turned down in pre-benchmark (April) reporting, had revised into positive territory, thanks largely to upside benchmark revisions to multiple-structure starts in the May 2016 detail, but it did not revise with headline July 2016 reporting, holding at 6.0%.

Second-quarter 2016 activity revised lower, to an annualized pace of 1.7% [previously 2.9%] growth. Based solely on the volatile headline July detail, third-quarter housing starts are on an early track for an annualized 20.3% gain.

Smoothed Numbers. Despite the regular volatility and instabilities in the Housing Starts series, the general pattern of low-level stagnation continued. The six-month moving-average pattern for the aggregate series continued to flatten—as flat as one ever sees in such a series—in low-level stagnation, reflecting the most-recent headline detail (*Graph 11*), with the same pattern of stability also seen broadly in raw monthly data of (*Graph 10*). That general pattern also can be viewed in terms of the longer-range historical graph of aggregate activity (*Graph 46*) at the end of this section. Given the broad pattern of

stagnation in the aggregate series, total July 2016 housing-starts remained well below any recovery level, down from its January 2006 pre-recession high by 47% (-47%).

Separately, in July 2016, the dominant, single-unit housing starts component of the series (*Graphs 12* and *13* in the *Opening Comments*) remained down by 57% (-57%) from its January 2006 pre-recession peak.

Reflected in the smoothed graphs in the *Opening Comments*, the various housing-starts series generally were flat, at a low level of stagnation (*Graph 11* for the aggregate), with recent up-trending, low-level stagnation in the six-month-smoothed single-unit activity (*Graph 13*) turning lower in July. That was offset by down-trending, smoothed multiple-unit starts (*Graph 15*), which had continued to fall back from pre-recession levels, although it has turned in the last several months, including July.

Consumer Liquidity Problems Continue to Impair Housing Activity. An extreme consumer-liquidity bind continues to constrain the residential real estate sales and related construction activity, as fully updated in the *Opening Comments* of prior-*Commentary No. 825*. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including aggregate real estate activity. That circumstance—in the last eight-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity, 70% of which is dependent on personal spending, including real estate.

July 2016 Housing Starts, Headline Reporting. The broadly unstable and highly volatile aggregate Housing Starts series rose month-to-month, in the context of downside revisions to the two prior months. The Census Bureau reported August 16th, a statistically-insignificant, seasonally-adjusted, headline monthly gain of 2.1% +/- 10.3% (all confidence intervals are expressed at the 95% level) in July 2016 housing starts. Such followed a revised 5.1% [previously 4.8%] monthly gain in June, and a revised monthly decline of 2.3% (2.3%) [previously down by 1.7% (-1.7%), initially down by 0.3% (-0.3%)] in May. Net of prior-period revisions, July 2016 housing starts rose by 1.9%, instead of the headline gain of 2.1%. Level-of-activity aggregate detail is plotted in *Graphs 8* to *11* of the *Opening Comments*, and in *Graphs 45* and *46* at the end of this section.

Year-to-year change in the seasonally-adjusted, July 2016 aggregate housing-starts measure was a statistically-insignificant gain of 5.6% +/- 17.2%, versus a revised decline of 2.2% (-2.2%) [previously down by 2.0% (-2.0%)] in June 2016, and downwardly-revised gain of 6.1% [previously up by 6.8%, initially up by 9.5%] in May 2016.

The July 2016 headline gain of 2.1% in total housing starts encompassed headline monthly gains of 0.5% in the "one unit" category and 8.3% in the "five units or more" category; with a missing balance in the "two to four units" category discussed later in the broader, aggregate "multiple unit" category. As most commonly is the case with this extraordinarily volatile series, not one of the monthly or annual headline changes was statistically meaningful.

By-Unit Category (See Graphs in the Opening Comments). Where the irregular housing starts series can show varying patterns, that partially is due to a reporting mix of residential construction products, with the largest physical-count category of one-unit structure housing starts—generally for individual consumption, resulting in new home sales—versus multi-unit structure starts that generally reflect the building of rental and apartment units.

