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

COMMENTARY NUMBER 848 October Industrial Production, Producer Price Index (PPI)

November 16, 2016

Early Trend for Fourth-Quarter Industrial Production Suggested Renewed Quarterly Contraction and Fifth-Straight Quarter of Annual Contraction

Outside of Formal Recessions, Two-or-More Consecutive Quarters of Annual Decline Remain Unprecedented in 98-Year History of the Production Series

Little Changed versus September, October Production Remained Down by 1.38% (-1.38%) from Its Pre-2007 Recession High; Down by 2.27% (-2.27%) from Its One-Month, November 2014 Recovery

With October Monthly Growth Boosted by Downside Third-Quarter Revisions, Manufacturing Remained Down by 6.19% (-6.19%) from Its Never-Recovered Pre-Recession Peak

> Coal Mining Rebound and Bottoming Oil and Gas Exploration Continued to Boost Mining Activity

Monthly October PPI Inflation: Goods Up by 0.37%, Construction Up by 0.70%, Services Down by 0.27% (-0.27%), Total Unchanged at 0.00%

October 2016 Year-to-Year Energy Inflation Turned Positive for First Time Since 2014 Oil-Price Collapse

PLEASE NOTE: The next regular Commentary, scheduled for Friday, November 18th, will cover the October CPI, Real Retail Sales and Housing Starts and review post-election market circumstances.

Please call at (707) 763-5786 if you have questions or would like to discuss current issues or otherwise. Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

Industrial Production Detail Confirmed Ongoing Recession; Energy Prices Turned Positive Year-to-Year. Yesterday's nonsensical surge in October nominal retail sales should face ultimate downside revisions, or be followed by "unexpected" monthly declines, as the headline sales data are brought into closer alignment with underlying consumer-liquidity conditions (see *Commentary No. 847*).

Not confirming the rosy retail news—suggesting instead a continued downturn, not a near-term economic boom—today's (November 16th) headline October 2016 industrial production came in on the downside of expectations. The early trend for fourth-quarter 2016 activity suggested a fifth consecutive quarter of annual contraction for the series, an event never seen outside of formal recessions, as well as a possible fourth-quarter quarterly contraction. Also with not so happy news, today's headline reporting of the October PPI showed annual energy and goods inflation turning positive year-to-year for the first time since the 2014 collapse in oil prices. A weak economy and rising inflation are not good news on any front, circumstances that will be explored in greater depth come Friday's (November 18th) *Commentary No.* 849.

Today's *Commentary* (**November 16th**). The balance of these *Opening Comments* covers summary detail and special graphs of October 2016 Industrial Production, while the *Reporting Detail* includes expanded detail and extensive, additional graphs. Also provided is a brief summary of the October Producer Price Index (PPI) results, fully expanded upon in the *Reporting Detail*.

The *Week and Month Ahead* updates the preview of Thursday's (November 17th) releases of the October CPI, real Retail Sales and Earnings and New Residential Construction (Housing Starts). Those releases will be covered in Friday's (November 18th) *Commentary No. 849*, along with a review of financial-market circumstances.

Industrial Production—October 2016—Early Indications of a Fifth Consecutive Quarterly Year-to-Year Contraction in Production. In the context of shifting utility usage revisions between recent months, the broad production picture remains little changed, with negligible net revisions as of last month's headline September level of activity, with October little changed versus September, with annual

growth continuing in decline, and with implications for continuing annual contraction as well as a renewed quarterly contraction in unfolding fourth-quarter 2016 activity.

Given the fourteenth consecutive month of year-to-year decline in industrial production activity—65% of the nominal value of Gross Domestic Product (GDP) as estimated by the Federal Reserve—the economy remains in the harsh reality of recession, one that began somewhat before 2007. That is irrespective of the happy hype out of the Bureau of Economic Analysis (BEA), which guesstimated that the "advance" estimate of third-quarter 2016 real GDP reflected broad economic activity at 11.4% above its prerecession peak (see *Commentary No. 844*). No other major economic series shows anything close to that purported level of recovery, where industrial production is showing a renewed and continuing downturn.

As of today's headline October 2016 reporting, Industrial Production at 104.269, stood below its formal pre-recession high by 1.38% (-1.38%) and was down by 2.27% (-2.27%) from its one-month "recovery" peak level of November 2014.

The dominant manufacturing sector (78.5% of Industrial Production, 51.0% of GDP) never even recovered its pre-recession high, in the current series. As of October 2016, manufacturing activity was down by 6.19% (-6.19%) from its pre-2007 recession peak.

An overriding issue continuing to stymie policies of the Federal Reserve, as well as the dominant contributing factor behind the major political shift seen in the 2016 presidential election (see *Commentary No. 846*), 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 *No. 777 Year-End Special Commentary*). In the post-2016-benchmark revision era for Industrial Production, the headline (not the ShadowStats-corrected) series, again, recovered its pre-recession high only for only one month, in November 2014, and it has been in fairly-consistent monthly decline ever since, falling month-to-month in 15 out of 23 subsequent months.

Headline Industrial Production—October 2016. In the context of shifting utility-usage revisions in June, July and August, the level of September 2016 was little changed in aggregate from its prior reporting. Against that, October 2016 headline reporting was "unchanged," up by 0.04% at the second decimal point. That was against a heavily revised monthly growth rate (not level) of a contraction of 0.23% (-0.23%). August saw a shallower monthly contraction of 0.12% (-0.12%) versus a downwardly-revised 0.35% gain in July.

Net of prior-period revisions, October 2016 production gained 0.04% for the month, the same as the headline gain of 0.04%. The levels of activity in September 2016 were revised lower for manufacturing and to the upside for utilities and mining.

Detailed by major industry group (see *Graphs 5*, 7, 12 and 14 in the *Reporting Detail*), the headline October 2016 monthly aggregate production gain of 0.04% was composed of a monthly October gain of 0.20% in manufacturing activity; an October gain of 2.05% in mining activity (including oil and gas production); and an offsetting October decline of 2.58% (-2.58%) in utilities activity.

Year-to-year change in October 2016 industrial production was a decline of 0.85% (-0.85%), the fourteenth consecutive monthly year-to-year decline. That followed a revised decline of 1.03% (-1.03%) in September, a shallower decline of 0.84% (-0.84%) in August 2016, and a revised shallower decline in July 2016 of 0.60% (-0.60%).

