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

COMMENTARY NUMBER 863
Fourth-Quarter GDP, December Durable Goods, New- and Existing-Home Sales
January 27, 2017

Both Before and After Inflation Adjustment, 2016 Annual GDP Growth Was Weakest Since the Economic Collapse

Softer-than-Expected Headline 4q2016 GDP Real Growth of 1.88%, Suggested Greater Weakness and Downside Revisions in February and March Reporting

Final Sales (GDP Net of Inventory Change) Slowed to 0.88% from 3.02%

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

Fourth-Quarter Velocity of Money Rose for M3, Declined for M1 and M2

Real New Orders for Durable Goods (Total and Ex-Commercial Aircraft)
Declined in December, but Rose Quarter-to-Quarter,
Still in Low-Level, Stagnating Non-Recovery

December New- and Existing-Home Sales Contracted Month-to-Month, Smoothed Activity Continued in Broad, Non-Recovering Stagnation

Proportion of Existing Sales in Distress Increased for the Third Month

PLEASE NOTE: The next regular Commentary, scheduled for Saturday, February 4th will cover January 2017 Employment and Unemployment, December Construction Spending and updated Consumer Liquidity. While the labor detail will be published on February 3rd, analyses of the accompanying annual benchmark revisions to payrolls and the annual recasting of unemployment population controls, will push publication of the ShadowStats analysis to the next day.

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

No Economic Recovery Here, Despite Market Euphoria. Stock prices push to new highs, amidst market hype continuing to favor equities and the U.S. dollar, as most frequently is the case. While market optimism is understandable at present, both U.S. stocks and the U.S. dollar already are well beyond foreseeably-sustainable levels. The near-term good news increasingly will be mixed with some near-term difficulties, given economic weakness already in play through the end of 2017. Tied to the shifting circumstances remain a befuddled Fed and global currency-market sensitivities to long-range sovereign solvency issues facing the United States, discussed in *No. 859 Special Commentary*. As near-term domestic economic weakness/contraction increasingly dominates the data, risk remains particularly high of a massive shift against the U.S. dollar. That likely would take the domestic equity market with it, as it did in 1987.

Weakest Annual GDP Growth Since the Recession. Worse-than-expected conditions surfaced with today's (January 27th) headline reporting of fourth-quarter 2016 GDP. In nominal terms, before inflation adjustment, annual change for the GDP in 2016 was 2.94%, down from 3.70% in 2015. The 2016 nominal growth pace was the weakest since the annual contraction of 2.09% (-2.09%) in 2009, which was the trough year of the economic collapse. In real terms, adjusted for inflation, annual change for the GDP in 2016 was 1.60%, down from 2.60% in 2015. The 2016 real growth pace was tied with 2011 (also 1.60%) as the weakest since the annual contraction of 2.78% (-2.78%) in 2009.

Below-Consensus Headline GDP Reporting Probably Signaled Even-Weaker Numbers Ahead. The headline GDP numbers likely will get worse in the next two months. The "advance" estimate of 1.9% fourth-quarter GDP growth came in below consensus expectations of 2.2%. While that continued to reflect a not credible, positive pace of headline activity, as discussed in the Executive Summary, the Bureau of Economic Analysis (BEA) well may have just signaled consensus forecasters that the fourth-quarter GDP growth is going lower in revision. The BEA usually targets the consensus outlook with its "advance" estimate, and headline growth below consensus signals that even weaker growth is likely in the two subsequent monthly revisions, more often than not.

Beyond the likelihood that near-term, monthly economic indicators also will come in below consensus expectations, there also is some particular risk of a downside data surprise in the week ahead.

Downside Payroll Benchmarking Looms. Discussed in the Week, Month and Year Ahead section, the January 2017 payroll reporting on February 3rd will include the annual benchmark revisions to the payroll employment survey. Where there already has been a pre-announced "pending downside" benchmark revision, the specifics still may be surprising. They could be much worse than expected, in terms of negative revisions to the upside monthly bias factors usually used to bloat the monthly payroll gains. Change-in-Administration games-playing with data has been seen before, as happened when data gathering changes shifted what should have been a headline 2000 recession, into a headline 2001 recession. More will follow with Commentary No. 864 covering the payroll revisions.

the White House. Separately, updating the discussion in the *Executive Summary* of *No. 859 Special Commentary*, the headline detail published with the fourth-quarter 2016 and annual 2016 GDP included 2016 annual real growth in Disposable Personal Income (DPI). Real DPI growth below 3.10% always has gone against the incumbent party holding the White House in presidential elections since 1932 (since the onset of consistently estimated income numbers). Today's initial headline estimate of real growth in annual disposable income for the full year of 2016 was 2.30%, consistent with Mr. Trump winning the White House, and as discussed variously in these *Commentaries*, both before and after the election.

Today's *Commentary* (January 27th). These *Opening Comments and Executive Summary* cover summary detail of the "advance" reporting of fourth-quarter 2016 GDP, December 2016 New Orders for Durable Goods and New- and Existing Home Sales.

The *Hyperinflation Watch* updates the velocity of money for Money Supply M1, M2 and M3 (ShadowStats Ongoing Measure), reflecting headline fourth-quarter GDP and related money supply details.

The Week, Month and Year Ahead section previews next week's reporting of January employment and unemployment, and December construction spending.

Executive Summary: Gross Domestic Product (GDP)—Fourth-Quarter 2016, First Estimate—Below Expectations but Still Far Shy of Reality. The "advance" or first estimate of fourth-quarter 2016 GDP showed a statistically-insignificant, real (inflation-adjusted), annualized, quarterly headline increase of 1.88%, following gains of 3.51% in third-quarter 2016, 1.42% in second-quarter 2016, 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015.

Headline year-to-year real GDP growth in fourth-quarter 2016 rose to 1.91%, versus 1.65% in third-quarter 2016, 1.28% in second-quarter 2016, 1.57% in first-quarter 2016, and 1.88% in fourth-quarter 2015. Annual 2016 GDP real growth slowed to 1.60%, versus 2.60% in 2015, which tied with 2011 for slowest pace of annual growth in the post-2009 "recovery."

Plots of the historical GDP levels as well as annual GDP changes are found in *Graphs 25* to *30* in the *Reporting Detail*.

Fourth-Quarter 2016 GDP, "Advance Estimate" - Growth Distribution. The first estimate of fourth-quarter 2016 GDP came in at an annualized real growth rate of 1.88%, against 3.51% in third-quarter 2016 GDP growth.

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 1.70% + 1.67% - 1.70% + 0.21% = 1.88%. <u>Commentary No. 857</u> of December 23rd detailed the growth-distribution for third-quarter 2016 GDP.

Regrouped by general product line, the BEA estimated that the headline 1.88% quarterly GDP growth rate included a 0.60% growth-rate contribution from services, a 0.75% contribution from goods and a 0.52% contribution from structures, with a rounding difference.

Contributing Growth Factors. Headline fourth-quarter 2016 GDP growth was dominated by an involuntary buildup in inventories, gains in construction, vehicle sales and state- and local-government spending, and heavily offset by a sharply deteriorating trade deficit.

- Consumer Spending Contributed 1.70% to Fourth-Quarter 2016 GDP Growth; Third-Quarter Growth Contribution Was 2.03%. The consumer spending category, was dominated by motor vehicle sales (including recreational), food consumption and the nebulous details of the non-productive and heavily-guesstimated healthcare sector, including hospital activities.
- Business/Residential Investment Contributed 1.67% to Fourth-Quarter 2016 GDP Growth; Third-Quarter Growth Contribution Was 0.50%. Contrary to private indicators, surging real estate investment helped to prop activity here, but the dominant factor was a sharp spike in inventory growth, which contributed 1.00% by itself of the headline 1.88% GDP growth rate. Accordingly, headline final sales—GDP net of inventory change—fell to an annualized quarterly growth rate of 0.88%, versus 3.02% in third-quarter 2016.
- Net Exports Subtracted 1.70 % (-1.70%) from Fourth-Quarter 2016 GDP Growth, Third-Quarter Growth Contribution Was 0.85%. Heavily hitting the headline growth estimate for fourth-quarter GDP was a sharp deterioration in quarterly trade deficit. Such reversed the highly-suspect, sharp improvement in the headline third-quarter deficit, which was the primary prop behind the pre-election jump in third-quarter 2016 GDP (see Commentary No. 860). Further detail will follow the coverage of February 7th release of the headline December 2016 trade deficit, which was indicated as having held about even for the month.
- Government Spending Added 0.21% to Fourth-Quarter 2016 GDP Growth, Third-Quarter Growth Contribution Was 0.14%. Federal government spending subtracted 0.08% (-0.08%) from the headline fourth-quarter GDP growth. That was more than offset by surging state- and local government "investment," usually in the realm of Affordable Care Act (ACA) issues.

