John Williams'

Shadow Government Statistics

Analysis Behind and Beyond Government Economic Reporting

COMMENTARY NUMBER 802
March New Orders for Durable Goods, New- and Existing-Home Sales

April 26, 2016

Durable Goods Orders Contracted Quarter-to-Quarter
Both in Fourth-Quarter 2015 and First-Quarter 2016

New- and Existing-Home Sales Continued in Non-Recovery with
Smoothed, Low-Level and Down-Trending Stagnation

Three-Month Moving Average of Confidence Tumbled to a 16-Month Low

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PLEASE NOTE: The next regular Commentary, *scheduled for Thursday, April 28th will cover the first estimate of first-quarter 2016 GDP.*

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

Economy Continued to Slow and to Turn Down. Reporting of March 2016 New Orders for Durable Goods and of New- and Existing-Home Sales continued to reflect a renewed decline in what otherwise had been stagnant activity that never had recovered pre-recession highs. Such is detailed in this *Commentary* and accompanying graphs. Discussed in the *Week Ahead* section, the economic consensus does not appear to have moved into contraction territory for the "advance" estimate of first-quarter 2016 GDP. Accordingly, that circumstance strongly favors the Bureau of Economic Analysis (BEA) bringing that initial GDP guesstimate in at a low level—below consensus expectations—with a revision into negative territory with the May 27th first revision. Circumstances here will be updated, following the GDP release on August 28th.

Today's *Commentary* (April 26th). The balance of these *Opening Comments* provides summary coverage of March 2016 New Orders for Durable Goods, New- and Existing-Home Sales and a brief update to Consumer Conditions, reflecting April 2016 reporting of the Conference Board's Consumer Confidence Index®.

The most recent *Hyperinflation Outlook Summary* is found in *Commentary No. 783*, with *Commentary No. 799* and *No. 777 Year-End Special Commentary* as background to the currently unfolding financial circumstances.

The *Week Ahead* section, again, updates prospects for the initial estimate of first-quarter 2016 GDP.

New Orders for Durable Goods—March 2016—Quarter-to-Quarter Contractions for the Second Consecutive Quarter. Headline March 2016 durable goods orders rose by 0.8% for the month, below market expectations, but that headline number also was bloated in the context of a 0.2% (-0.2%) downside revision to the level of February's orders. Both before and after consideration of commercial aircraft orders, new orders for nominal durable goods contracted quarter-to-quarter in both fourth-quarter 2015 and first-quarter 2016. Net of highly questionable negative headline inflation in this sector, both series still contracted in fourth-quarter 2015, but gained in first-quarter 2016. With these highly irregular series smoothed by six-month moving averages, the pattern of stagnation remained down-trending and consistent with signaling a deepening and ongoing recession.

Quarterly Growth. Annualized quarterly declines in real new orders (ex-commercial aircraft) were 5.58% (-5.58%) in fourth-quarter 2014 and 7.73% (-7.73%) in first-quarter 2015. With appropriate one-quarter lags, those were followed by quarterly contractions in both first- and second-quarter 2015 industrial production.

Annualized real change for second-quarter 2015 orders was a gain of 2.10%, with third-quarter activity up at an annualized 10.38%. Fourth-quarter 2015, contracted at a revised annualized pace of 1.77% (-1.77%) where adjustment reflected a PPI revision, not an orders revision.

Headline annualized real change for first-quarter 2016 was 0.48%. Based solely on January and February 2016 reporting, the series had been on early track for real, annualized quarterly growth of 0.56% [previously up by 4.89% based just on initial January reporting]. Again, the quarterly gains or muted real contractions here are due partially to highly-suspect, negative durable goods inflation in the PPI reporting, which has the effect of boosting the real monthly-, quarterly- and annual-growth detail.

Third-quarter industrial production growth was on the plus-side, but fourth-quarter 2015 and first-quarter 2015 industrial production collapsed. Current first-quarter durable goods orders remain a negative indicator for second-quarter 2016 production, again, part of an unfolding and protracted domestic recession.

On a nominal basis (before inflation adjustment), initial fourth-quarter 2015 orders growth—again, ex-commercial aircraft—fell at an unrevised annualized quarterly pace of 2.71% (-2.71%), versus a third-quarter 2015 unrevised annualized gain of 8.63%, second-quarter 2015 quarterly annualized growth of 0.57%, a first-quarter 2015 annualized contraction of 7.29% (-7.29%), and a decline of 4.36% (-4.36%) in fourth-quarter 2014. Headline annualized nominal change for first-quarter 2016 was a contraction of 0.41% (-0.41%). Based solely on January and February 2016 reporting, annualized first-quarter 2016 growth also had been on an early track for a contraction of 0.41% (-0.41%) [previously up by 2.52%, based just on initial January 2016 reporting].

Headline Nominal Detail. The regularly-volatile, seasonally-adjusted, nominal level of March 2016 new orders for durable goods rose month-to-month by 0.78%, following a revised decline of 3.07% (-3.07%), versus a minimal upside revision in monthly growth to 4.29% in January. Net of the revisions to February, aggregate new orders in March rose by 0.56%, instead of the headline 0.78%.

The year-to-year change in March 2016 durable goods orders was a decline of 2.54% (-2.54%), following a downwardly revised annual gain of 1.60% in February 2016, and a minimally revised gain of 1.17% in January 2016.

The headline March 2016 detail, again, was before consideration of the volatility in commercial-aircraft orders. With the aircraft orders considered, headline changes in March were slightly more positive. Before and after consideration of commercial-aircraft volatility, and the monthly irregularities in the headline reporting of new orders, the smoothed trends of activity continued to be negative, 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 reflected in the accompanying graphs. The corrected series—net of commercial aircraft orders—has remained relatively flat, at a low-level and now in a down-trending pattern of stagnation, with the other plotted series still showing an unfolding downturn of a nature that usually precedes or coincides with a recession or a deepening business downturn.

Detail Net of Volatility in Commercial-Aircraft Orders. The reporting of extreme contractions and surges in commercial-aircraft orders is seen commonly in an irregularly-repeating process throughout the year, and that often dominates changes in headline monthly durable goods orders. These extremely volatile aircraft orders are booked years into the future and are indicative more of longer-term, rather than shorter-term prospects for manufacturing activity. In the current circumstance, the relatively small monthly decline in March commercial aircraft orders reduced the aggregate orders gain to 0.8%, where it would have been 1.1% otherwise.

Net of a headline monthly decline of 5.73% (-5.73%) in March 2016 commercial aircraft orders, a revised decline of 26.61% (-26.61%) in February 2016, and a revised gain of 48.66% in January 2016, aggregate new orders rose by 1.09% in March 2016, fell by a revised 1.59% (-1.59%) in February 2016, and rose by a revised 2.37% in January 2016.

Year-to-year and seasonally-adjusted, March 2016 new orders (net of commercial aircraft) rose by 0.59%, following a revised 2.57% in February 2016, and a revised 1.17% in January 2016.

Real (Inflation-Adjusted) Durable Goods Orders—March 2016. ShadowStats uses the PPI component inflation measure "Durable Manufactured Goods" for deflating the new orders for durable goods series, as detailed in the *Reporting Detail*.

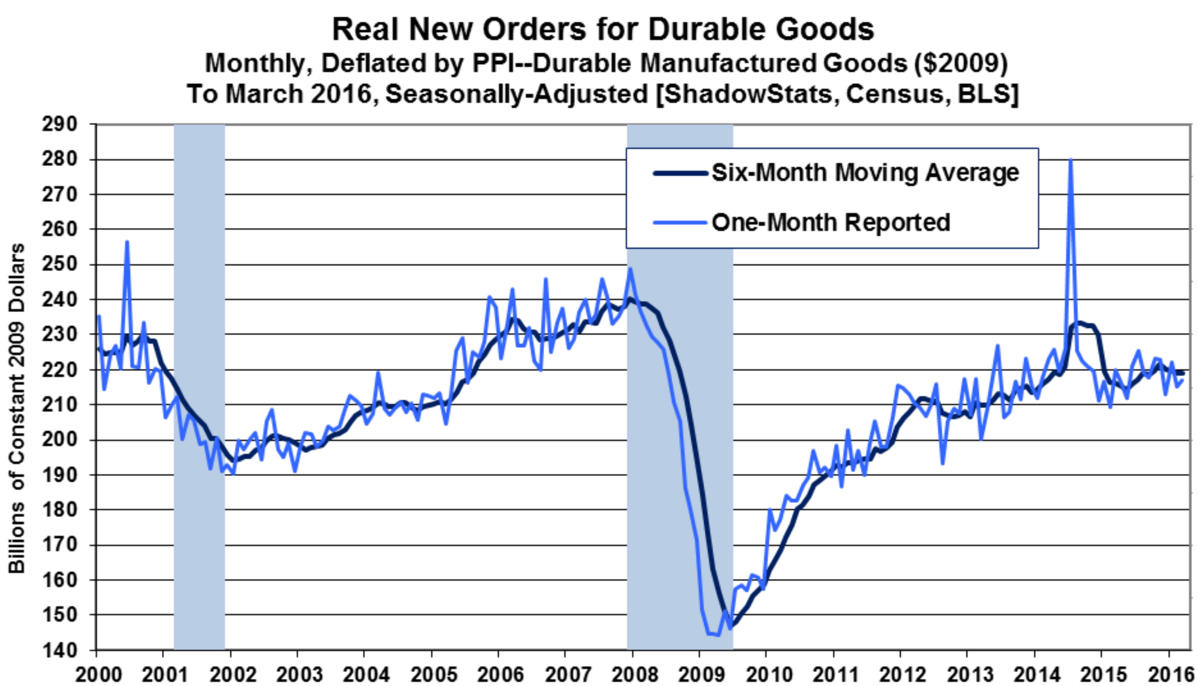
Adjusted for "unchanged" monthly March 2016 inflation, and as reflected in accompanying real graphs, real month-to-month aggregate orders in March 2016 rose by the same 0.78% as seen in nominal terms, as was the case with a 3.07% (-3.07%) decline in February 2016 and a 4.29% gain in January orders. In like manner, ex-commercial aircraft, monthly real orders rose by 1.09% in March 2016, fell in February by 1.59% (-1.59%) and gained 2.37% in January.

Real aggregate new orders fell year-to-year by 1.42% (1.42%) in March 2016, versus a revised gain of 2.89% in February 2016 and a revised 2.52% annual gain in January 2016. Ex-commercial aircraft, real orders rose year-to-year by 1.74% in March 2016, versus a revised gain of 3.87% in February 2016 and a revised gain of 2.51% in January 2016.

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

The moving-average levels in both series had turned lower into year-end 2014 and after some uptick in mid-2015—some smoothed bounce-back—the smoothed trend turned down anew into late fourth-quarter 2015 and into first-quarter 2016.

