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

COMMENTARY NUMBER 857
November Durable Goods, New- and Existing Home Sales, Revised Third-Quarter GDP

December 23, 2016

Decline in November Durable Goods Orders Was Dominated by a 74% (-74%) Plunge in Irregular Commercial Aircraft Orders

Ex-Commercial Aircraft, Orders Gained for the Month, but Smoothed Activity Showed Ongoing Recession

Latest Revisions to Third-Quarter National Income Were Not Credible: Annualized Headline Growth of 3.5% (Was 3.2%) for GDP, 4.8% (Was 5.2%) for GDI and 3.4% (Was 3.1%) for GNP

Better-Quality Indicators of Broad Business Activity Still Show the Economy Never Recovered from Its Collapse into 2009 and Is Turning Down Anew

Home-Sales Activity Continued in Broad, Non-Recovering Stagnation

Gain of 5.2% in November New-Home Sales Was No More than Statistical Noise, Still Down by 57% (-57%) from Pre-Recession High

November Existing-Home Sales Still Down by 23% (-23%) from Pre-Recession Peak; 0.7% Monthly Gain Largely Was Due to Downside Revision in October

Annual Existing-Sales Growth Heavily Skewed by Year-Ago Reporting Inconsistencies

Proportion of Existing Sales in Foreclosure Rose for a Second Month

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PLEASE NOTE: The next ShadowStats missive will be the year-end Special Commentary*, planned for December 30th. Offering a full review of the* ShadowStats *outlook for 2017 and beyond, in the context of historical activity and writings, as well as current, shifting U.S. political and economic conditions, it will include implications for domestic fiscal and inflation circumstances, Federal Reserve behavior and related global impact, including in the U.S. dollar and the gold, silver and oil markets.*

Merry Christmas! Happy Hanukkah! Best Wishes to All for a Most Joyous Holiday Season!
— John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

No Economic Recovery Here. The "final" revision of official third-quarter 2016 GDP was to the upside, to 3.5% annualized real quarterly growth (still subject to annual benchmarking in July 2017). While that topped the historical average growth of 2.8% for U.S. GDP (last 40 years, both quarter-to-quarter and year-to-year), the revised year-to-year change of 1.7% continued well below the historical norm. The heavily gimmicked and bloated headline GDP activity remained far removed from real-world experience.

Underlying economic reality remains that elements of the U.S. economy began to turn down as early as 2005, with aggregate economic activity entering a severe economic collapse by the end of 2007. That collapse continued into 2009, but there was no full economic recovery thereafter, contrary to ensuing government estimates of the headline GDP. Better-quality economic indicators not only confirm the non-recovery, but also show that the economy began to turn down anew at the end of 2014.

As of the December 22nd reporting, inflation-adjusted "real" GDP activity was 11.6% above its pre-recession high. Such post-recession performance, however, never has been confirmed by underlying fundamental activity, ranging from headline employment, to industrial production and real retail sales.

While headline jobs growth and real retail sales have topped their pre-recession peaks, they showed recoveries far shy of the GDP estimate. Those "recoveries" also reflected a variety of data-quality issues, discussed regularly in these *Commentaries*. A plethora of better-quality indicators, including manufacturing production, new orders for durable goods, various measures of construction/real estate activity and privately-surveyed indicators, such as freight activity, confirm the pattern of non-recovery and renewed contraction. These areas will be explored anew in the year-end *Special Commentary*.

Today's *Commentary* (December 23rd). These *Opening Comments and Executive Summary* cover summary detail of November 2016 New Orders for Durable Goods, the third estimate of Third-Quarter 2016 GDP and New- and Existing-Home Sales. As usual, expanded coverage and additional graphs of GDP and expanded coverage of Durable Goods Orders and New- and Existing-Home Sales are found in the *Reporting Detail* section.

With no major economic releases due in the week ahead, there is no *Week, Month and Year Ahead Section*, today. The next publication will be the comprehensive year-end *Special Commentary*, planned for Friday, December 30th. *Regular Commentaries* resume with *No. 859* on January 6, 2017, covering December 2016 labor conditions and the November 2016 trade-deficit and construction spending.

Executive Summary: New Orders for Durable Goods—November 2016—Orders Decline Was Dominated by Collapsing Commercial Aircraft Orders. In the context of a monthly plunge of 73.54% (-73.54%) in November commercial aircraft orders, nominal November 2016 new orders for durable goods declined by 4.60% (-4.60%) for the month and by 1.86% (-1.86%) year-to-year. Excluding commercial aircraft, new orders gained 2.36% for the month and 1.21% year-to-year.

The best leading indicator to industrial production and to the broad, general economy, out of this series, is inflation-adjusted real new orders, ex-commercial aircraft, which gained 2.36% month-to-month, and 0.54% year-to-year, in November. The two-month trend for that series in fourth-quarter 2016 suggests an annualized, real quarterly gain of 3.48%, 0.83% year-to-year. Despite the headline gains, activity here generally remained a tentative, negative leading indicator for first-quarter 2017 industrial production, a series that has remained in definitive recession since December 2014.

Smoothed with six-month moving averages, and adjusted for inflation, both of these highly volatile series (total and ex-commercial aircraft) remained in non-recovering, low-level, down-trending stagnation. Those patterns remained consistent in signaling an ongoing and deepening "new" recession, as reflected in accompany *Graphs 3* to *6*.

Headline Nominal Detail. The Census Bureau reported December 22nd, that the regularly-volatile, seasonally-adjusted, nominal level of November 2016 aggregate new orders for durable goods fell by 4.60% (-4.60%) month-to-month, versus an unrevised monthly gain of 4.81% in October, and a downwardly-revised 0.32% gain month-to-month in September. Year-to-year, November 2016 durable goods orders fell by 1.86%, versus a downwardly-revised annual gains of 1.99% in October 2016 and 2.02% in September 2016. That headline detail, though, was before consideration of the irregular volatility in commercial-aircraft orders, and before inflation adjustment.

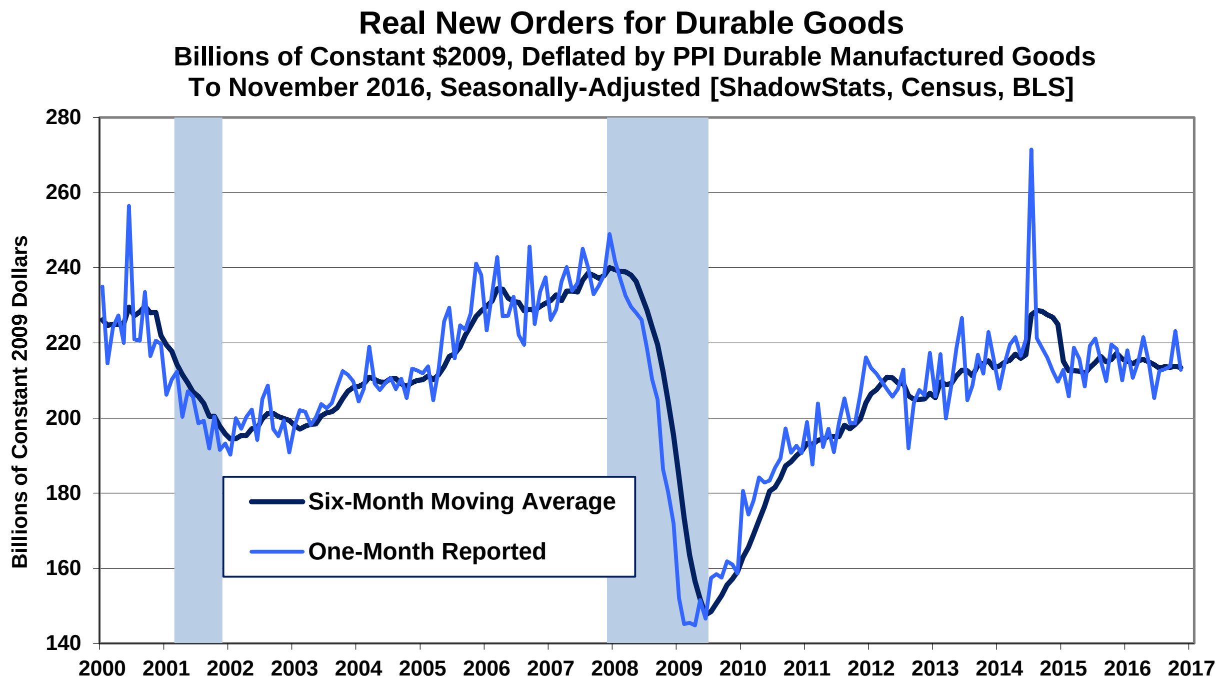
Extreme contractions and surges in commercial-aircraft orders are seen in an irregularly-repeating process throughout the year, and that often dominates the changes in headline monthly durable goods orders. These extremely volatile aircraft orders are booked years into the future and are indicative more of longer-term, rather than shorter-term prospects for manufacturing activity. In the current circumstance, a monthly plunge of 73.54% (-73.54%) in November 2016 commercial aircraft orders depressed the aggregate orders into a monthly drop of 4.60% (-4.60%), from what otherwise was a gain of 2.36%.

Net of commercial aircraft activity, new orders gained by 2.36% in November 2016, 0.15% in October, and saw a deepened monthly drop of 0.87% (-0.87%) in September. Year-to-year and seasonally-adjusted, November 2016 new orders rose by 1.21%, having gained by a downwardly-revised 0.01% in October 2016, and a downwardly-revised 0.81% in September.

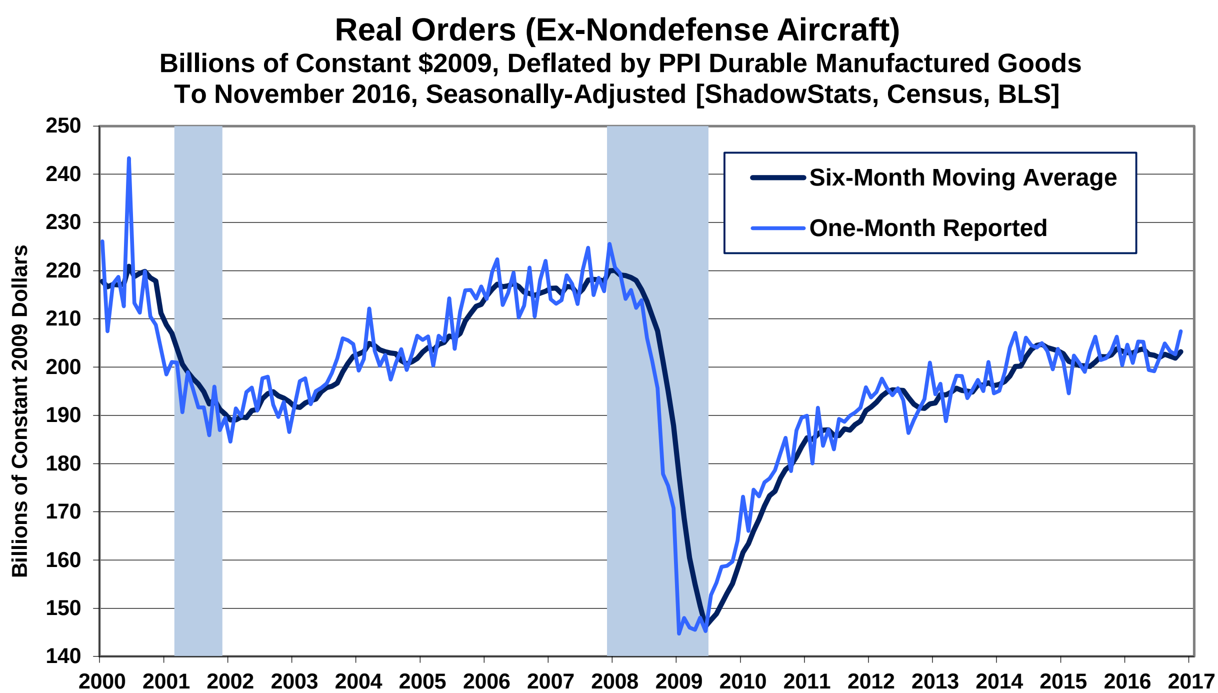
Adjusted for inflation (see *Reporting Detail* for related inflation information), real month-to-month aggregate orders in November 2016 still contracted by 4.60% (-4.60%), having gained by 4.37% in October and by 0.38% in September. Ex-commercial aircraft, real month-to-month orders in November

2016 increased by 2.36%, declined by 0.27% (-0.27%) in October 2016 and fell by 0.81% (-0.81%) in September.

Graph 1: Real Total New Orders for Durable Goods to Date



Graph 2: Real New Orders for Durable Goods – Ex Commercial-Aircraft Orders to Date



Real aggregate new orders fell year-to-year by 2.51% (-2.51%) in November 2016, having gained 1.62% in October 2016 and 1.89% in September 2016. Ex-commercial aircraft, real orders in November 2016 rose year-to-year by 0.54%, having contracted in October 2016 by 0.35% (-0.35%) and versus a 0.69% annual gain in September 2016, as plotted in *Graphs 1* and *2*.

Graphs of Inflation-Adjusted and "Corrected" Smoothed Durable Goods Orders. Preceding *Graphs 1* and *2* show the headline monthly detail, as well as the six-month moving-average activity for both the aggregate new orders series and the series net of the unstable commercial-aircraft orders.

The moving-average levels in both series had turned lower into year-end 2014 and after an uptick in mid-2015—some smoothed bounce-back—the smoothed trend turned down again into late fourth-quarter 2015. After some continued minor fluttering, it turned lower again into third- and fourth-quarter 2016.

Broadly, there has been a general pattern in recent years of stagnation or bottom-bouncing evident in the orders—clearly not the booming recovery seen in official GDP reporting. The real (inflation-adjusted) monthly and six-month moving-average level of new orders in November 2016 remained below both the pre-2007 recession high, as well as the pre-2000 recession high for the series. The pattern of low-level stagnation and fluctuating trend in the annual inflation-adjusted series since mid-2014—net of the irregular aircraft-order effects—again is one that most commonly precedes and/or coincides with a recession, as is the current circumstance.

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

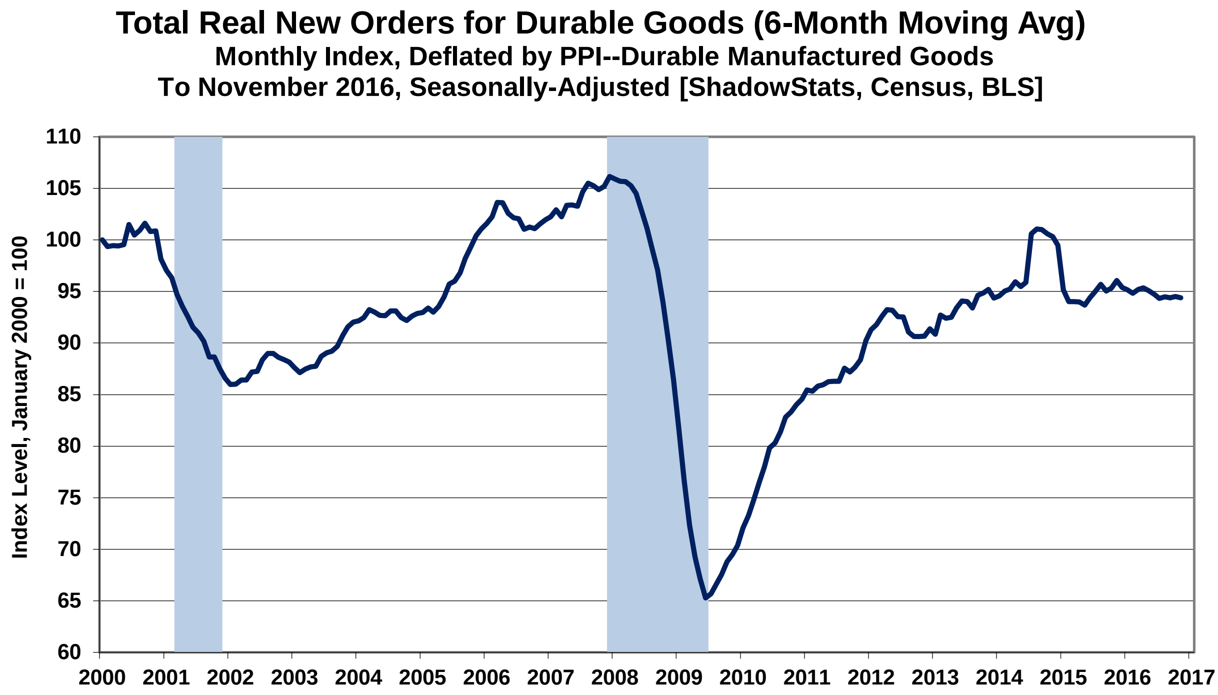
As done for other series such as the GDP (see *Graph 10* later in this *Executive Summary*), industrial production and real retail sales (see respectively *Commentary No. 854* and *Commentary No. 855*), ShadowStats publishes an experimental, corrected version of the inflation-adjusted graph of real new orders for durable goods, corrected for the understatement of the inflation measurement used in in deflating the series, headline PPI inflation for manufactured durable goods in this circumstance.