Implicit Price Deflator (IPD). The first estimate of fourth-quarter 2016 GDP inflation, or the implicit price deflator, showed an annualized quarterly change of 2.12%, versus an annualized 1.41% in third-quarter 2016. Year-to-year, the headline fourth-quarter 2016 IPD inflation was 1.57%, versus 1.27% in third-quarter 2016. In terms of year-over-year, average annual inflation, the 2016 IPD inflation was 1.32%, versus 1.08% in 2015. Generally, the stronger the pace of relative inflation used in deflating

nominal economic data (not adjusted for inflation), the weaker will be the resulting inflation-adjusted "real" growth, and vice versa. Extended detail and CPI-U comparisons follow in the *Reporting Detail*.

Gross National Product (GNP) and Gross Domestic Income (GDI). Standardly, the first estimates of fourth-quarter GNP and GDI are not published until the release of the third estimate of fourth-quarter GDP (March 30th this year). That circumstance is due to quality issues with the available data for the "advance" and second estimates of the year-end data, a problem also common to the headline GDP reporting (see the Reporting Detail).

Underlying Economic Reality. [Much of the regular discussion and all of the comparative economic series traditionally used in these monthly GDP Commentaries were updated and expanded upon in the ECONOMY section of No. 859 Special Commentary of January 8th, incorporated here by reference. Accordingly, the comparative charts and some text are limited this month so as to avoid undue repetition. Fundamentally, the broad U.S. economy never fully recovered from its collapse into 2009, with continued low-level stagnation that generally has turned down anew.]

Despite the booming 3.51% real annualized GDP growth in third-quarter 2016 and the 1.88% gain in today's headline fourth-quarter GDP detail, realistic, underlying U.S. economic activity has continued in a deepening and as-yet-unrecognized "new" recession. Headline monthly reporting activity in better-quality subsidiary economic series continues 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 the Trump Administration moving quickly to generate new economic stimulus. Given basic economic lead times, the first major, positive impact on the economy from that should be in early-2018, not much before. Interim economic activity and even GDP reporting still should turn lower in the next several quarters.

Discussed in <u>Commentary No. 823</u>, 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 (subsequent fourth-quarter 2016 GDP revisions 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 <u>Commentary No. 739</u>), 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 in <u>No. 859 Special Commentary</u>. 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).

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, as reviewed fully in *No. 859 Special Commentary*. Those indicators range from such varied series as domestic freight activity (*Graph 5*) to the employment-population ratio (*Graph 6*) and corporate revenues (*Graph 7*). Either the GDP reporting is wrong, or most 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 following text remains along the lines as recently expounded upon in <u>No. 859</u>. The details and numbers here, however, are updated for the latest headline information. In combination, these various collapsing economic indicators eventually should engender a formal recession call, irrespective of the timing of actual, if any, headline quarterly contractions in real GDP, or what likely has been related political gaming of the data up through year-end 2016.

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.

Again, discussed in <u>No. 859</u>, 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. 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 initial estimate of fourth-quarter 2016, as well as reflecting a sampling other elements of economic reality.

The first set of graphs (*Graphs 1* and 2) 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 2*, 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 3* and 4 show short-term detail, expressed on an index base where first-quarter 2000 = 100.0.

Shown in the first graph of each set (*Graphs 1* and *3*) 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 "advance" estimate of fourth-quarter 2016 GDP currently stands 12.1% 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 and in *No. 859* has 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 2* and 4), shows fourth-quarter 2016 GDP activity to be down from its pre-recession peak of first-quarter 2006 by 7.1% (-7.1%).

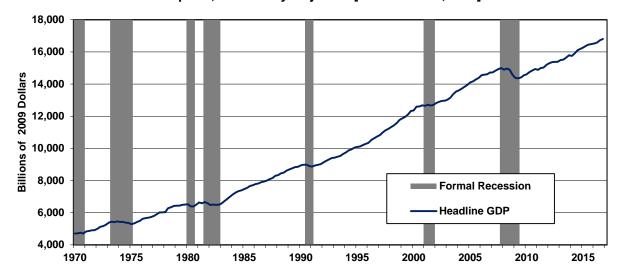
Again, the second graph in each series (*Graphs 2* and 4) plots the *Corrected Real GDP*, adjusted for the understatement inherent in official inflation estimates (see <u>Public Commentary on Inflation</u> <u>Measurement</u>), with the deflation by the implicit price deflator (IPD) adjusted for understatement 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 5* to 7 (again see <u>No. 859</u>), 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.

[Graphs 1 to 7 begin on the following page.]

Graph 1: Real GDP Index (1970-2016), "Advance" Estimate of Fourth-Quarter 2016

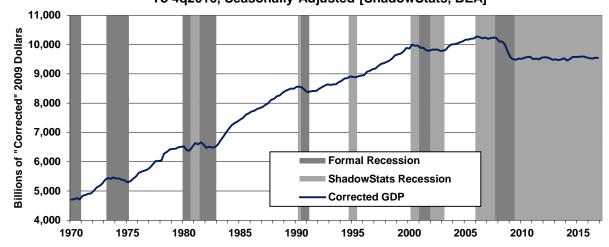
Headline Real GDP Nominal GDP Deflated by Implicit Price Deflator To 4q2016, Seasonally-Adjusted [ShadowStats, BEA]



Graph 2: "Corrected" Real GDP (1970-2016), "Advance" Estimate of Fourth-Quarter 2016

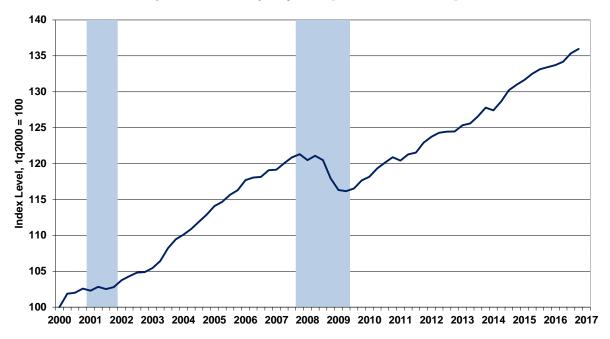
Corrected Real GDP

Nominal GDP Deflated by Implicit Price Deflator Adjusted for Understatement of Annual Inflation
To 4q2016, Seasonally-Adjusted [ShadowStats, BEA]



Graph 3: Real GDP Index - Headline Real GDP through First Estimate of Fourth-Quarter 2016

Headline Real GDP -- Index Level GDP Deflated by Official Implicit Price Deflator To 4q2016, Seasonally-Adjusted [ShadowStats, BEA]



Comparative Indicators. Graph 4 of the "corrected" GDP series follows, with subsequent, limited sampling of comparative economic indicators (see the expanded coverage in <u>No. 859</u>). The comparative indicators 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 still is slightly up-trending.

Graph 5 shows the Cass Freight IndexTM measure of North American freight volume through December 2016, used with the permission of Cass Information Systems, Inc. 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 4*, than with the headline GDP of *Graph 3*. It also tends to follow activity in New Orders for Durable Goods (see for example *Graphs 12* and *13* in the next section).

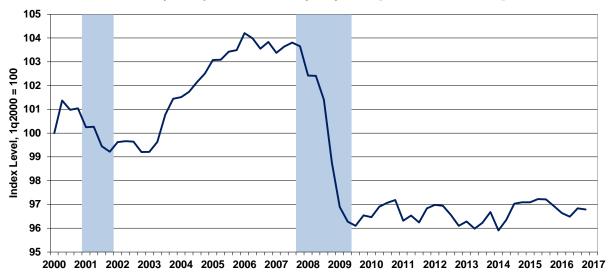
Graph 6 of the employment to population ratio is a solid indicator of underlying labor conditions in the context of the broad population and long-term discouraged and displaced workers, reflected here through December 2016. The detail here will be updated through January 2007 in the next *Commentary No. 864* of February 4th.

Graph 7 of S&P 500 revenues is plotted (not seasonally adjusted) on a quarterly basis, adjusted for the estimated impact of share buybacks and inflation. When real year-to-year change in U.S. corporate revenues turns negative, broad domestic economic activity invariably follows.