Quarterly and Annual Production Contractions. Annual growth in aggregate production held in negative territory for the fourteenth straight month, again, down by 0.85 (-0.85%) in October 2016, suggesting a fifth consecutive quarter of annual contraction, implied as an annual contraction for fourth-quarter 2016 of 0.28% (-0.28%), based solely on October's reporting. In the 98-year history of the industrial production series, two consecutive quarters of annual contraction never have been seen outside of formal recessions, let alone four or more.

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 annual declines of 1.62% (-1.62%) in fourth-quarter 2015, 1.57% (-1.57%) in first-quarter 2016, down by 1.08% (-1.08%) in second-quarter 2016 and by 0.97% (-0.97%) in third-quarter 2016.

<u>Annualized Quarter-to-Quarter.</u> 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 was 1.66% (-1.66%), with the second-quarter 2016 quarterly growth down by 0.84% (-0.84%). Third-quarter 2016 industrial production expanded at an annualized pace of 1.97%, but the early fourth-quarter 2016 trend is for an annualized contraction of 0.61% (-0.61%), based solely on October's detail.

Production Graphs—Corrected and Otherwise—October 2016. The regular graphs of the headline production level and annual growth detail are found in the *Reporting Detail (Graphs 3* to 6), along with the drill-down graphs of major subcomponents of the production series (*Graphs 7* to 20).

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. Third-quarter 2016 growth was positive on a quarter-to-quarter basis, but remained in annual contraction for the fourth consecutive quarter. October 2016, the first month of reporting for fourth-quarter 2016, showed an early pattern suggestive of renewed quarter-to-quarter decline and a fifth straight quarter of year-to-year contraction.

Such patterns never have been seen outside of formal recessions. Such faltering patterns of monthly, quarterly and annual decline were seen last in the depths of the economic collapse from 2007 into 2009.

Graphs 1 and 2, 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 Inflation</u> and <u>Chapter 9</u> of <u>2014 Hyperinflation Report—Great Economic Tumble</u>).

Graph 1 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 *Commentary*

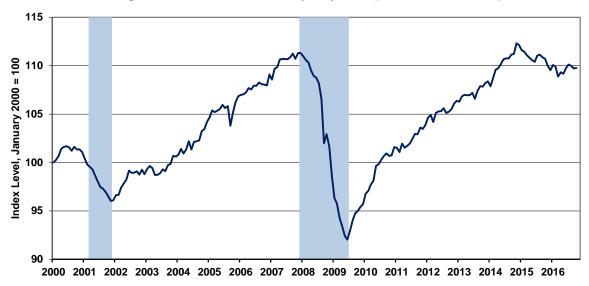
<u>No. 839</u>), new orders for durable goods (see <u>Commentary No. 843</u>) and the GDP (see <u>Commentary No. 844</u>). It does not affect the appearance of the graph or reported growth rates (as can be seen with a comparison of *Graph 1* here to *Graph 5* in the *Reporting Detail* section).

Graph 2 is a recast version of *Graph 1*, 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 1 and 2 follow on the next page.]

Graph 1: Indexed Headline Level of Industrial Production (Jan 2000 = 100)

Headline Industrial Production (Jan 2000 = 100) Through October 2016, Seasonally-Adjusted [ShadowStats, FRB]



Graph 2: Headline ShadowStats-Corrected Level of Industrial Production (Jan 2000 = 100)

ShadowStats-Corrected Industrial Production (Jan 2000 = 100) Hedonic-Adjusted Inflation Understatement Removed, Level Through October 2016, Seasonally-Adjusted [ShadowStats, FRB]



This "corrected" *Graph 2* 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 (see *Commentary No. 844* and *No. 777 Year-End Special*

<u>Commentary</u>). Unlike the headline industrial production data and the headline GDP numbers, corrected production levels never recovered pre-recession highs, although the headline aggregate production index quickly backed off its official one-month "recovery" in November 2014, and the headline manufacturing sector never has 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 2013, an irregular uptrend into 2014, a topping-out in late-2014 and generally turning lower through 2015 and into fourth-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, with October's early indication of fourth-quarter 2016 activity showing an annual contraction, once again, but with renewed quarterly contraction. Again, these are patterns still never seen historically, outside of formal recessions.

Producer Price Index—October 2016—Goods Inflation Rose by 0.37%; Construction Inflation Rose by 0.70%, Profit Margins in the Dominant Services Sector Declined by 0.27% (-0.27%); with Aggregate PPI Inflation Unchanged at 0.00%. The headline monthly "unchanged" reading at 0.00% in October 2016 PPI followed an increase of 0.27% in September, with annual inflation rising to 0.91% in October 2016 versus 0.73% in September 2016. The headline PPI inflation generally reflected neither real world activity, nor common experience. The same applies to many of its major subcomponents, which are discussed in the *Reporting Detail* section.

REPORTING DETAIL

INDEX OF INDUSTRIAL PRODUCTION (October 2016)

Early Indications of a Fifth Consecutive Quarterly Year-to-Year Contraction in Production. In the context of shifting utility usage revisions between recent months, the broad production picture remains little changed, with negligible net revisions as of last month's headline September level of activity, with

October little changed versus September, with annual growth continuing in decline, and with implications for continuing annual contraction as well as renewed quarterly contraction in the unfolding fourth-quarter 2016 production activity.

Given the fourteenth consecutive month of year-to-year decline in industrial production activity—65% of the nominal value of Gross Domestic Product (GDP) as estimated by the Federal Reserve—the economy remains in the harsh reality of recession, one that began somewhat before 2007. That is irrespective of the happy hype out of the Bureau of Economic Analysis (BEA), which guesstimated that the "advance" estimate of third-quarter 2016 real GDP reflected broad economic activity at 11.4% above its prerecession peak (see <u>Commentary No. 844</u>). No other major economic series shows anything close to that purported level of recovery, where industrial production is showing a renewed and continuing downturn.

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An overriding issue continuing to stymie policies of the Federal Reserve, as well as the dominant contributing factor behind the major political shift seen in the 2016 presidential election (see <u>Commentary No. 846</u>), 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 Special Commentary</u>). In the post-2016-benchmark revision era for Industrial Production, the headline (not the ShadowStats-corrected) series, again, recovered its pre-recession high only for only one month, in November 2014, and it has been in fairly-consistent monthly decline ever since, falling month-to-month in 15 out of 23 subsequent months.