Two sets of graphs follow. The first set (*Graph 3* and *Graph 4*) shows the aggregate series or total durable goods orders; the second set (*Graph 5* and *Graph 6*) shows the ex-commercial aircraft series.

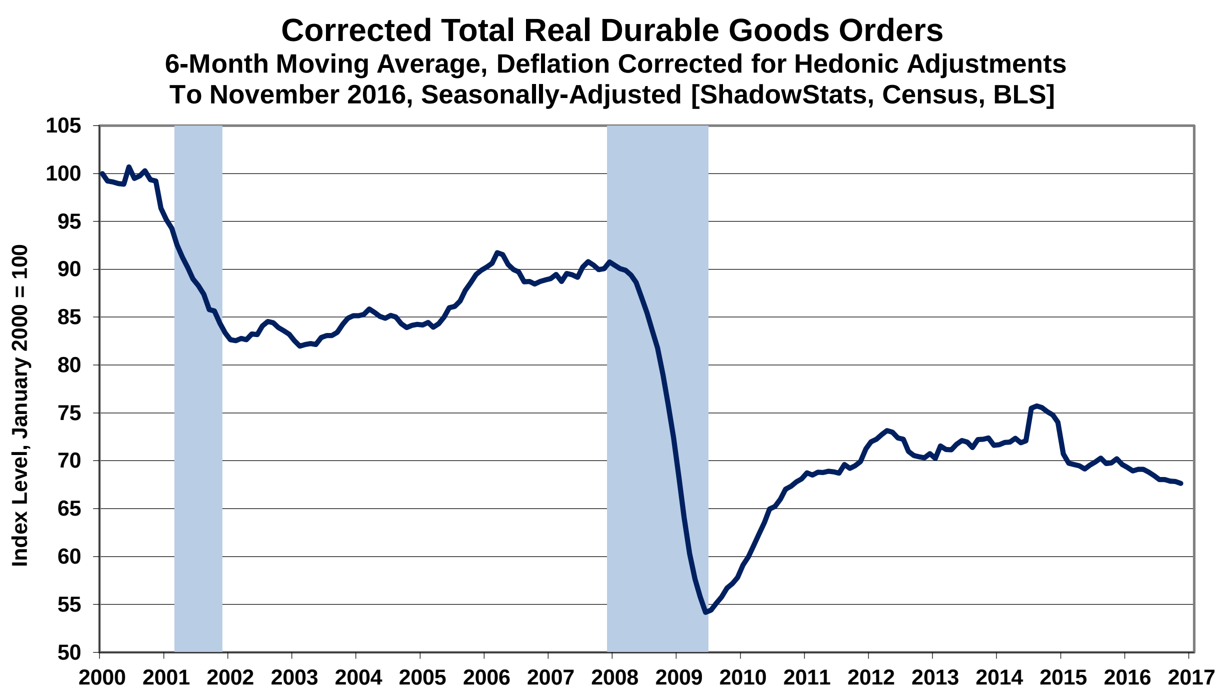
The aggregate orders series in *Graphs 3* and *4* includes the monthly commercial aircraft orders. Placed years in advance, aircraft orders are a better indicator of long-range production activity, than they are as a near-term leading indicator of production activity. Again, *Graphs 5* and *6* are shown net of those volatile commercial aircraft orders.

The first graph in each of the two series shows the official six-month moving average, the same heavy dark-blue line shown in *Graph 1* and *Graph 2*, along with the light-blue thin line of monthly detail. The second graph in each set is the same six-month, moving-average series shown in the first graph, but it has been re-deflated to correct for ShadowStats estimate of the understatement of the PPI manufactured durable goods inflation measure used in the headline-deflation process. The "corrected" graphs all are indexed to January 2000 = 100.

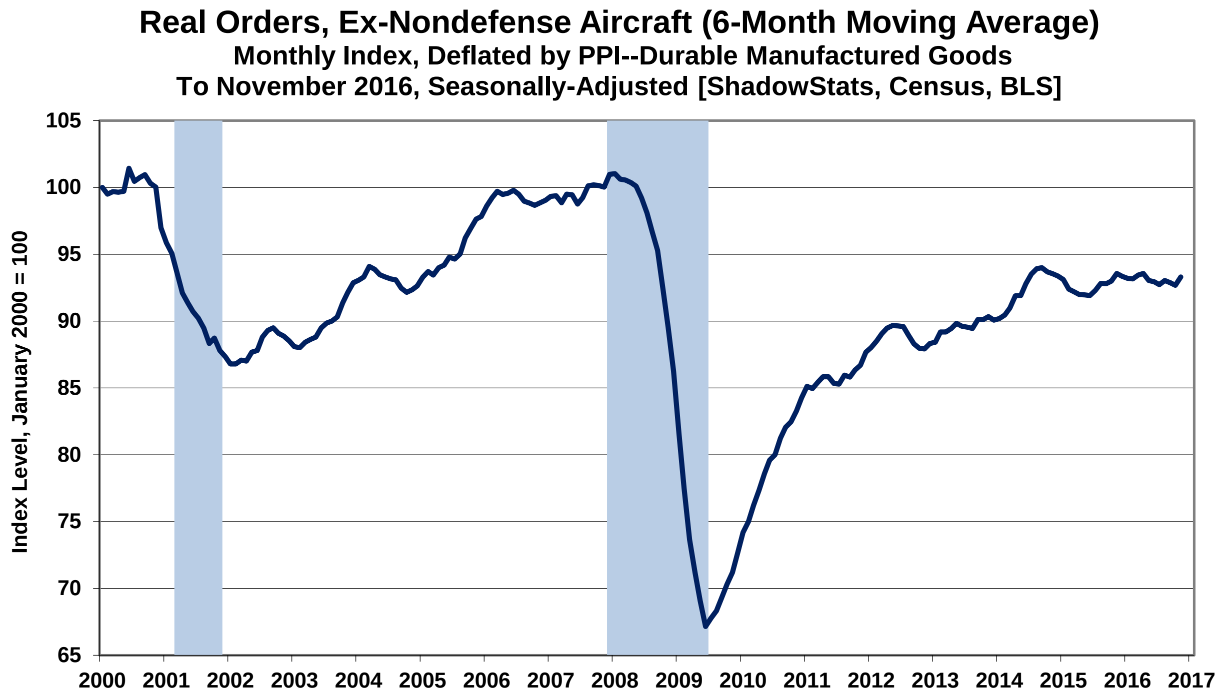
Graph 3: Index of Real Total New Orders for Durable Goods, 6-Month Moving Average



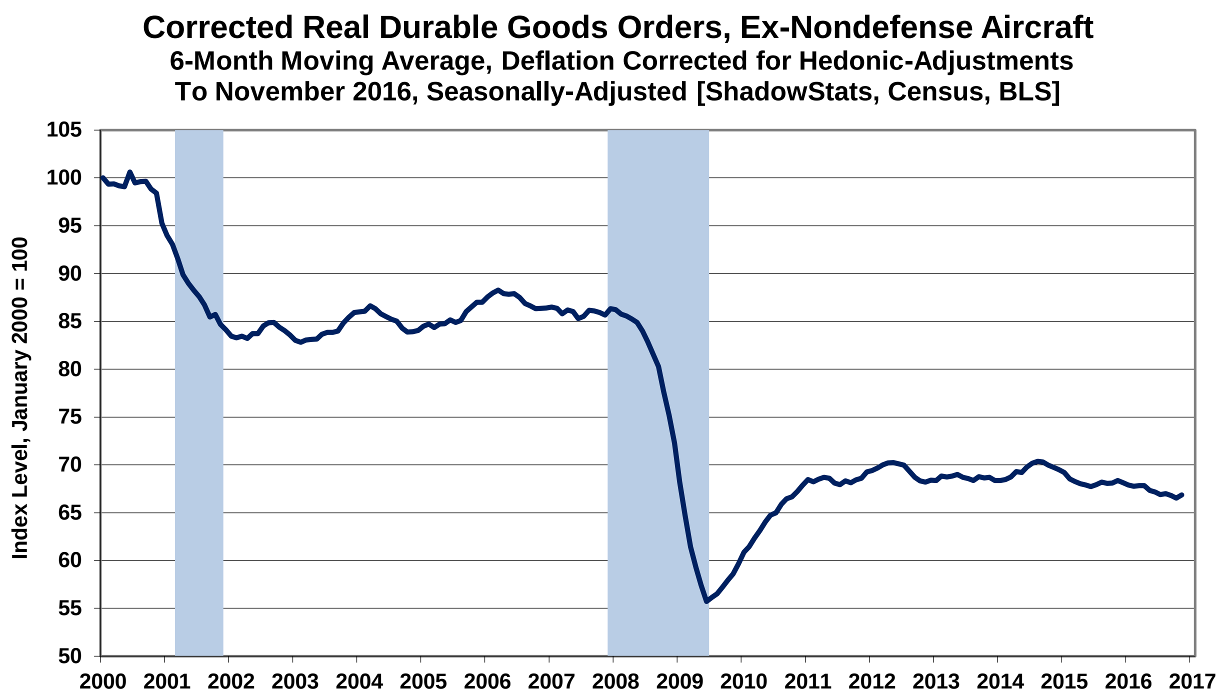
Graph 4: Corrected Index of Real Total New Orders for Durable Goods, 6-Month Moving Average



Graph 5: Index of Durable Goods Orders – Ex Commercial Aircraft, 6-Month Moving Average



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



Third-Quarter 2016 Gross Domestic Product (GDP)—Third Estimate, Second Revision—Underlying Recession Continued in Play, Despite Continued Reporting Nonsense. Despite the second, upside revision to third-quarter 2016 GDP, broad economic weakness continued in headline reporting of key underlying, fundamental economic series. As discussed shortly in the *Underlying Economic Reality* section, it is difficult to reconcile the GDP's headline recovery from the 2007 recession, and purported subsequent expansion, with better-quality government and private economic surveys that confirm a non-recovered economy, and an ongoing and deepening economic contraction.

The GDP does not reflect properly or accurately the changes to the underlying economic fundamentals and measures that drive the broad economy. The GDP simply remains the most worthless of the popular government economic series, in terms of determining what really is happening to U.S. business activity. The series is the most-heavily-modeled, politically-massaged and gimmicked government indicator of the economy. It has been so since at least the 1960s, and that reporting quality deteriorated anew, sharply in July 2016 benchmarking.

Gross Domestic Product (GDP). Published December 22nd, by the Bureau of Economic Analysis (BEA), the third estimate of, second revision to third-quarter 2016 GDP showed a revised, marginally-statistically-significant, real (inflation-adjusted), annualized, quarterly headline gain of 3.51%, previously estimated at 3.16%, initially up by 2.90%, against a gain of 1.42% in second quarter 2016 and 0.83% in first-quarter 2016.

Headline year-to-year real GDP growth in third-quarter 2016 rose to a revised 1.65% from 1.28% in second-quarter 2016 and versus 1.57% annual growth in first-quarter 2016.

Found in the *Reporting Detail*, *Graphs 24* and *26* plot headline levels of real quarterly GDP activity, while *Graphs 25* and *27* show the year-to-year annual change.

Implicit Price Deflator (IPD). The third estimate of third-quarter 2016 GDP inflation, or the implicit price deflator, showed a revised, annualized quarterly change of 1.42%, versus an annualized 2.29% in second-quarter 2016, 0.46% in first-quarter 2016. Year-to-year, headline third-quarter 2016 IPD inflation revised to 1.27%, versus 1.22% in second-quarter 2016 and 1.21% in first-quarter 2016.

Gross National Product (GNP) and Gross Domestic Income (GDI). GNP remains the broadest measure of U.S. economic activity, where GDP is GNP net of trade flows in factor income (interest and dividend payments). As a reporting gimmick aimed at boosting the headline reporting of economic growth for net-debtor nations such as the United States, international reporting standards were shifted some decades back to reporting headline GDP instead of what had become a relatively weaker GNP.

The second estimate of annualized real third-quarter 2016 GNP growth came in at a revised 3.35%, versus 2.16% in second-quarter 2016 and an "unchanged" 0.00% [a fractional annualized quarterly contraction of 0.003% (-0.003%)] in first-quarter 2016. The second estimate of year-to-year GNP growth rose to a revised 1.71% in third-quarter 2016, from 1.28% in second-quarter 2016 and 1.31% in first-quarter 2016, reflecting primarily the gains in the underlying GDP base; the quarter shifts in in factor income trade flows remained negligible.

GDI is the theoretical income-side equivalent to the consumption-side GDP estimate. The GDP and GDI are made to equal each other, every quarter, with the addition of a "statistical discrepancy" to the GDI-side of the equation. The second estimate of the annualized real third-quarter 2016 GDI growth came in at a downwardly-revised 4.77% annualized quarterly real gain, versus a gain of 0.71% in second-quarter 2016, and a gain of 0.81% in first-quarter 2016. In terms of year-to-year change, real third-quarter 2016 GDI revised lower to 1.93%, versus revised 1.36% in second-quarter 2016 and 1.33% in first-quarter 2016.

Third-Quarter 2016 GDP, Third Estimate - Growth Distribution. The third estimate of third-quarter 2016 GDP was a revised annualized real growth rate of 3.51% [previously 3.16%, initially 2.90%]. Such was against growth of 1.42% in second-quarter 2016.

The annualized growth number in each sub-category of consumer spending, business/residential investment, trade deficit and government spending is the additive contribution to the total, headline change in GDP, where 2.03% + 0.50% + 0.85% + 0.14% = 3.51%, with a rounding difference. *Commentary No. 851* of November 29th detailed the growth-distribution for the second estimate of third-quarter GDP.

Regrouped by general product line, the BEA estimated that the headline 3.51% quarterly GDP growth rate included a 1.34% growth-rate contribution from services and a 2.22% contribution from goods, with a growth-rate subtraction of 0.05% (-0.05%) from structures.

Contributing Growth Factors. The latest headline increase in third-quarter 2016 GDP reflected upside revisions to all major categories, except for net-exports.

- ***Consumer Spending Contributed 2.03% (Previously 1.89%, Initially 1.47%) to Third-Quarter 2016 GDP Growth; Second-Quarter Growth Contribution was 2.88%.*** The largest GDP growth contribution continued to come from the consumer spending category, in motor vehicles (still contrary to retail sales and durable goods revisions), weather-induced and surging utility usage. The latest upside revision came nebulous shifts within the detail of the non-productive and heavily-guesstimated healthcare sector, including hospital activities.

- ***Business/Residential Investment Contributed 0.50% (Previously 0.34%, Initially 0.52%) to Third-Quarter 2016 GDP Growth; Subtracted 1.34% (-1.34%) from Second-Quarter Growth.*** With increased nonresidential investment spiking the general category, inventory growth held at a 0.49% [initially 0.61%] contribution to the GDP growth rate. Accordingly, headline final sales—GDP net of inventory change—revised to an annualized quarterly growth rate of 3.02% [previously 2.67%, initially 2.29%], versus 2.57% in second-quarter 2016.

- ***Net Exports Added 0.85% (Previously 0.87%, Initially 0.83%) to Third-Quarter 2016 GDP Growth; Added 0.18% to Second-Quarter Growth.*** Minimally revised, the trade improvement here remained heavily distorted, from a one-time surge in soybean exports and from highly-suspect, improved reporting of the September trade deficit. The October deficit (early fourth-quarter 2016) showed a more-normal deficit, suggesting a sharp negative hit to fourth-quarter 2016 GDP (see *Commentary No. 853*). Further detail will follow with coverage of December 6th release of the October trade deficit, which is indicated as having deteriorated markedly.

- ***Government Spending Added 0.14% (Previously 0.05%, Initially 0.09%) to Third-Quarter 2016 GDP Growth, It Subtracted 0.30% (-0.30%) from Second-Quarter Growth.*** Federal government spending contributed an unrevised 0.16% to the GDP growth rate, with the balance coming from an upside (less-negative) revision to state and local government investment.

Underlying Economic Reality. *[Beyond the specific updated numbers tied to the second revision of third-quarter 2016, the updated detail in the comparative economic series and some language clean up, this section has changed little in broad concept from previous versions of GDP coverage in recent releases (see* Commentary No. 851*). The broad economy never fully recovered from its collapse into 2009, with continued low-level stagnation that generally has turned down anew.]*

Despite the broadly neutral, and artificially-smoothed 2016 GDP benchmark revisions of July 29th (see *Commentary No. 823*), and the upwardly-revised 3.16% real annualized growth for third-quarter 2016, the U.S. economy has continued in a deepening and as-yet-unrecognized "new" recession. Headline monthly reporting activity in better-quality subsidiary economic series continue to confirm that general direction (the ShadowStats contention remains that the "new" downturn is in reality just a continuation of the economic crash into 2009). Such is despite recent headline gimmicks bloating key data, and a post-election surge in consumer expectations. Given basic economic lead times, likely new fiscal stimulus from the incoming Administration would have its first major impact in early-2018, not much before.

The revised estimate of third-quarter 2016 GDP at an annualized real quarterly pace of 3.51% was marginally-statistically-significant. That followed annualized real quarterly growth of 1.42% in second-quarter 2016, versus benchmarked annualized gains of 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015. The three consecutive quarters through second-quarter 2016 were the weakest three quarters of real GDP growth since 2012 and otherwise since formally exiting the 2007 recession. Where final, near-term revision of third-quarter 2016 GDP revision is place, prior to the July 28, 2017 benchmark revisions, fourth-quarter 2016 activity should slow sharply, or contract, based on what has been suggested already by an initial indication of sharp deterioration (a return to more-normal levels) in the October 2016 trade deficit.