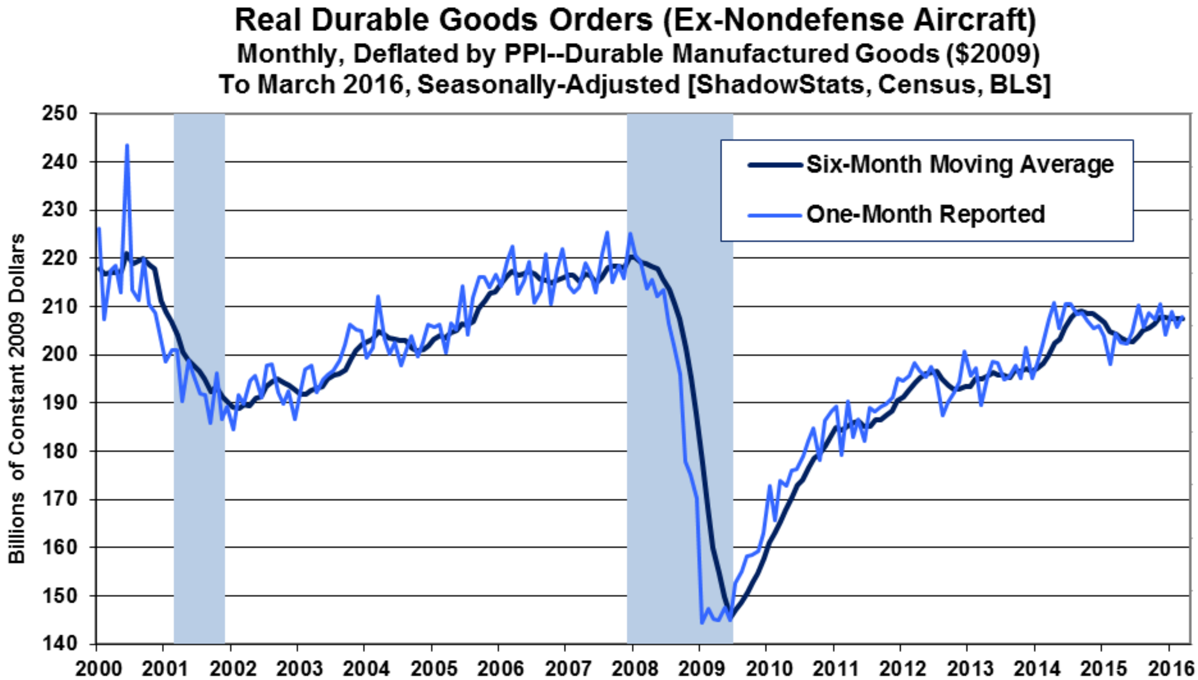
Graph 1: Real Total New Orders for Durable Goods to Date



Broadly, there has been a general pattern in recent years of stagnation or bottom-bouncing evident in the orders—clearly not the booming recovery seen in official GDP reporting. The real (inflation-adjusted) monthly and six-month moving-average level of new orders in March 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 downtrend in the annual inflation-adjusted series since mid-2014—net of the irregular aircraft-order effects—again is one that usually precedes or coincides with a recession.

Graph 2: 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, estimates of inflation-adjusted growth in new orders for durable goods generally are overstated, due to the understatement of official inflation. That understatement comes from the government's use of hedonic-quality adjustments—quality issues usually not perceived by users or consumers of the involved products—in justifying a reduced pace of headline inflation (see *Public Commentary on Inflation Measurement*).

As done for other series such as the GDP, real retail sales and industrial production, ShadowStats publishes an experimental corrected version of the inflation-adjusted graph of real new orders for durable goods, corrected for the understatement of the related headline PPI inflation.

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

The aggregate orders series in *Graphs 3* and *4* includes 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. *Graphs 5* and *6* are shown net of the volatile commercial aircraft orders.

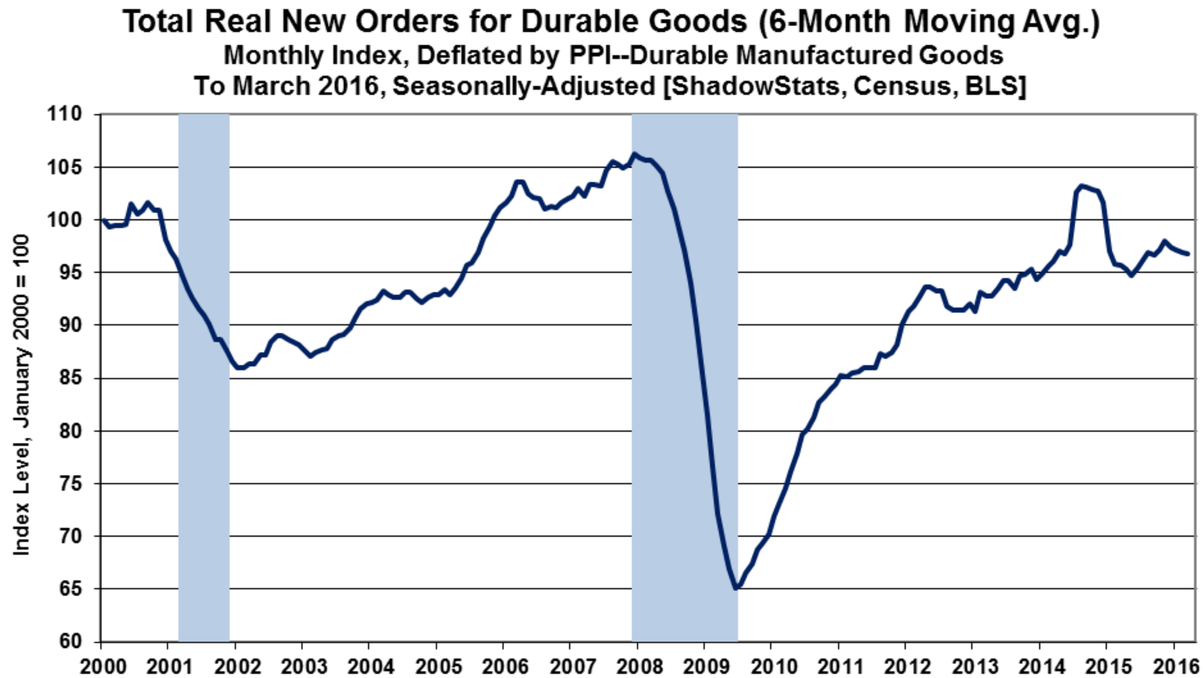
The first graph in each of the following two series shows the official six-month moving average, the same heavy dark-blue line shown in *Graph 1* and *Graph 2,* along with the light-blue thin line of monthly detail.

The second graph in each set is the same six-month, moving-average series shown in the first graph, but it has been re-deflated to correct for the understatement of the PPI durable goods inflation measure used in the headline-deflation process. ShadowStats estimates that inflation understatement, with the graphs indexed to January 2000 = 100.

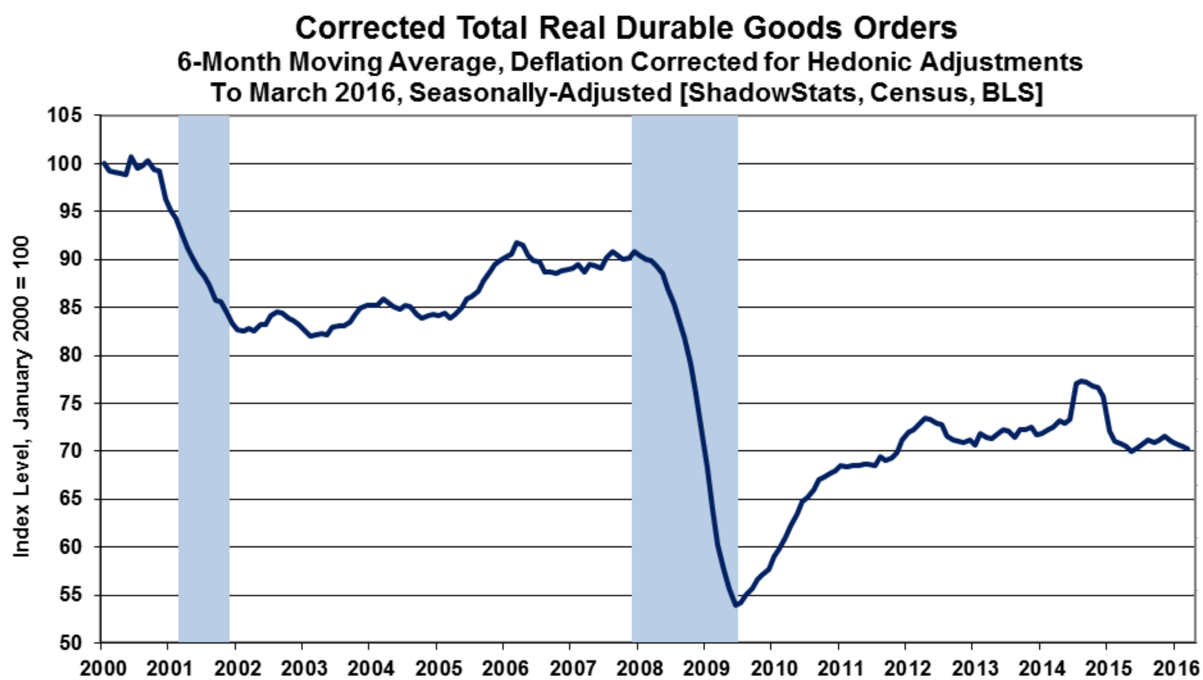
Graph 6, entitled "Corrected Real Orders—Ex-Commercial Aircraft" (a six-month trailing average) is perhaps the best indicator of broad underlying order activity in the durable goods sector, in the context of signaling in advance actual near-term production and economic activity.