Housing starts for single-unit structures in July 2016 rose month-to-month by a statistically-insignificant 0.5% +/- 10.1%, following a downwardly revised monthly gain of 3.9% [previously up by 4.4%] in June, and a revised deeper decline of 3.5% (-3.5%) [down by previously 2.5% (-2.5%), initially a gain of 0.3%] in May. Net of prior-period revisions, single-unit starts declined by 1.0% in July 2016, instead of the headline 0.5% monthly gain. July 2016 single-unit starts showed a statistically-insignificant annual gain of 1.3% +/- 10.7%, versus a downwardly-revised annual gain of 11.7% [previously up by 13.4%] in June 2016, and a downwardly-revised 6.2% [previously 7.3%, initially a 10.1%] gain in May, (see *Graphs 8, 9, 12* and *13* in the *Opening Comments*).

Housing starts for apartment buildings (generally 5-units-or-more) in July 2016 rose month-to-month by a statistically-insignificant 8.3% +/- 30.4%, versus an upwardly-revised 3.6% gain [previously up by 1.6%] in June, and an unrevised 2.1% [initially 1.3%] gain in May. Net of prior-period revisions, July 2016 starts here gained 10.5%, instead of increasing by the headline 8.3%.

The statistically-insignificant year-to-year gain of 15.2% +/- 51.7% in July 2016, followed a revised annual decline of 22.0% (-22.0%) [previously 23.6% (-23.6%)] in June 2016, and an unrevised 7.2% annual gain [initially up by 10.0%] in May 2016.

Expanding the multi-unit housing starts category to include 2-to-4-units plus 5-units-or-more usually reflects the bulk of rental- and apartment-unit activity. The Census Bureau does not publish estimates of the 2-to-4-units category, due to statistical significance problems (a general issue for the aggregate series). Nonetheless, the total multi-unit category can be estimated by subtracting the single-unit category from the total category (see *Graphs 8, 9, 14* and *15* in the *Opening Comments*).

Accordingly, the statistically-insignificant July 2016 monthly gain of 2.1% in aggregate starts was composed of a statistically-insignificant gain of 0.5% in one-unit structures and a statistically-insignificant gain of 5.0% in the multiple-unit structures categories (2-units-or-more, including the 5-units-or-more category). Again, these series all are graphed in the *Opening Comments*.

Regular Housing Starts Graphs. Headline reporting of Housing Starts activity is expressed by the Census Bureau as an annualized monthly pace of starts, which was 1,211,000 in July 2016, versus a downwardly-revised 1,186,000 (previously 1,189,000) in June 2016. The scaling detail used in the aggregate *Graphs 45* and 46 at the end of this section reflects those annualized numbers.

Nonetheless, given the nonsensical monthly volatility in reporting and the exaggerated effect of annualizing the monthly numbers in this unstable series, the magnitude of monthly activity and the changes in same, more realistically are reflected at the non-annualized monthly rate. Consider that the headline 228,000 month-to-month gain reported in the annualized April 2015 housing starts was larger than any actual total (non-annualized) level of monthly starts ever, for a single month. That is since related starts detail first was published after World War II.

Accordingly, the monthly rate of 100,092 units in July 2016, instead of the annualized 1,211,000-headline number, is used in the scaling of the *Graphs 8* to 15 in the *Opening Comments*. With the use of either scale of units, though, appearances of the graphs and the relative monthly, quarterly and annual percentage changes are otherwise identical, as can be seen in a comparison of *Graph 45* versus *Graph 10* in the *Opening Comments*.

Graph 45: Housing Starts (Annualized Monthly Rate of Activity), 2000 to Date



Graph 46: Housing Starts (Annualized Monthly Rate of Activity), 1946 to Date



The record monthly low level of activity seen for the present aggregate series was in April 2009, where the annualized monthly pace of housing starts then was down by 79% (-79%) from the January 2006 prerecession peak. Against that downside-spiked low in April 2009, the June 2016 headline number was up by 153%, but it still was down by 47% (-47%) from the January 2006 pre-recession high for the series. Shown in the historical perspective of the post-World War II era, current aggregate-starts activity is in stagnation at low levels that otherwise have been at or near the historical troughs of other recession activity of the last 70 years, as reflected in *Graph 46*.