Discussed in *Commentary No. 823*, the 2016 benchmark revisions effectively were neutral in aggregate, with the business-cycle reporting "smoothed" by the BEA. The revisions were not of a nature to trigger formal immediate recognition of a "new" recession, which likely still will be clocked from December 2014. While that should happen eventually, the focus now should be on the rapidly weakening economy in the next several months (fourth-quarter 2016 and first-quarter 2017 GDP), which could trigger the "formal" recession recognition.

Beyond the smoothing gimmicks of the 2016 benchmarking, last year's 2015 GDP annual benchmark revisions (covered in *Commentary No. 739*), noted that annual benchmarkings increasingly are reshaping the GDP-reporting history into a post-2007 collapse pattern of successive multiple dips. By the next "comprehensive" GDP benchmark revision in July 2018 (a restatement of activity back to 1929), post-2007 historical GDP reporting should be confirming a non-recovering, multiple-dip economic collapse including a "new" or ongoing recession.

That circumstance should encompass the evolving, current downturn in broad, domestic economic activity, discussed previously in *No. 777* and *No. 742 Special Commentary: A World Increasingly Out of Balance*. Where again, the present "new" recession or multiple-dip downturn remains likely to be timed from December 2014, without headline back-to-back contractions of quarterly GDP currently in place. Formal recognition of same remains pending, where consecutive quarterly GDP contractions no longer are necessary for formal recession recognition (see the opening paragraphs of *Commentary No. 823*). Recognition of the onset of the prior December 2007 recession was not formalized until November 28, 2008, but it did have consecutive GDP contractions.

Headline Aggregate GDP Remains Heavily Overstated versus Underlying Reality. Formal headline GDP activity continues to run well above economic reality as signaled by a number of better-quality business indicators, such as domestic freight activity (*Graph 11*), consumer goods manufacturing (*Graph 12*), domestic consumption of petroleum products (*Graph 13*), corporate revenues (*Graph 14*) and the employment-population ratio (*Graph 15*). A variety of better-quality government economic series, including broad industrial production and manufacturing (*Commentary No. 854*), real retail sales (*Commentary No. 855*) and new orders for durable goods (see the accompanying November 2016 detail, particularly earlier *Graph 6*) also confirm lack of economic recovery.

Either the GDP reporting is wrong, or all other major economic series are wrong. While the GDP is heavily modeled, imputed, theorized and gimmicked, it also encompasses reporting from those various major economic series and private surveys, which still attempt to measure real-world activity. Flaws in the GDP inflation methodologies and simplifying reporting assumptions have created the headline post-2009 "recovery."

Accordingly, the broad ShadowStats economic outlook has not changed, and, again, the gist of most of this and following text remains along the lines of other recent GDP *Commentaries*. The details and numbers, however, are updated to reflect the latest headline information.

Ongoing monthly economic-reporting details for key series, public and private, increasingly confirm the patterns of declining or collapsing economic activity. For example, consider the discussion in *Commentary No. 820* on The Conference Board Help Wanted OnLine® Advertising, which was generating a signal for an economic downturn. November 2016 detail, discussed in *Commentary No. 852*, showed that year-to-year declines in the monthly data have continued and deepened unabated. Historically, such activity has been among the best of the leading indicators to an unfolding economic contraction.

In combination, these various collapsing economic indicators eventually should engender a formal recession call, irrespective of the timing of actual, in any, headline quarterly contractions in real GDP, or what likely has been related political gaming of the data in Washington.

Fundamental, real-world economic activity shows that the broad economy began to turn down in 2006 and 2007, plunged into 2009, entered a protracted period of stagnation thereafter—never recovering—and then began to turn down anew in recent quarters. Irrespective of the reporting gimmicks introduced in the July 2013, July 2014 and July 2016 GDP benchmark revisions—including a recent pattern of inclusion and estimation of highly-questionable data on the Affordable Care Act (ACA) and related healthcare spending—a consistent, fundamental pattern of faltering historical activity is shown in the accompanying "corrected" GDP graphs.

Please note that the pattern of activity shown for the "corrected" GDP series is much closer to the patterns shown in the graphs of unemployment (see *Graph 16* and *Commentary No. 852*), monthly real median household income and other consumer measures (see the *Consumer Liquidity Update* in *Commentary No. 854*). This also has been detailed in *No. 742 Special Commentary: A World Increasingly Out of Balance* and *No. 692 Special Commentary: 2015 - A World Out of Balance*. Similar patterns are found in economic series not otherwise reliant on understated inflation for their reported growth, such as housing starts (see *Commentary No. 856* and *2014 Hyperinflation Report—Great Economic Tumble – Second Installment*).

With liquidity-strapped consumers unable to fuel sustainable growth in consumption, a full business recovery could not have taken place since 2009, and a recovery will not be forthcoming until consumer structural income and liquidity problems are resolved, including more-normal credit functioning of the domestic banking system.

Official and Corrected GDP. Usually discussed in these *Commentaries* covering the quarterly GDP reporting and monthly updates, the full economic recovery indicated by the official, real GDP numbers remains an illusion. It is a statistical illusion created at least partially by using a too-low rate of inflation in deflating (removing certain inflation effects) from the GDP series. The accompanying graphs tell that story, updated for the second estimate of third-quarter 2016, as well as reflecting other elements of economic reality.

The first set of graphs (*Graphs 7* and *8*) updates the detail 1970-to-date, expressed in billions of 2009 dollars as used with the headline GDP. The graphs show official periods of recession as shaded areas, with ShadowStats-defined recessions indicated by the lighter shading in *Graph 8*, the second graph of the first set, as published initially in *2014 Hyperinflation Report—Great Economic Tumble*.

The second set of graphs (2000-to-date) is the one that traditionally has been incorporated in the GDP *Commentaries*. *Graphs 9* and *10* show short-term detail, expressed on an index base where first-quarter 2000 = 100.0.

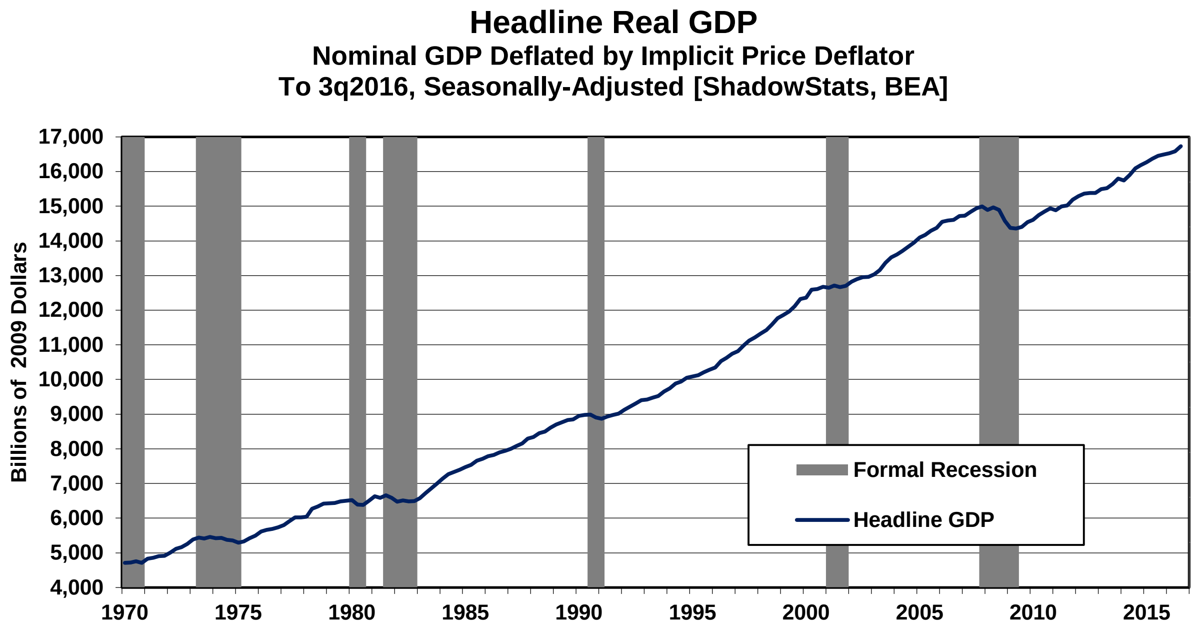
Shown in the first graph of each set (*Graphs 7* and *9*) of official *Headline Real GDP*, GDP activity has been reported above pre-2007 recession levels—in full recovery—since second-quarter 2011, and headline GDP has shown sustained growth since (growth pauses or interruptions for second-half 2012 and first-quarter 2014 excepted). Adjusted for GDP inflation (the implicit price deflator - IPD), the third-estimate headline third-quarter 2016 GDP currently stands 11.6% above its pre-recession peak-GDP estimate of fourth-quarter 2007. As discussed in the opening details of *Commentary No. 844*, no major traditional GDP components or indicators are showing recovery close to the GDP's. None of the series covered here have shown significant recoveries, and many remain well shy of ever having recovered.

In contrast, the "corrected" GDP version, in the second graph of each set (*Graphs 8* and *10*), shows third-quarter 2016 GDP activity to be down from its pre-recession peak of first-quarter 2006 by 7.1% (-7.1%).

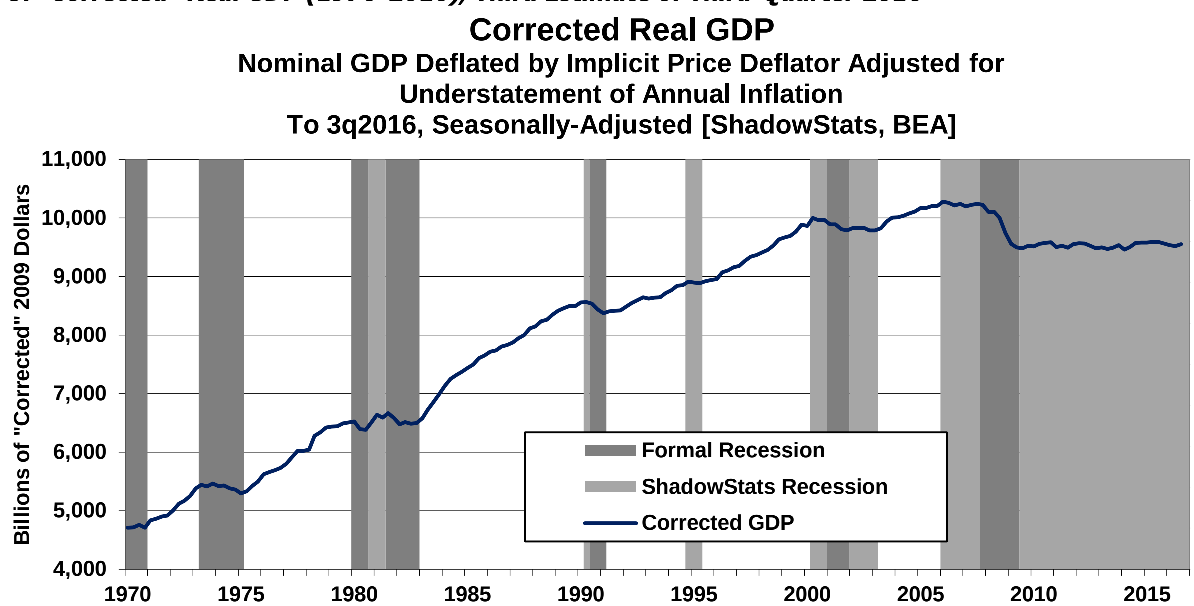
Again, the second graph in each series (*Graphs 8* and *10*) plots the *Corrected Real GDP*, adjusted for the understatement inherent in official inflation estimates (see *Public Commentary on Inflation Measurement*), with the deflation by the implicit price deflator (IPD) adjusted for understatement of roughly two-percentage points of annual inflation in recent years. The inflation understatement has resulted from hedonic-quality adjustments, also as discussed in the *Hyperinflation Reports*.

The pattern of economic collapse into 2009, followed by some minimal recovery, low-level stagnation and renewed contraction is seen with many series. As shown in *Graphs 11* to *15*, better-quality independent numbers—including some U.S. government—put the lie to the gimmicked headline reporting that has been massaged for decades by government agencies and consulting academics.

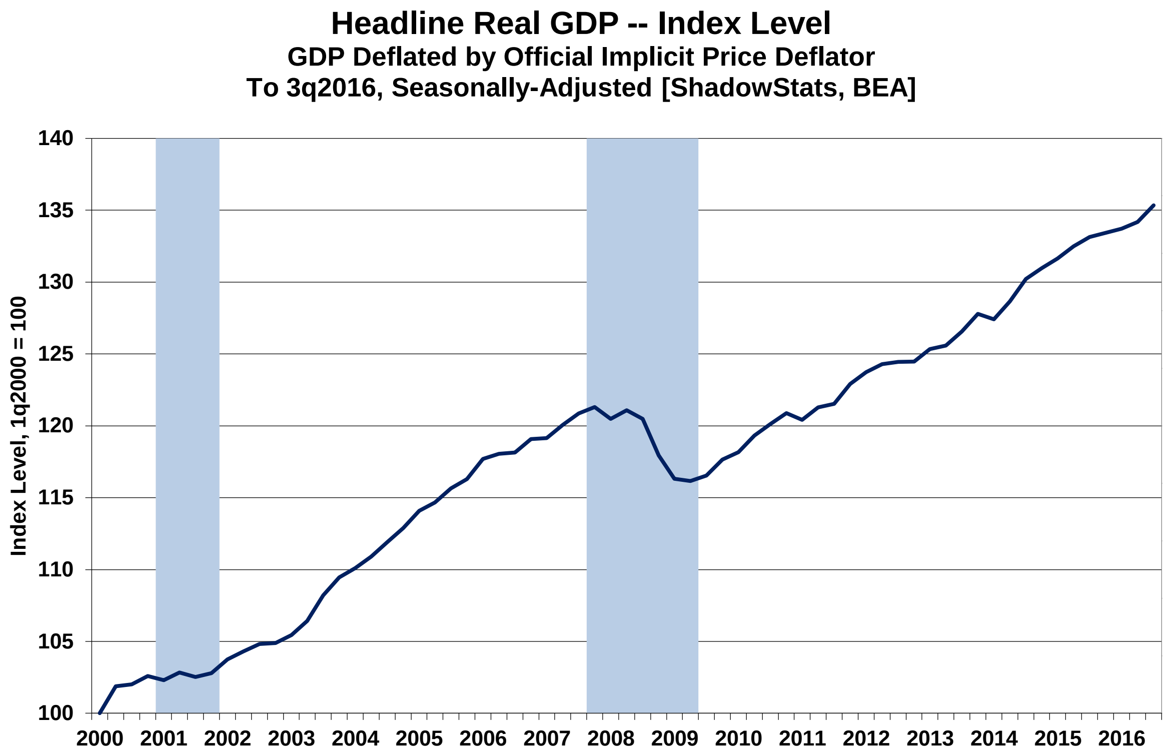
Graph 7: Real GDP Index (1970-2016), Third Estimate of Third-Quarter 2016



Graph 8: "Corrected" Real GDP (1970-2016), Third Estimate of Third-Quarter 2016



Graph 9: Real GDP Index – Headline Real GDP through Third Estimate of Third-Quarter 2016

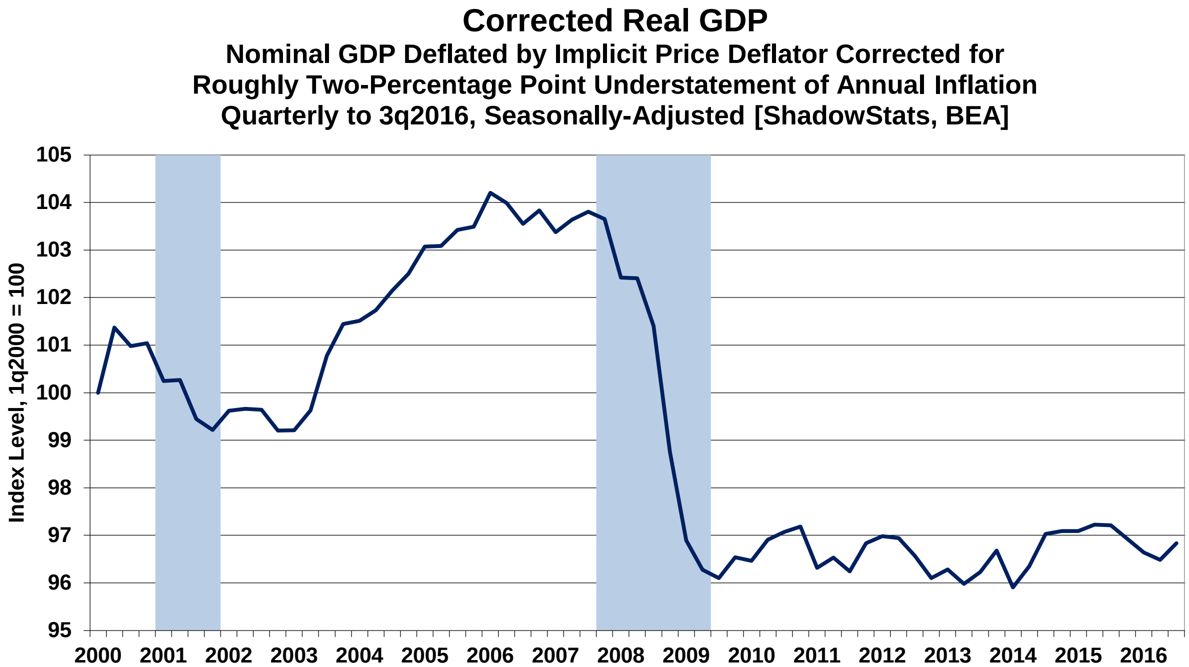


Comparative Indicators. *Graph 10* of the "corrected" GDP series follows. Several graphs are added thereafter for economic comparison. Updated from the prior two *Commentaries*, *Graph 11* is the Cass Freight Index™ measure of North American freight volume through November 2016, used with the permission of Cass Information Systems, Inc. (see prior *Commentary No. 856*). Few measures better reflect the actual flow of goods in commerce than freight activity. As a broad measure of basic domestic economic activity, the index has much more in common with the "corrected" GDP in *Graph 10*, than with the headline GDP of *Graph 9*.