[Graphs 3 to 6 follow, beginning on the next page]

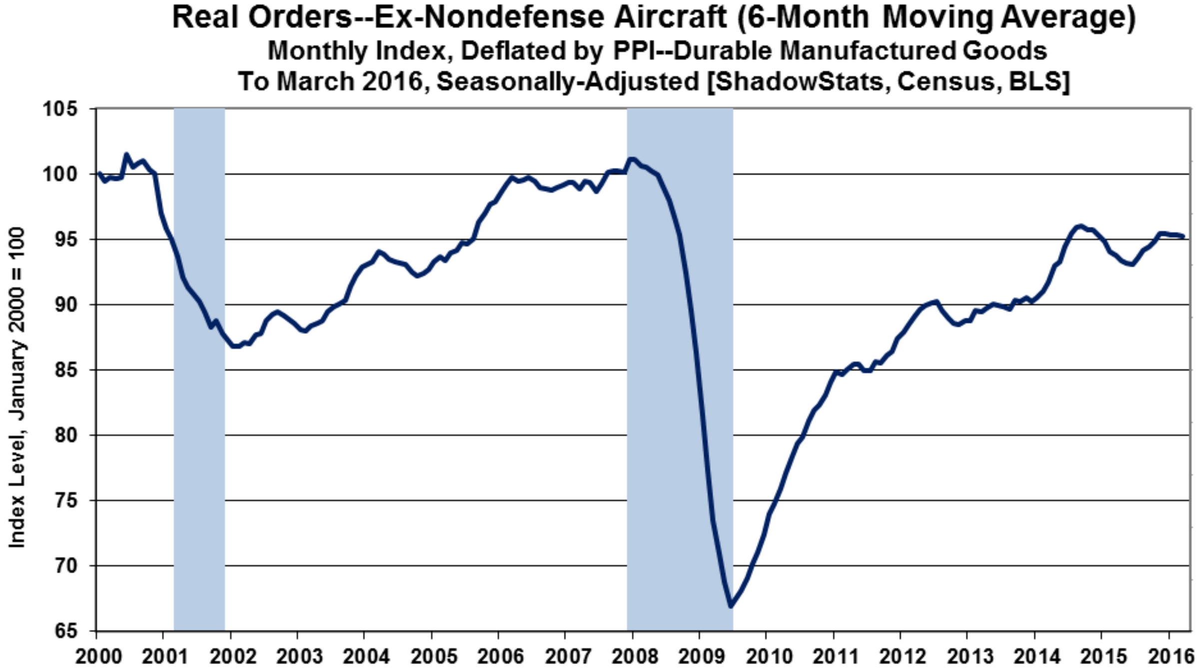
Graph 3: Index of Real Total New Orders for Durable Goods, 6-Month Moving Average



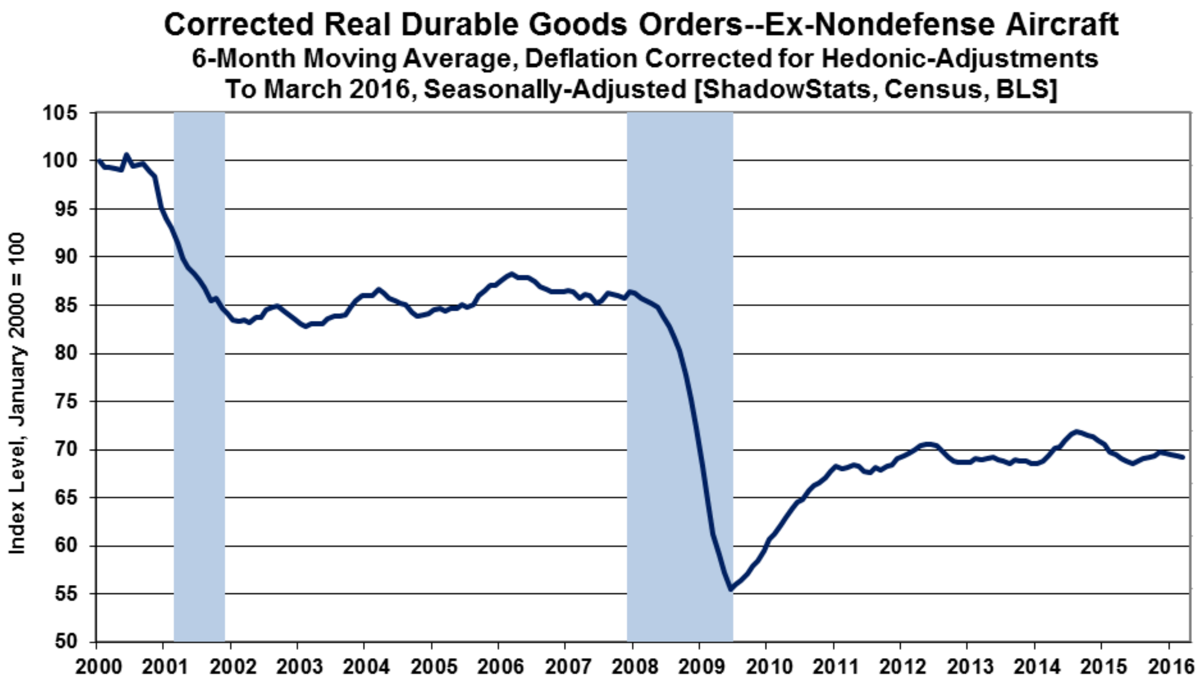
Graph 4: Corrected Index of Real Total New Orders for Durable Goods, 6-Month Moving Average



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



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



New- and Existing-Home Sales—March 2016—Continued Low-Level Stagnation and Instabilities, No Recovery. March 2016 New- and Existing-Home Sales series both remained deep in depression (see *Commentary No. 754*), down respectively by 63% (-63%) and by 27% (-27%) from their pre-recession peaks. Holding in low-level stagnation, with statistically-insignificant changes in headline activity for New-Home Sales, smoothed activity has been relatively flat (*Graph 9*) in the latter part of 2015 and into first-quarter-2016. Despite still- unstable headline detail in Existing-Home Sales, and in the context of shifting patterns in smoothed, low-level stagnation, Existing-Home Sales activity turned to the downside (*Graph 13*) in the latter part of 2015 into first-quarter 2016. These series never recovered from the economic collapse into 2009. After going through a period of protracted, low-level stagnation, general housing construction and sales activity broadly have begun to turn down anew.

More fully discussed in *Commentary No. 796* and updated briefly in the *Consumer Conditions* section that follows, the primary underlying issues restraining current residential real estate activity remain intense, structural-liquidity woes and conditions besetting the consumer.

New-Homes Sales—First-Quarter Sales Unchanged versus Year-Ago, Weather-Impaired Activity; Smoothed Data Held in Low-Level, Down-Trending Stagnation. As usual, the volatile reporting of monthly and annual changes in March 2016 New-Home Sales was not statistically significant. Although January and February headline sales revised higher, March activity was down for the third straight month. Thanks to those revisions, however, the headline detail was on the upside for the quarter-to-quarter change, but flat at 0.00% on year-to-year basis.

On a monthly basis, the unstable March 2016 headline reporting of 511,000 units in annualized sales (a 42,583 monthly rate as used in the graphs) was down by 1.5% (-1.5%) for the month, but up by 5.4% year-to-year. Yet, as usual, the headline monthly changes were not close to being statistically significant, with the headline March 2016 activity still below its 2005 pre-recession peak by 63% (-63%).

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, stagnation (see *Graph 9*).

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, and then stagnation, with the stagnation continuing at a low level of activity to date. Housing activity never recovered with the purported GDP recovery. From the series' pre-recession peak of July 2005, headline March 2016 New-Home Sales still were down by 63.2% (-63.2%), while March 2016 Single-Unit Housing Starts were down by 58.1% (-58.1%) from the January 2006 pre-recession high of that series.

Headline New-Home Sales Reporting. March 2016 New-Home Sales (counted based on contract signings, Census Bureau) declined month-to-month by a headline, seasonally-adjusted, statistically-insignificant 1.5% (-1.5%). Revised upwardly by 1.4%, the February sales level declined versus January by a revised 0.6% (-0.6%), where that level of January activity was revised higher by an even greater 3.8%. In the context of revised December headline detail, January activity fell by 3.4% (-3.4%), with December up by a revised 5.1%. Net of prior-period revisions, the monthly decline in March 2016 was 0.2% (-0.2%), instead of the headline 1.5% (-1.5%).

Year-to-year, March 2016 sales rose by a statistically-insignificant 5.4%. That followed a revised annual decline of 4.8% (-4.8%) in February 2016, a revised "unchanged" at 0.0% in January 2016, and a revised annual gain in December 2015 of 8.5%.

In the arena of continued extreme volatility and unstable, nonsensical headline reporting, consider that the annualized quarterly pace of sales gain in first-quarter 2015 was 43.9%, with the second-quarter 2015 sales activity in an annualized quarterly decline of 14.8% (-14.8%). Third-quarter 2015 new-home sales showed an annualized contraction of 6.8% (-6.8%), with the fourth-quarter sales gain estimated at a downwardly revised 18.7%. First-quarter 2016 activity gained at an annualized 6.2%, having been on track for an annualized decline of 2.6% (-2.6%), based on just January and February reporting, and an initial quarterly contraction of 11.3% (-11.3%) based solely on January 2016 reporting.

Existing-Homes Sales—Sales Rebounded Amidst Ongoing Volatility, with Smoothed Sales in Down-Trending, Low-Level Stagnation. Discussed in *Commentary No. 782*, the Existing-Home Sales series is based on actual closings of home sales. Recent changes in mortgage closing requirements had disrupted timing in some sales closings relative to the next month's activity, with resulting unstable monthly swings in existing-home sales counts. Those systemic distortions likely still are in play, although to an unknown extent, with headline numbers remaining less stable than usual. At some point, though, those numbers should stabilize. That said, the National Association of Realtors® (NAR) is taking a 5.1% sales jump in March 2016 sales closings as just regular month-to-month activity, as they did with the revised hit to sales in February of 7.3% (-7.3%). Along with the standard cautions on potential data instabilities, the accompanying detail and graphs reflect the headline numbers.

Ongoing Lack of Recovery from Collapse into 2009. Existing-Home Sales in March 2016 were down by a headline 26.7%% (-26.7%) from the June 2005 pre-recession peak, a high that has not been matched since the collapse. In contrast, the March 2016 headline monthly Housing Starts remained down by 52.1% (-52.1%) versus its January 2006 pre-recession high.

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 expanded at annualized pace of 7.1%. Based just on January and February 2016, first-quarter 2016 had been on track for an annualized gain of 5.9%. That had been at a 22.4% annualized pace, based solely on the initial January detail in this highly-volatile series.

Headline Detail for Existing-Home Sales. In the context of likely continued distortions in monthly "closing counts," existing-home sales (counted based on actual closings, NAR) showed a seasonally-adjusted, headline monthly gain of 5.1%, following a revised contraction of 7.3% (-7.3%) in February. On a year-to-year basis, March 2016 sales rose by 1.5%, following a revised annual gain of 2.0% in February 2016.

These numbers still are moving somewhat outside the normal scope of reporting volatility for this series, again, suggestive of some ongoing reporting issues with the timing of mortgage-related closings that have distorted headline activity since November 2015. Separately, the quality of data underlying this series remains questionable, as seen in erratic reporting over the years. All that said, smoothed for irregular distortions, the reporting remained statistically consistent with a period of low-level broad stagnation. Although that had been slightly up-trending, it now is down-trending, as seen in *Graph 13*.

Proportion of Distressed Sales Fell-Back to 8% in March, with All Cash Sales Holding at 25%. The NAR estimated the portion of March 2016 sales in "distress" eased in the month to 8% (7% foreclosures, 1% short sales), from 10% (7% foreclosures, 3% short sales) in February 2016 , and from 10% (7% foreclosures, 3% short sales) in March 2015.

Reflecting continued lending problems and stresses within the financial system, including related banking-industry and consumer-solvency issues, as well as the ongoing influx of speculative investment money into the existing-housing market, the NAR estimated that all-cash sales were 25% of March 2016 activity. That was the same level as in January 2016 sales, but was up from 24% in March 2015.