Graph 4: "Corrected" Real GDP Index (2000-2016), First Estimate of Fourth-Quarter 2016

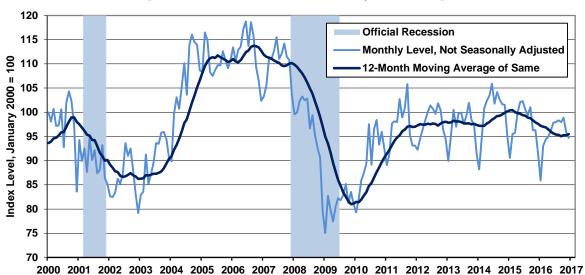
Corrected Real GDP

Nominal GDP Deflated by Implicit Price Deflator Corrected for Roughly Two-Percentage Point Understatement of Annual Inflation Quarterly to 4q2016, Seasonally-Adjusted [ShadowStats, BEA]



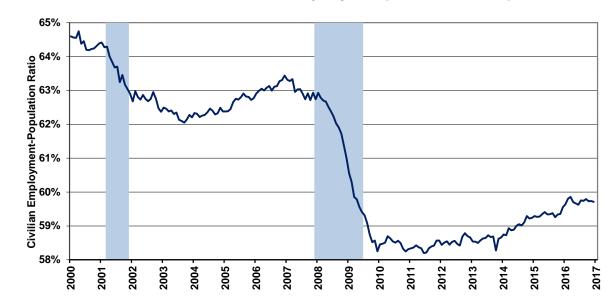
Graph 5: Cass Freight Index ™ (2000-November 2016)

Cass Freight Index[™] (Jan 2000 = 100) To December 2016, Not Seasonally Adjusted [ShadowStats, Cass Information Systems, Inc.]



Graph 6: Civilian Employment-Population Ratio

Civilian Employment-Population Ratio To December 2016, Seasonally-Adjusted [ShadowStats, BLS]



Graph 7: Real S&P 500 Sales Adjusted for Share Buybacks (2000 - 2015), Indexed to January 2000 = 100

Real S&P 500 Quarterly Revenues per Share Adjusted for Share Buybacks, Deflated by CPI-U, 2000 to 3q2016,Indexed to January 2000 = 100

Not Seasonally-Adjusted [ShadowStats, BLS, S&P]



New Orders for Durable Goods—December 2016—Declined Month-to-Month, but Picked Up Quarter-to-Quarter, both Before and After Consideration of Inflation and Commercial Aircraft. In the context of an exaggerated 42.44% gain in an otherwise very low level of December commercial

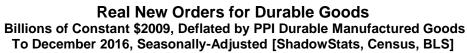
aircraft orders, nominal December 2016 new orders for durable goods declined by 0.43% (-0.43%) for the month and rose by 1.62% year-to-year. Excluding commercial aircraft, new orders declined by 1.25% (-1.25%) for the month and rose by 3.62% year-to-year.

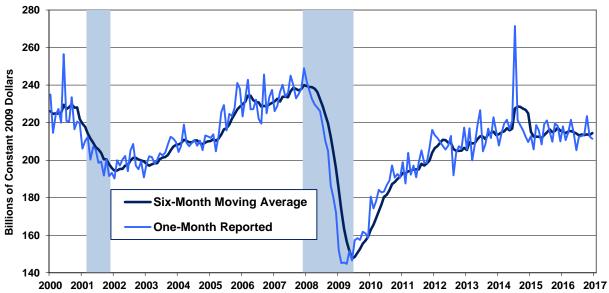
The best leading indicator to industrial production out of this series is inflation-adjusted real new orders, ex-commercial aircraft. It declined by 1.43% (-1.43%) month-to-month, but rose by 2.63% year-to-year, in December 2016. For fourth-quarter 2016, the annualized real ex-aircraft series showed a quarterly gain of 5.09%, up by 1.20% year-to-year. Despite the headline gains, that series remained in low-level, non-recovering stagnation, and it remained a tentative, neutral/negative leading indicator to first-quarter 2017 industrial production, which has remained in definitive recession since December 2014.

Graphs of Inflation-Adjusted and Smoothed Durable Goods Orders. Graphs 8 and 9 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 anew into late fourth-quarter 2015 and, with continued minor fluttering, into third-quarter 2016 and a small uptick in fourth-quarter 2016.

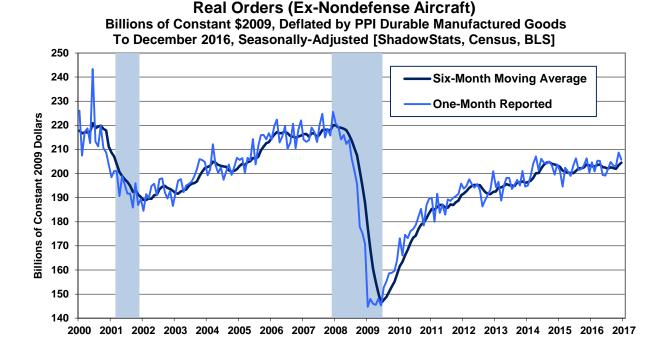
Broadly, there has been a general pattern in recent years of stagnation or bottom-bouncing evident in the orders—clearly not the booming recovery seen in official GDP reporting (see *Underlying Economic Reality* comments in the previous GDP section). The real monthly and six-month moving-average level of new orders in December 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.

Graph 8: Real Total New Orders for Durable Goods to Date





Graph 9: Real New Orders for Durable Goods - Ex Commercial-Aircraft Orders to Date



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 used in deflating various series (see Public Commentary on Inflation Measurement).

As done for other series such as the GDP (see *Graph 4* earlier in this *Executive Summary*), industrial production and real retail sales (see prior *Commentary No. 862*), 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 10* and *Graph 11*) shows the aggregate series or total durable goods orders; the second set (*Graph 12* and *Graph 13*) shows the ex-commercial aircraft series. The aggregate orders series in *Graphs 10* and *11* includes the monthly commercial aircraft orders. Placed years in advance, aircraft orders are a better indicator of long-range production activity, than they are as a near-term leading indicator of production activity. Again, *Graphs 12* and *13* 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 8* and *Graph 9*, 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 10: Index of Real Total New Orders for Durable Goods, 6-Month Moving Average

Total Real New Orders for Durable Goods (6-Month Moving Avg) Monthly Index, Deflated by PPI--Durable Manufactured Goods To December 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 11: Corrected Index of Real Total New Orders for Durable Goods, 6-Month Moving Average

Corrected Total Real Durable Goods Orders 6-Month Moving Average, Deflation Corrected for Hedonic Adjustments



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

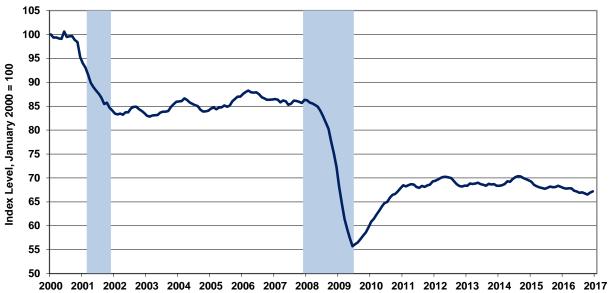
Real Orders, Ex-Nondefense Aircraft (6-Month Moving Average)

Monthly Index, Deflated by PPI--Durable Manufactured Goods
To December 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 13: Corrected Index of Durable Goods Orders - Ex Commercial Aircraft, 6-Month Moving Average

Corrected Real Durable Goods Orders, Ex-Nondefense Aircraft 6-Month Moving Average, Deflation Corrected for Hedonic-Adjustments To December 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



New- and Existing-Home Sales—December 2016—December Activity Contracted, with Continued Low-Level Stagnation and No Recovery. The December 2016 New- and Existing-Home Sales series both remained in depression territory (see *Commentary No. 754*), down respectively by 61.4% (-61.4%) and 24.5% (-24.5%) from their pre-recession peaks.

Usual reporting instabilities and distortions, involving high volatility, irregular seasonality and lack of statistical significance, continued to warp the New-Home Sales series, which declined month-to-month and quarter-to-quarter. Despite continuing extreme, near-term volatility, albeit statistically-insignificant, the series remained in low-level, non-recovering stagnation. As shown in *Graph 14*, that stagnation had had a recent, minor uptrend over time, although it turned negative in recent months, flattening out as seen in the smoothed *Graph 16*.

Headline December Existing-Home Sales also declined month-to-month, with a sharply distorted slowing in year-to-year change. In the context of shifting patterns in smoothed, low-level stagnation, Existing-Home Sales activity has turned to a shallow downtrend as seen in *Graphs 18* and 20. December 2016 monthly detail held at 24.5% (-24.5%) below recovering its pre-recession high.

These series never have recovered from the economic collapse into 2009. General housing construction and sales activity broadly have shown patterns of protracted, low-level, non-recovering stagnation, with related single-unit housing starts and aggregate housing starts in December 2016, also down from their pre-recession highs, respectively by 56.4% (-56.4%) and by 46.1% (-46.1%).

Consumer Liquidity Problems Continue to Impair Home Sales Activity. An extreme consumer-liquidity bind continues to constrain personal consumption, residential real estate sales and related construction activity, as updated in No. 859 Special Commentary. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including real estate activity. That circumstance—in the last nine-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity, 70% of which is dependent on personal spending, including residential real estate.

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, despite the change in Administration (*No. 859 Special Commentary*).