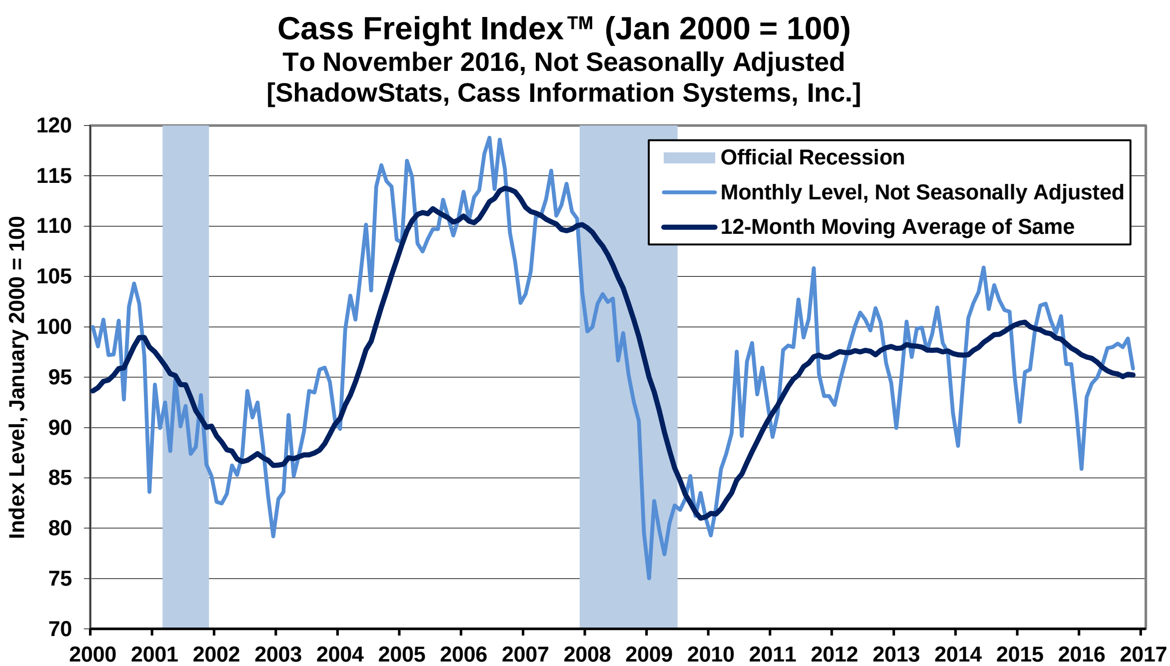
Graph 12 of Consumer Goods Manufacturing and *Graphs 13* to *15* have been lifted respectively from (and are described in) earlier *Commentary No. 854* and *Commentary No. 852*. They generally confirm the story from the "corrected" GDP graph, that the economy never recovered from its collapse into 2009 and is either in renewed downturn or in continuing low-level stagnation, albeit some of the latter is slightly up-trending. The U.S. aggregate consumption of crude oil petroleum product (*Graph 13*), for example, measured in physical barrel count, is an extraordinarily broad indicator of general activity [U.S. Energy Information Agency (EIA)].

As with the CASS index, where the monthly data are not seasonally adjusted, ShadowStats has plotted the petroleum series using a trailing twelve-month average, through the latest headline monthly detail of September 2016. The resulting smoothed pattern reflects the economic collapse into 2009, followed by a protracted period of variable, low-level stagnation, and an upside notch into first-half 2016. In contrast, the CASS index continues to turn down in its twelve-month trailing average, with monthly year-to-year contractions through November 2016 (fourth-quarter 2016), despite a minimal uptick in October 2016.

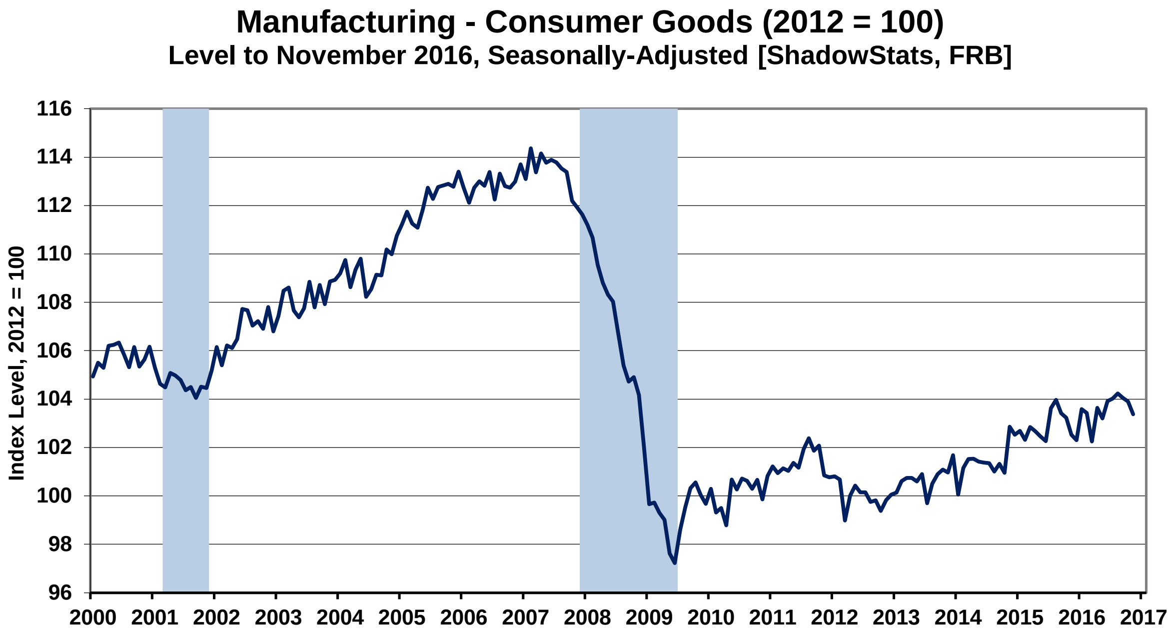
Graph 10: "Corrected" Real GDP Index (2000-2016), Third Estimate of Third-Quarter 2016



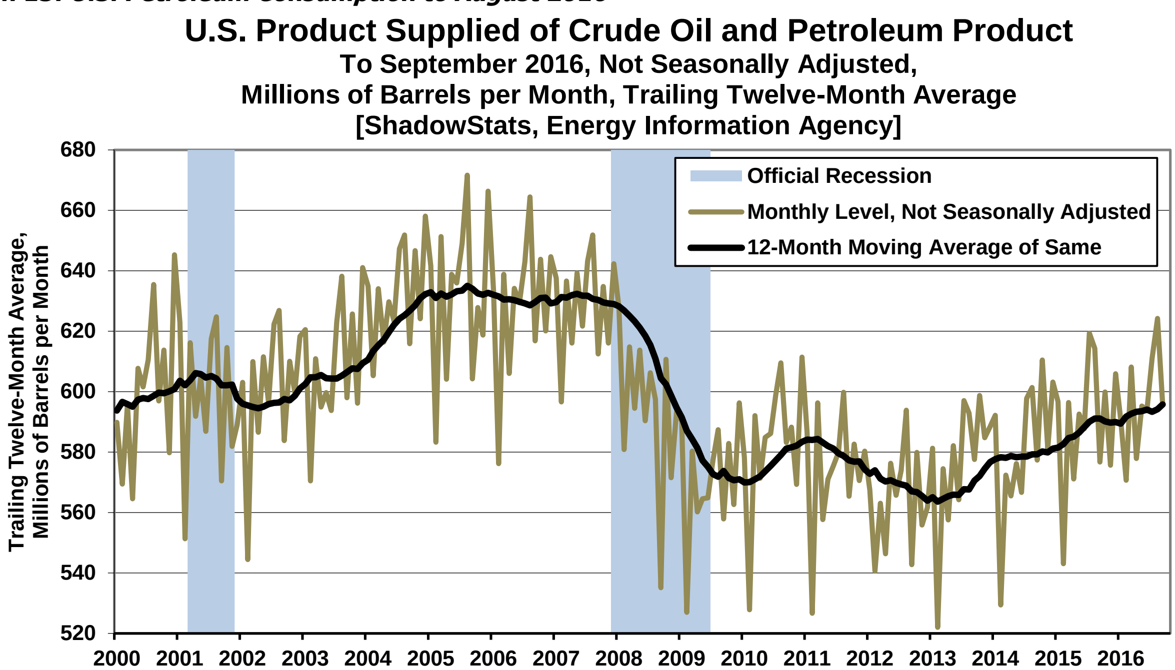
Graph 11: Cass Freight Index ™ (2000-November 2016)



Graph 12: U.S. Industrial Production – Manufacturing, Consumer Goods to November 2016



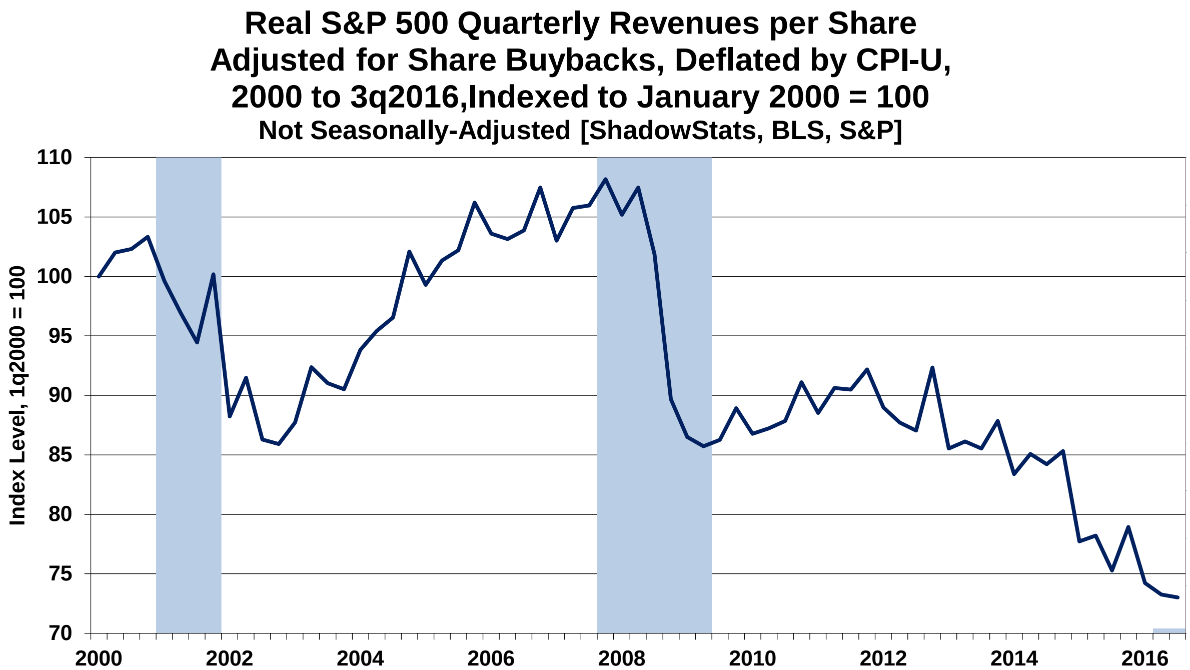
Graph 13: U.S. Petroleum Consumption to August 2016



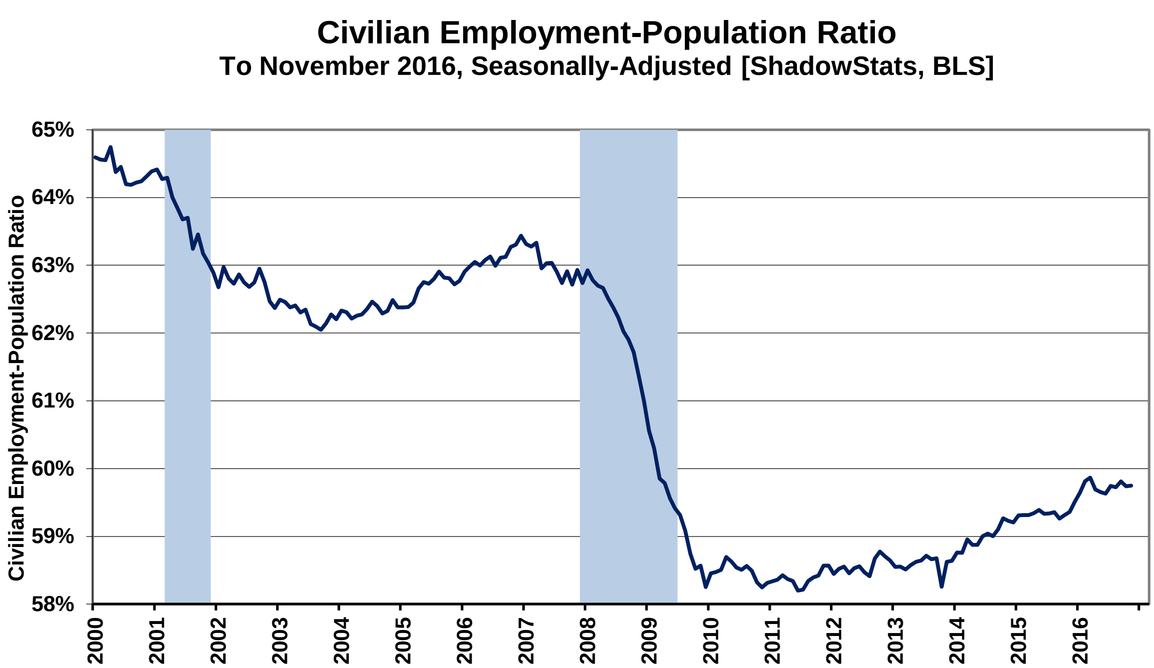
Graph 14 of S&P 500 revenues is plotted (not seasonally adjusted) on a quarterly basis, adjusted for the estimated impact of share buybacks and inflation. *Graph 15* of the employment to population ratio is a solid indicator of underlying labor conditions in the context of the broad population and long-term

discouraged and displaced workers, reflected here through November 2016, to be updated through December in *Commentary No. 860* of January 6th.

Graph 14: Real S&P 500 Sales Adjusted for Share Buybacks (2000 - 2015), Indexed to January 2000 = 100



Graph 15: Civilian Employment-Population Ratio



New- and Existing-Home Sales—November 2016—Down by 57% (-57%) and 23% (-23%) from Pre-Recession Highs, Continuing in Stagnant, Non-Recovering Economic Activity. The November 2016 New- and Existing-Home Sales series both remained in depression territory (see *Commentary No. 754*), down respectively by 57.4% (-57.4%) and 22.8% (-22.8%) from their pre-recession peaks, despite respective, statistically-insignificant monthly November gains of 5.2% and 0.7%.

Usual instabilities and reporting distortions, involving high volatility and irregular seasonality, continued to warp the New-Home Sales series, with a prior-period revision providing the bulk of the monthly increase in headline Existing-Home Sales. Unlike the headline GDP reporting, which now stands 11.6% above its pre-recession high, both home-sales series remained in patterns of low-level, non-recovering, albeit up-trending stagnation, as shown in *Graphs 18* and *22*. These series never have recovered from the economic collapse into 2009. General housing construction and sales activity broadly have shown similar patterns of protracted, low-level, non-recovering stagnation, with housing starts (parallel to new-home sales) and aggregate housing starts (parallel to existing-home sales) in November 2016, down respectively from their pre-recession highs by 54.6% (-54.6%) and 52.0% (-52.0%), as seen in *Graphs 17* and *21*.

ShadowStats generally assesses volatile series by considering the gyrations in monthly activity in the context of a six-month moving-average of the headline numbers. With the otherwise meaningless monthly swings in these numbers smoothed out, home sales and related construction activity have continued in a broad pattern of low-level, albeit with a somewhat up-trending pattern of stagnation; again, see *Graphs 18*, *19*, *22* and *23*.

