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

SUPPLEMENTAL COMMENTARY NUMBER 807-A Durable Goods Orders Benchmark Revision, GDP Outlook, Existing-Home Sales

May 20, 2016

Sharply Negative Benchmark Revisions to Shipments of Manufacturers and New Orders for Durable Goods Promise Downside Adjustments to GDP on July 29th

12% of the Recovery in Monthly Shipments, Post-2009 Trough, Just Disappeared in Revision

Smoothed Existing-Home Sales Held in Low-Level, Down-Trending Stagnation

PLEASE NOTE: The next regular Commentary, scheduled for Thursday, May 26th will cover April New Orders for Durable Goods and New- and Existing-Home Sale, followed by a Commentary on May 27th reviewing the first revision to first-quarter 2016 GDP.

Best wishes to all — John Williams

DIMINISHING GDP PROSPECTS AMIDST DOWNSIDE DURABLE GOODS REVISIONS

As Revisions Catch Up with Reality, Reality Will Catch Up with the GDP Reporting. Despite limited near-term downside revisions in hand for previously-reported first-quarter 2016 detail (watch out for pending trade revisions), chances continue for some negligible downside revision on May 27th to the

initial, annualized real growth estimate of 0.54% for first-quarter 2016. Yet, the Bureau of Economic Analysis (BEA) likely will keep the headline first-quarter GDP detail in positive territory for this first revision, lacking a major shift to the downside, so far, in consensus expectations. A revision into negative territory remains a reasonably good bet for the second revision on June 28th.

As suggested, however, by the just-published (May 18th) benchmark revisions to Manufacturers' Shipments and related series, what happens in the next month or so with existing GDP reporting, should be slammed by the July 29th benchmark revisions to the national income accounts. Formal recession recognition should follow in response to the GDP revisions, once that benchmarking is absorbed and assessed by the economics community and the financial markets.

The Economic Recovery Has Not Been As Strong as Previously Indicated. In current dollars, before any adjustment for inflation, the differences between the pre- and post-benchmark-revision numbers were meaningfully-negative for the regular reporting of the Census Bureau's "Manufacturers' Shipments, Inventories and Orders (M3) Survey," which also is the source of the monthly reporting on New Orders for Durable Goods ["M3" here is a report title, not related to the money supply]. Numerous surveys of earlier periods—with better-quality information—were incorporated into the benchmarking process (*Census Press Release*). Although the revisions went back to 1997, the more-significant changes began to appear in the late-2000s and accelerated post-2011, as seen in the accompanying graphs.

ShadowStats regularly tracks and reports on New Orders for Durable Goods, a reliable and traditional, leading indicator of broad U.S. economic activity. It signals shifts in business activity for up to two quarters into the future (see *Commentary No. 802*).

Considering the net revisions to the levels of various M3-Report measures for March 2016, both before and after the benchmarking, broad economic activity is not as previously indicated. It is weaker, it is going to be weaker-than-expected, going forward and existing GDP reporting is going to revise lower in the July 29th benchmarking. That last matter already was set in motion by a major downside benchmark revision to the industrial production series (see *Commentary No. 776-A*).

With the headline detail for March 2016 New Orders (including durables) revised lower by 1.6% (-1.6%), Shipments revised lower by 2.0% (-2.0%), Inventories also revised lower by 2.0% (-2.0%) and Unfilled Orders revised lower by 4.5% (-4.5%), business that purportedly already was in hand, was not. That previous overstatement of activity had been building up since about 2012.

Just Lost 12% (-12%) of the Shipments Pick-Up Since the 2009 Economic Trough. Measured in constant dollar terms (billions of 2009 dollars), as deflated with the PPI inflation measure for Manufactured Goods, the difference between the pre- and post-benchmarking numbers was of substance. Consider that real Manufacturers' Shipments hit a monthly trough of \$356.9 billion (not annualized) in May 2009, down by \$106.4 trillion from peak monthly activity of \$463.3 billion in January 2008, again, all these numbers are adjusted and "standardized" for official inflation. Before the benchmarking, May 2016 stood at \$431.9 billion, having recovered \$75.0 billion in monthly activity from the economic trough. Post-benchmarking, that recovery stood at \$66.0 billion, where 12% of the purported monthly gains in real Manufacturers' Shipments disappeared in revision.