Headline Industrial Production—October 2016. The Federal Reserve Board released its first estimate of seasonally-adjusted, October 2016 industrial production this morning, November 16th. In the context of shifting utility-usage revisions in June, July and August, the level of September 2016 was little changed in aggregate from its prior reporting. Against that, October 2016 headline reporting was unchanged, up by 0.04% at the second decimal point. That was against a heavily revised monthly growth rate (not level) of negative 0.23% (-0.23%) [previously up by 0.06%]. August saw a shallower monthly contraction of 0.12% (-0.12%) [previously down by 0.53% (-0.53%), initially down by 0.43% (-0.43%)], versus a downwardly-revised 0.35% [previously 0.48%, 0.56%, initially 0.74%] gain in July.

Net of prior-period revisions, October 2016 production gained 0.04% for the month, the same the headline gain of 0.04%. The levels of activity in September 2016 were revised lower for manufacturing and to the upside for utilities and mining.

Detailed by major industry group (see *Graphs 5*, 7, 12 and 14), the headline October 2016 monthly aggregate production gain of 0.04% was composed of a monthly October gain of 0.20% in manufacturing activity; an October gain of 2.05% in mining activity (including oil and gas production); and an offsetting October decline of 2.58% (-2.58%) in utilities activity.

Year-to-year change in October 2016 industrial production was a decline of 0.85% (-0.85%), the fourteenth consecutive monthly year-to-year decline, a circumstance unprecedented outside of formal recessions, in the 98-year history of the series. That followed a revised decline of 1.03% (-1.03%) [previously down by 1.05% (-1.05%)] in September, a shallower decline of 0.84% (-0.84%) [previously down by 1.34% (-1.34%), initially down by 1.11% (-1.11%)] in August 2016, and a revised shallower decline in July 2016 of 0.60% (-0.60%) [previously down by 0.72% (-0.72%), 0.59% (-0.59%), initially down by 0.53% (-0.53%)].

Quarterly and Annual Production Contractions. Annual growth in aggregate production held in negative territory for the fourteenth straight month, again, down by 0.85 (-0.85%) in October 2016, suggesting a fifth consecutive quarter of annual contraction, implied as an annual contraction for fourth-quarter 2016 of 0.28% (-0.28%), based solely on October's reporting. In the 98-year history of the industrial production series, two consecutive quarters of annual contraction never have been seen outside of formal recessions, let alone four or more.

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 annual declines of 1.62% (-1.62%) in fourth-quarter 2015, 1.57% (-1.57%) in first-quarter 2016, down by 1.08% (-1.08%) in second-quarter 2016 and by 0.97% (-0.97%) in third-quarter 2016.

<u>Annualized Quarter-to-Quarter.</u> 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%).

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Production Graphs. The regular two sets of plots for long- and short-term industrial production levels and annual growth rates (*Graphs 3* to 6) set the background for the drill-down detail graphs of various components of the aggregate industrial series (*Graphs 7* to 20).

Graphs 3 and 4, and Graphs 5 and 6 show headline industrial production activity to date. Graph 4 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 0.85% (-0.85%) in October 2016, and with headline annual contractions in place for the last fourteen months, continuing annual declines are a pattern never seen outside of formal recessions.

Graph 3 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, a bounce back in third quarter, but with an early trend unfolding for a fourth-quarter 2016 quarter-to-quarter contraction. Such patterns of monthly, quarterly and annual declines were seen last in the economic collapse into 2009. Graphs 5 and 6 show the same series in near-term detail, beginning in January 2000.

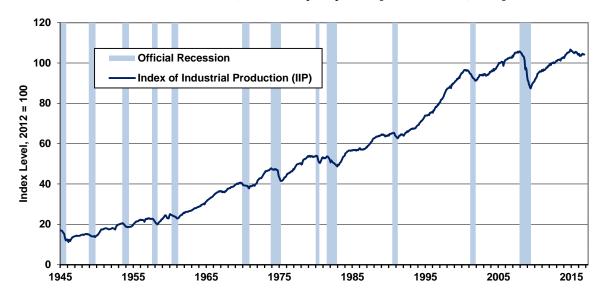
Seen most clearly in *Graph 6*, the pattern of year-to-year activity dipped anew in 2013, again, to levels usually seen at the onset of recent recessions, bounced higher into mid-2014, fluctuated thereafter, now turning sharply negative, again, as seen only in formal recessions. Year-to-year growth remains 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 4*, 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 2*) that 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 a gain in third-quarter 2016 and a possible renewed quarterly contraction in fourth-quarter 2016. The "corrected" series has contracted quarter-to-quarter throughout 2016.

[Graphs 3 to 8 begin on the following page]

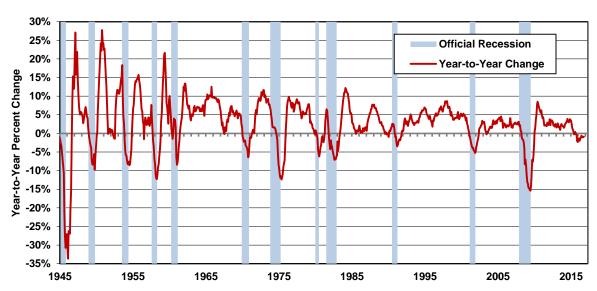
Graph 3: Index of Industrial Production (Aggregate) since 1945

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



Graph 4: Industrial Production, Year-to-Year Percent Change since 1945

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



Drilling Down into the October 2016 U.S. Industrial Production Detail. Graphs 5, 7, 12 and 16 show headline reporting of industrial production and its major components.