***Consumer Liquidity Problems Continue to Impair Home Sales Activity*.** The extreme liquidity bind besetting consumers continues to constrain personal-consumption expenditures, and residential real estate sales, as fully updated in *Commentary No. 854* and *Commentary No. 833*. Liquidity conditions will be updated and reviewed fully in the year-end *Special Commentary*. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic economic activity, which has prevented a normal recovery during the last nine-plus years of economic collapse and stagnation. That has included constrained demand for residential real estate and related construction 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 still does not appear to be in the offing.

New-Home Sales Reporting—Statistically Insignificant Monthly and Annual Gains. Reported this morning, December 23rd, by the Census Bureau, November 2016 New-Home Sales (counted based on contract signings) rose month-to-month by 5.2%, versus a narrower decline of 1.4% (-1.4%) in October and an upwardly-revised gain of 2.1% in September. Year-to-year, November 2016 sales rose by a 16.5%, versus an unrevised 17.8% gain in October 2016 and a downwardly-revised gain of 24.9% in September 2016. This series remains extraordinarily unstable and consistently unreliable on a near-term, month-to-month basis and often on a year-to-year basis, as to whether headline sales actually increased or decreased, as was the case with the current headline detail.

Existing-Home Sales—Monthly Gain was Minimal, Net of Revisions; Still in Non-Recovery. The National association of Realtors (NAR) reported on December 21st that monthly November 2016

Existing-Home Sales rose by 0.72%, following a downwardly-revised 1.46% gain in October and unrevised 3.58% gain in September.

Year-to-year growth rose by 15.43% in November 2016, versus a downwardly-revised 5.26% annual gain in October 2016 and a unrevised 0.92% annual gain in September 2016. The spiking annual growth in October and November was due to heavy reporting distortions of one year ago. Consumer mortgage regulations were altered at the end of 2015, with the effect of delaying the closings then of existing home sales. As a result, monthly November 2015 sales (a count of closings) collapsed by 8.1% (-8.1%), only to rebound by 12.1% in December 2015. Accordingly, the relative annual growth-rate surge in November 2016 activity likely will be followed by a collapse in year-to-year activity for December 2016.

Holding at its highest monthly sales level since February 2007, again, the series continued in depression, with headline November 2016 activity still down by 22.8% (-22.8%) from its pre-recession peak. Smoothed with a six-month moving average, Existing-Home Sales activity held in low-level stagnation, albeit currently in a sputtering uptrend.

Proportion of Distressed Sales Rose to 6% in November, with All Cash Sales Notching Lower to 21%. The NAR estimated the portion of November 2016 sales in "distress" notched higher to 6% (4% foreclosures, 2% short sales), versus 5% (4% foreclosures, 1% short sales) in October and down from 9% (7% foreclosures, 2% short sales) in November 2015.

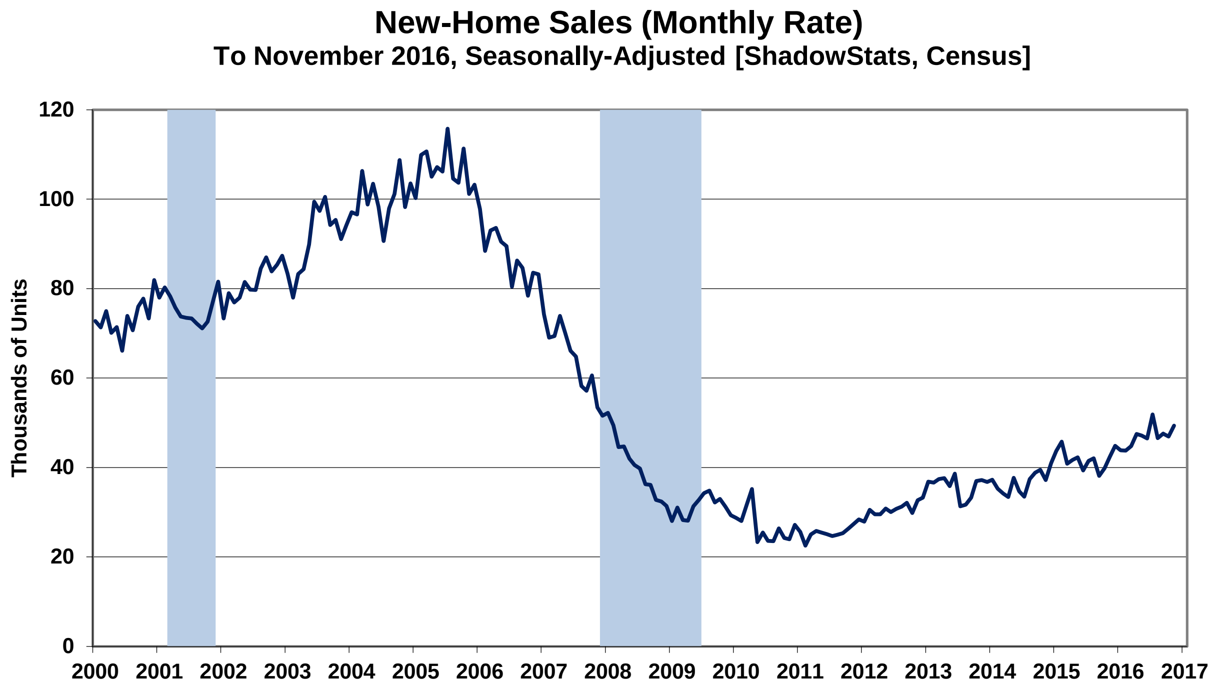
Reflecting continued lending problems and stresses within the financial system, including related banking-industry and consumer-solvency issues, as well as the ongoing influx of speculative investment money into the existing-housing market, the NAR estimated that all-cash sales declined to 21% in November 2016, versus 22% in October 2016, and down from 27% in November 2015.

New- and Existing-Home Sales Graphs. The regular monthly graphs of November 2016 New-Home Sales follows, along with a six-month moving-average version of the series (see *Graphs 16* and *18*). Added for comparison purposes are parallel graphs of the headline and six-month moving-average versions of November 2016 Housing Starts for single-unit construction, from *Commentary No. 856* (see *Graphs 17* and *19*).

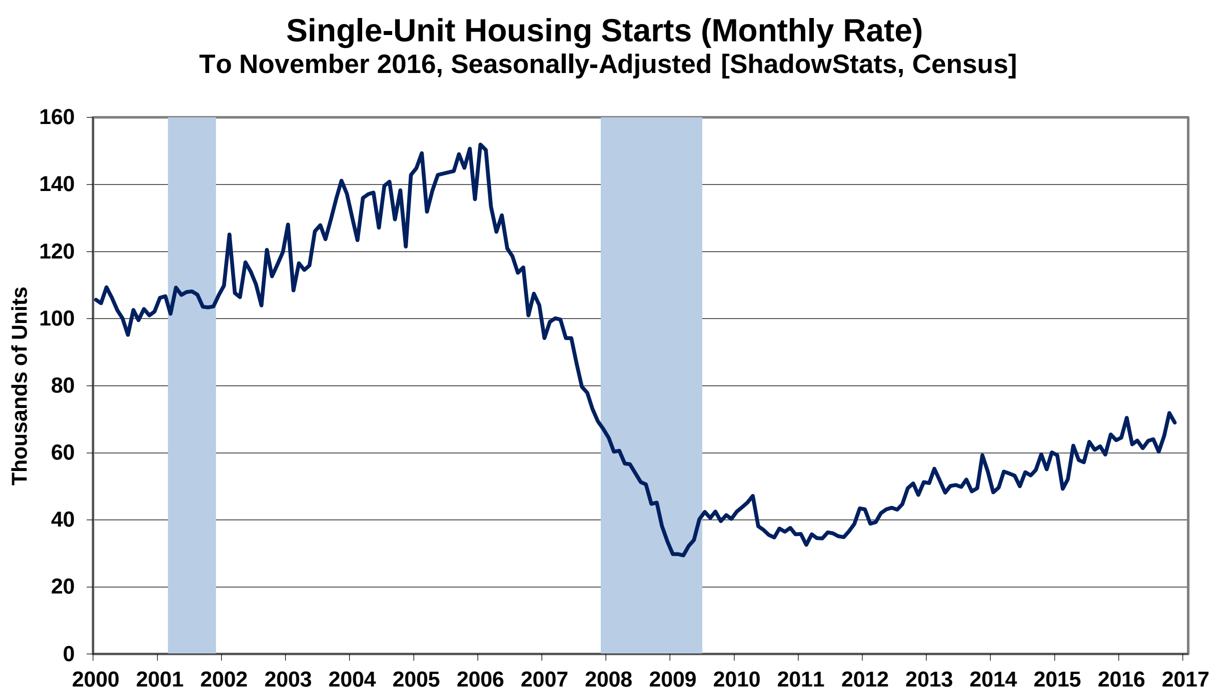
Graph 20 plots the traditional headline Existing-Home Sales monthly detail. Such is supplemented by *Graph 22* of the six-month moving average of Existing-Home Sales. Accompanying the Existing-Home Sales plots are comparative graphs of November 2016 aggregate Housing Starts activity, also from *Commentary No. 856*, where both series reflect activity in terms of single- and multiple-housing units (see *Graphs 21* and *23*).

[Graphs 16 to 23 begin on the following page.]

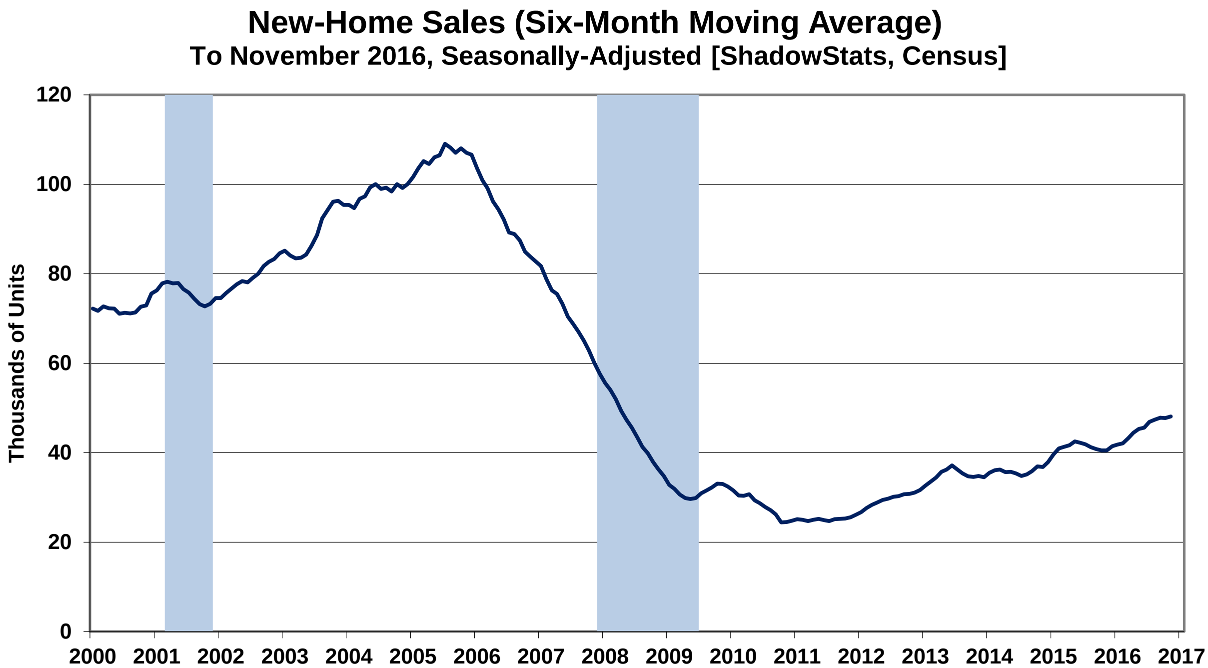
Graph 16: New-Homes Sales – Monthly Rate of Activity



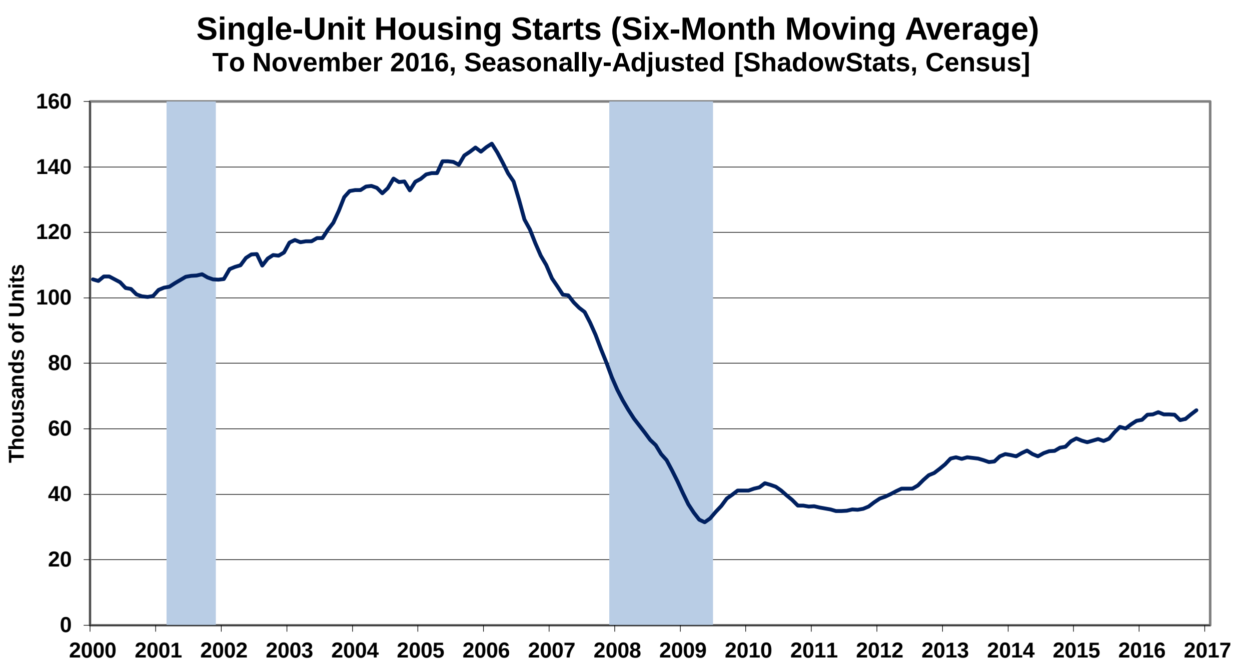
Graph 17: Single-Unit Housing Starts, Monthly Rate of Activity



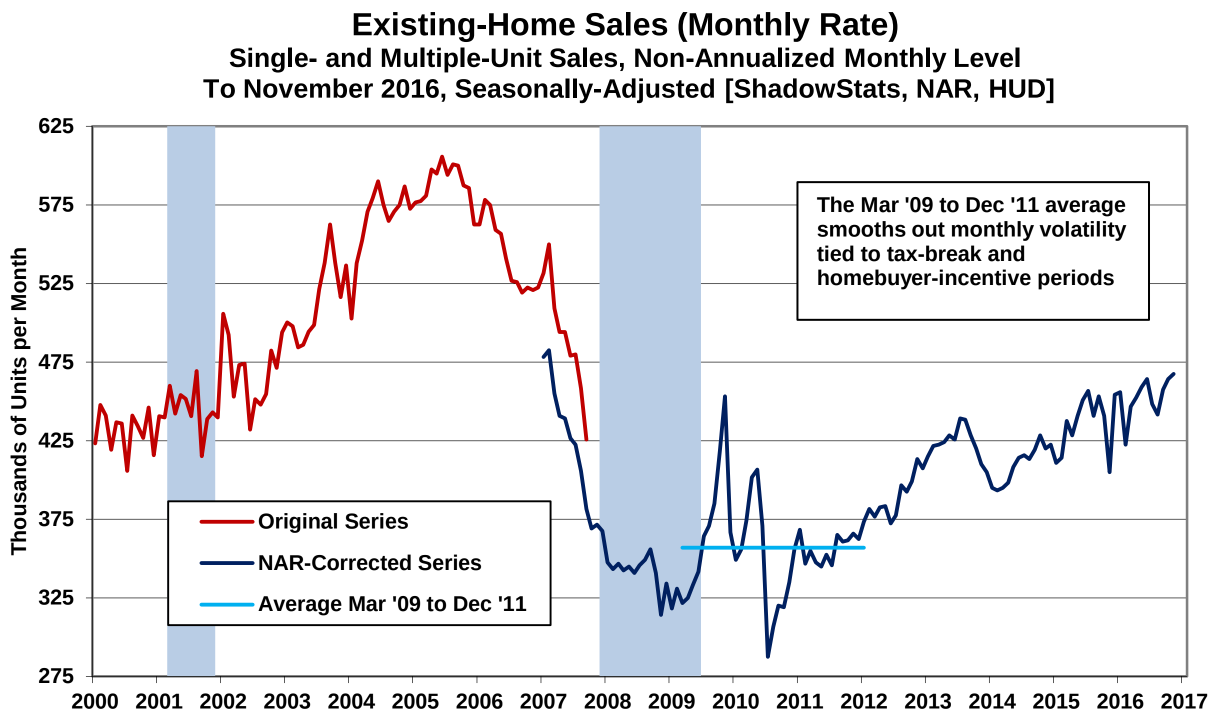
Graph 18: New-Homes Sales – Six-Month Moving Average, Monthly Rate of Activity