New-Home Sales—Monthly and Quarterly Sales Declined in Unstable Reporting, with the Smoothed Series 61.4% (-61.4%) Below Its Pre-Recession Peak. Headline monthly reporting of New-Home Sales remained of no substance, short term, as seen most frequently here with massive, unstable and continuously shifting revisions to recent history, along with statistically-insignificant monthly changes that just as easily could be a gain or a loss. In the latest reporting, the trend was down and the revisions were minimally to the upside.

December 2016 New-Home Sales (Census Bureau, counted based on contract signings) declined month-to-month by a headline, seasonally-adjusted and statistically-insignificant 10.4% (-10.4%). That was against a downwardly-revised 4.7% gain in November and a revised 0.5% gain in October.

Year-to-year, December 2016 sales declined by a statistically-insignificant 0.4% (-0.4%), following a revised 17.7% gain in November 2016 and a revised gain of 19.5% in October 2016. This series remained 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.

ShadowStats assesses such unstable series by considering the gyrations in monthly activity in the context of a six-month moving-average of the headline numbers. With the otherwise meaningless monthly swings in these numbers smoothed out, New-Home Sales activity continued in a broad pattern of low-level—albeit with some up-trending—stagnation, which recently flattened out (see *Graph 16*).

Existing-Home Sales—Non-Recovering Stagnation, Monthly Sales Fell, Activity Remained Down from Pre-Recession Peak by 24.5% (-24.5%). In the context of the third month of a rising portion of foreclosed or distressed properties in Existing-Home Sales, December 2016 activity dropped month-to-month, with flattening annual growth.

Based on actual closings of home sales, the National Association of Realtors® (NAR) reported a seasonally-adjusted monthly decline in December 2016 Existing Home Sales of 2.83% (-2.83%), following gains of an upwardly revised 1.44% in November and an unrevised 1.46% in October.

December 2016 sales collapsed year-to-year to 0.73%, from an upwardly-revised 16.26% in November 2016 and against an unrevised annual gain in October 2016 of 5.29%. Annual growth rates were distorted by market aberrations of the year before.

Backing off the November 2016 high—the highest monthly sales level since February 2007—headline December 2016 sales still were down by 24.5% (-24.5%) from the pre-recession peak of the series. Smoothed with a six-month moving average, Existing-Home Sales activity held in low-level stagnation, albeit currently in a faltering uptrend. The NAR touted that the aggregate 2016 sales level was the strongest since 2006. Yet the 2016 annual sales rate still was down by 15.9% (-15.9%) from 2006, and by 22.8% (-22.8%) from the pre-recession peak annual-average sales rate of 2005.

New-Home Sales Graphs. The regular monthly graph of December 2016 New-Home Sales follows, along with a six-month moving-average version of the series (see *Graphs 14* and *16*). Added for comparison purposes are parallel graphs of the headline and six-month moving-average versions of December 2016 Housing Starts for single-unit construction, from prior *Commentary No. 862* (see *Graphs 15* and *17*).

Existing-Home Sales Graphs. Graph 18 plots the traditional headline Existing-Home Sales monthly detail. Such is supplemented by *Graph 20* of the six-month moving average of Existing-Home Sales. Accompanying the Existing-Home Sales plots are comparative graphs of December 2016 aggregate Housing Starts activity, again, from prior *Commentary No. 862*, where both series reflect activity in terms of single- and multiple-housing units (see *Graphs 19* and *21*).

[Graphs 14 to 21 begin on the following page.]

Graph 14: New-Homes Sales - Monthly Rate of Activity

New-Home Sales (Monthly Rate) To December 2016, Seasonally-Adjusted [ShadowStats, Census]



Graph 15: Single-Unit Housing Starts, Monthly Rate of Activity

Single-Unit Housing Starts (Monthly Rate) To December 2016, Seasonally-Adjusted [ShadowStats, Census]



Graph 16: New-Homes Sales - Six-Month Moving Average, Monthly Rate of Activity

New-Home Sales (Six-Month Moving Average) To December 2016, Seasonally-Adjusted [ShadowStats, Census]



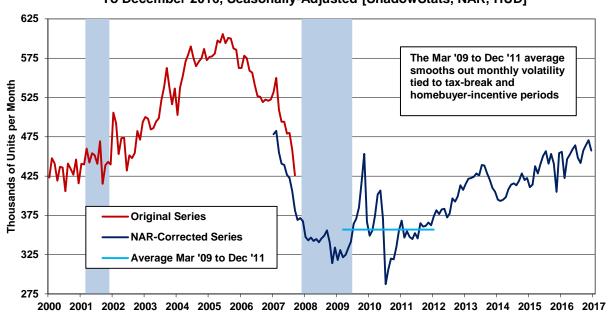
Graph 17: Single-Unit Housing Starts, Six-Month Moving Average, Monthly Rate of Activity

Single-Unit Housing Starts (Six-Month Moving Average) To December 2016, Seasonally-Adjusted [ShadowStats, Census]



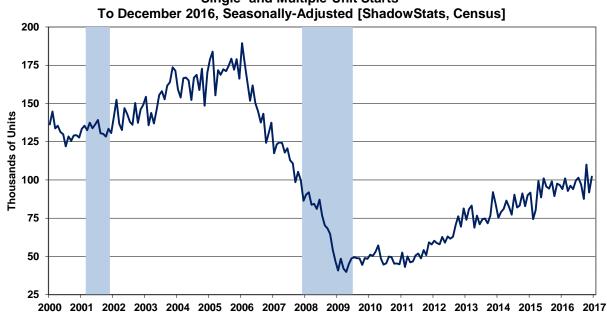
Graph 18: Existing-Home Sales – Monthly Level

Existing-Home Sales (Monthly Rate) Single- and Multiple-Unit Sales, Non-Annualized Monthly Level To December 2016, Seasonally-Adjusted [ShadowStats, NAR, HUD]



Graph 19: Total Housing Starts - Monthly Level

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



Graph 20: Existing-Home Sales (Six-Month Moving Average)

Existing-Home Sales (Six-Month Moving Average) Single- and Multiple-Unit Sales, Non-Annualized Monthly Rate To December 2016, Seasonally-Adjusted [ShadowStats, NAR, HUD]



Graph 21: Total Housing Starts (Six-Month Moving Average)

Aggregate Housing Starts (Six-Month Moving Average) To December 2016, Seasonally-Adjusted [ShadowStats, Census]



[The Reporting Detail contains significant further analysis and graphs on the GDP, Durable Goods Orders and New- and Existing-Home Sales.]

HYPERINFLATION WATCH

VELOCITY OF MONEY

Fourth-Quarter Velocity of Money Rose for M3, Declined for M1 and M2. Despite the slowing quarterly growth in nominal (not adjusted for inflation) fourth-quarter 2016 GDP, quarterly growth slowed even more in nominal Money Supply M3 growth, to below the GDP pace. Growth rates in the narrower M1 and M2 measures (M3 encompasses M2, M2 encompasses M1), though, were at a faster pace, above that of the nominal GDP. As a result, quarterly growth in the Velocity of Money (GDP/money supply) rose in terms of M3, but continued to decline in terms of M1 and M2.

Incorporating the headline detail of fourth-quarter 2016 GDP, as well as the detail from the latest Federal Reserve reporting and continual benchmarking of money-supply-related data, *Graphs 23* and 24 show estimates of the Velocity of Money, broken out for Money Supply M1, M2 and M3 (the ShadowStats Ongoing-M3 Measure). Velocity is a measure of how many times the money supply turns over in a year, versus the broad economy (GDP). Velocity is calculated simply as the ratio of the nominal GDP to the nominal money supply measure.

The respective headline velocities of Money Supply M1, M2 and M3 generally declined (M3 was flat when rounded) in third-quarter 2016, but where M1 and M2 money supply growth rates continued to rise, slowing M3 money supply growth boosted the velocity minimally to the plus-side in the fourth-quarter 2016. Where nominal GDP is in the numerator and the nominal money measure is in the denominator of the velocity ratio, slowing velocity indicates a relatively slower pace of nominal economic growth versus the money supply growth, and vice versa.

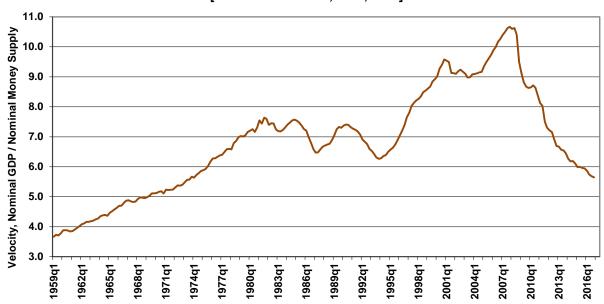
Velocity had plunged into first-quarter 2015 for M1 and M2. Since the end of 2010, however, the broader measure of M3 velocity had been steady through third-quarter 2014, when it also turned lower. With the exception of an uptick in second-quarter 2015, all velocity measures have been declining since late-2014, except for the just indicated uptick in fourth-quarter 2016 M3 velocity.