Graph 5: Index of Aggregate Industrial Production since 2000

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



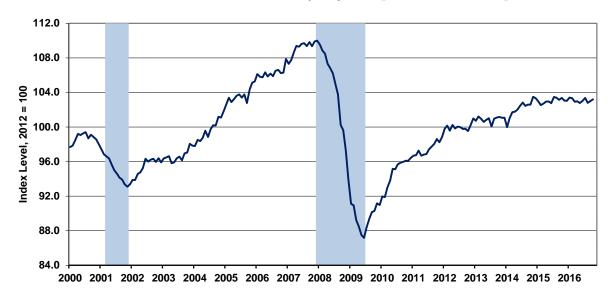
Graph 6: Aggregate Industrial Production, Year-to-Year Percent Change since 2000

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



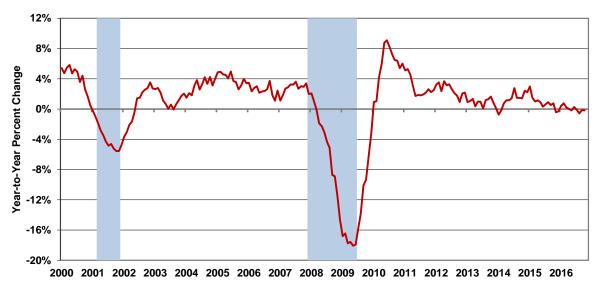
Graph 7: Industrial Production - Manufacturing (78.48% of the Aggregate in 2015)

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



Graph 8: Industrial Production - Manufacturing, Year-to-Year Percent Change Since 2000

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



The broad, aggregate index (*Graph 5*) 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, with another bounce in third-quarter 2016, but a

developing fourth-quarter 2016 contraction. Third-quarter 2016, however, was the fourth consecutive annual contraction, a circumstance simply not seen outside of recessions, as discussed earlier, and, again, fourth-quarter 2016 is shaping up as the fifth consecutive quarter of annual downturn.

Shown in *Graphs 7*, 12 and 14, of the three major industry groups, manufacturing, mining and utilities, manufacturing and mining showed monthly gains, while utilities contracted in October 2016 reporting.

Graph 7 of the dominant manufacturing sector showed a month-to-month gain of 0.46% in October, which was down from 0.86% in September. Consumer goods manufacturing reflected stronger auto production, but the dominant nondurable consumer goods sector pulled consumer production lower (see *Graphs* 9 to 11). *Graph* 8 reflects annual growth patterns in manufacturing, which had been fluttering at low levels since an initial bounce off the 2009 trough, down year-to-year in the last three months.

Graph 9: Consumer Goods (27.08% of the Aggregate in 2015)





[Graphs 10 and 11 follow on the next page.]

Graph 10: Durable Consumer Goods (6.36% of the Aggregate in 2015)

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



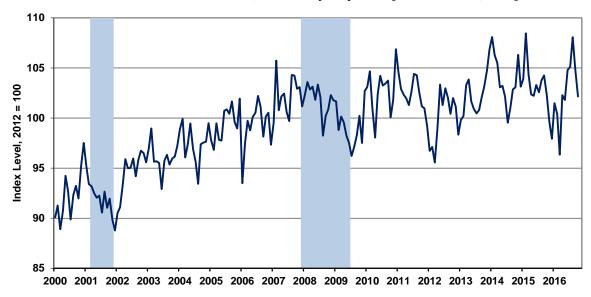
Graph 11: Nondurable Consumer Goods (20.73% of the Aggregate in 2015)

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



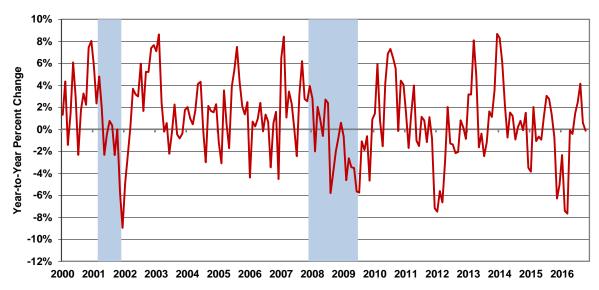
Graph 12: Industrial Production - Utilities (10.76% of the Aggregate in 2015)

Industrial Production - Utilities (2012 = 100) Level to October 2016, Seasonally-Adjusted [ShadowStats, FRB]



Graph 13: Industrial Production - Utilities, Year-to-Year Percent Change Since 2000

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



Monthly volatility in the utilities sector (*Graph 12*) usually reflects unseasonable shifts in weather conditions and reversals of same, with a 2.58% (-2.58%) decline in October 2016 of that nature.

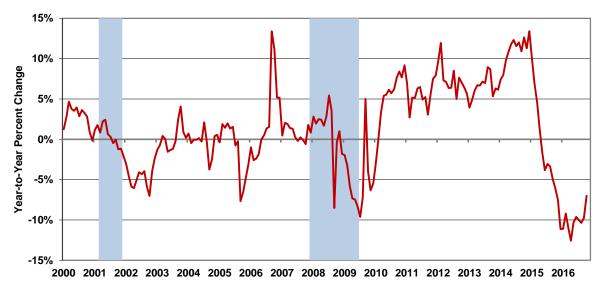
Graph 14: Industrial Production - Mining, Including Oil and Gas (10.76% of the Aggregate in 2015)





Graph 15: Industrial Production - Mining, Year-to-Year Percent Change

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



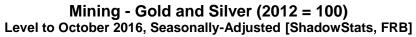
Activity in the mining sector (*Graph 14*), particularly in oil and gas exploration and production, and in coal production, still remains the near-term focus of this analysis. The sector easily recovered its pre-recession high and accounted for the full "recovery," albeit extremely short-lived, seen in the aggregate

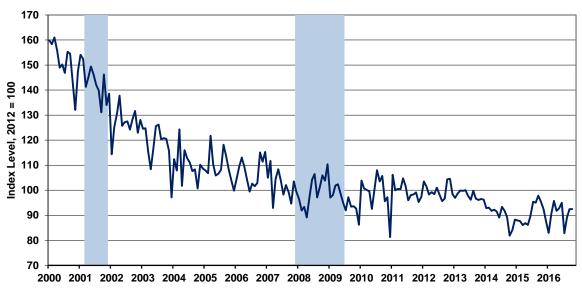
production detail since the economic collapse. Since then, however, mining production has turned down sharply, reflecting a number of factors, including the impact of largely orchestrated lower oil prices (and related recent, now-faltering U.S. dollar strength), as well as U.S. government actions to limit coal consumption and production. Year-to-year mining activity (*Graph 15*), still down by 7.01% (-7.01%), has moved off bottom, thanks to some rebound in coal production and a bottoming in the collapse of oil and gas exploration.

Graph 16 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.