Graphs of New- and Existing-Home Sales. These series and comparative numbers are plotted in the accompanying *Graphs 7* to *14.*

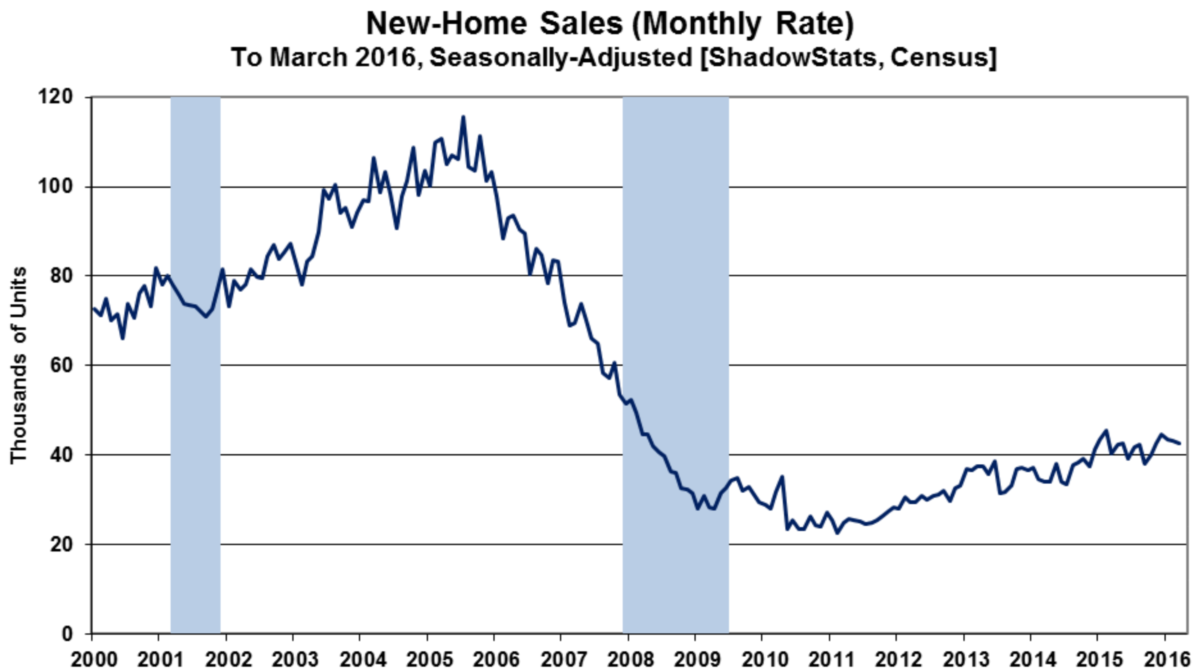
New-Home Sales Graphs. *Graphs 7* and *9* show the regular monthly and six-month moving-average versions of New-Home Sales activity. Added for comparison purposes are parallel graphs of the headline and monthly and six-month moving-average versions of March 2016 Housing Starts for single-unit construction (*Graphs 8* and *10*) from prior *Commentary No. 801*.

Existing-Home Sales Graphs**.** *Graph 11* shows the traditional headline Existing-Home Sales monthly detail. Such is supplemented by *Graph 13* of the Six-Month Moving Average of Existing-Home Sales. Unlike the levels shown *Graph 11* of the monthly series, there are no special averages to smooth the effects of government programs to create buyer incentives. The series is smoothed only by a six-month moving average, and a related transitional averaging that joins the old and new series otherwise plotted separately as seen in *Graph 11*.

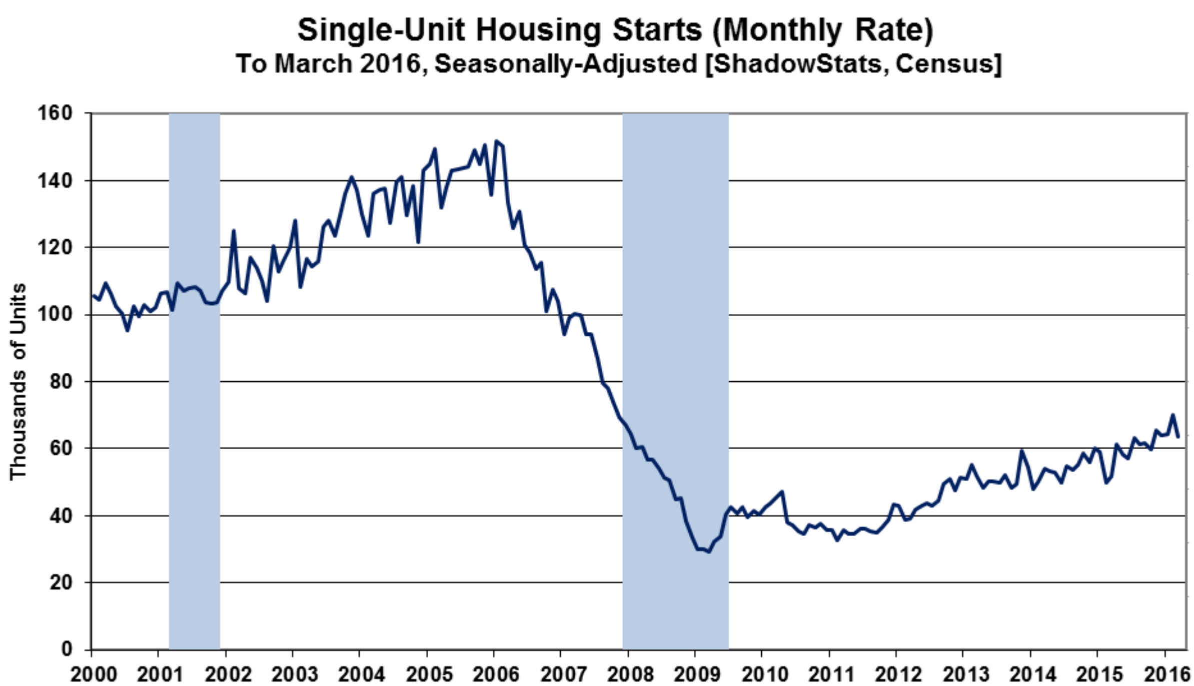
Accompanying the Existing-Home Sales plots are comparative graphs of March 2016 aggregate Housing Starts activity, again from *Commentary No. 801*, where both series reflect activity in terms of single- and multiple-housing units (see *Graphs 12* and *14*).

[Graphs 7 to 14 begin on the next page]

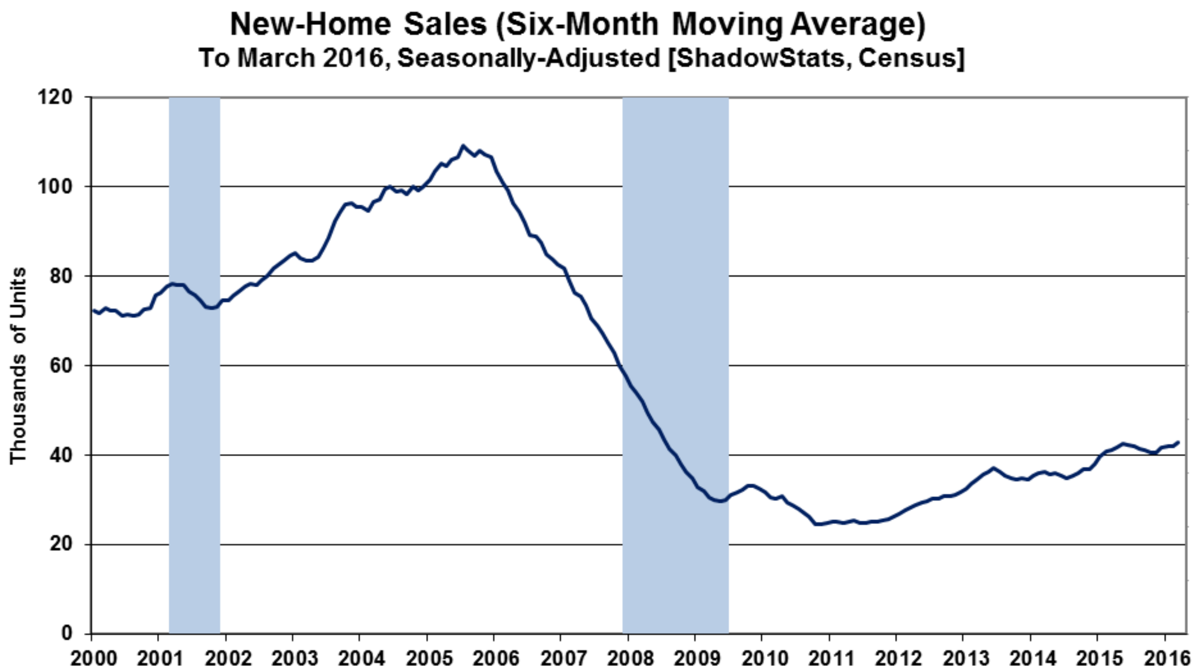
Graph 7: New-Homes Sales – Monthly Level



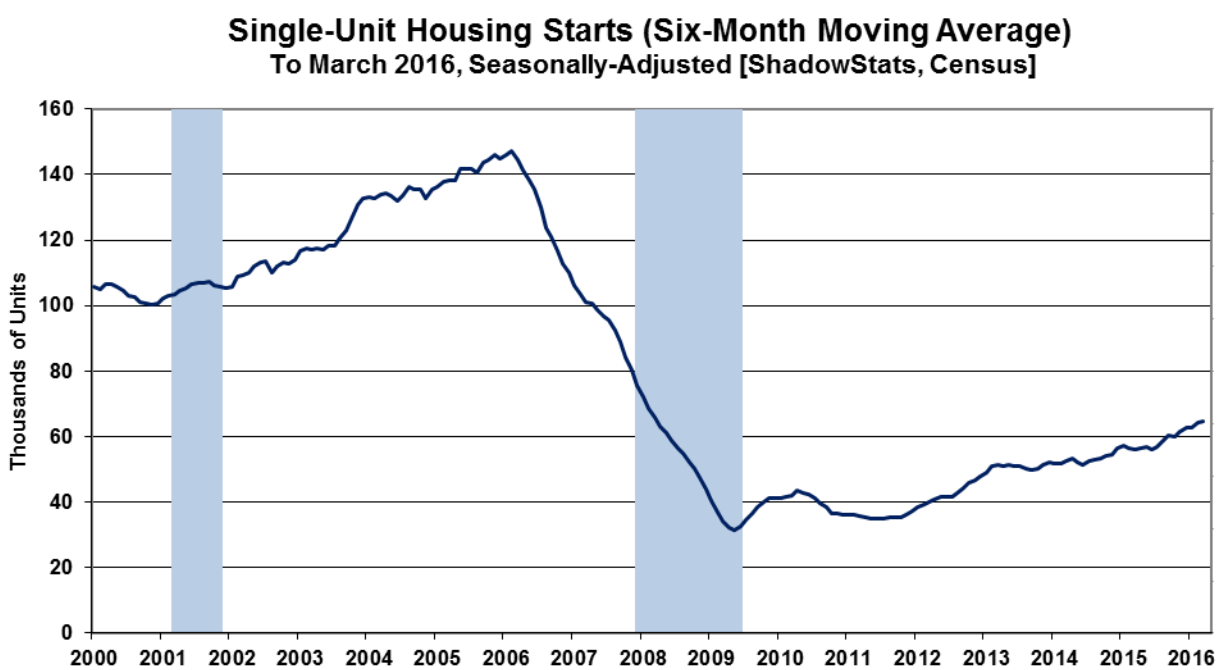
Graph 8: Single-Unit Housing Starts – Monthly Level