WEEK AND MONTH AHEAD

Headline Economic Deterioration Should Continue to Intensify in the Weeks and Month Ahead, Increasingly Pummeling the U.S. Dollar and Boosting Gold, Silver and Eventually Oil Prices. Market expectations for business activity should continue to deteriorate at an accelerating pace, amidst intensifying, negative headline economic reporting, and with Fed-policy retrenchment likely shifting towards renewed quantitative easing in the months ahead. The general trend in weakening expectations for business activity and movement towards looming recession recognition, reflect a broad spectrum of market-disappointing headline data. Unfolding circumstances are discussed in today's *Hyperinflation Watch* and *Opening Comments, Commentary No. 825, Commentary No. 824, Commentary No. 823, Commentary No. 822, Commentary No. 821, Commentary No. 820, Commentary No. 818, Commentary No. 817, General Commentary No. 811, Supplemental Commentary No. 807-A, Commentary No. 800, Commentary No. 799, Commentary No. 796-A, Commentary No. 796* and <u>No. 777 Year-End Special Commentary</u>.

Negative market reactions have surfaced in trading of the U.S. dollar and in related financial markets, with some upside pressure on gold, silver and oil prices, subsequent to the weaker-than-expected headline and annualized real growth in second-quarter 2016 GDP and downside GDP revisions to recent quarters, and against generally and increasingly weaker-than-expected headline economic detail. Such reflects the impact of perpetual U.S. economic non-recovery and a renewed, intensifying downturn.

Market activity in oil has been mixed, due partially to some irregular U.S. dollar strength, as discussed in <u>No. 818</u>. These market reactions reflect an intensifying sense of Federal Reserve impotence, with bleak longer-term implications for the U.S. dollar. Further Fed tightening prior to the election is unlikely, while renewed quantitative easing could become a target of intensified market speculation, as the deepening recession unfolds and becomes increasingly obvious in the next month or two (see <u>No. 820</u>).

Rapidly weakening, regular monthly economic reporting should result in much worse-than-expected increasingly negative—reporting for at least the next several quarters of GDP (and GDI and GNP). That was seen minimally with a miniscule first-quarter 2016 contraction in the Gross National Product (GNP)—the broadest measure of U.S. economic activity reflected in the recent GDP benchmarking. CPI-U consumer inflation—intermittently driven lower in 2015 and early-2016 by collapsing prices for gasoline and other oil-price related commodities—likely has seen its near-term, year-to-year low. Headline monthly March to June 2016 detail moved into positive headline territory, in tandem with rising gasoline prices. CPI inflation was "unchanged"—minimally negative—with a switch to positive seasonal adjustments for gasoline prices only partially offsetting the unadjusted monthly drop in gasoline prices. Those shifting energy seasonals should boost the August detail more strongly, resulting in a headline monthly gain. Going forward, a weakening U.S. dollar increasingly should boost inflation, with a related upturn in oil prices, gasoline and other commodities. The <u>Public Commentary on Inflation Measurement</u> reviews fundamental reporting issues with the headline CPI.

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

Data instabilities—induced partially by the still-evolving economic turmoil of the last nine-to-eleven years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn provide particularly unstable headline economic results, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). That issue is discussed and explored in the labor-numbers related <u>Supplemental</u> <u>Commentary No. 784-A</u> and <u>Commentary No. 695</u>.

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

Combined with ongoing allegations in the last year or two of Census Bureau falsification of data in its monthly Current Population Survey (the source for the BLS Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular economic series (see <u>Commentary No. 669</u>). John Crudele of the <u>New York Post</u> continues his investigations in reporting irregularities: <u>Crudele Investigation</u>. In the 1990s, the Census Bureau and BLS played political-reporting games with the nature of statistical sampling size in "inner cities" in the Census Bureau surveying tied to the monthly Household Surveys and the annual piggy-backed Poverty Survey. Such had major distorting impact on the headline data, and it may be in the works, again.