Graph 17 still shows an extraordinarily rebound in monthly coal production, which was down year-to-year by 18.39% (-18.39%) in August 2016, now is down by just 1.13% (-1.13%) as of October 2016, although current activity still is down sharply from its near-term May 2014 production peak.

Graph 16: Mining – Gold and Silver Mining (Since 2000)





[Graphs 17 and 18 follow on the next page.]

Graph 17: Mining - Coal Mining (Since 2000)

Mining - Coal (2012 = 100)
Level to October 2016, Seasonally-Adjusted [ShadowStats, FRB]



Graph 18: Mining - U.S. Oil & Gas Extraction (Since 2000)

Mining - Oil & Gas Extraction (2012 = 100)
Level to October 2016, Seasonally-Adjusted [ShadowStats, FRB]

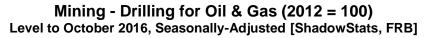


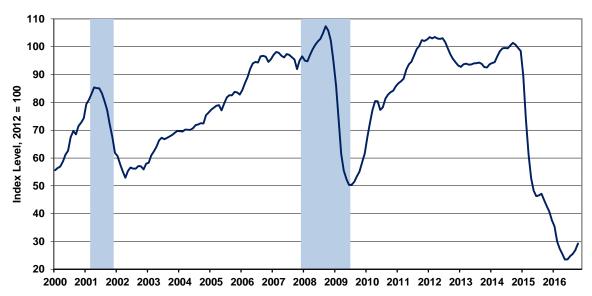
Despite oil prices continuing to move off recent lows, oil and gas extraction has continued to decline, revising into negative-monthly change from positive-monthly change, remaining well off its all-time high. October 2016 extraction still was down by 0.48% (-0.48%) month-to-month.

Exploration in terms of oil and gas drilling (*Graph 19*) has continued to move higher in what increasingly looks like a bottoming process.

Regularly discussed here, the collapse in drilling largely was an artefact of the massive U.S. dollar rally and oil-price 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 still has collapsed by 71% (-71%).

Graph 19: U.S. Drilling for Oil & Gas (Since 2000)

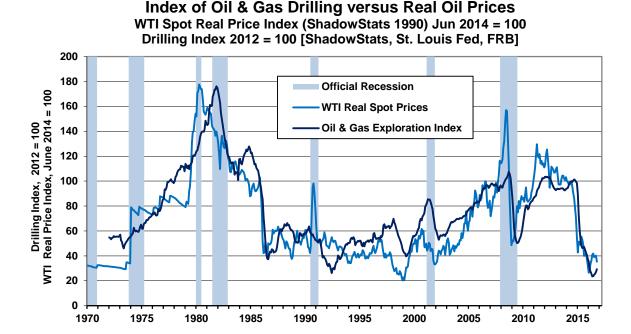




Shown in *Graph 20*, with some lag following the sharp movements in oil prices, oil and gas exploration tends to move in tandem, and an upswing, indeed, appears to be in its early stages. The oil price index used is for the West Texas Intermediate (WTI) monthly average spot price, deflated using the ShadowStats Alternate CPI measure (1990 Base).

When the dollar recently started to weaken anew, dollar-denominated oil prices also began to strengthen, even in a circumstance with excess supply conditions. At such time as the U.S. dollar declines meaningfully—ShadowStats looks for a massive sell-off in the dollar in the year ahead—U.S. dollar-denominated oil prices should rally (see *General Commentary No. 811*). That said, post-election, the U.S. dollar has rallied sharply, but there has not been a commensurate decline in oil prices. Again, those circumstances will be discussed in Friday's (November 18th) *Commentary No. 849*.

Graph 20: Mining - U.S. Drilling for Oil & Gas versus Real Oil Prices (WTI ShadowStats 1990 Base)



PRODUCER PRICE INDEX—PPI (October 2016)

Headline October PPI Goods Inflation Rose by 0.37%; Construction Inflation Rose by 0.70%; Profit Margins in the Dominant Services Sector Declined by 0.27% (-0.27%); with Aggregate PPI Inflation Unchanged at 0.00%. The headline month-to-month "unchanged" October 2016 PPI generally reflected neither real world activity, nor common experience.

Beyond the broad issues with general inflation measurement (see <u>Public Commentary on Inflation Measurement</u>), the bulk of the PPI is covered by the "services" sector, where inflation is determined by shifting profit margins. Discussed in the *Inflation That Is More Theoretical than Real World* section, profit-margin inflation estimates generally are handled in a manner counter-intuitive to the moretraditional measurement of inflation in goods and services, otherwise calculated as a measurement of change in prices. Accordingly, the headline detail here increasingly has a limited relationship to real-world activity.

The conceptual differences between goods inflation and services profit margins do not blend well and are not merged easily or meaningfully in the current version of the PPI. While, the dual measures are more meaningfully viewed independently than as the hybrid measure of the headline Producer Price Index Final Demand—ShadowStats separates the analyses of those sectors in by sub-category—the aggregate

headline series here also is reviewed and covered within the headline reporting conventions of the Bureau of Labor Statistics (BLS).

Inflation That Is More Theoretical than Real World? [This background text is as published previously.] Effective with January 2014 reporting, a new Producer Price Index (PPI) replaced what had been the traditional headline monthly measure of wholesale inflation in Finished Goods (see <u>Commentary No. 591</u>). In the new headline monthly measure of wholesale Final Demand, Final Demand Goods basically is the old Finished Goods series, albeit expanded.

The new and otherwise dominant Final Demand Services sector largely reflects problematic and questionable surveying of intermediate or quasi-wholesale profit margins in the services area. To the extent that profit margins shrink in the services sector, one could argue that the resulting lowered estimation of inflation actually is a precursor to higher inflation, as firms subsequently would move to raise prices, in an effort to regain more-normal margins. In like manner, in the circumstance of "increased" margins—due to the lower cost of petroleum-related products not being passed along immediately to customers—competitive pressures to lower margins would tend to be reflected eventually in reduced retail prices (CPI). The oil-price versus margin gimmick works both way. In times of rapidly rising oil prices, it mutes the increase in Final Demand inflation, in times of rapidly declining oil prices; it tends to mute the decline in Final Demand inflation.