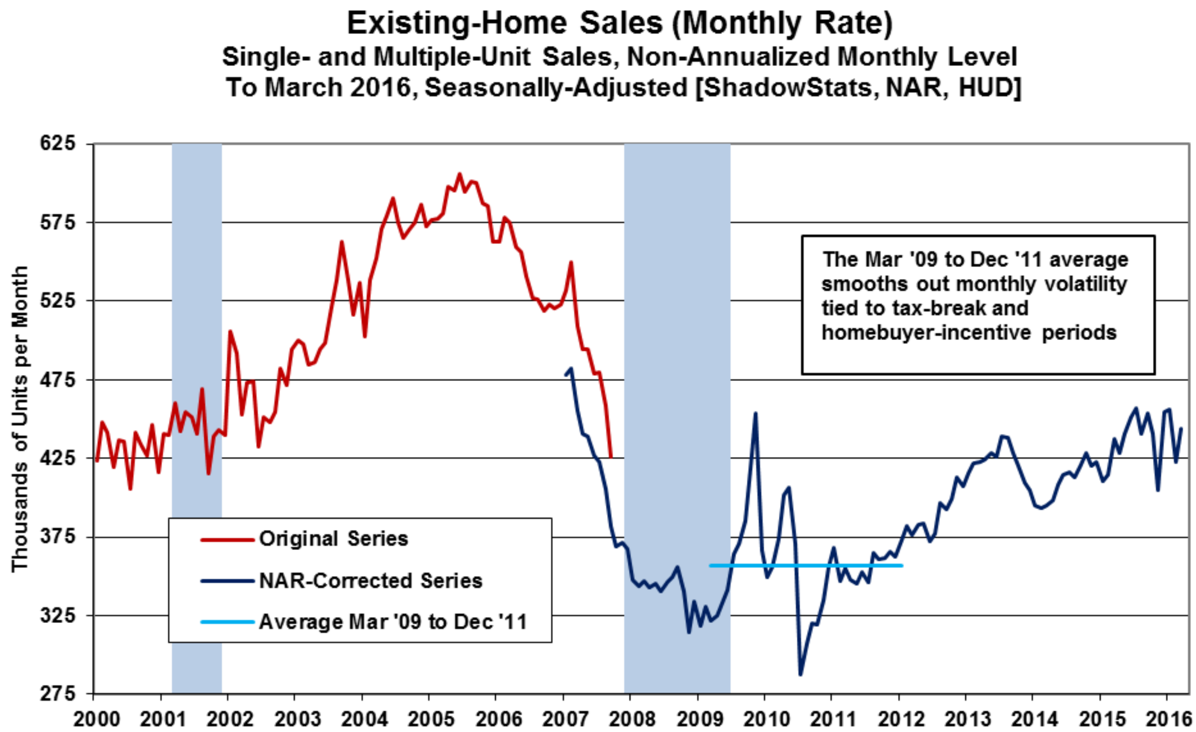
Graph 9: New-Homes Sales – Six-Month Moving Average



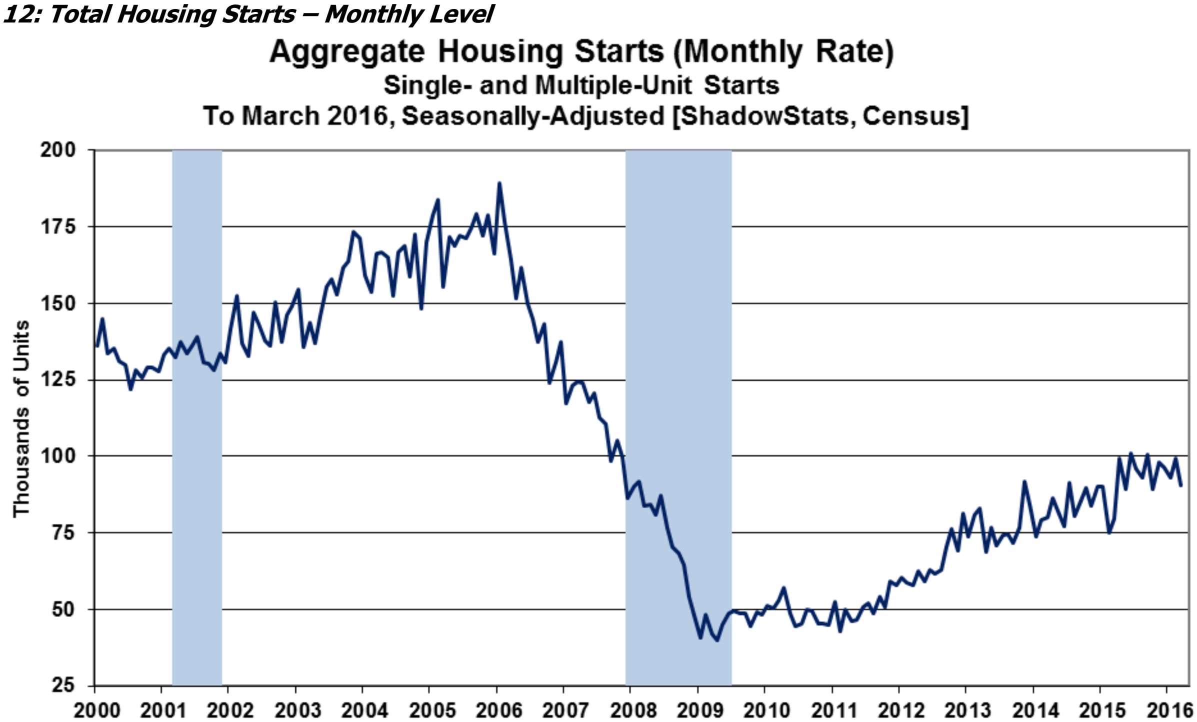
Graph 10: Single Unit Housing Starts – Six-Month Moving Average



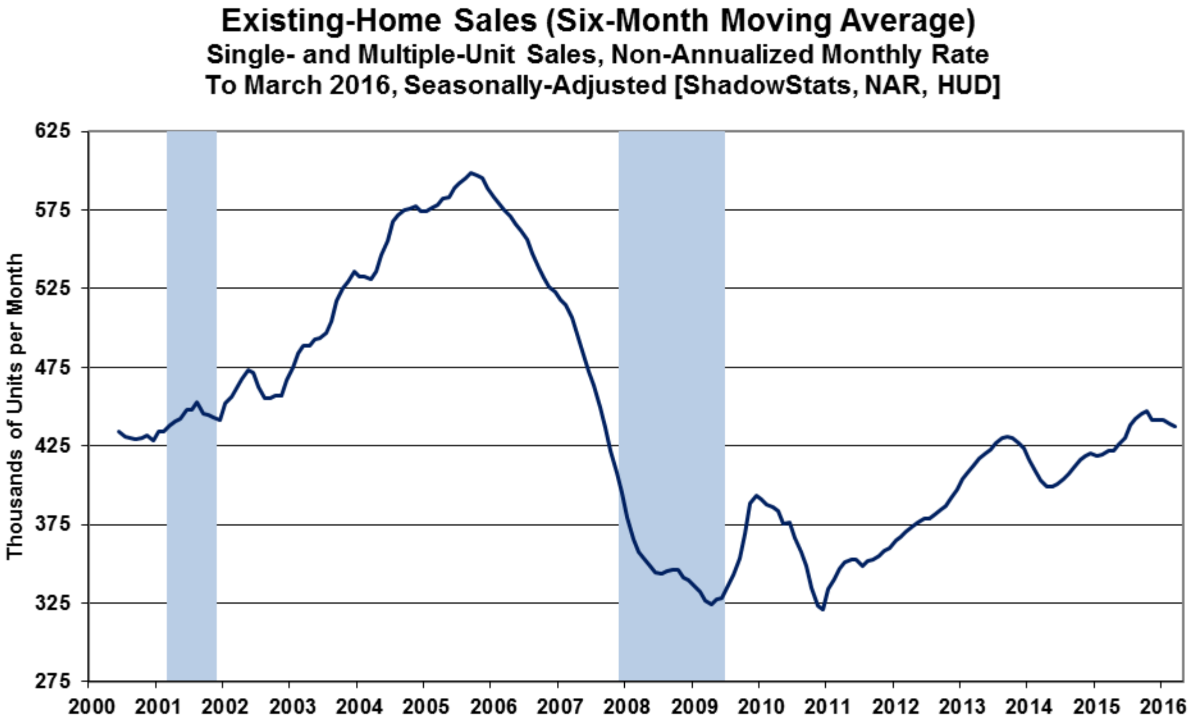
Graph 11: Existing-Home Sales – Monthly Level



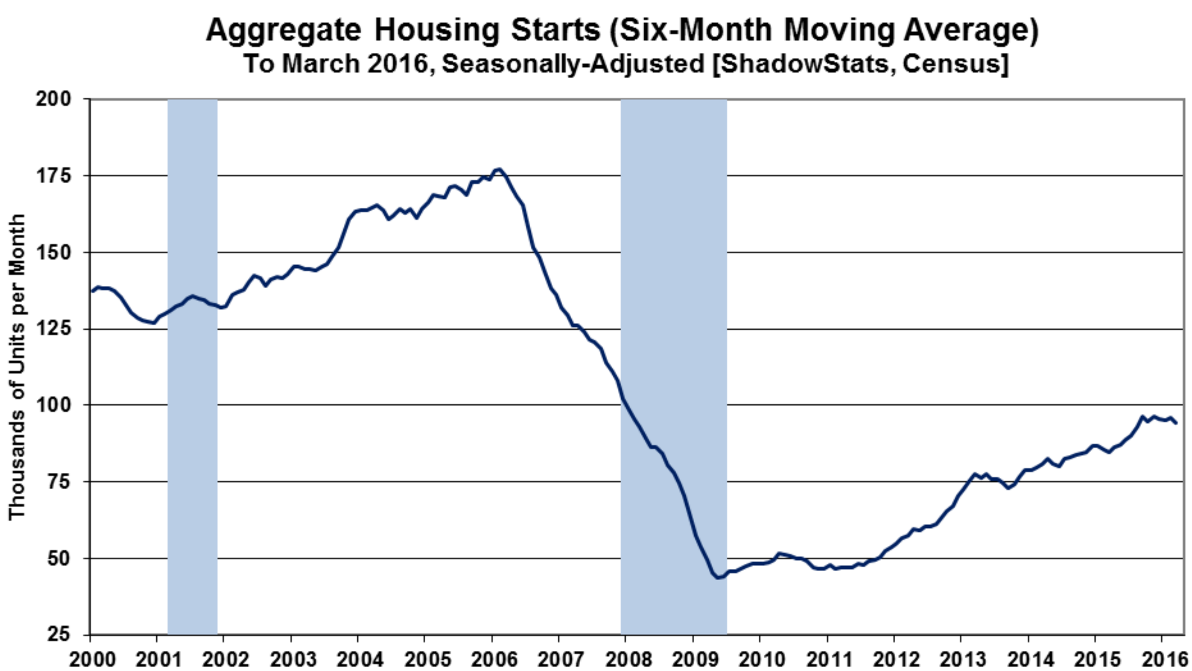
Graph 12: Total Housing Starts – Monthly Level



Graph 13: Existing-Home Sales (Six-Month Moving Average)



Graph 14: Total Housing Starts (Six-Month Moving Average)



Consumer Conditions: Three-Month Moving Average in Confidence Hit a 16-Month Low.
Continuing to constrain sales and construction of residential structures, the ongoing the extreme liquidity

bind besetting consumers, briefly is updated here for April 2016 Consumer Confidence from the Conference Board. Previously updated in *Commentary No. 801* for Consumer Sentiment from the University of Michigan, and for February Consumer Credit Outstanding in *Commentary No. 798*, the consumer conditions last were reviewed fully in *Commentary No. 796* and *No. 777 Year-End Special Commentary*. The next full update of consumer liquidity conditions should follow in *Commentary No. 806*, of May 13th. 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 the income shortfall, the U.S. consumer is unable to sustain positive growth in domestic personal consumption, including retail sales, real or otherwise, and including demand for residential real estate.