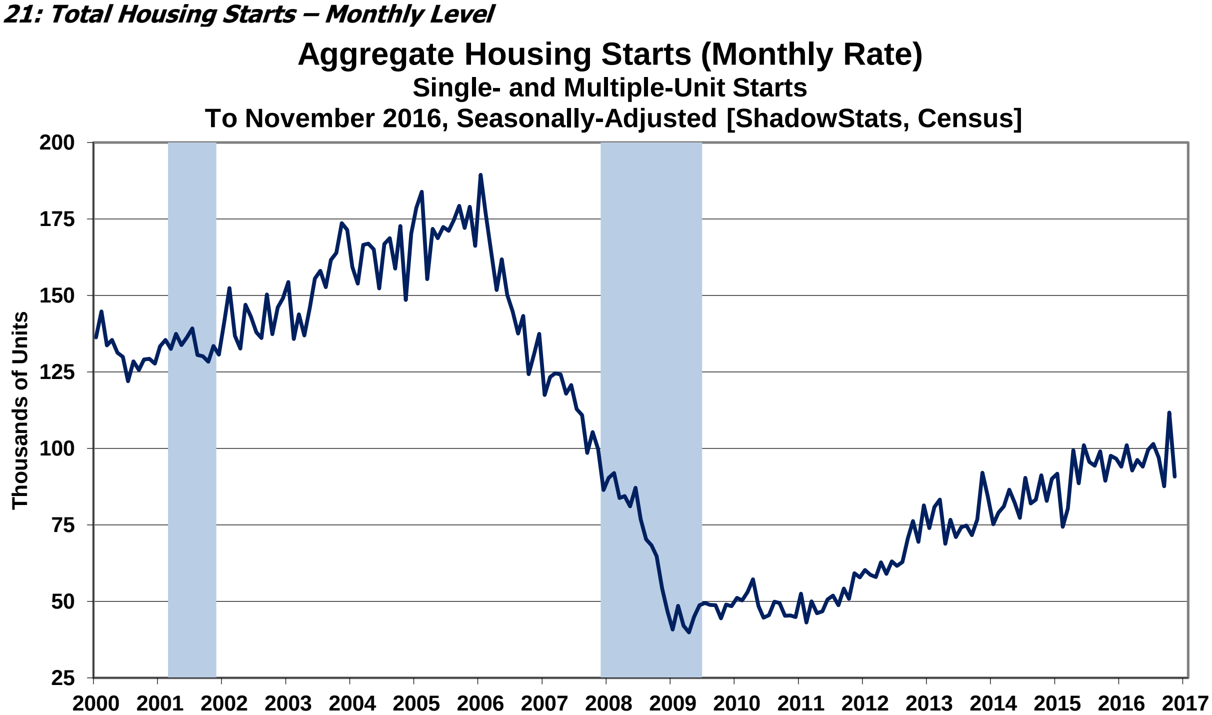
Graph 19: Single-Unit Housing Starts, Six-Month Moving Average, Monthly Rate of Activity



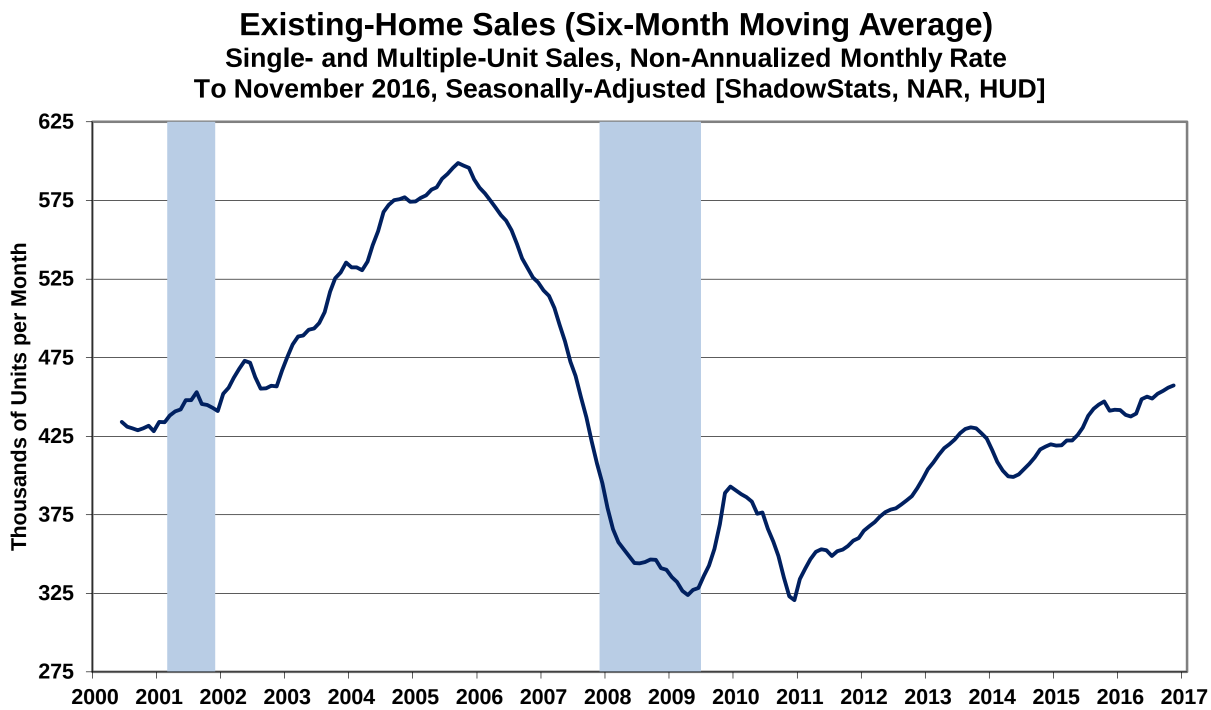
Graph 20: Existing-Home Sales – Monthly Level



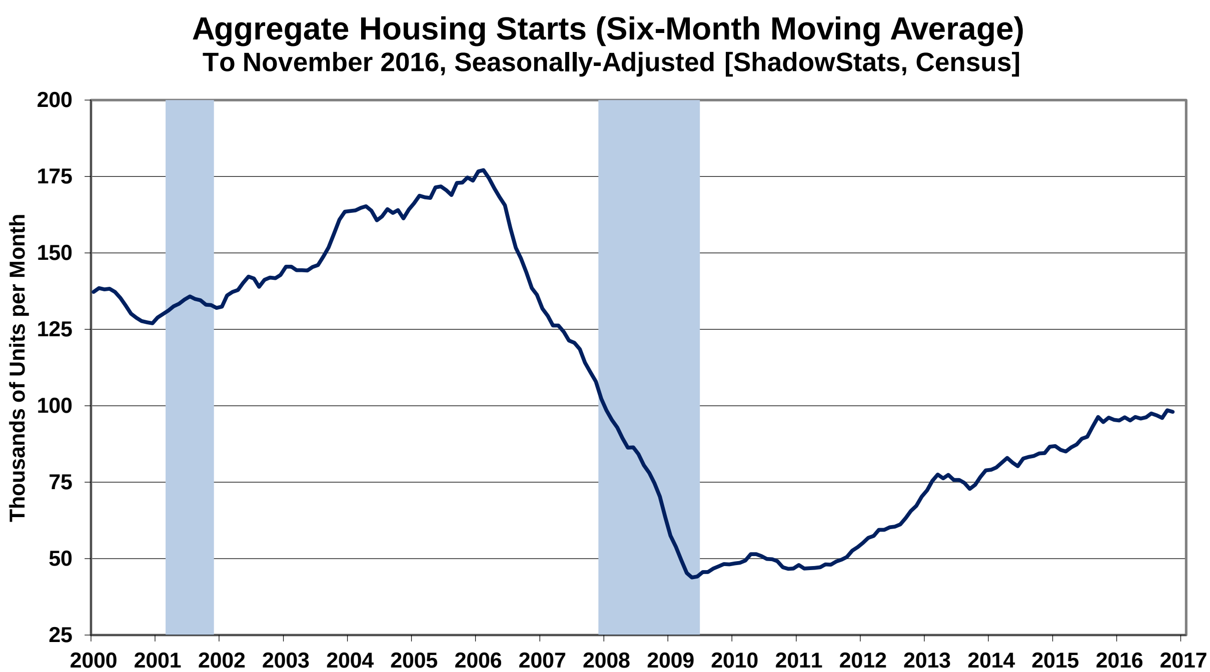
Graph 21: Total Housing Starts – Monthly Level



Graph 22: Existing-Home Sales (Six-Month Moving Average)



Graph 23: Total Housing Starts (Six-Month Moving Average)



[The* Reporting Detail *section contains significant additional analysis and graphs.]

REPORTING DETAIL

NEW ORDERS FOR DURABLE GOODS (November 2016)

Decline in November Orders Was Dominated by Irregular, Collapsing Commercial Aircraft Orders; Orders Otherwise Rose Month-to-Month and Year-to-Year. In the context of a monthly 73.54% (-73.54%) collapse in November commercial aircraft orders, nominal November 2016 new orders for durable goods declined by 4.60% (-4.60%) for the month and by 1.86% (-1.86%) year-to-year. Excluding commercial aircraft, new orders gained 2.36% for the month and 1.21% year-to-year.

The best leading indicator to industrial production and to the broad, general economy, out of this series, is inflation-adjusted real new orders, ex-commercial aircraft, which gained 2.36% month-to-month, and 0.54% year-to-year, in November. The two-month trend for that series in fourth-quarter 2016 suggests an annualized, real quarterly gain of 3.48%, 0.83% year-to-year. Despite the headline gains, activity here generally remained a tentative, negative leading indicator for first-quarter 2017 industrial production, a series that has remained in definitive recession since December 2014 (see *Commentary No. 854*).

Smoothed with six-month moving averages, and adjusted for inflation, both (total and ex-commercial aircraft) of these highly volatile series generally remained in non-recovering, low-level, down-trending stagnation. Those patterns remained consistent in signaling an ongoing and deepening "new" recession (see *Graphs 3* to *6* in the *Opening Comments*).

Headline Nominal Detail. The Census Bureau reported December 22nd, that the regularly-volatile, seasonally-adjusted, nominal level of November 2016 aggregate new orders for durable goods fell by 4.60% (-4.60%) month-to-month, versus an unrevised monthly gain of 4.81% in October, and a downwardly-revised 0.32% [previously up by 0.40%, initially down by 0.12% (-0.12%)] month-to-month in September. Net of prior-period revisions, November 2016 orders declined by 4.67% (-4.67%), instead of the headline 4.60% (-4.60%).

Year-to-year, November 2016 durable goods orders fell by 1.86%, versus a downwardly-revised annual gains of 1.99% [previously 2.07%] in October 2016 and 2.02% [previously up by 2.10%, initially up by 1.60%] in September 2016. That headline detail, though, was before consideration of the irregular volatility in commercial-aircraft orders.

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

The corrected series—net of commercial aircraft orders—has remained relatively flat, at a low-level and in a down-trending pattern of stagnation, albeit with an occasional upside blip as seen with the November 2016 detail. In parallel with the other plotted series, the corrected series still shows an unfolding economic contraction of a nature that usually precedes or coincides with a recession or deepening business downturn.

Detail Net of Volatility in Commercial-Aircraft Orders. The reporting of extreme contractions and surges in commercial-aircraft orders is seen in an irregularly-repeating process throughout the year, and that often dominates the changes in headline monthly durable goods orders. These extremely volatile aircraft orders are booked years into the future and are indicative more of longer-term, rather than shorter-term prospects for manufacturing activity. In the current circumstance, a monthly plunge in November 2016 commercial aircraft orders depressed the aggregate orders into a monthly drop of 4.60% (-4.60%), from what otherwise was a gain of 2.36%.

Net of a headline monthly plunge of the 73.54% (-73.54%) in November 2016 commercial aircraft orders, a minimally-revised monthly gain of 94.56% [previously 94.08%] in October, and a minimally-revised gain of 30.58% [previously 30.33%, initially up by 12.49%] in September 2016, new orders gained by 2.36% in November 2016, 0.15% in October, and saw a deepened monthly drop of 0.87% (-0.87%) [previously down by 0.78% (-0.78%), initially down by 0.62% (-0.62%)] in September.

Year-to-year and seasonally-adjusted, November 2016 new orders (net of commercial aircraft) rose by 1.21%, having gained by a downwardly-revised 0.01% [previously 0.15%] in October 2016, and a downwardly-revised 0.81% [previously 0.90%, initially 1.10%] in September 2016.

Real Durable Goods Orders—November 2016. ShadowStats uses the PPI component inflation measure "Durable Manufactured Goods" for deflating the new orders for durable goods series. Published only on a not-seasonally-adjusted basis, the related November 2016 PPI series showed an "unchanged" headline monthly change at 0.00%, following a strong headline monthly gain of 0.42% in October and a decline of 0.06% (-0.06%) in September. Headline year-to-year annual inflation jumped to 0.66% in November 2016, up from 0.36% in October 2016 and 0.12% in September 2016 (see *Commentary No. 854*).

Adjusted for that unchanged month-to-month inflation reading in November 2016, and as reflected in the graphs in the *Executive Summary* section, real month-to-month aggregate orders in November 2016 contracted by 4.60% (-4.60%), having gained by 4.37% in October and by 0.38% in September. Ex-commercial aircraft, real month-to-month orders in November 2016 increased by 2.36%, declined by 0.27% (-0.27%) in October 2016 and fell by 0.81% (-0.81%) in September.

Real aggregate new orders fell year-to-year by 2.51% (-2.51%) in November 2016, having gained 1.62% in October 2016 and 1.89% in September 2016. Ex-commercial aircraft, real orders in November 2016 rose year-to-year by 0.54%, having contracted in October 2016 by 0.35% (-0.35%) and versus a 0.69% annual gain in September 2016.

Real Quarterly Growth, Ex-Commercial Aircraft. Where the inflation-adjusted series, ex-commercial aircraft, is the best leading economic indicator out of these data, following are the annualized real quarterly changes in that series. Beginning at the onset of eventually what should become recognized as a formal recession, the real ex-commercial aircraft orders series showed annualized quarterly declines of 4.44% (-4.44%) in fourth-quarter 2014, and 5.54% (-5.54%) in first-quarter 2015. Annualized real change for second-quarter 2015 was a gain of 3.31%, a gain of 4.52% in third-quarter activity, a gain of 0.31% in fourth-quarter 2015 activity, and a 0.48% gain in first-quarter 2016.

In second-quarter 2016, the series declined at an annualized real pace of 4.53% (-4.53%). The revised third-quarter 2016 showed an annualized gain of 4.12% [previously 4.25%, initially 4.49%]. Based on October and November 2016 reporting, the trend for real fourth-quarter 2016 is an annualized gain of 3.48%. The trend had been for an annualized contraction of 0.84% (-0.84%), based just on the initial October reporting.

Graphs of Inflation-Adjusted and "Corrected" Smoothed Durable Goods Orders. Three sets of inflation-adjusted graphs (*Graphs 1* to *6*) are displayed in the *Executive Summary* of the *Opening Comments*. The first set (*Graphs 1* and *2*) shows the headline monthly detail, as well as the six-month moving-average activity for both the aggregate new orders series and the series net of the irregular commercial-aircraft orders. The moving-average levels in both series had turned lower into year-end 2014 and into the first two quarters of 2015, with some smoothed bounce-back into third-quarter 2015, followed by renewed, ongoing downturn into fourth-quarter 2016.

The second set of graphs (*Graphs 3* and *4*) shows the patterns of six-month moving averages of historical, headline real new orders for durable goods, net of official inflation, as well as that pattern "corrected" for the understatement of that inflation (and for the related overstatement of official, inflation-adjusted growth). The third set of graphs (*Graphs 5* and *6*) shows the same patterns, but for the aggregate durable goods orders series, net of commercial aircraft orders. Separately, consider that *Graph 6* shows patterns of activity that are parallel to activity indicated in *Graph 11* of the historical Cass Freight Index™ and other broad indicators of economic activity showing the general economy to be down-trending, having never recovered fully from the economic collapse into 2009.