The current PPI series remains an interesting concept, but it appears limited as to its aggregate predictive ability versus general consumer inflation. Further, there is not enough history available on the new series (just six years of post-2008-panic data) to establish any meaningful relationship to general inflation or other economic or financial series.

October 2016 Headline PPI Detail. The Bureau of Labor Statistics (BLS) reported this morning, November 16th, that the seasonally-adjusted, month-to-month, headline Producer Price Index (PPI) Final Demand inflation for October 2016 was unchanged at 0.00%, versus a gain of 0.27% in September. The impact of seasonal adjustments on the headline PPI reporting was neutral, in aggregate, with the unadjusted monthly October measure also unchanged for the month.

On a not-seasonally-adjusted basis—all annual growth rates are expressed unadjusted—year-to-year PPI Final Demand inflation in October 2016 rose to 0.82% from 0.73% in September 2016.

For the three major subcategories of October 2016 Final Demand PPI, headline monthly Goods inflation rose by 0.37%, Services inflation declined by 0.27% (-0.27%) and Construction inflation rose by 0.70%.

<u>Final Demand Goods (Weighted at 33.63% of the Aggregate Index)</u>. Running somewhat in parallel with the old Finished Goods PPI series, headline month-to-month Final Demand Goods inflation in October 2016 rose by 0.37%, having gained 0.65% in September. There was positive impact on the aggregate goods headline reading from underlying seasonal-factor adjustments. Not-seasonally-adjusted, October Final Demand Goods inflation rose by 0.09%.

Unadjusted, year-to-year goods inflation in October 2016 turned positive for the first-time since the U.S. government orchestrated the 2014-collapse in oil prices, showing an annual gain of 0.28% in October 2016, following an annual decline of 0.37% (-0.37%) in September 2016.

Headline seasonally-adjusted monthly changes by major components of the October 2016 Final Demand Goods:

- "Foods" inflation (weighted at 5.56% of the total index) declined month-to-month in October 2016 by 0.79% (-0.79%), having gained 0.53% in September. Seasonal adjustments were positive for the October headline change, which was down by 1.05% (-1.05%) unadjusted. Unadjusted and year-to-year, annual October 2016 foods inflation dropped by 3.50% (-3.50%), having declined by 3.46 (-3.46%) in September 2016.
- "Energy" inflation (weighted at 5.24% of the total index) rose by 2.48% month-to-month in October 2016, following a 2.54% gain in September. Seasonal adjustments here were strongly positive, with unadjusted monthly energy inflation down by 0.32% (-0.32%) in the month. Unadjusted and year-to-year, October 2016 energy prices rose by 0.32%, the first annual gain since oil prices collapsed in 2014. September 2016 prices had been down by 2.47% (-2.47%) year-to-year.
- "Less foods and energy" ("Core" goods) monthly inflation (weighted at 22.83% of the total index) rose by 0.09% in October 2016, versus 0.27% in September. Seasonal adjustments were negative for monthly core inflation, with an unadjusted monthly gain of 0.54%. Unadjusted and year-to-year, October 2016 was up by 1.27%, versus a gain of 0.91% in September 2016.

<u>Final Demand Services (Weighted at 64.28% of the Aggregate Index).</u> Headline monthly Final Demand Services inflation fell by 0.27% (-0.27%) in October 2016, having gained 0.09% in September. The overall seasonal-adjustment impact on headline October services inflation was negative, with an unadjusted monthly contraction of 0.09% (-0.09%). Year-to-year, unadjusted October 2016 services rose by 1.09%, following a 1.36% annual gain in September 2016.

The headline monthly changes by major component for October 2016 Final Demand Services inflation:

- "Services less trade, transportation and warehousing" inflation, or the "Other" category (weighted at 38.96% of the total index), fell by 0.27% (-0.27%) month-to-month in October 2016, having gained 0.18% in September. Seasonal-adjustment impact on the adjusted October detail was negative, where the unadjusted monthly reading was a contraction of 0.18% (-0.18%). Unadjusted and year-to-year, October 2016 "other" services inflation was 2.02%, versus 2.20% in September 2016.
- "Transportation and warehousing" inflation (weighted at 4.99% of the total index) rose month-to-month in October 2016 by 0.18%, having gained by 1.33% in September. Seasonal adjustments were negative for the headline October reading, where the unadjusted monthly number had been a gain of 0.62%. Unadjusted and year-to-year, October 2016 transportation inflation declined by 0.18% (-0.18%), having declined by 0.53% (-0.53%) in September 2016.
- "Trade" inflation (weighted at 20.34% of the total index) declined month-to-month in October 2016 by 0.27% (-0.27%), having declined by 0.36% (-0.36%) in September. Seasonal adjustments had a negative impact here, where the unadjusted monthly change was a gain of 0.18%. Unadjusted and year-to-year, October 2016 trade inflation was a decline of 0.18% (-0.18%), where September 2016 trade inflation had been "unchanged" at 0.00%.

<u>Final Demand Construction (Weighted at 2.09% of the Aggregate Index).</u> Although a fully self-contained subsection of the Final Demand PPI, Final Demand Construction inflation receives no formal headline

coverage. Month-to-month construction inflation rose by 0.70% in October 2016, having gained 0.09% in September. The impact of seasonal factors on the October reading was neutral, where the unadjusted monthly change also 0.70%. The issues here are a combination of monthly headline cost changes along with a quarterly estimate of contractor profit-margin changes. The latter circumstance was addressed in *Commentary No.* 829 of September 2nd.

On an unadjusted basis, year-to-year construction inflation rose by 0.61% in October 2016, having gained 0.80% in September 2016. At present, private surveys are showing much higher construction-related inflation than is reported by the government, by an order of magnitude of a couple of hundred basis points, such as reflected in the privately-published Building Cost and Construction Cost Indices [Dodge Data and Analytics (McGraw Hill) <u>Engineering News-Record</u>] and in construction-related price deflators in the National Income Accounts, such as the Gross Domestic Product (GDP).

Discussed in <u>Commentary No. 829</u>, ShadowStats has constructed a Composite Construction Deflator (CCD) that now is used by ShadowStats in deflating the Census Bureau's monthly estimates of Construction Spending Put in Place in the United States.