As to M1, consider that perhaps 70% or more of the cash-in-circulation component of that measure (with cash accounting for about 43% of M1) could be physically outside the United States, per the Federal Reserve. Where that has been an increasing trend, a true measure of domestic M1 velocity well could be showing a significant uptrend. In like manner, where M1 includes cash, M2 includes M1, and M3 includes M2, M2 and M3 velocities also would be higher (cash is roughly 11% of M2, 8% of M3).

[Graphs 23 and 24 follow on the next page.]

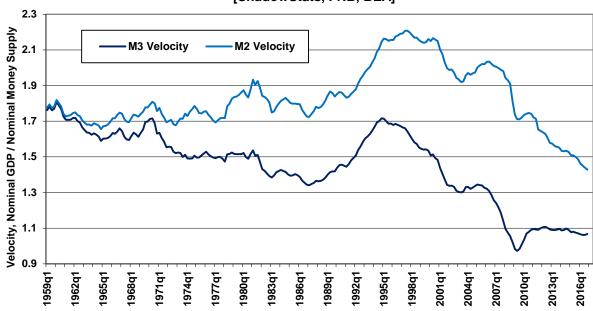
Graph 23: Velocity of Money Supply M1 through 4q2016

Velocity of Money Supply M1 (1q1959 to 4q2016) Benchmarked Nominal GDP/Nominal Money Supply [ShadowStats.com, FRB, BEA]



Graph 24: Velocities of Money Supply M2 and M3 through 4q2016

Velocities of Money Supply M3 and M2 (1q1959 to 4q2016) Benchmarked Nominal GDP/Nominal Money Supply [ShadowStats, FRB, BEA]



M3 versus M1 and M2 had been showing opposite patterns since 2011, because growth in M3 had been weaker than growth in M1 and M2, which has intensified. The reason behind that difference was that much of the relatively stronger M1 and M2 growth reflected, and still reflects, cash moving out of M3 categories—such as large time deposits and institutional money funds—into M2 or M1 accounts. The clarity of what happened there is why ShadowStats still tracks what had been the broadest money measure (M3) available. Again, though, M3 velocity also has started to turn down in the last year or two.

Subscribers often ask for specifics on the velocity of the money supply, with the result that this section has become a standard feature for *Commentaries* covering the "advance" GDP reporting of a given quarter. The nature of velocity is discussed in further detail in the 2008 *Money Supply Special Report*. Again, velocity simply is the number of times the money supply turns over in the economy in a given year, or the ratio in nominal terms (not adjusted for inflation) of GDP to the money supply. It is a residual number, not otherwise open to calculation or independent surveying.

Velocity has theoretical significance. In combination with money-supply growth, it should be a driving force behind inflation. Yet, since velocity is a ratio of two not-particularly-well or realistically-measured numbers, its actual estimate is of limited value. As an inflation predictor, it has to be viewed in the context of accompanying money-supply growth, and vice versa, generally as a coincident indicator. Again, full definitions can be found in the *Money Supply Special Report*.

REPORTING DETAIL

GROSS DOMESTIC PRODUCT—GDP ("Advance" Estimate of Fourth-Quarter 2016 GDP)

Underlying Recession Continued in Play, Despite Still Heavily-Massaged and Bloated GDP Detail. Irrespective of the weaker-than-expected 1.88% annualized, quarterly real growth in the headline reporting of fourth-quarter 2016 GDP, underlying reality remained that broad U.S. economic activity never recovered fully from its crash into 2009, and that it began to turn down anew in December 2014. Those circumstances are discussed in the *Executive Summary* and in the *ECONOMY* section of <u>No. 859</u> <u>Special Commentary</u>. [The next two paragraphs largely have been lifted from the Opening Comments.]

Weakest Annual GDP Growth Since the Recession. Nonetheless, discussed in the Opening Comments, worse-than-expected conditions surfaced with the headline fourth-quarter detail. In nominal terms, before inflation adjustment, annual change for the GDP in 2016 was 2.94%, down from 3.70% in 2015. The 2016 nominal growth pace was the weakest since the annual contraction of 2.09% (-2.09%) in 2009, which was the trough year of the economic collapse. In real terms, adjusted for inflation, annual change

for the GDP in 2016 was 1.60%, down from 2.60% in 2015. The 2016 real growth pace was tied with 2011 (also 1.60%) as the weakest showing since the annual contraction of 2.78% (-2.78%) in 2009.

Separately, headline GDP numbers likely will get worse in the next two months. The "advance" estimate of 1.9% fourth-quarter GDP growth came in below consensus expectations of 2.2%. While that continued to be at a not credible, positive pace of headline activity, the BEA well may have just signaled consensus forecasters that the fourth-quarter GDP growth is going lower in revision. The Bureau usually targets the consensus outlook with its "advance" estimate, and headline growth coming in below consensus more often than not signals that even weaker growth will follow in subsequent monthly revisions.

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* and the *ECONOMY* section of *No.* 859 Special Commentary).

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 $4 \times 1\% = 4\%$.

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 this morning, January 27th, by the Bureau of Economic Analysis (BEA), the "advance" or first estimate of fourth-quarter 2016 GDP showed a statistically-insignificant, real (inflation-adjusted), annualized, quarterly headline gain of 1.88% +/- 3.5% (95% confidence interval), versus 3.51% in third-quarter GDP. Distribution of the fourth -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 two subsequent monthly revisions and the next round of annual GDP benchmarking scheduled for July 28, 2017.

The "advance" estimate of fourth-quarter GDP growth came in below consensus expectations of 2.2%, at a continuing, still not credible positive pace of headline activity. Where the BEA usually targets the consensus outlook with the "advance" estimate, again, headline growth below consensus usually signals that even weaker growth is likely in the two subsequent monthly revisions.

Headline fourth-quarter 2016 annualized real growth of 1.88%, followed gains of 3.51% in third-quarter 2016, 1.42% in second-quarter 2016, 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015.

Fourth-quarter growth was dominated by an involuntary buildup in inventories, gains in construction, vehicle sales and state- and local-government spending, heavily offset by a deteriorating trade deficit. Fourth-quarter 2016 Final Sales (GDP net of inventory change) grew at an annualized real quarterly pace of 0.88%, versus 3.02% in third-quarter 2016.

Graphs 25 and 27 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. *Graph* 29 shows the level of annual real GDP activity, as estimated beginning in 1929.

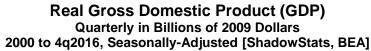
Shown in *Graphs 26* and 28, headline year-to-year real GDP growth in fourth-quarter 2016 rose to 1.91%, versus 1.65% in third-quarter 2016, 1.28% in second-quarter 2016, 1.57% in first-quarter 2016, and

1.88% in fourth-quarter 2015. Through second-quarter 2016 reporting, real annual growth had been in a continual slowing pattern 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. Shown in *Graph 30*, annual-average real GDP growth in 2016 slowed to 1.60%, versus 2.60% in 2015, which tied with 2011 for slowest pace of annual growth in the post-2009 "recovery."

The current-cycle trough in quarterly annual change was in second-quarter 2009 (see *Graphs 26* and 28), 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 26* shows current year-to-year quarterly detail, from 2000-to-date, where *Graph 28* shows the same series in terms of its full quarterly, year-to-year history back to 1948. In annual terms (*Graph 30*), the year-to-year decline of 2.78% (-2.78%) in 2009 was the steepest regular annual drop in economic activity since the Great Depression. The 1946 production shutdown and economic reorganization following World War II, however, resulted in an annual GDP decline of 11.58% (-11.58%), minimally narrower than the 1932 annual economic crash of 12.89% (-12.89%).