Graphs Show the Restated Manufacturing Sector Activity. The first two Graphs 1 and 2, reflect the revisions in level for the broad Manufacturer's Shipments category, both before and after inflation adjustment. Graphs 3 to 12 show various versions and time scales of the key New Orders for Durable Goods series, both in aggregate and net of commercial or non-defense aircraft, as well as on a monthly basis and as smoothed using a six-month moving average. All the durable goods graphs are in real or inflation-adjusted terms.

Schedule of Graphs

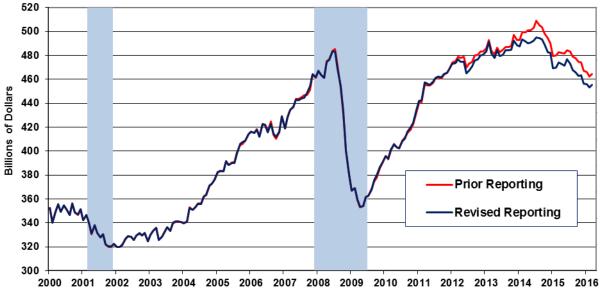
- **Graph 1: Benchmarked Manufacturers' Shipment Nominal Terms**
- Graph 2: Benchmarked Manufacturers' Shipments Constant 2009 Dollars
- **Graph 3: New Orders for Durable Goods, Monthly Constant 2009 Dollars**
- Graph 4: New Orders for Durable Goods, Monthly Constant 2009 Dollars
- Graph 5: New Orders for Durable Goods, Six-Month Moving Average Constant 2009 Dollars
- **Graph 6: New Orders for Durable Goods, Ex-Commercial Aircraft, Monthly Constant 2009 Dollars**
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- Graph 9: Revised New Orders for Durable Goods, Monthly Constant 2009 Dollars
- *Graph 10: Corrected, New Orders for Durable Goods, 6-Month Moving Average
- Graph 11: Revised New Orders for Durable Goods Ex-Commercial Aircraft Constant 2009 Dollars *Graph 12: Corrected, Durable Goods Ex-Commercial Aircraft, Six-Month Moving Average

^{*}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. The correction process used for producing *Graphs 10* and *Graph 12* is described in the *Opening Comments* of *Commentary No. 802*.

Graph 1: Benchmarked Manufacturers' Shipment – Nominal Terms

Benchmarked Manufacturers' Shipments, All Industries Billions of Nominal Dollars, Not Adjusted for Inflation

Billions of Nominal Dollars, Not Adjusted for Inflation
To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



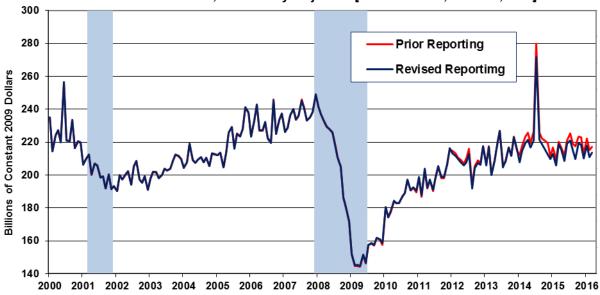
Graph 2: Benchmarked Manufacturers' Shipments - Constant 2009 Dollars

Benchmarked Manufacturers' Real Shipments, All Industries Billions of Constant 2009 Dollars, Deflated by PPI Manufactured Goods To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



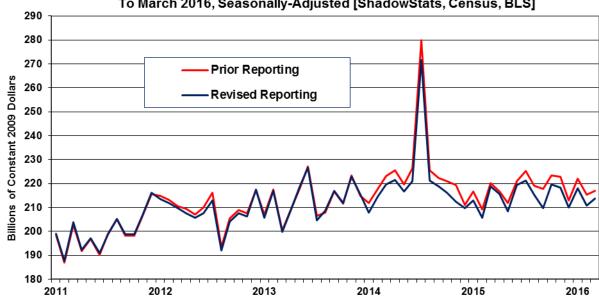
Graph 3: New Orders for Durable Goods, Monthly – Constant 2009 Dollars

Benchmarked Real New Orders for Durable Goods Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



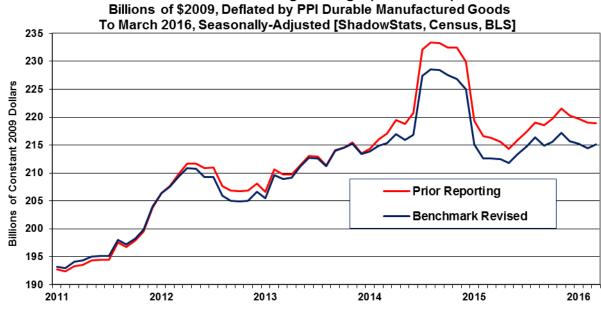
Graph 4: New Orders for Durable Goods, Monthly - Constant 2009 Dollars