PPI-Inflation Impact on Pending Reporting of New Orders for Durable Goods. As to the upcoming reporting of October 2016 new orders for durable goods, monthly inflation (reported only on a not-seasonally-adjusted basis) for new orders for manufactured durable goods jumped by 0.42% in October 2016, having declined by 0.06% (-0.06%) in September and having been "unchanged" at 0.00% in August. Year-to-year annual inflation rose to 0.36% in October 2016, versus 0.12% in September 2016 and an annual gain of 0.06% in August 2016. October 2016 durable goods orders will be reported on November 23rd and covered in ShadowStats *Commentary No.* 850 of that date.

WEEK AND MONTH AHEAD

Despite the Pending Change in Government, Near-Term Economic Deterioration Should Intensify, Increasingly Frustrating Fed Provocateurs, Pummeling the U.S. Dollar and Boosting Gold, Silver and Oil Prices. Despite expectations of better business conditions under the Trump Administration, market expectations for business activity still should continue to falter, amidst intensifying, negative headline economic reporting. Likely new fiscal stimulus has at least a nine-month lead-time before its impact will surface in headline economic activity, most likely early in 2018. The new administration also will have a difficult time working with or around the Federal Reserve's global banking-system liquidity woes, as well as its own Treasury's funding needs as the federal deficit swells initially with new spending

and tax cuts, before hoped-for increased tax revenues begin to flow in from the strengthened economy, as discussed in *Commentary No.* 846.

Irrespective of continuing talk by some FOMC members of a near-term rate hike, the still-ongoing and deepening domestic economic downturn promises intensified stress on systemic liquidity. That circumstance ultimately dooms the U.S. central bank to an intensified quantitative easing, post-election. The circumstance remains in play, even if the FOMC hikes rates at its December meeting, which ends on December 14th.

<u>Commentary No. 847</u> reviewed the highly-suspect headline surge in nominal October retail sales. That area will be revisited in the November 18th *Commentary No. 849*, in the context of October headline CPI-U and related real retail sales activity.

Covered in <u>Commentary No. 845</u>, October employment and unemployment and September construction spending did not offer a brightening economic outlook. The sharp narrowing in the September and third-quarter 2016 trade deficit generally reflected nonrecurring elements of highly-suspect quality.

Reviewed in <u>Commentary No. 844</u>, the above-consensus "advance" estimate of third-quarter 2016 GDP remained well above any realistic estimate of domestic U.S. economic activity. Separate from the strong headline detail in October retail sales, other headline detail from that just-closed month likely will surprise on the downside, as was seen with October labor conditions. Where the retail sales would suggest an upside revision, production and housing detail remain good bets to trigger downside revisions to third-quarter GDP growth estimates.

<u>Commentary No. 843</u> offered a <u>Special Comment</u> on background economic circumstances and the then pending election, following up on <u>No. 841</u>. Headline related details from September new- and existing-home sales and from new orders for durable goods reporting also were reviewed. That followed <u>Commentary No. 842</u>, which assessed the negative shifts in monthly, quarterly and annual growth patterns of the housing-starts series.

Noted in <u>Commentary No. 841</u>, consumer inflation started to rebound, along with higher gasoline prices, yet the economy continued to falter as indicated in September freight activity, and as seen in the headline detail of September housing starts. The <u>Special Comments</u> in <u>No. 841</u> also looked a little deeper into the likely impact of unusually protracted and negative economic conditions on the presidential election and on the post-election environment for the U.S. dollar and precious metals.

September industrial production detail disappointed market expectations and deteriorated sharply in the context of downside, prior-period revisions. Such was reviewed in <u>Commentary No. 840</u>. <u>Commentary No. 839</u> provided the opening salvo of comments on the November 8th election and potential aftermath for the economy and the markets. Consumer liquidity conditions also were updated, along with a review of September 2016 nominal Retail Sales and the PPI.

September employment and unemployment circumstances were covered in <u>Commentary No. 838</u>. Fedpolicy retrenchment should remain very much alive, shifting towards that renewed quantitative easing, in the post-election environment, as discussed in the <u>Opening Comments</u> of <u>No. 839</u>, and those of <u>Commentary No. 837</u> and <u>Commentary No. 835</u>, which respectively also reviewed the August trade deficit and construction spending, and August durable goods orders, home-sales activity and the most-recent FOMC inaction.

The general trend in weakening expectations for business activity and movement towards looming recession recognition, reflect an ongoing broad spectrum of market-disappointing headline data, such as seen in the industrial production detail (*No. 840*) and in <u>Commentary No. 832</u>. Earlier FOMC considerations also were covered in <u>Commentary No. 831</u>, while the initial payroll benchmark revision for 2016 was discussed in <u>Commentary No. 830</u>.

Broad economic and systemic details otherwise have been reviewed regularly in <u>Commentary No. 827</u>, <u>Commentary No. 826</u>, <u>Commentary No. 825</u>, <u>Commentary No. 824</u>, <u>Commentary No. 823</u>, <u>Commentary No. 823</u>, <u>Commentary No. 817</u>, <u>Commentary No. 821</u>, <u>Commentary No. 820</u>, <u>Commentary No. 818</u>, <u>Commentary No. 817</u>, <u>General Commentary No. 811</u>, <u>Supplemental Commentary No. 807-A</u>, <u>Commentary No. 800</u>, <u>Commentary No. 796-A</u>, <u>Commentary No. 796</u> and <u>No. 777 Year-End Special Commentary</u>.

Post-election market activity has seen positive boosts to the equity markets and the U.S. dollar, with sharply negative impact on prices of precious metals. Market concerns as to the Federal Reserve's quagmire should resurface fairly quickly, where negative market reactions had surfaced in trading of the U.S. dollar and in related financial markets, with some upside pressure on gold, silver and oil prices, subsequent to pre-election, weaker-than-expected headline economic data or suggestions of a less-aggressive tightening stance by the Fed. Then, Fed rate-hike jawboning put a temporary flutter into those market movements, placing some Fed-desired support under the U.S. currency. The post-election market circumstances will be reviewed in November 18th *Commentary No. 849*.

Again, though, the fundamental liquidity issues facing the Fed remain dominated by perpetual U.S. economic non-recovery and a renewed, intensifying downturn. Even if the Fed should raise rates in the near future, ongoing negative economic pressures still will mount, forcing the U.S. central bank back into a position of having to support domestic financial- and banking-system liquidity needs. Effectively, the Fed will have no way out other than to return to some form of expanded quantitative easing, post-election.