Caution: Current durable goods reporting remains subject to many of the same sampling and concurrent-seasonal-adjustment problems seen with retail sales, and payroll and unemployment reporting. Unusual seasonal-factor volatility raises issues as to the significance of reported seasonally-adjusted monthly and annual changes. While those issues were brought into balance, for a period of ten days, with the annual benchmark revision to durable goods orders on May 18, 2016 (Supplemental Commentary No. 807-A)*, for subsequent months of reporting up through the November detail, unpublished historical revisions calculated along with the November seasonal adjustments, have made all historical reporting prior to September 2016 inconsistent with the current headline numbers. All historical data will be briefly consistent, once again, come next year's May 2017 benchmark revisions.*

GROSS DOMESTIC PRODUCT—GDP (Third-Quarter 2016, Third Estimate, Second Revision)

Underlying Recession Continued in Play, Despite Continued Heavily-Massaged and Bloated GDP Detail. Despite a second, upside revision to third-quarter 2016 GDP, broad economic weakness continued in key underlying, fundamental economic series. Noted with last month's first-revision to third-quarter 2016 GDP, those series include, but are not limited to: industrial production, new orders for durable goods, broad unemployment indicators and better-quality construction reporting, along with a variety of private indicators ranging from S&P 500® revenues and the Cass Freight Index™ to domestic petroleum consumption and the Conference Board's Help Wanted OnLine® advertising survey. Where a number of indicators show clear and continuing recession, the real-world U.S. economy has been in a "new" recession since December 2014.

Third-quarter GDP activity has been bloated by unusual, recent reporting in real retail sales and trade-balance activity. That said, the third estimate of third-quarter 2016 Gross Domestic Product (GDP) and related detail jumped sharply from minimal 1.4% second-quarter 2016 activity, to 3.5%. There is no recession, yet, based on the headline GDP numbers. Discussed in the *Executive Summary*, it is difficult to reconcile the GDP's headline recovery from the 2007 recession and purported subsequent expansion, with the better-quality government and private economic surveys just referenced.

Heavily Followed but of Extremely Poor Quality. In this most-politically-sensitive of popularly followed economic series, the GDP does not reflect properly or accurately the changes to the underlying economic fundamentals and measures that drive the broad economy. Separately reported, real-world economic activity has shown that the general economy began to turn down in 2006 and 2007, plunged into 2009, entered a protracted period of stagnation thereafter—never recovering fully—and then began to turn down anew in late-2014 (see graphs in the *Executive Summary*).

The GDP (or the broader GNP detail headlined in earlier decades) simply remains the most worthless of the popular government economic series, in terms of determining what really is happening to U.S. business activity. The series is the most-heavily-modeled, politically-massaged and gimmicked government indicator of the economy. It has been so since at least the 1960s, and that reporting quality deteriorated anew, sharply in 2016 benchmarking (see the *Opening Comments* of *Commentary No. 823*).

Notes on GDP-Related Nomenclature and Definitions

For purposes of clarity and the use of simplified language in the text of the GDP analysis, here are definitions of several key terms used related to GDP reporting:

Gross Domestic Product (GDP) *is the headline number and the most widely followed broad measure of U.S. economic activity. It is published quarterly by the Bureau of Economic Analysis (BEA), with two successive monthly revisions, and with an annual revision in the following July.*

Gross Domestic Income (GDI) *is the theoretical equivalent to the GDP, but the popular press generally does not follow it. Where GDP reflects the consumption side of the economy and GDI reflects the offsetting income side. When the series estimates do not equal each other, which almost always is the case, since the series are surveyed separately, the difference is added to or subtracted from the GDI as a "statistical discrepancy." Although the BEA touts the GDP as the more accurate measure, the GDI is relatively free of the monthly political targeting the GDP goes through.*

Gross National Product (GNP) *is the broadest measure of the U.S. economy published by the BEA. Once the headline number, now it rarely is followed by the popular media. GDP is the GNP net of trade in factor income (interest and dividend payments). GNP growth usually is weaker than GDP growth for net-debtor nations.*

Games played with money flows between the United States and the rest of the world tend to mute that impact on the reporting of U.S. GDP growth.

***Real** (or **Constant Dollars**) means the data have been adjusted, or deflated, to reflect the effects of inflation.*

***Nominal** (or **Current Dollars**) means growth or level has not been adjusted for inflation. This is the way a business normally records revenues or an individual views day-to-day income and expenses.*

***GDP Implicit Price Deflator (IPD)** is the inflation measure used to convert GDP data from nominal to real. The adjusted numbers are based on "Chained 2009 Dollars," as introduced with the 2013 comprehensive revisions, where 2009 is the base year for inflation. "Chained" refers to the substitution methodology, which gimmicks the reported numbers so much that the aggregate of the deflated GDP sub-series missed adding to the theoretically-equivalent deflated total GDP series by $105.5 billion in "residual," as of the second estimate of second-quarter 2016.*

***Quarterly** growth, unless otherwise stated, is in terms of seasonally-adjusted, annualized quarter-to-quarter growth, i.e., the growth rate of one quarter over the prior quarter, raised to the fourth power, a compounded annual rate of growth. While some might annualize a quarterly growth rate by multiplying it by four, the BEA uses the compounding method, raising the quarterly growth rate to the fourth power. So a one percent quarterly growth rate annualizes to 1.01 x 1.01 x 1.01 x 1.01 = 1.0406 or 4.1%, instead of 4 x 1% = 4%.*

***Annual** growth refers to the year-to-year change of the referenced period versus the same period the year before.*

Gross Domestic Product (GDP). Published December 22nd, by the Bureau of Economic Analysis (BEA), the third estimate of, second revision to third-quarter 2016 GDP showed a revised, marginally-statistically-significant, real (inflation-adjusted), annualized, quarterly headline gain of 3.51% +/- 3.5% (95% confidence interval), previously estimated at 3.16%, initially up by 2.90%. Distribution of the revised third-quarter 2016 GDP growth by major category is detailed in the *Executive Summary*. The current headline detail remains in the context of the July 29, 2016 annual GDP benchmark revisions discussed in *Commentary No. 823* and is subject to the next round of annual GDP benchmark revisions scheduled for July 28, 2017.

The third estimate of third-quarter GDP growth came in slightly above consensus expectations of 3.3%, at a continuing, not credible pace of headline activity. The latest upside revisions were spread across the personal-consumption-expenditure, business-investment and government-spending categories. Third-quarter 2016 Final Sales (GDP net of inventory change) grew at a revised annualized real quarterly pace of 3.02% [previously 2.67%, initially 2.29%], versus 2.57% in second-quarter 2016.

The revised headline third-quarter 2016 annualized real growth of 3.51%, followed gains of 1.42% in second quarter 2016, 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015.

Graphs 24 and *26* plot headline levels of real quarterly GDP activity, respectively showing short-term (since 2000) and long-term (since the historical onset of the quarterly GDP series in 1947) perspectives.

Shown in *Graphs 25* and *27*, headline year-to-year real GDP growth in third-quarter 2016 rose to a revised 1.65% [previously 1.57%, initially 1.50%], from 1.28% in second-quarter 2016, versus 1.57% annual growth in first-quarter 2016, and 1.88% in fourth-quarter 2015. Through second-quarter 2016 reporting, real annual growth had been in continual decline since the near-term peak of 3.31% in first-quarter 2015, the post-recession high annual growth for the series. A sharp downtrend in annual growth is common at the onset of formal recessions.

The current-cycle trough in annual change was in second-quarter 2009 (see *Graphs 25* and *27*), reflecting a year-to-year decline of 4.09% (-4.09%). That was the deepest year-to-year contraction for any quarterly GDP in the history of the series, which began with first-quarter 1947 (1948 in terms of available year-to-year detail). *Graph 25* shows current year-to-year quarterly detail, from 2000-to-date, where *Graph 27* shows the same series in terms of its full quarterly, year-to-year history back to 1948.

Implicit Price Deflator (IPD). The third estimate of third-quarter 2016 GDP inflation, or the implicit price deflator (IPD), showed a revised, annualized quarterly change of 1.42% [previously estimated at 1.38%, initially at 1.49%], versus an annualized 2.29% in second-quarter 2016, 0.46% in first-quarter 2016, 0.91% in fourth-quarter 2015, 1.22% in third-quarter 2015, 2.25% in second-quarter 2015 and 0.04% in first-quarter 2015.

As general guidance, the weaker the inflation rate used in deflating an economic series, the stronger will be the resulting inflation-adjusted growth, and vice versa. The revised upside movement in the third-quarter versus second-quarter 2016 IPD of 0.04% was worth a relative, parallel decline in real growth versus nominal growth for third-quarter 2016 relative to the second-quarter 2016, generating small negative impact against a net upside revision to third-quarter GDP growth.

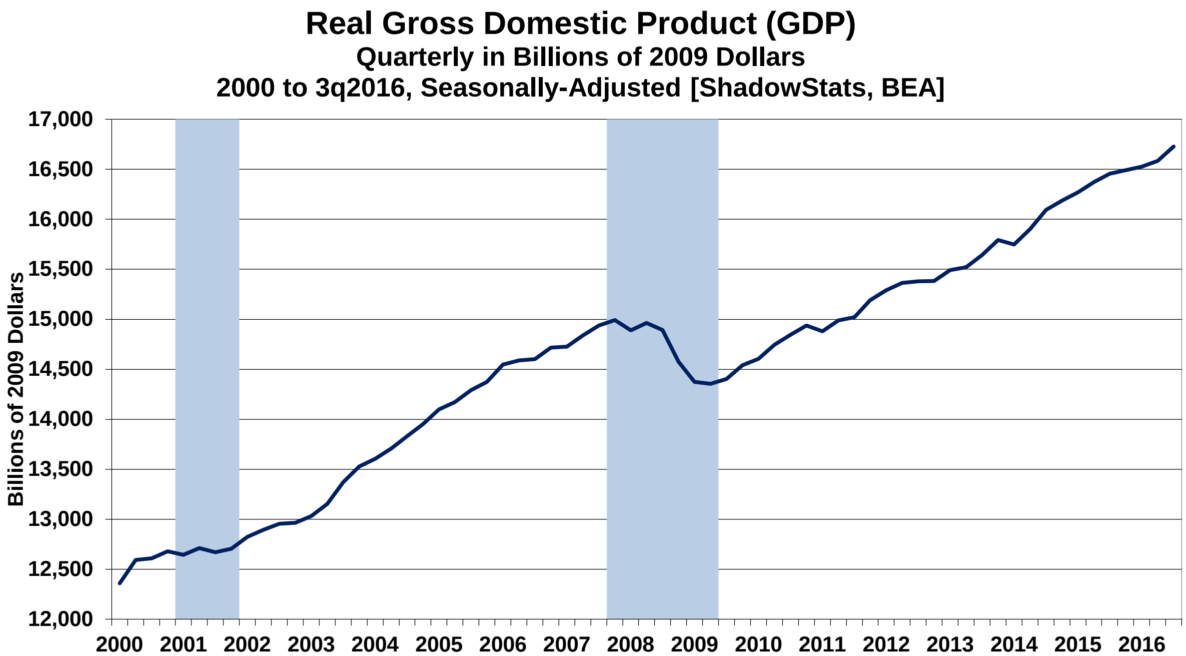
Year-to-year, headline third-quarter 2016 IPD inflation revised to 1.27% [previously 1.26%, initially 1.29%], versus 1.22% in second-quarter 2016, 1.21% in first-quarter 2016, 1.10% in fourth-quarter 2015, 1.00% in third-quarter 2015, 1.11% in second-quarter 2015 and 1.10% in first-quarter 2015.

For purposes of comparison, the seasonally-adjusted Consumer Price Index CPI-U rose by an annualized 1.63% in third-quarter 2016, versus a revised gain of 2.53% (previously 2.54%) in second-quarter 2016, a decline of 0.31% (-0.31%) in first-quarter 2016, a 0.77% gain in fourth-quarter 2015, a 1.38% gain in the third quarter, a 2.44% gain in the second quarter and a quarterly contraction of 2.86% (-2.86%) in the first quarter of 2015.

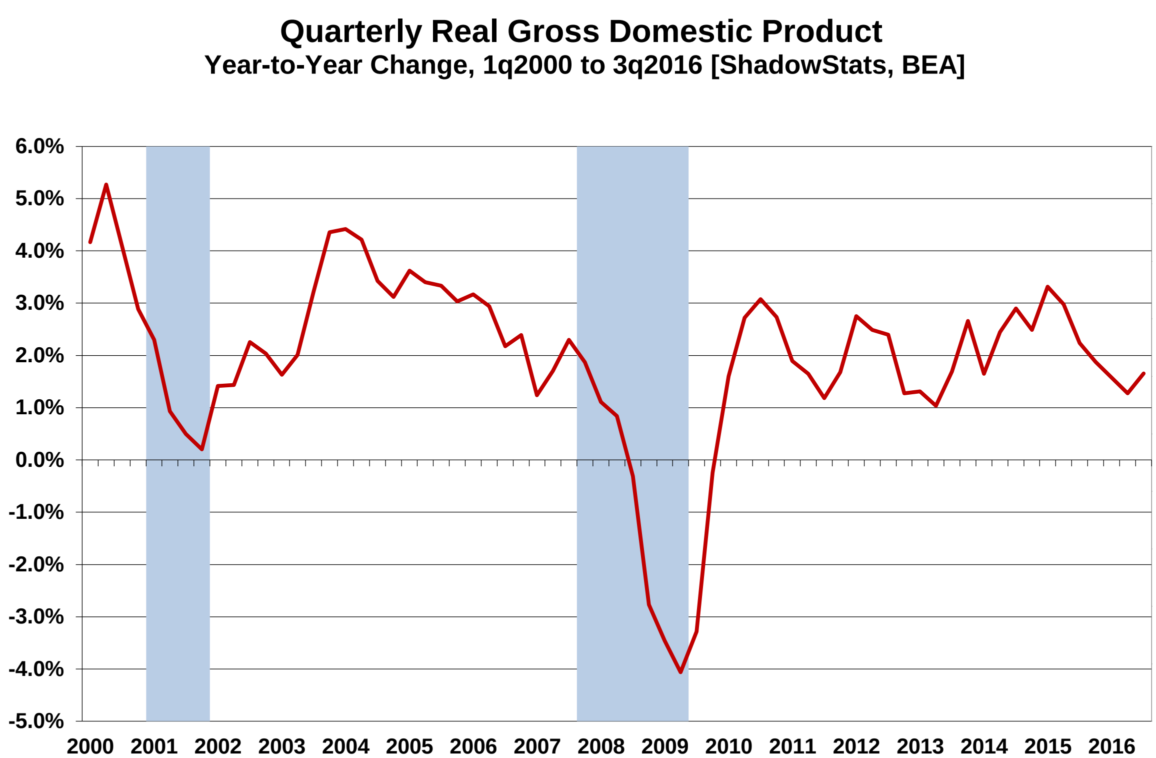
Unadjusted, year-to-year quarterly CPI-U inflation showed a year-to-year third-quarter 2016 gain of 1.12%, versus a second-quarter 2016 gain of 1.05%, a first-quarter 2016 gain of 1.08%, a fourth-quarter 2015 gain of 0.47%, a third-quarter 2015 gain of 0.11%, an annual contraction of 0.04% (-0.04%) in second-quarter 2015 and a year-to-year decline of 0.06% (-0.06%) in first-quarter 2015 (see *Commentary No. 841*).