Underlying fundamentals to consumer economic activity, such as liquidity, have been severely impaired in the last decade or so, having driven economic activity into collapse and prevented meaningful or sustainable economic rebound, recovery or ongoing growth. The level of and growth in sustainable real income, and the ability and willingness of the consumer to take on new debt, remain at the root of the liquidity issues.

Consumer Confidence and Updated Sentiment. The April 2016 reading (published today April 26th) for the Conference Board's Consumer-Confidence measure and for the early-April 2016 reading (published April 15th) for the University of Michigan's Consumer-Sentiment measure are plotted in *Graphs 15* to *17*.

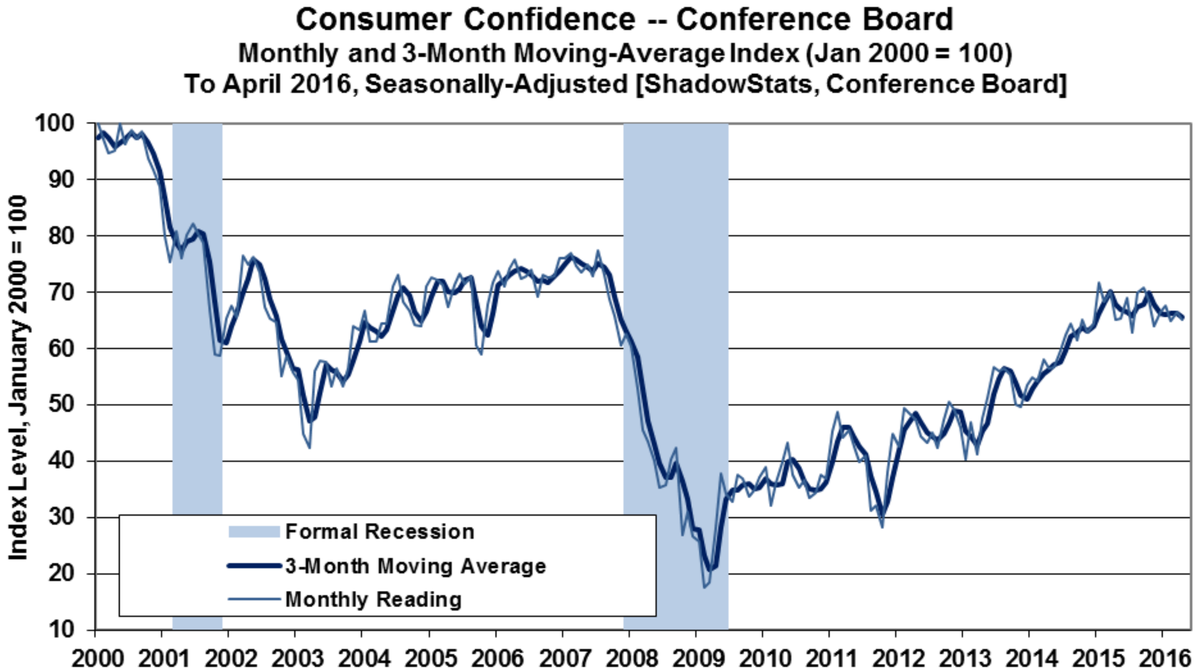
For purposes of showing the Consumer Confidence and Consumer Sentiment measures on a comparable basis, those graphs reflect both measures re-indexed to January 2000 = 100 for the monthly reading. Standardly reported, the Conference Board's Consumer Confidence Index is set with 1985 = 100, while the University of Michigan's Consumer Sentiment Index is set with January 1966 = 100.

The Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index (*Graph 15*) fell in April after a small increase in March. On a three-moving average basis, the confidence measure was at a 16-month low, its lowest since December 2014. Previously discussed, the University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph 16*) declined for both February and March 2016, and was down again for the early estimate of April sentiment.

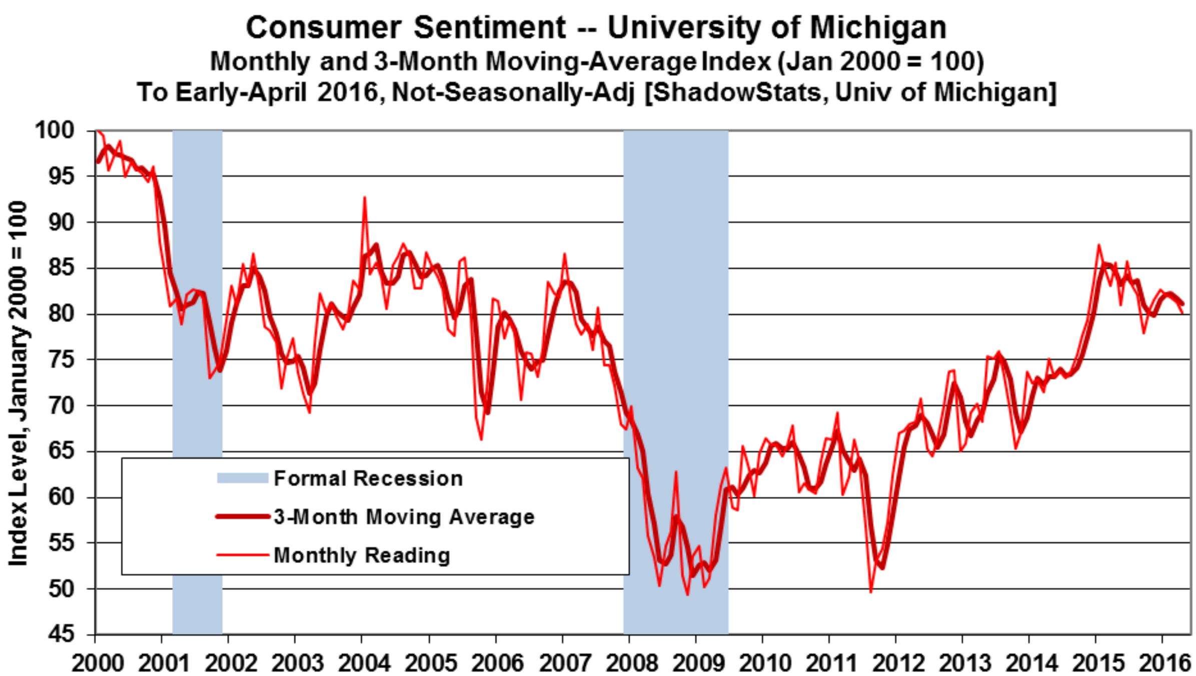
Again, both series continued to move lower, smoothed for their three-month and six-month moving-average readings. The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in *Commentary No. 764*), and often are highly volatile month-to-month, as a result. With increasingly-negative, headline financial and economic reporting and developments at hand and ahead, successive negative hits to both the confidence and sentiment readings likely will continue in the months ahead.

Smoothed for irregular, short-term volatility, the two series remain at levels seen typically in recessions. Suggested in *Graph 17*—plotted for the last 45 years—the latest readings of Confidence and Sentiment generally have not recovered levels preceding most formal recessions of the last four decades. Broadly, the consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth seen in 2014 and as indicated for second-and third-quarter 2015 GDP growth.

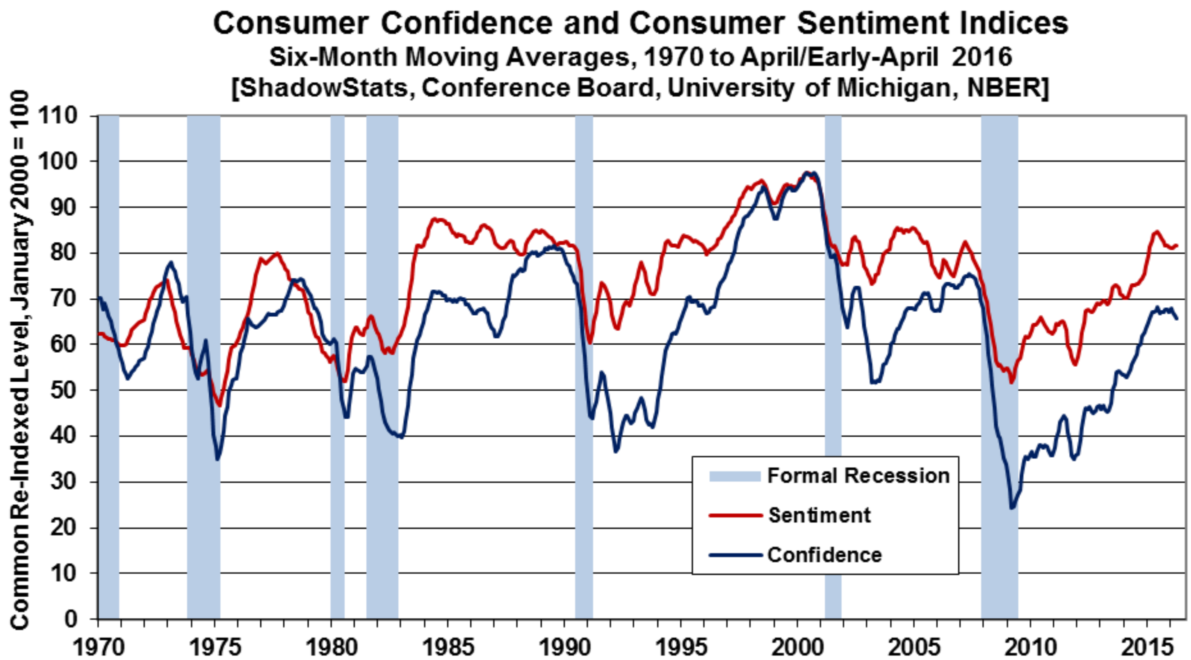
Graph 15: Consumer Confidence to April 2016



Graph 16: Consumer Sentiment to Early-April 2016



Graph 17: Comparative Confidence and Sentiment (6-Month Moving Averages) since 1970



[The *Reporting Detail* section includes additional information on Durable Goods Orders and Home Sales.]