Temporary jawboning aside, market reactions increasingly should reflect a renewed sense of Federal Reserve impotence in the wake of the last no rate hike, with bleak longer-term implications for the U.S. dollar. Irrespective of any near-term, one-shot rate hike, renewed quantitative easing increasingly should become the target of post-election speculation, as the deepening recession continues to unfold.

Rapidly weakening, regular monthly economic reporting should continue and result in much worse-than-expected—increasingly negative—reporting for at least the next several quarters of GDP (and GDI and GNP). Although such was not in place with the headline, "advance" reporting of third-quarter 2016, with the exception of second-quarter 2016 GDI, downside revisions loom there in the next two months, with quarterly economic contractions fair bets in fourth-quarter 2016 and first-quarter 2017.

CPI-U consumer inflation—intermittently driven lower in 2015 and early-2016 by collapsing prices for gasoline and other oil-price related commodities—has seen its near-term, year-to-year low. Headline monthly March to June 2016 detail moved into positive headline territory, in tandem with rising gasoline prices. CPI inflation was "unchanged"—minimally negative—with a switch to positive seasonal adjustments for gasoline prices only partially offsetting the unadjusted monthly drop in gasoline prices in July. August CPI was boosted by "core" inflation, while the September CPI was spiked by gasoline prices and positive seasonal adjustments. The October CPI looks to be similarly destined (see *Pending Releases*). 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 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 *Commentary No. 669*). John Crudele of the *New York Post* continues his investigations in reporting irregularities: *Crudele Investigation*, and as updated on October 24th: *Crudele*. 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:

Updated - Consumer Price Index—CPI (October 2016). The Bureau of Labor Statistics (BLS) will release the October 2016 CPI tomorrow, Thursday, November 17th, which will be covered in *Commentary No. 849* of Friday, November 18th. The headline October CPI-U is a fair bet to show a strong month-to-month increase, perhaps up by 0.3%, again reflecting rising gasoline prices exacerbated by strongly-positive seasonal adjustments to same. Headline year-to-year annual inflation for October 2016 likely will increase to about 1.6%, versus 1.5% in September 2016. Consensus expectations are centered on a 0.4% month-to-month gain, which is credible.

Continuing Positive Monthly Inflation Impact from Gasoline Prices. Average retail gasoline prices rose in October 2016, up by 1.38% for the month on a not-seasonally-adjusted basis, per the Department of Energy (DOE). Where BLS seasonal adjustments to gasoline prices in October are strongly on the plusside, they should exacerbate the unadjusted price increase in gasoline, with seasonally-adjusted gasoline prices contributing roughly a positive 0.19% to the headline monthly change in the CPI-U. Boosted further by higher food and "core" (net of food and energy) inflation, a headline monthly CPI-U reading of 0.3%, plus or minus, is a reasonable expectation.

Annual Inflation Rate. Noted in <u>Commentary No. 841</u>, year-to-year, CPI-U inflation would increase or decrease in the headline October 2016 reporting, dependent on the seasonally-adjusted month-to-month change, versus the adjusted, headline gain of 0.19% in October 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 October 2016, the difference in October's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the September 2016 annual inflation rate of 1.46%. For example, a seasonally-adjusted, gain of 0.3% in the monthly October 2016 CPI-U, would move the annual CPI-U inflation rate for October 2016 up to about 1.6%, plus-or-minus, depending on rounding.

Real Retail Sales (October 2016). The Census Bureau released October 2016 nominal (not-adjusted-for-inflation) Retail Sales today (November 14th), showing a headline monthly gain of 0.82%, with annual growth of 4.30%. Those gains were boosted by rising inflation, and they will be adjusted for the headline October 2016 CPI-U inflation detail in *Commentary No. 849* of November 18th. With a likely strong increase in the monthly CPI-U, October real sales growth should be weaker than the headline nominal sales activity, but not enough to turn monthly real retail sales to a contraction, or to turn annual real retail sales growth to below 2.0%.

Discussed in the *Consumer Liquidity* update of prior *Commentary No. 846*, without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for an income shortfall, the liquidity-strapped U.S. consumer is unable to sustain growth in broad economic activity, including personal-consumption expenditures and retail sales. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for an income shortfall, the U.S. consumer is unable to sustain positive growth in domestic personal consumption, including retail sales, real or otherwise.

Updated - Residential Construction—Housing Starts (October 2016). The Census Bureau will release October 2016 residential construction detail, including Housing Starts, tomorrow, Thursday, November 17th, which will be covered in *Commentary No. 849* of Friday, November 18th. In line with common-reporting experience of recent years, monthly results are likely to be unstable and not statistically meaningful, holding in a general pattern of down-trending stagnation. Where consensus estimates most frequently settle on the upside, and they have done so strongly here, they also should prove to be shy of meaningful, statistically-significant change.

Irrespective of generally meaningless headline detail, the broad pattern of housing starts should remain consistent with the low-level, stagnant housing starts activity seen at present, with September 2016 starts having been down by 54% (-54%) from the pre-recession high of the series. Such is particularly evident

with the headline detail viewed in the context of a six-month moving average. Again, this series remains subject to regular and extremely-large, prior-period revisions.

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

Again, discussed in the *Consumer Liquidity* update in prior <u>Commentary No. 846</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 an income shortfall, the liquidity-strapped U.S. consumer is unable to sustain growth in broad economic activity, including demand for residential construction.

PLANNED UPDATES: Comprehensive *Special Report* **and ShadowStats Website.** ShadowStats is updating fully, into one, massive background piece—a *Special Report (Commentary)*—the latest broad outlook for the U.S. and global economies, financial markets and systems, and inflation (U.S. hyperinflation). Publication date and other details will follow in Friday's (November 18th) *Commentary No.* 849.

All of that will be in the context of incorporating and fully revising, wherever necessary, the materials in the 2014 Hyperinflation Report—The End Game Begins, 2014 Hyperinflation Report—Great Economic Tumble, No. 777 Year-End Special Commentary and other intervening missives, including the most-recent Hyperinflation Outlook Summary as found in Commentary No. 783. It 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.

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

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 and/or our readers have found of particular interest and substance. Many thanks to those who already have submitted recommendations of specific books and publications. 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.