PENDING RELEASES:

Existing- and New-Home Sales (July 2016). July 2016 Existing-Home Sales are due for release on Wednesday, August 24th, from the National Association of Realtors (NAR), with the July 2016 New-

Home Sales report due from the Census Bureau the day before on Wednesday, August 23rd. Both Existing- and New-Home Sales will be covered in the *Commentary No.* 827 of August 25th.

The extreme liquidity bind besetting consumers continues to constrain personal-consumption expenditures, and residential real estate sales, as fully updated in prior-<u>Commentary No. 825</u>. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic 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 has not happened and does not appear to be in the offing.

Headline Existing-Home Sales should continue their current general pattern of low-level stagnation, with a minimal uptrend likely to turn to renewed downtrend.

Smoothed for regular extreme and nonsensical monthly gyrations, a pattern of low-level stagnation in New-Home Sales also is likely to continue. The pattern of low-level stagnation in new sales generally turned from up-trending to down-trending or flat in September 2015, with a minimal upside trend resuming to 2016. Monthly changes in activity here rarely are statistically-significant, amidst the otherwise unstable headline reporting and revisions; nonetheless, the series is due for some further downside catch-up, possibly in the July 2016 detail.

New Orders for Durable Goods (July 2016). The Census Bureau will report July 2016 New Orders for Durable Goods on Thursday, August 25th, which will be covered in *Commentary No. 827* of that date. Net of irregular activity in commercial aircraft orders, aggregate orders likely continued a pattern of down-trending real stagnation.

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

Noted in <u>*Commentary No. 825*</u>, unadjusted manufactured-durable goods inflation in the July 2016 Producer Price Index (PPI) rose by 0.18% in the month, versus "unchanged" at 0.00% in June 2016 and having gained 0.18% in May. The decline in annual inflation continued to narrow, to a contraction in July 2018 of 0.18% (-0.18%), versus 0.42% (-0.42%) in June 2016 and an annual decline of 0.60% (-0.60%) in May 2016, with related implications for inflation-adjusted real monthly and annual changes reported for the new orders.

Gross Domestic Product (GDP)—**Second-Quarter 2016, Second Estimate, First Revision.** The Bureau of Economic Analysis (BEA) will publish its first revision, second estimate of second-quarter 2016 Gross Domestic Product (GDP) on Friday, August 26th. With initial headline reporting of 1.22% annualized real quarterly growth for the second-quarter, the first revision should take it lower, to perhaps

0.8%, reflecting subsequent deterioration reported in the trade, construction spending and housing starts data, with minimal upside offsets from revisions to inventories, industrial production and real retail sales. For prior quarters—not subject to near-term revisions—benchmarked headline quarterly real GDP growth was 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015.

Keep in mind that real annual growth in the initial, second-quarter reporting—also subject to downside revision—came in at a 12-quarter low of 1.23%.

Initial estimates of the broader measure of second-quarter 2016 Gross National Product (GNP) and the theoretical GDP equivalent of the Gross Domestic Income (GDI) also are scheduled for release. They often offer unpredictable surprise for the markets, with the headline first-quarter GNP 2016 currently on the negative side of flat, down by 0.003% (-0.003%) at a real, annualized quarterly pace.

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

The various background articles available at the <u>www.ShadowStats.com</u> site also will be updated in the process, including those first published in 2004 as introductory articles to the site. As usual, all original material will remain available to subscribers (all original public material also will remain available to anyone visiting the site).

As to timing, the *Special Report* already is in the works and should be published by early-October. It will incorporate fully up-to-date economic detail, including the mid-September 2016 releases by the Census Bureau of its 2015 income survey and by the Bureau of Labor Statistics of its preliminary benchmark revisions to 2016 payroll employment. It also will include updated, consistent GAAP-based financial detail on the U.S. government's financial condition through September 30, 2015 and initial prospects for the fiscal year ended September 30, 2016.

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

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