[Graphs 25 to 30 begin on the next page]

Graph 25: Quarterly GDP in Billions of 2009 Dollars (2000 to 2016), First Estimate of Fourth-Quarter 2016

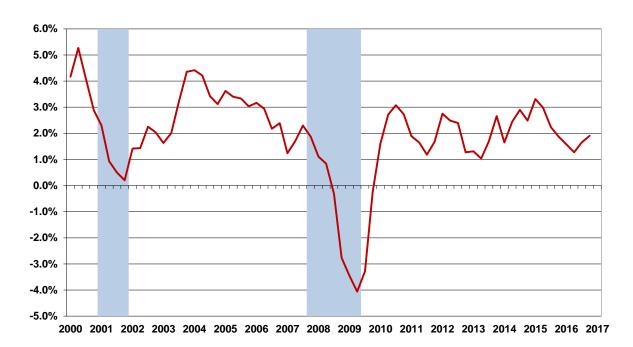




Graph 26: Quarterly GDP Real Year-to-Year Change (2000 to 2016), First Estimate of Fourth-Quarter 2016

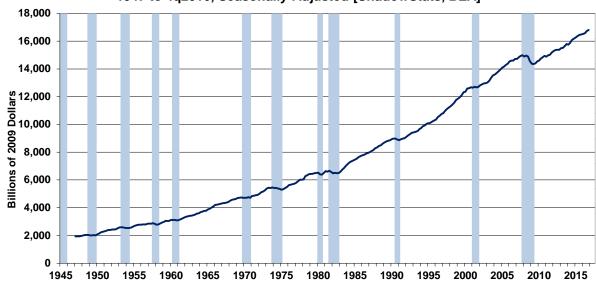
Quarterly Real Gross Domestic Product

Year-to-Year Change, 1q2000 to 4q2016 [ShadowStats, BEA]



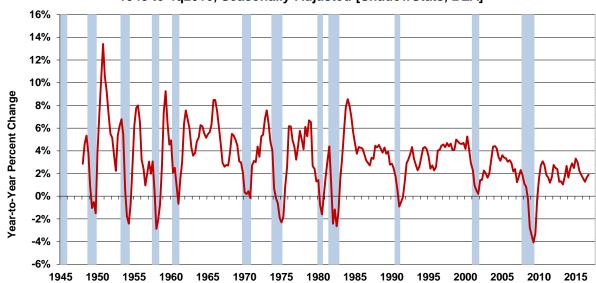
Graph 27: Quarterly GDP in Billions of 2009 Dollars (1947-2016), First Estimate of Fourth-Quarter 2016





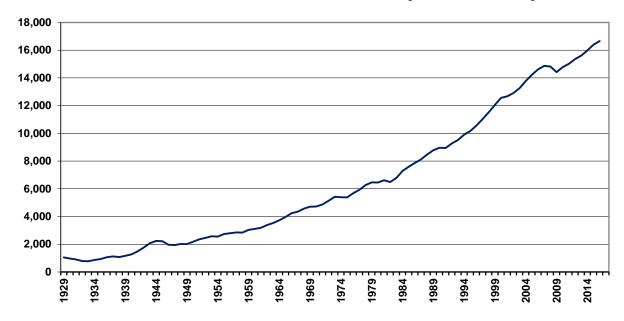
Graph 28: Year-to-Year GDP Real Change (1948-2016), First Estimate of Fourth-Quarter 2016

Real Gross Domestic Product (GDP) Year-to-Year Percent Change by Quarter 1948 to 4q2016, Seasonally-Adjusted [ShadowStats, BEA]



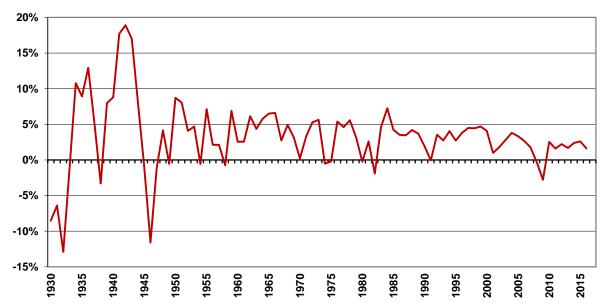
Graph 29: Annual GDP in Billions of 2009 Dollars (1929-2016), Includes First Estimate of Fourth-Quarter 2016

Annual Real Gross Domestic Product Level in Billions of 2009 Dollars, 1929 to 2016 [ShadowStats, BEA]



Graph 30: GDP Real Annual Percent Change (1930-2016), Includes First Estimate of Fourth-Quarter 2016

Annual Real Gross Domestic Product Percent Change, 1930 to 2016 [ShadowStats, BEA]



Implicit Price Deflator (IPD). The first estimate of fourth-quarter 2016 GDP inflation, or the implicit price deflator (IPD), showed an annualized quarterly change of 2.12%, versus an annualized 1.41% in third-quarter 2016, 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 upside movement in the fourth-quarter versus third-quarter 2016 IPD of 0.71% was worth a relative, parallel decline in real growth versus nominal growth for fourth-quarter 2016 relative to the third-quarter 2016.

Year-to-year, the headline fourth-quarter 2016 IPD inflation was 1.57%, versus 1.27% in third-quarter 2016, 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.

In terms of year-over-year, average annual inflation, the 2016 IPD inflation was 1.32%, versus 1.08% in 2015 and 1.79% in 2014.

For purposes of comparison, the seasonally-adjusted Consumer Price Index CPI-U rose by an annualized 3.44% in fourth-quarter 2016, versus 1.63% in third-quarter 2016, 2.53% 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 gains of 1.80% in fourth-quarter 2016, 1.12% in third-quarter 2016, 1.05% in second-quarter 2016, 1.08% in first-quarter 2016, 0.47% in fourth-quarter 2015, 0.11% in third-quarter 2015, and annual contractions of 0.04% (-0.04%) in second-quarter 2015 and 0.06% (-0.06%) in first-quarter 2015.

In terms of year-over-year, average annual inflation, the 2016 CPI-U inflation was 1.26%, versus 0.12% in 2015 and 1.62% in 2014 (see prior *Commentary No. 862*).

Gross National Product (GNP) and Gross Domestic Income (GDI). Standardly, the first estimates of fourth-quarter GNP and GDI are not published until the release of the third estimate of fourth-quarter GDP. That circumstance is due to quality issues with the available "advance" and second estimates of year-end data, a problem also specifically common to the headline GDP reporting. Initial fourth-quarter 2016 estimates of GNP and GDI will follow on March 30th, along with the third estimate of, second revision to the fourth-quarter GDP. Available third-quarter GNP and GDI details are found in Commentary No. 857 of December 23rd.

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. Headline, annualized real third-quarter 2016 GNP growth stood at 3.35%, versus 2.16% in second-quarter 2016.

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. Third-quarter 2016 GDI rose at an annualized pace of 4.77%, against a gain of 0.71% in second-quarter GDI.

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. 860*, subject to annual payroll-employment benchmark revisions on February 3rd).

ShadowStats-Alternate GDP. The ShadowStats-Alternate GDP fourth-quarter 2016 GDP estimate is a year-to-year contraction of 1.8% (-1.8%), versus the headline "advance" estimate of a fourth-quarter 2016 annual real headline GDP gain of 1.9%. That circumstance was against a ShadowStats 1.9% (-1.9%) annual-decline estimate for third-quarter 2016, versus the official headline annual gain of 1.7% in third-quarter 2016 GDP.

While the annualized, real quarterly growth rate is not estimated formally on an alternate basis, the statistically-insignificant, annualized, headline quarter-to-quarter gain of 1.9% in fourth-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 2* and 4 in the *Executive Summary* (see also the *ECONOMY* section in *No. 859 Special Commentary* and *2014 Hyperinflation Report—Great Economic Tumble*), 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 ORDERS FOR DURABLE GOODS (December 2016)

December Orders Declined Month-to-Month, but Picked Up Quarter-to-Quarter, both Before and After Consideration of Inflation and Commercial Aircraft Orders. In the context of a 42.44% gain in an otherwise low level of commercial aircraft orders, nominal December 2016 new orders for durable goods declined 0.43% (-0.43%) for the month and rose 1.62% year-to-year. Excluding commercial aircraft, new orders declined 1.25% (-1.25%) for the month but rose 3.62% 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 declined by 1.43% (-1.43%) month-to-month, but rose by 2.63% year-to-year, in December 2016. For fourth-quarter 2016, the annualized real

series, ex-aircraft, showed a quarterly gain of 5.09%, up by 1.20% year-to-year. Despite the headline gains, the series remained in low-level, non-recovering stagnation, and it remained a tentative, neutral/negative leading indicator to first-quarter 2017 industrial production, a series that has remained in definitive recession since December 2014 (see prior *Commentary No. 862*).

Smoothed with six-month moving averages, and adjusted for inflation, both of these highly volatile series (total and ex-commercial aircraft) generally remained in non-recovering, low-level stagnation. Those patterns remained consistent in signaling an ongoing and deepening "new" recession (see *Graphs 10* to *13* in the *Executive Summary*).

Headline Nominal Detail. The Census Bureau reported this morning, January 27th, that the regularly-volatile, seasonally-adjusted, nominal level of December 2016 aggregate new orders for durable goods declined by 0.43% (-0.43%) month-to-month, versus a revised, deeper decline of 4.83% (-4.83%) [previously down by 4.60% (-4.60%)] in November and an upwardly monthly gain of 4.98% [previously and initially up by 4.81%] in October. Net of prior-period revisions, December 2016 orders declined by 0.51% (-0.51%), instead of the headline 0.43% (-0.43%).

Year-to-year, December 2016 durable goods orders rose by 1.62%, versus a deeper annual decline of 1.94% (-1.94%) [previously down by 1.86% (-1.86%)] in November 2016 and an upwardly-revised annual gain of 2.15% [previously 1.99%, initially 2.07%] in October 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 flat, 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 the occasional upside blip as seen with the latest 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 gain in December 2016 commercial aircraft orders boosted aggregate orders into a monthly decline of 0.43% (-0.43%), from what otherwise was a decline of 1.25% (-1.25%).