Revisions to Real New Orders for Durable Goods - Monthly Billions of Constant 2009\$, Deflated by PPI Durable Manufactured Goods To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 5: New Orders for Durable Goods, Six-Month Moving Average - Constant 2009 Dollars

Revisions to Real New Orders for Durable Goods Six-Month Moving Average (2011-2016)



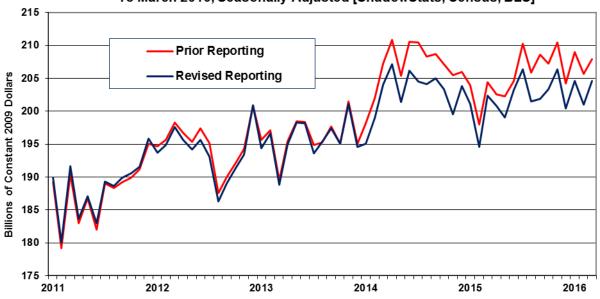
Graph 6: New Orders for Durable Goods, Ex-Commercial Aircraft, Monthly – Constant 2009 Dollars

Benchmarked Real Orders (Ex-Commercial Aircraft) Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



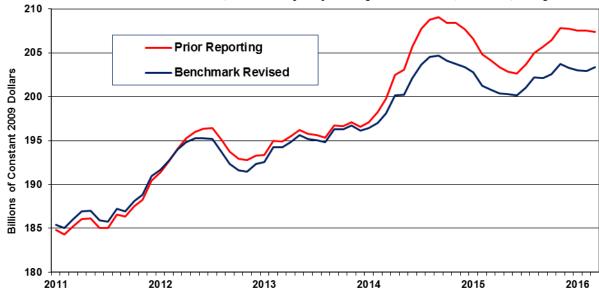
Graph 7: New Orders for Durable Goods, Ex-Commercial Aircraft, Monthly – Constant 2009 Dollars

Revisions to Real New Orders, Ex-Commercial Aircraft
Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods
To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



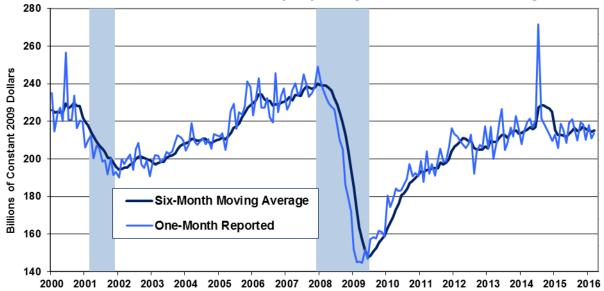
Graph 8: Durable Goods, Ex-Commercial Aircraft, 6-Month Moving Average — Constant 2009 Dollars

Revisions to Real New Orders, Ex-Commercial Aircraft 6-Month Moving Avg, Deflated by PPI--Durable Manufactured Goods (\$2009) To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



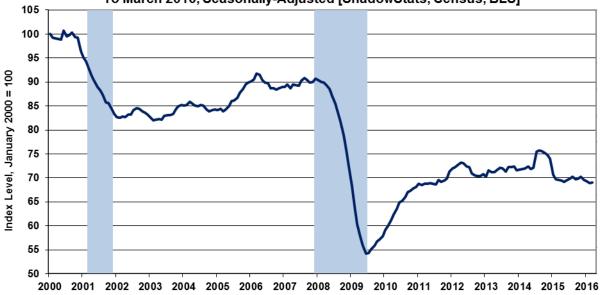
Graph 9: Revised New Orders for Durable Goods, Monthly – Constant 2009 Dollars

Benchmarked Real New Orders for Durable Goods Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



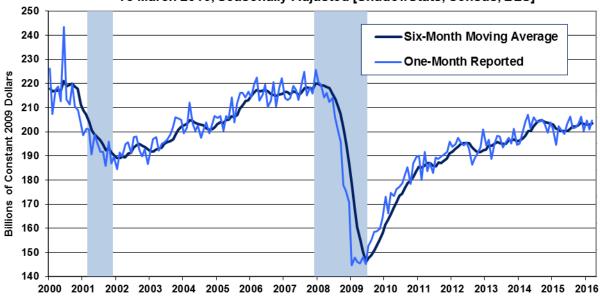
Graph 10: Corrected, New Orders for Durable Goods, 6-Month Moving Average