REPORTING DETAIL

NEW ORDERS FOR DURABLE GOODS (March 2016)

Nominal Durable Goods Orders in Quarter-to-Quarter Contractions for the Second Consecutive Quarter. Headline March 2016 durable goods orders rose by 0.8% for the month, below market expectations, but that number also was bloated in the context of a 0.2% (-0.2%) downside revision to the level of February's orders. Both before and after consideration of commercial aircraft orders, new orders for nominal durable goods contracted quarter-to-quarter in both fourth-quarter 2015 and first-quarter 2016. Net of highly questionable negative headline inflation in this sector, both series still contracted in fourth-quarter 2015, but gained in first-quarter 2016. With these highly irregular series smoothed by six-month moving averages, the pattern of stagnation remained down-trending and consistent with signaling a deepening and ongoing recession.

Quarterly Growth. Annualized quarterly declines in real new orders (ex-commercial aircraft) were 5.58% (-5.58%) in fourth-quarter 2014 and 7.73% (-7.73%) in first-quarter 2015. With appropriate one-quarter lags, those were followed by quarterly contractions in both first- and second-quarter 2015 industrial production.

Annualized real change for second-quarter 2015 orders was a gain of 2.10%, with third-quarter activity up at an annualized 10.38%. Fourth-quarter 2015, contracted at a revised annualized pace of 1.77% (-1.77%) [previously down by 1.85% (-1.85%), by 1.78% (-1.78%) initially down by 2.30% (-2.30%)]. The fourth-quarter adjustment reflected a PPI revision, not an orders revision.

Headline annualized real change for first-quarter 2016 was 0.48%. Based solely on January and February 2016 reporting, the series had been on early track for real, annualized quarterly growth of 0.56% [previously up by 4.89% based just on initial January reporting]. Again, the quarterly gains or muted real contractions here are due partially to highly-suspect, negative durable goods inflation in the PPI reporting, which has the effect of boosting the real monthly-, quarterly- and annual-growth detail.

Third-quarter industrial production growth was on the plus-side, but fourth-quarter 2015 and first-quarter 2015 industrial production collapsed. Current first-quarter durable goods orders remain a negative indicator for second-quarter 2016 production, again, part of an unfolding and protracted domestic recession.

On a nominal basis (before inflation adjustment), initial fourth-quarter 2015 orders growth—again, ex-commercial aircraft—fell at an unrevised annualized quarterly pace of 2.71% (-2.71%), versus a third-quarter 2015 unrevised annualized gain of 8.63%, second-quarter 2015 quarterly annualized growth of 0.57%, a first-quarter 2015 annualized contraction of 7.29% (-7.29%), and a decline of 4.36% (-4.36%) in fourth-quarter 2014. Headline annualized nominal change for first-quarter 2016 was a contraction of 0.41% (-0.41%). Based solely on January and February 2016 reporting, annualized first-quarter 2016 growth also had been on an early track for a contraction of 0.41% (-0.41%) [previously up by 2.52%, based just on initial January 2016 reporting].

Headline Nominal (Not-Adjusted-for-Inflation) March 2016 Reporting. The Census Bureau reported this morning, April 26th, that the regularly-volatile, seasonally-adjusted, nominal level of March 2016 new orders for durable goods rose month-to-month by 0.78%, following a revised monthly decline of 3.07% (-3.07%) [previously down by 2.78% (-2.78%)], versus a minimal upside revision in monthly growth to 4.29% [previously up by 4.21%, initially up by 4.89%] in January. Net of the revisions to February, aggregate new orders in March rose by 0.56%, instead of the headline 0.78%.

The year-to-year change in March 2016 durable goods orders was a decline of 2.54% (-2.54%), following a downwardly revised annual gain of 1.60% [previously up by 1.82%] in February 2016, and a minimally revised gain of 1.17% [previously up by 1.09%, initially up by 1.75%] in January 2016.

The headline March 2016 detail, again, was before consideration of the volatility in commercial-aircraft orders. With the aircraft orders considered, headline changes in March were slightly more positive. Before and after consideration of commercial-aircraft volatility, and the monthly irregularities in the headline reporting of new orders, the smoothed trends of activity continued to be negative, 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 *Opening Comments* section. The corrected series—net of commercial aircraft orders—has remained relatively flat, at a low-level and now in a down-trending pattern of stagnation, with the other plotted series still showing an unfolding downturn of a nature that usually precedes or coincides with a recession or a deepening business downturn.

Detail Net of Volatility in Commercial-Aircraft Orders. The reporting of extreme contractions and surges in commercial-aircraft orders is seen commonly in an irregularly-repeating process throughout the year, and that often dominates changes in headline monthly durable goods orders. These extremely volatile aircraft orders are booked years into the future and are indicative more of longer-term, rather than shorter-term prospects for manufacturing activity. In the current circumstance, the relatively small monthly decline in March commercial aircraft orders reduced the aggregate orders gain to 0.8%, where it would have been 1.1% otherwise.

Net of a headline monthly decline of 5.73% (-5.73%) in March 2016 commercial aircraft orders, a revised decline of 26.61% (-26.61%) [previously down by 27.15% (-27.15%)] in February 2016, and a revised gain of 48.66% [previously up 48.60%, initially up by 54.16%] in January 2016, aggregate new orders rose by 1.09% in March 2016, fell by a revised 1.59% (-1.59%) [previously down by 1.25% (-1.25%)] in February 2016, and rose by a revised 2.37% [previously up by 2.29%, initially up by 2.75%] in January 2016.

Year-to-year and seasonally-adjusted, March 2016 new orders (net of commercial aircraft) rose by 0.59%, following a revised 2.57% [previously up by 2.84%] in February 2016, and a revised 1.17% [previously up by 1.09%, initially up by 1.54%] in January 2016.

Real (Inflation-Adjusted) Durable Goods Orders—March 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 March 2016 PPI series was "unchanged," at 0.00% month-to-month for the third month, having contracted on a monthly basis in ten of the preceding twelve months before that. Headline annual inflation contracted year-to-year by 1.14% (-1.14%) in March 2016, having declined by 1.25% (-1.25%) in February 2016 and by 1.31% (-1.31%) in January 2016.

Adjusted for that "unchanged" monthly March 2016 inflation, and as reflected in the graphs in the *Opening Comments* section, real month-to-month aggregate orders in March 2016 rose by the same 0.78% as seen in nominal terms, as was the case with a 3.07% (-3.07%) decline in February 2016 and a 4.29% gain in January orders. In like manner, ex-commercial aircraft, monthly real orders rose by 1.09% in March 2016, fell by 1.59% (-1.59%) in February and gained 2.37% in January.

Real aggregate new orders fell year-to-year by 1.42% (1.42%) in March 2016, versus a revised gain of 2.89% [previously 3.11%] in February 2016 and a revised 2.52%, [previously 2.43%, initially 3.11%] annual gain in January 2016. Ex-commercial aircraft, real orders rose year-to-year by 1.74% in March 2016, versus a revised gain of 3.87% [previously 4.15%] in February 2016 and a revised gain of 2.51% [previously 2.43%, initially 2.89%] in January 2016.

Annual Benchmark Revisions Back to 1997 Set for May 18, 2016. The Census Bureau has scheduled its annual benchmarking to the *Manufacturers' Shipments, Inventories, and Orders (M3) Survey* (New Orders for Durable Goods), for May 18th. Encompassing a variety of updated detail, seasonally-adjusted data will be revised from January 1997 through March 2016, with the unadjusted data revised for the period January 2001 to March 2016 (see page 4 of the Census March 24th *press release* for further detail.)

Graphs of Inflation-Adjusted and "Corrected" Smoothed Durable Goods Orders. Three sets of inflation-adjusted graphs (*Graphs 1* to *5*) are displayed in the *Opening Comments* section. The first set (*Graphs 1* and *2*) shows the headline monthly detail, as well as the six-month moving-average activity for both the aggregate new orders series and the series net of the unstable 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 downturn into late fourth-quarter 2015 and first-quarter 2016.

The second set of graphs (*Graphs 3* to *4*) shows the patterns of six-month moving averages of historical, headline real new orders for durable goods, net of official inflation, as well as that pattern "corrected" for the understatement of that inflation (and for the related overstatement of official, inflation-adjusted growth). The third set of graphs (*Graphs 5* to *6*) shows the same patterns, but for the aggregate durable goods orders series, net of commercial aircraft orders.

Caution: Current durable goods reporting remains subject to many of the same sampling and concurrent-seasonal-adjustment problems seen with retail sales, 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, temporarily, with the most-recent annual benchmark revision to durable goods orders on May 14, 2015, subsequent monthly reporting and revisions have made all historical reporting prior to January 2016 inconsistent with the current headline numbers. All the historical data will be briefly consistent, following the May 18th benchmark revisions and before the headline release of April 2016 detail on May 26th.

NEW-HOME SALES (March 2016)

First-Quarter 2016 Sales Unchanged versus Year-Ago Weather-Impaired Activity; Smoothed Data Held in Low-Level, Down-Trending Stagnation. As usual, the volatile reporting of monthly and annual changes in March 2016 New-Home Sales was not statistically significant. Although January and February headline sales revised higher, March activity was down for the third straight month. Thanks to those revisions, however, the headline detail was on the upside for the quarter-to-quarter change, but flat at 0.00% on year-to-year basis.

On a monthly basis, the unstable March 2016 headline reporting of 511,000 units in annualized sales (a 42,583 monthly rate as used in the graphs) was down by 1.5% (-1.5%) for the month, but up by 5.4% year-to-year. Yet, as usual, the headline monthly changes were not close to being statistically significant, with the headline March 2016 activity still below its 2005 pre-recession peak by 63% (-63%).

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, stagnation (see *Graph 9* in the *Opening Comments*).

Graphed either way, smoothed or not, the various housing series generally have continued to show a pattern of economic activity plunging from 2005 or 2006 into 2009, and then stagnation, with the stagnation continuing at a low level of activity to date. Housing activity never recovered with the purported GDP recovery. From the series' pre-recession peak of July 2005, headline March 2016 New-Home Sales still were down by 63.2% (-63.2%), while March 2016 Single-Unit Housing Starts were down by 58.1% (-58.1%) from the January 2006 pre-recession high of that series.

Discussed in the *Opening Comments* section, there has been no improvement in underlying consumer liquidity conditions. Correspondingly, with no fundamental growth in liquidity and other conditions to fuel increasing activity, there is no basis for a current or imminent recovery in the housing market.