Net of a headline monthly gain of 42.44% in December 2016 commercial aircraft orders, a revised, deeper monthly plunge of 80.38% (-80.38%) [previously 73.54% (-73.54%)] in November and a minimally-revised monthly gain of 94.45% [previously 94.56%, initially 94.08%] in October, new orders declined by 1.25% (-1.25%) in December 2016, gained 2.77% in November 2016 and 0.33% in October.

Year-to-year and seasonally-adjusted, December 2016 new orders (net of commercial aircraft) rose by 3.26%, having gained 1.81% in November 2016 and 0.20% in October 2016.

Real Durable Goods Orders—December 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 December 2016 PPI series showed monthly inflation of 0.18%, 0.00% in November and 0.42% in October. Related year-to-year annual inflation has continued to rise, up to 0.97% in December 2016, versus 0.66% in November 2016 and 0.36% in October 2016 (see *Commentary No. 861*).

Adjusted for that 0.18% month-to-month inflation reading in December 2016, and as reflected in the graphs in the *Executive Summary* section, real month-to-month aggregate orders in December 2016 contracted by 0.60% (-0.60%), having declined by 4.83% (-4.83%) in November 2016 and having gained by 4.98% in October. Ex-commercial aircraft, real month-to-month orders in December 2016 declined by 1.43% (-1.43%), following a gain of 2.77% in November and a decline of 0.09% (-0.09%) in October.

Real aggregate new orders rose year-to-year by 0.65% in December 2016, declined by 2.59% (-2.59%) in November 2016 and gained 1.78% in October 2016. Ex-commercial aircraft, real orders in December 2016 rose year-to-year by 2.83%, having gained 1.14% in November 2016 and having contracted in October 2016 by 0.16% (-0.16%).

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%). Revised third-quarter 2016 showed an annualized gain of 4.03% [previously 4.12%, 4.25% and initially 4.49%], while initial fourth-quarter 2016 reporting showed an annualized gain of 5.09%.

Graphs of Inflation-Adjusted and "Corrected" Smoothed Durable Goods Orders. Three sets of inflation-adjusted graphs (Graphs 8 to 13) are displayed in the Executive Summary. The first set (Graphs 8 and 9) 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 2016 with a minimal late-year uptick.

The second set of graphs (*Graphs 10* and *11*) 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 12* and *13*) shows the same patterns, but for the aggregate durable goods orders series, net of commercial aircraft orders. Separately, consider that *Graph 13* shows patterns of activity that are parallel to activity indicated in *Graph 5* of the historical Cass

Freight IndexTM 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 December detail, unpublished historical revisions calculated along with the December seasonal adjustments, have made all historical reporting prior to October 2016 inconsistent with the current headline numbers. All historical data will be briefly consistent, once again, come the next benchmark revision on May 18, 2017.

NEW-HOME SALES (December 2016)

Amidst Continued Unstable Reporting, Monthly and Quarterly Sales Declined, with the Smoothed Series Still 61.4% (-61.4%) Below Its Pre-Recession Peak. Headline monthly reporting of new-home sales remained of no substance, short term, as seen most frequently here with massive, unstable and continuously shifting revisions to recent history, along with statistically-insignificant monthly changes that just as easily could be a gain or a loss. At present, the reporting trend is down and the revisions are minimally to the upside.

The December 2016 headline reporting of 536,000 units in annualized sales (a 44,667 monthly rate as used in the graphs in the *Opening Comments and Executive Summary*) fell by 10.4% (-10.4%) month-to-month, following revised smaller gain of 4.7% in November and an upside-revised 0.5% in October, previously a contraction. As usual, the headline monthly change was not statistically meaningful. That short-term monthly volatility continued in the context of headline December activity still holding below its never-recovered 2005 pre-recession peak by 61.4% (-61.4%).

ShadowStats assesses such unstable series by considering the gyrations in monthly activity in the context of a six-month moving-average of the headline numbers. With the otherwise meaningless monthly swings in these numbers smoothed out, New-Home Sales activity continued in a broad pattern of low-level—albeit with some up-trending—stagnation, which recently flattened out (see *Graph 16* in the *Executive Summary*).

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 New-Home Sales, related real-estate activity never has recovered along with the purported rebound in real GDP, which now stands 12.9% above its pre-recession high. For example, from the series' pre-recession peak of July 2005, headline December 2016 New-Home Sales still were down by 61.4% (-61.4%), while December 2016 Single-Unit Housing Starts were down by 56.4% (-56.4%) from the January 2006 pre-recession high of that series (see prior *Commentary No.* 862).

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 near-term, sustainable turnaround in home-sales activity, without a fundamental upturn in consumer and banking-liquidity conditions.

Headline December 2016 New-Home Sales Reporting. Reported January 26th, by the Census Bureau, in the context of minimal upside monthly revisions back to September 2016, December 2016 New-Home Sales (counted based on contract signings) declined month-to-month by a headline, seasonally-adjusted and statistically-insignificant 10.4% (-10.4%) +/- 14.3% (all confidence intervals are at the 95% level).

That was against a downwardly-revised 4.7% [previously 5.2%] gain in November, a revised 0.5% gain [previously a decline of 1.4% (-1.4%), initially down by 1.9% (-1.9%)] in October and a revised gain of 1.6% [previously up by 2.1%, by 1.2% and initially up by 3.1%] in September. Net of prior-period revisions, the month-to-month change in December 2016 was a decline of 9.5% (-9.5%), instead of the headline 10.4% (-10.4%), still shy of being statistically significant.

Year-to-year, December 2016 sales declined by a statistically-insignificant 0.4% (-0.4%) +/- 13.7%. That followed a revised 17.7% [previously 16.5%] gain in November 2016, a revised gain of 19.5% [previously and initially up by 17.8%] in October 2016 and a gain of 24.3% [previously up by 24.9%, by 25.6%, initially up by 29.8%] in September 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.

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 sales gain estimated at 18.7%.

First-quarter 2016 activity showed an annualized gain of 17.9%, with second-quarter 2016 up by 29.5%, and third-quarter activity at a sharply-lower, annualized pace of 13.6%. Based initial fourth-quarter 2016 detail, sales contracted at an annualized pace of 9.7% (-9.7%).

New-Home Sales Graphs. The regular monthly graph of New-Home Sales is included in the Executive Summary section, along with a six-month moving-average version of the series (Graphs 14 and 16). Added for comparison purposes are parallel graphs of the headline and six-month moving-average versions of December 2016 Housing Starts for single-unit construction, from prior Commentary No. 862, (Graphs 15 and 17) along with comparative graphs of the Existing-Home Sales and related series (see Graphs 18 to 21).

EXISTING-HOME SALES (December 2016)

Sales Activity Declined, Holding in Non-Recovering Stagnation, Down by 24.5% (-24.5%) from Its Pre-Recession Peak. In the context of the proportion of monthly sales in distress (in foreclosure or short sales) rising for the third straight month, Existing-Home Sales fell month-to-month in December 2016 by 2.8% (-2.8%), having gained 1.4% in November and 1.5% October. Year-to-year growth in December 2016 collapsed to 0.7%, from 16.3% in November 2016 and against a 5.3% annual gain in October 2016.

Noted last month (<u>Commentary No. 857</u>): "consumer mortgage regulations were altered at the end of 2015, with the effect of delaying the closings of existing home sales. As a result, monthly November 2015 sales collapsed by 8.1% (-8.1%), only to rebound by 12.1% in December 2015. Accordingly, watch for the annual surge in November 2016 activity to be followed next month by a collapse in year-to-year activity for December 2016." That happened.

Still, the series remained in depression (see <u>Commentary No. 754</u>). Backing off the November 2016 high—the highest monthly sales level since February 2007—headline December 2016 sales still were down by 24.5% (-24.5%) from the pre-recession peak of the series. Smoothed with a six-month moving average, Existing-Home Sales activity held in low-level stagnation, albeit currently in a faltering uptrend. All that said, the NAR touted that the aggregate 2016 sales level was the strongest since 2006. Yet the 2016 annual sales rate still was down by 15.9% (-15.9%) from 2006, and by 22.8% (-22.8%) from the pre-recession peak annual-average sales rate of 2005.

Along with the broader real estate and construction measures and New-Home Sales, Existing-Home Sales never have recovered from the economic collapse into 2009, a common issue for the 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 *Executive Summary*, the underlying problem remains that the U.S. consumer remains 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 properties.

Specifically, Existing-Home Sales activity in December 2016, again, was down by a 24.5% (-24.5%) from its 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 46.1% (-46.1%) from their January 2006 pre-recession high (see prior *Commentary No. 862*).

Headline December Detail for Existing-Home Sales. Based on actual closings of home sales, the National Association of Realtors® (NAR) reported January 24th a seasonally-adjusted, headline monthly decline of 2.83% (-2.83%) in December 2016 Existing Homes Sales, against an upwardly-revised 1.44% gain [previously up by 0.72%] in November and an unrevised 1.46% gain in October. Net of prior-period revisions, the December decline 2.14% (-2.14%), instead of the headline 2.83% (-2.83%).