[Graphs 24 to 27 begin on the next page]

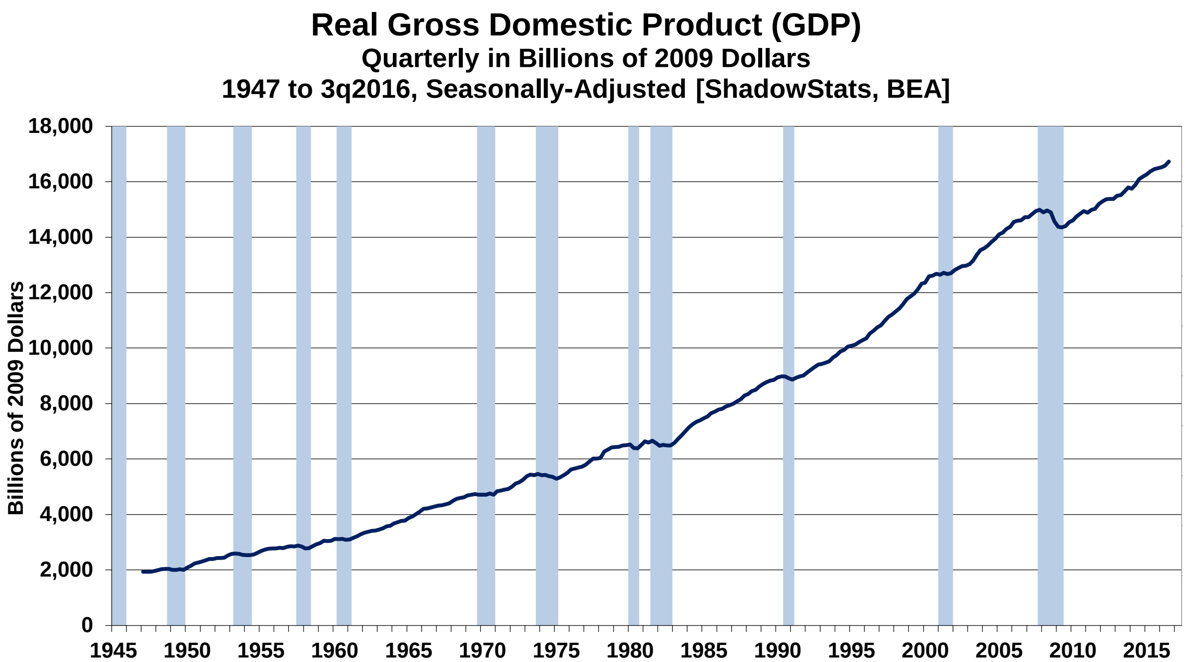
Graph 24: Quarterly GDP in Billions of 2009 Dollars (2000 to 2016), Third Estimate of Third-Quarter 2016



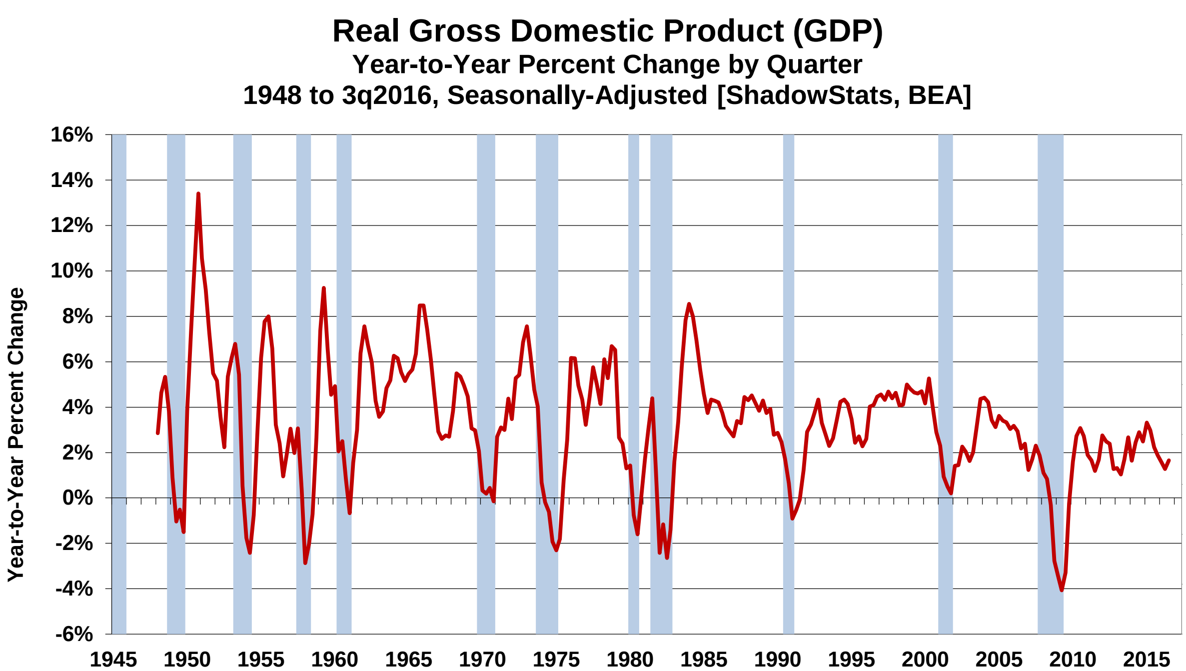
Graph 25: Quarterly GDP Real Year-to-Year Change (2000 to 2016), Third Estimate of Third-Quarter 2016



Graph 26: Quarterly GDP in Billions of 2009 Dollars (1947-2016), Third Estimate of Third-Quarter 2016



Graph 27: Year-to-Year GDP Real Change (1948-2016), Third Estimate of Third-Quarter 2016



Gross National Product (GNP) and Gross Domestic Income (GDI). Standardly, the second estimates of third-quarter GNP and GDI are published with the third headline estimate of third-quarter GDP. That circumstance is due to quality issues with the available "advance" data, a problem also common to the

GDP reporting. Second estimate of third-quarter 2016 GNP and GDI follow.

Gross National Product. GNP remains the broadest measure of U.S. economic activity, where GDP is GNP net of trade flows in factor income (interest and dividend payments). As a reporting gimmick aimed at boosting the headline reporting of economic growth for net-debtor nations such as the United States, international reporting standards were shifted some decades back to reporting headline GDP instead of what had become a relatively weaker GNP.

The second estimate of annualized real third-quarter 2016 GNP growth came in at a revised 3.35% [previously up by 3.13%], versus 2.16% in second-quarter 2016 and an "unchanged" 0.00% [a fractional annualized quarterly contraction of 0.003% (-0.003%)] in first-quarter 2016. The second estimate of year-to-year GNP growth rose to a revised 1.71% [previously 1.65%] in third-quarter 2016, from 1.28% in second-quarter 2016 and 1.31% in first-quarter 2016, reflecting primarily the gains in the underlying GDP base; the quarter shifts in in factor income trade flows remained negligible.

Gross Domestic Income. GDI is the theoretical income-side equivalent to the consumption-side GDP estimate. The GDP and GDI are made to equal each other, every quarter, with the addition of a "statistical discrepancy" to the GDI-side of the equation, which narrowed in revision to widened to a negative $293.9 [previously a negative $327.8] billion in third-quarter 2016, versus a negative $233.9 billion in second-quarter 2016.

The second estimate of the annualized real third-quarter 2016 GDI growth came in at a downwardly-revised 4.77% [previously up by 5.16%] annualized quarterly real gain, versus a gain of 0.71% in second-quarter 2016, and a gain of 0.81% in first-quarter 2016.

In terms of year-to-year change, real third-quarter 2016 GDI revised lower to 1.93% [previously 2.02%], versus revised 1.36% in second-quarter 2016 and 1.33% in first-quarter 2016.

Increasingly touted by the BEA as *the* GDP counterpart, the regularly-unstable GDI has been bloated heavily by effectively-worthless income reporting out of the Bureau of Labor Statistics (BLS). The purported income gains have reflected heavily-upside-biased income estimates out of the otherwise-rigged nonfarm payroll survey, held in almost perpetual growth by built-in upside biases (see the *Birth-Death/Bias Factor* discussion in *Commentary No. 852*).

ShadowStats-Alternate GDP. The ShadowStats-Alternate GDP estimate for third-quarter 2016 GDP remains a year-to-year contraction of 1.9% (-1.9%), versus the third estimate of the third-quarter 2016 annual real headline GDP gain of 1.7% (previously 1.6%, initially up by 1.5%). That circumstance was against a ShadowStats 2.0% (-2.0%) annual decline estimate for second-quarter 2016, versus the official headline gain of 1.3% in second-quarter 2016 GDP.

While the annualized, real quarterly growth rate is not estimated formally on an alternate basis, the marginally-statistically-significant revised 3.5% annualized, headline quarter-to-quarter gain in third-quarter 2016 was much weaker, net of all the happy assumptions, regular reporting gimmicks and any short-term political gaming coming into the headline detail. Actual quarterly contractions appear to have been a realistic possibility for inflation-adjusted GDP in most quarters since the official, second-quarter 2009 end to the 2007 recession.

Adjusted for understated inflation and other methodological changes—such as the inclusion of intellectual property, software and recent accounting for the largely not-measurable and questionable impact of the Affordable Care Act (ACA)—the business collapse that began in 2006/2007 is ongoing; there has been no meaningful economic rebound. The "corrected" real GDP graphs (see *Graphs 8* and *10* in the *Executive Summary*), updated from *2014 Hyperinflation Report—Great Economic Tumble – Second Installment*, are based on the removal of the impact of hedonic quality adjustments that have reduced the reporting of official annual GDP inflation by roughly two-percentage points. It is not the same measure as the ShadowStats-Alternate GDP, here, which reflects reversing additional methodological distortions ("Pollyanna Creep") of recent decades.

NEW-HOME SALES (November 2016)

November's Headline Monthly Sales Gain of 5.2% Was No More than Statistical Noise. Headline reporting of new-home sales remained of no substance, as seen most frequently here in the massive, unstable and continuously shifting revisions to recent history, along with statistically-insignificant monthly changes that just as easily could be a loss or a gain. As of the November headline detail, the smoothed reporting trend was slightly to the upside, in an ongoing pattern of low-level stagnation. Prior-period revisions were to the downside for August and September. While October was not revised in aggregate, such was just coincidence, given mixed revisions to the underlying regional data for the month.

The November 2016 headline reporting of 592,000 units in annualized sales (a 49,333 monthly rate as used in the graphs in the *Opening Comments and Executive Summary*) rose by 5.2% in the month, having declined by a revised, shallower 1.4% (-1.4%) in October. As usual, the headline monthly and annual changes were not statistically meaningful. That unstable monthly reporting continued in the context of November activity still holding below its never-recovered 2005 pre-recession peak by 57.4% (-57.4%).

ShadowStats assesses such volatile series by considering the gyrations in monthly activity in the context of a six-month moving-average of the headline numbers. With the otherwise meaningless monthly swings in these numbers smoothed out, new-home sales activity continued in a broad pattern of low-level, albeit with some up-trending stagnation (see *Graph 18* in the *Opening Comments*).

Graphed either way, smoothed or not, the various housing series generally have continued to show a pattern of economic activity plunging from 2005 or 2006 into 2009, with some bounce off the bottom and then stagnation, with the stagnation continuing at a low level of activity to date. Including and beyond new-home sales, related housing activity never has recovered along with the purported rebound in real GDP, which now stands 11.6% above its pre-recession high. For example, from this series' pre-recession peak of July 2005, headline November 2016 New-Home Sales, again, still were down by 57.4% (-57.4%), while November 2016 Single-Unit Housing Starts were down by 54.6% (-54.6%) from the January 2006 pre-recession high of that series (see *Commentary No. 856*).

Discussed in the *Executive Summary* section, the extreme liquidity bind besetting consumers continues to constrain personal-consumption expenditures and related residential-real-estate sales activity. Where the private housing sector never recovered from the business collapse of 2006 into 2009, there remains no chance of a 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 November 2016 New-Home Sales Reporting. Reported this morning, December 23rd, by the Census Bureau, in the context of downside monthly revisions to aggregate August and September, but not October 2016 activity, November 2016 New-Home Sales (counted based on contract signings) rose month-to-month a headline, seasonally-adjusted and statistically-insignificant 5.2% +/- 16.5% (all confidence intervals are at the 95% level).

That was against a revised, narrower decline of 1.4% (-1.4%) [previously down by 1.9% (-1.9%)] in October, an upwardly-revised gain of 2.1% [previously up by 1.2%, initially up by 3.1%] in September, and a deeper, revised monthly decline of 10.1% (-10.1%) [previously down by 8.8% (-8.8%), down by 8.6% (-8.6%), initially down by 7.6% (-7.6%)] in August. Net of prior-period revisions, the month-to-month change in November still was the headline gain of 5.2%.

Year-to-year, November 2016 sales rose by a statistically-insignificant 16.5% +/- 22.6%. That followed an unrevised 17.8% gain in October 2016, a downwardly-revised gain of 24.9% [previously up by 25.6%, initially up by 29.8%] in September 2016, and a downwardly-revised gain of 10.7% [previously up by 12.5%, up by 13.9%, initially up by 20.6%] in August 2016. This series remains extraordinarily unstable and consistently unreliable on a near-term, month-to-month basis and often on a long-term basis, as to whether headline sales actually increased or decreased, as was the case in the latest headline detail.

In the arena of continued extreme volatility, consider that the annualized quarterly pace of sales change gyrated from a sales gain in first-quarter 2015 of 50.1%, to a second-quarter 2015 annualized quarterly sales decline of 19.8% (-19.8%). Third-quarter 2015 new-home sales declined by 5.0% (-5.0%), with the fourth-quarter 2015 sales gain estimated at 18.7%.

First-quarter 2016 activity showed an annualized gain of 17.9%, with second-quarter 2016 up at an annualized quarterly gain of 29.5%, and third-quarter activity at a downwardly-revised 14.4% annualized pace [previously 17.3%, initially 26.6%]. Based on just on October and November detail, and boosted by the relative downside revision to third-quarter activity, fourth-quarter 2016 was on track for an annualized quarterly contraction of 4.4% (-4.4%) [down by 6.7% (-6.7%) net of prior-period revisions]. That had been estimated as an annualized contraction of 15.8% (-15.8%), based just on original October reporting.

New-Home Sales Graphs. The regular monthly graph of New-Home Sales is included in the *Opening Comments* section, along with a six-month moving-average version of the series (*Graphs 16* and *18*). Added for comparison purposes are parallel graphs of the headline and six-month moving-average versions of November 2016 Housing Starts for single-unit construction, from *Commentary No. 856*, (*Graphs 17* and *19*) along with comparative graphs of the Existing-Home Sales and related series (see *Graphs 20* to *23*).

EXISTING-HOME SALES (November 2016)

November Existing-Home Sales Monthly Gain was Minimal, Net of Revisions; Still in Non-Recovery, Down by 23% (-23%) from Pre-Recession Peak. Existing-Home Sales rose in November 2016, gaining 0.72% for the month, on top of a downwardly revised 1.46% [previously 2.00%] gain in October and versus an unrevised 3.58% gain in September. Year-to-year growth rose by 15.43% in

November 2016, versus a downwardly-revised 5.26% [previously a 5.86%] annual gain in October 2016 and an unrevised 0.92% annual gain in September 2016.

Consumer mortgage regulations were altered at the end of 2015, with the effect of delaying the closings then of existing home sales. As a result, headline monthly November 2015 sales (a closings count) collapsed by 8.1% (-8.1%), only to rebound by 12.1% in December 2015. Accordingly, watch for the annual growth-rate surge in November 2016 activity to be followed next month by a collapse in year-to-year activity for December 2016.

The series remained in depression (see *Commentary No. 754*). Holding at its highest monthly sales level since February 2007, headline November 2016 sales still were down 22.8% (-22.8%) from the pre-recession peak for the series. Smoothed with a six-month moving average, Existing-Home Sales activity held in low-level stagnation, albeit currently in a sputtering uptrend.

Along with the broader real estate and construction measures and new-home sales—existing-home sales never recovered from the economic collapse into 2009, a common issue in the residential real estate industry. After going through a period of protracted, low-level stagnation and non-recovery, general housing construction and related smoothed sales activity continued broadly with minimal variation around flat-to-rising trends, well below any formal recovery in economic activity.

Discussed in the *Opening Comments*, the underlying problem remains that the U.S. consumer is in an extreme liquidity bind, which prevents a meaningful recovery in national home-sales growth. Without sustained 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 consumer has been unable to sustain positive growth in broad U.S. economic activity, particularly as tied to residential real estate and personal consumption.

Specifically, Existing-Home Sales activity in November 2016, again, was down by a 22.8% (-22.8%) from the June 2005 pre-recession peak, a high that has not been matched since the ensuing economic collapse into 2009. In like manner, headline monthly Housing Starts remained down by 52.0% (-52.0%) from their January 2006 pre-recession high (see *Commentary No. 856*,).

Headline November Detail for Existing-Home Sales. Based on actual closings of home sales, the National Association of Realtors® (NAR) reported December 21st a seasonally-adjusted, headline monthly gain of 0.72% in November 2016 Existing Home Sales, against a downwardly-revised 1.46% [previously 2.00%] gain in October and an unrevised monthly gain of 3.58% in September an unrevised monthly contraction of 1.49% (-1.49%) in August. Net of prior-period revisions, the November gain was 0.18%, instead of the headline 0.72%.

On a year-to-year basis, November 2016 sales jumped by 15.43% against heavily-skewed prior-year reporting, versus a revised annual gain of 5.29% [previously 5.86%] in October 2016 and an unrevised 0.92% annual gain in September 2016.

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

First-quarter 2016 sales expanded at an annualized pace of 7.9%, followed by 16.3% in second-quarter 2016, with a revised annualized contraction of 8.0% (-8.0%) in third-quarter 2016 activity. With two months month of reporting in place for fourth-quarter 2016 activity, the trend is for an annualized fourth-quarter gain of 15.7% [previous 16.5%, based solely on initial October detail].

The quality of data underlying this series remains questionable, as seen in erratic reporting over the years. All that said, smoothed for irregular distortions, the reporting remained statistically consistent with a period of low-level broad stagnation, albeit up-trending, as can be seen in *Graph 22* of the *Executive Summary* in the *Opening Comments*.

Proportion of Distressed Sales Rose to 6% in November, with All Cash Sales Notching Lower to 21%. The NAR estimated the portion of November 2016 sales in "distress" notched higher to 6% (4% foreclosures, 2% short sales), versus 5% (4% foreclosures, 1% short sales) in October and down from 9% (7% foreclosures, 2% short sales) in November 2015.

The September 2016 reading of existing-home sales in distress at 4% had been the lowest level since the NAR began such surveying in October 2008. Consider, though, that October 2008 already was more than three years into the housing-market collapse.

Reflecting continued lending problems and stresses within the financial system, including related banking-industry and consumer-solvency issues, as well as the ongoing influx of speculative investment money into the existing-housing market, the NAR estimated that all-cash sales declined to 21% in November 2016, versus 22% in October 2016, and down from 27% in November 2015.

Existing-Home Sales Graphs. Shown in the *Opening Comments*, *Graph 20* plots the traditional headline Existing-Home Sales monthly detail. Such is supplemented by *Graph 22* of the six-month moving average of Existing-Home Sales. Accompanying the Existing-Home Sales plots are comparative graphs of November 2016 aggregate Housing Starts activity, from *Commentary No. 856*, where both series reflect activity in terms of single- and multiple-housing units (see *Graphs 21* and *23*). Comparative graphs of New-Home Sales and related series are shown in *Graphs 16* to *19* of the *Opening Comments*.