Headline March 2016 Reporting. Reported by the Census Bureau, yesterday, April 25th, March 2016 New-Home Sales (counted based on contract signings) declined month-to-month by a headline, seasonally-adjusted, statistically-insignificant 1.5% (-1.5%) +/- 17.6% (all confidence intervals are at the 95% level). Revised upwardly by 1.4% February sales declined by a revised 0.6% (-0.6%) [previously up by 2.0%] versus January activity, where that level of activity was revised higher by an even greater 3.8%. In the context of revised December headline detail, January fell by a revised 3.4% (-3.4%) [previously down by 7.0% (-7.0%), initially down by 9.2% (-9.2%)], with December up by a revised 5.1% [previously up 5.7%, by 8.2%, and initially up by 10.8%]. Net of prior-period revisions, the monthly decline in March 2016 was 0.2% (-0.2%), instead of the headline 1.5% (-1.5%).

Year-to-year, March 2016 sales rose by a statistically-insignificant 5.4% +/- 18.7%. That followed a revised annual decline of 4.8% (-4.8%) [previously down by 6.1% (-6.1%)] in February 2016, a revised "unchanged" at 0.0% [previously down by 3.6% (-3.6%), initially down by 5.2% (-5.2%)] in January 2016, and a revised annual gain in December 2015 of 8.5% [previously up by 9.1%, previously and initially up by 9.9%].

In the arena of continued extreme volatility and unstable, nonsensical headline reporting, consider that the annualized quarterly pace of sales gain in first-quarter 2015 was 43.9%, with the second-quarter 2015 sales activity in an annualized quarterly decline of 14.8% (-14.8%). Third-quarter 2015 new-home sales showed an annualized contraction of 6.8% (-6.8%), with the fourth-quarter sales gain estimated at a downwardly revised 18.7% [previously up 19.6%, by 18.4%, initially up by 15.3%]. First-quarter 2016 activity gained at an annualized 6.2%, having been on track for an annualized decline of 2.6% (-2.6%), based on just January and February reporting, and an initial quarterly contraction of 11.3% (-11.3%) based solely on January 2016 reporting.

New-Home Sales Graphs. The regular monthly graph of New-Home Sales is included in the *Opening Comments* section, along with a six-month moving-average version of the series. Added for comparison purposes are parallel graphs of the headline and six-month moving-average versions of March 2016 Housing Starts for single-unit construction, from prior *Commentary No. 801*, along with comparative graphs of Existing-Home Sales and aggregate Housing Starts (see *Graphs 7* to *14*).

EXISTING-HOME SALES (March 2016)

Monthly Sales Rebounded Amidst Ongoing Volatility, with Smoothed Sales in Downtrending, Low-Level Stagnation. Discussed in *Commentary No. 782*, the Existing-Home Sales series is based on actual closings of home sales. Recent changes in mortgage closing requirements had disrupted timing in some sales closings relative to the next month's activity, with resulting unstable monthly swings in existing-home sales counts. Those systemic distortions likely still are in play, although to an unknown extent, with headline numbers remaining less stable than usual. At some point, though, those numbers should stabilize. That said, the National Association of Realtors® (NAR) is taking 5.1% sales jump in March 2016 sales closings as just regular month-to-month activity, as they did with the revised hit to sales in February of 7.3% (-7.3%) [previously down by 7.1% (-7.1%)]. Along with the standard cautions on potential data instabilities, the accompanying detail and graphs reflect the headline numbers.

Ongoing Lack of Recovery from Collapse into 2009. Existing-Home Sales in March 2016 were down by a headline 26.7%% (-26.7%) from the June 2005 pre-recession peak, a high that has not been matched since the collapse. In contrast, the March 2016 headline monthly Housing Starts remained down by 52.1% (-52.1%) versus its January 2006 pre-recession high.

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 expanded at annualized pace of 7.1%. Based just on January and February 2016, first-quarter 2016 had been on track for an annualized gain of 5.9%. That had been at a 22.4% annualized pace, based solely on the initial January detail in this highly-volatile series.

Headline Detail for March 2016 Existing-Home Sales. In the context of likely continued distortions in monthly "closing counts," the April 20th release of March 2016 existing-home sales (counted based on actual closings, NAR) showed a seasonally-adjusted, headline monthly gain of 5.1%, following a revised contraction of 7.3% (-7.3%) [previously down by 7.1% (-7.1%)] in February. On a year-to-year basis, March 2016 sales rose by 1.5%, following a revised annual gain of 2.0% [previously 2.0%] in February 2016.

These numbers still are moving somewhat outside the normal scope of reporting volatility for this series, again, suggestive of some ongoing reporting issues with the timing of mortgage-related closings that have distorted headline activity since November 2015. Separately, the quality of data underlying this series remains questionable, as seen in erratic reporting over the years. All that said, smoothed for irregular distortions, the reporting remained statistically consistent with a period of low-level broad stagnation. Although that had been slightly up-trending, it now is down-trending, as seen in *Graph 13* in the *Opening Comments*.

Proportion of Distressed Sales Fell-Back to 8% in March, with All Cash Sales Holding at 25%. The NAR estimated the portion of March 2016 sales in "distress" eased in the month to 8% (7% foreclosures, 1% short sales), from 10% (7% foreclosures, 3% short sales) in February, and from 10% (7% foreclosures, 3% short sales) in March 2015.

Reflecting continued lending problems and stresses within the financial system, including related banking-industry and consumer-solvency issues, as well as the ongoing influx of speculative investment money into the existing-housing market, the NAR estimated that all-cash sales were 25% of March 2016 activity. That was the same level as in January 2016 sales, but was up from 24% in March 2015.

The primary, underlying difficulty for the housing market remains intense, structural-liquidity constraints on the consumer, which continued to prevent a normal recovery in broad U.S. business activity from the economic collapse, as discussed in the *Opening Comments*.

Existing-Home Sales Graph. In the *Opening Comments* section, *Graph 11* shows the traditional headline Existing-Home Sales monthly detail. Such is supplemented by *Graph 13* of the Six-Month Moving Average of Existing-Home Sales (*Graph 13).* Unlike the levels shown *Graph 11* of the monthly series, there are no special averages to smooth the effects of government programs to create buyer incentives. The series is smoothed only by a six-month moving average, and a related transitional averaging that joins the old and new series otherwise plotted separately as seen in *Graph 11*.

Along with the monthly graphs of Existing-Home Sales are comparative graphs of March 2016 aggregate Housing Starts activity from *Commentary No. 801*, where both series reflect activity in terms of single- and multiple-housing units (see *Graphs 11* to *14*). These plots also are accompanied by comparative graphs of New-Home Sales and single-unit Housing Starts (see *Graphs 7* to *10*).

WEEK AHEAD

Economic Reporting Generally Should Continue in Deterioration, Increasingly Pummeling the Dollar and Boosting Gold, Silver and Oil Prices. Market expectations for business activity should continue to deteriorate sharply, amidst intensifying, negative headline reporting in the weeks and months ahead. The broad trend in weakening expectations for business activity, and in movement towards looming recession recognition, continues, as discussed in *Commentary No. 801*, *Commentary No. 800*, *Commentary No. 799*, *Commentary No. 796* and in *No. 777 Year-End Special Commentary*.

In response to perpetual non-recovery and a now intensifying downtrend in underlying economic activity, increasingly-negative market reactions have surfaced in trading of the U.S. dollar and in related financial markets, with upside price movements in gold, silver and oil, discussed in *Commentary No. 799*. These reactions reflect, at least in part, a growing sense of Federal Reserve impotence. Any further tightening by the Fed before the election is unlikely, but renewed quantitative easing should become a target of intensified market speculation as the deepening recession unfolds.

Weaker headline reporting of the regular monthly economic numbers increasingly should be accompanied by much worse-than-expected—negative—reporting for at least the next several quarters of GDP (and GDI and GNP). That includes a developing possible outright quarterly contraction for first-quarter 2016 GDP activity on April 28th or May 27th, as well as pending downside revisions to GDP history (including first-quarter 2015 and fourth-quarter 2015) in the July 29th annual benchmark revisions.

In line with recent downside revisions to industrial production and pending negative benchmark revisions to retail sales, construction, durable goods orders and trade, expectations for the GDP benchmarking also should fall sharply. That GDP benchmarking now is the most-likely point at which the elements for a "formal" recession call will be in full play.

CPI-U consumer inflation—intermittently driven lower in 2015 and early-2016 by collapsing prices for gasoline and other oil-price related commodities—likely has seen its near-term, year-to-year low. Headline March 2016 detail moved into positive headline territory, in tandem with rising gasoline prices. Inflation will rise more sharply, going forward, boosted by the weakening U.S. dollar environment, and a continued, related upturn in oil prices and other commodities. Fundamental reporting issues with the headline CPI also are discussed here: *Public Commentary on Inflation Measurement*.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. Significant reporting-quality problems remain with most major economic series. Beyond the pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended to understate actual inflation and to overstate actual economic activity, ongoing headline reporting issues are tied largely to systemic distortions of monthly seasonal adjustments. Data instabilities—induced partially by the still-evolving economic turmoil of the last nine-to-eleven years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn provide particularly unstable headline economic results, when concurrent seasonal adjustments are used (as with retail sales, durable goods orders, employment and unemployment data). That has been discussed and explored in the labor-numbers related *Supplemental Commentary No. 784-A* and *Commentary No. 695*.

Further, discussed in *Commentary No. 778*, a heretofore unheard of spate of "processing errors" has surfaced in recent surveys of earnings (Bureau of Labor Statistics) and construction spending (Census Bureau). This is suggestive of deteriorating internal oversight and control of the U.S. government's headline economic reporting. At the same time, it indicates an openness of the involved statistical agencies in revealing the reporting-quality issues.

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*).

PENDING RELEASE:

Gross Domestic Product (GDP)—First-Quarter 2016, "Advance" or First Estimate. The Bureau of Economic Analysis (BEA) will publish its first or "advance" estimate of first-quarter 2016 Gross Domestic Product (GDP) on Thursday, April 28th. Discussed in the opening section of the *Opening Comments* of *Commentary No. 801*, solid indications already are in place for an inflation-adjusted, real contraction in first-quarter 2016 GDP. Yet, the initial headline reporting of an outright contraction was dependent heavily on consensus expectations moving to a GDP contraction, during this last week, and that does not appear to have happened. General expectations still appear to be well below—less than half—the annualized quarterly gain of 1.4% currently reported for fourth-quarter 2015 activity.

History has shown that the BEA will hold back in its initial reporting of a headline quarterly GDP contraction, when the consensus outlook still is positive. With the underlying numbers so weak, the BEA likely will publish headline growth that is positive, but well below consensus. Both the consensus numbers and the BEA reporting then likely would turn negative in the second estimate of, first revision to first-quarter GDP, on May 27th. Such a pattern would be similar to that seen with first-quarter 2015 GDP. Initial reporting of the first-quarter GDP was a gain of 0.2%, then down by 0.7% (-0.7%) in the first revision. That quarterly change, however, was taken into positive territory with July 2015 benchmark revisions.

Formal recession recognition (timed from December 2014) likely will follow in the wake of the eventual announcement of a headline contraction in recent GDP activity. Such a contraction should be no further out in timing than the annual GDP benchmark revisions and the coincident initial reporting of second-quarter 2016 GDP.