On a year-to-year basis, December 2016 sales growth collapsed to 0.73%, from an upwardly-revised 16.26% [previously up by 15.43%] in November 2016 and against an unrevised annual gain in October 2016 of 5.29%.

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 7.9%, followed by 16.3% in second-quarter 2016, with an annualized contraction of 8.0% (-8.0%) in third-quarter 2016 activity. With initial full reporting in place for fourth-quarter 2016, activity gained at an annualized quarterly pace of 14.0%.

The quality of data underlying this series remains questionable, as seen in erratic reporting over the years (*Graph 18*). All that said, smoothed for irregular distortions, the reporting remained statistically consistent with a period of low-level broad stagnation, moving from up-trending to down-trending, as suggested in *Graph 20* of the *Executive Summary* in the *Opening Comments*.

Proportion of Distressed Sales Rose for a Third Month, to 7% in December, with All-Cash Sales Holding at 21%. The NAR estimated the portion of December 2016 sales in "distress" notched higher, for the third consecutive month, to 7% (5% foreclosures, 2% short sales), versus 6% (4% foreclosures, 2% short sales) in November 2016 and down from 8% (6% foreclosures, 2% short sales) in December 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. The October reading moved to 5%, with November to 6% and December to 7%.

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 held at 21% in December 2016, the same level as in November 2016, but down from 24% in December 2015.

Existing-Home Sales Graphs. Shown in the Executive Summary, Graph 18 plots the traditional headline Existing-Home Sales monthly detail. Such is supplemented by Graph 20 of the six-month moving average of Existing-Home Sales. Accompanying the Existing-Home Sales plots are comparative graphs of December 2016 aggregate Housing Starts activity, from prior Commentary No. 862, where both series reflect activity in terms of single- and multiple-housing units (see Graphs 19 and 21). Comparative graphs of New-Home Sales and related series are shown in Graphs 14 to 17.

WEEK, MONTH AND YEAR AHEAD

Deepening Economic Downturn Promises a Frustrated Fed and Rapidly Deteriorating Support for the U.S. Dollar, Despite Market Optimism for the New Administration. The publication of <u>No. 859</u> <u>Special Commentary</u> updated near-term economic and inflation conditions, and the outlook for same, including the general economic, inflation and systemic distortions evolving out of the Panic of 2008,

which have continued in play, and which need to be addressed by the new Administration in the immediate future (see also the *Hyperinflation Watch* of <u>Commentary No. 862</u>).

Contrary to the official reporting of an economy that collapsed from 2007 into 2009 and then recovered strongly into ongoing expansion, underlying domestic reality remains that the U.S. economy started to turn down somewhat before 2007, collapsed into 2009 and never fully recovered. While the economy bounced off its 2009 trough, it began to turn down anew in December 2014, a month that should mark the beginning of a "new" formal recession.

Coincident with and tied to the economic collapse and the Panic of 2008, the U.S. banking system moved to the brink of collapse, a circumstance from which U.S. and global central bank policies never have recovered. As this ongoing crisis evolves towards its unhappy end, the U.S. dollar ultimately should face an unprecedented debasement with a resulting runaway domestic inflation.

The current general trend in weakening data, and what should be related, increasingly-negative expectations for near-term business activity, along with movement towards looming recession recognition, reflect an ongoing broad spectrum of market-disappointing headline data. That should pressure the FOMC back towards expanded quantitative easing. Such is despite the Fed's rate hike in December 2016 and continuing market hype as to multiple rate hikes looming in the year ahead.

In response to an intensifying "new" downturn, financial market expectations also should shift towards renewed Fed "easing," with the effect of triggering a massive sell-off in the U.S. dollar, accompanied by a sharp upturn in oil prices, domestic inflation and heavy flight to the safe-haven qualities of physical gold and silver, with a commensurate rally in the prices of those precious metals. Again, see <u>No. 859</u> for extended discussion.

Broad economic and systemic details otherwise are reviewed regularly here, with the following special *Commentaries* of particular note: *No. 777 Year-End Special Commentary* (December 2015), *No. 742 Special Commentary: A World Increasingly Out of Balance* (August 2015) and *No. 692 Special Commentary: 2015 - A World Out of Balance* (February 2015). Those publications updated the long-standing hyperinflation and economic outlooks published in *2014 Hyperinflation Report—The End Game Begins – First Installment Revised* (April 2014) and *2014 Hyperinflation Report—Great Economic Tumble – Second Installment* (April 2014). The two *Hyperinflation* installments remain the primary background material for the hyperinflation circumstance.

Other references on underlying economic reality are the <u>Public Commentary on Inflation Measurement</u> and the <u>Public Commentary on Unemployment Measurement</u>.

Links to Commentaries of the last month follow here:

<u>Commentary No. 862</u> discussed December 2016 Industrial Production, Housing Starts and the Consumer Price Index (CPI) and related real Retail Sales and earnings, along with December detail of the CASS Freight IndexTM.

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

<u>Commentary No. 860</u> reviewed December 2016 labor conditions, and the November trade deficit and construction spending circumstances.

No. 859 *Special Commentary* reviewed and previewed economic, financial and systemic developments of the year passed and the year or so ahead.

Commentary No. 858 previewed the year-ahead Special Commentary.

<u>Commentary No. 857</u> covered the third revision to third-quarter 2016 GDP, November 2016 New Orders for Durable Goods and New- and Existing Home Sales.

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 inflation and to overstate economic activity—as generally viewed in common experience by Main Street, U.S.A.—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 2016 surveys of earnings (Bureau of Labor Statistics) and construction spending (Census Bureau). This is suggestive of deteriorating internal oversight and control of the U.S. government's headline economic reporting. That construction-spending issue now appears to have been structured as a gimmick to help boost the July 2016 GDP benchmark revisions, aimed at smoothing the headline reporting of the GDP business cycle, instead of detailing the business cycle and reflecting broad economic trends accurately, as discussed in <u>Commentary No. 823</u>.

Combined with ongoing allegations in the last 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*. Mr. Crudele's latest investigation focuses on retail sales reporting: *John Crudele on Retail Sales*.

PENDING ECONOMIC RELEASES:

Construction Spending (December 2016). The Commerce Department will release its estimate of December 2016 construction spending on Wednesday, February 1st. Detail will be covered in ShadowStats *Commentary No. 864* of February 4th. As usual, headline monthly changes should not be statistically-significant. Irrespective of almost perpetually-positive market expectations for this series, the detail generally should continue in down-trending stagnation, particularly in real terms, net of inflation.

Employment and Unemployment (January 2017). The Bureau of Labor Statistics (BLS) will publish headline January 2017 labor data on Friday, February 3rd. Given the wealth of new information accompanying the 2016 annual benchmark revisions to the Establish or Payroll Series, as well as new

population controls for the Household or Unemployment Series, headline details will be covered in *Commentary No. 864* of Saturday, February 4th.

Both the more-inclusive unemployment-rate numbers, as well as the headline payroll-employment details, are open for continuing negative headline surprises, given the ongoing, general weakening tone in a number of business indicators. The payroll detail should be in the context of downwardly-revised, priorperiod reporting.

2016 Payroll Employment Benchmarking. The initial estimate (summary number) for the 2016 benchmarking was for a downside revision in total payrolls for March of 2016 by 150,000 (-150,000), down by 224,000 (-224,000) in just private-sector employment (see <u>Commentary No. 830</u>). Those changes will be recast and imputed for adjustments back to April 2014, and forward to December 2016, with the fully-revised benchmarked detail accompanying this release of the January 2017 payroll data.

Underlying Reality Remains to the Downside of Expectations. Otherwise, in the context of recent the extreme volatility and inconsistencies in the last several months of payroll and unemployment detail, almost anything is possible with the BLS. Underlying reality remains a much weaker-than-expected economy, which increases the odds of negative surprises to the headline reporting.

Pending SPECIAL COMMENTARIES. Discussed in Opening Comments of Commentary No. 861 and in the FEDERAL DEBT AND DEFICIT section of No. 859 Special Commentary, the U.S. Treasury released the GAAP-based accounting (based on Generally Accepted Accounting Principles) financial statements of the United States government for fiscal-year 2016, on January 12th. Audited by the GAO, that detail will be combined with prior annual reporting and related analyses to prepare a Special Commentary updating and summarizing—including in graphic and tabular form—the U.S. government's GAAP-based obligations and annual operations, as well as a discussion as to different approaches to looking at the concept of net present value. Publication of that analysis will follow in early-February, subsequent to publication of the employment benchmark revisions.

The long-planned and delayed consolidation of the major *ShadowStats* reporting into one volume, including the recommended reading list, will follow shortly thereafter, with the likely publication date still pending.