Benchmarked Corrected Total Real Durable Goods Orders 6-Month Moving Average, Deflation Corrected for Hedonic Adjustments To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 11: Revised New Orders for Durable Goods Ex-Commercial Aircraft – Constant 2009 Dollars

Benchmarked Real Orders (Ex-Nondefense Aircraft) Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]

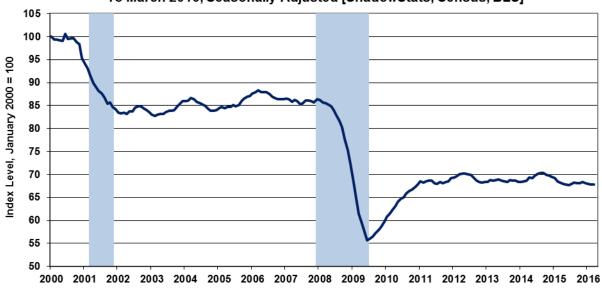


Graph 12: Corrected, Durable Goods Ex-Commercial Aircraft, Six-Month Moving Average

Benchmarked, Corrected Real Durable Goods Orders,

Ex-Nondefense Aircraft

6-Month Moving Average, Deflation Corrected for Hedonic-Adjustments To March 2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



Today's *Supplemental Commentary* (May 20th). With today's *Supplemental Commentary* a day later than planned originally, we have picked up this morning's release of April 2016 Existing-Home Sales.

That material is covered only in today's *Reporting Detail*, and it also will be repeated and supplemented with detail from next week's April New-Home release in *Commentary No. 808* of May 26th, as planned originally.

The *Week Ahead* section previews next week's reporting of the April New Orders for Durable Goods and New-Home Sales, and prospects for the first revision to first-quarter 2016 GDP, as otherwise reviewed in the opening *GDP Outlook and Durable Goods Revisions* section.

REPORTING DETAIL

EXISTING-HOME SALES (April 2016)

Down-Trending Low-Level Sales Stagnation Continued. Despite a 1.7% monthly gain, and in the context of an upside revision to March 2016 detail, April Existing-Home Sales remained deep in depression (see *Commentary No. 754*), down by 25% (25%) from its pre-recession peak. Smoothed with a six-month moving average, Existing-Home sales activity held in down-trending, low-level stagnation, having turned to the downside in the latter part of 2015 and having continued in that pattern through today's April 2016 reporting. That said, the moving average likely will regain some stability and flatten out temporarily in the next couple of months, as some unusually-volatile months worked of the average.

This series never recovered from the economic collapse into 2009, a common issue in the residential real estate industry. Indeed, after going through a period of protracted, low-level stagnation and non-recovery, general housing construction and sales activity broadly have begun to turn down anew.

Updated in <u>Commentary No. 806</u>, 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 real estate and personal consumption.

Indeed, Existing-Home Sales activity in April 2016 still was down by a headline 25.0%% (-25.0%) from its June 2005 pre-recession peak, a high that has not been matched since the economic collapse into 2009. In like manner, April 2016 headline monthly Housing Starts remained down by 48.4% (-48.4%) from their January 2006 pre-recession high.

Headline April Detail for Existing-Home Sales. Based on actual closings of home sales, the National Association of Realtors® (NAR) reported this morning (May 20th) a seasonally-adjusted, headline monthly gain of 1.7% in April 2016 Existing-Home Sales, versus an upwardly revised 5.7% [previously 5.1%] monthly gain in March 2016 and an unrevised contraction of 7.3% (-7.3%) in February. On a year-to-year basis, April 2016 sales rose by 6.0%, versus a revised gain of 2.1% [previously up by 1.5%] in March 2016 and an unrevised annual gain of 2.0% in February 2016. Net of prior-period revisions, the month-to-month April gain was 2.3%, versus the headline 1.7% uptick.

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 a revised annualized pace of 7.9% [previously 7.1%]. Based just on the April 2016 detail in this series of high month-to-month volatility, second-quarter 2016 is on early track for an annualized quarterly gain of 11.8%.

While the disruptions to the pattern of regular month-end home- sales closings from new mortgage regulations, appear to have been resolved (see <u>Commentary No. 782</u>), 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 in earlier in 2015, again, it turned to downtrending late in 2015, as can be seen in *Graph 15*.

Proportion of Distressed Sales Declined to 7% in March, with All Cash Sales Easing to 24%. The NAR estimated the portion of April 2016 sales in "distress" eased in the month to 7% (5% foreclosures, 2% short sales), from 8% (7% foreclosures, 1% short sales) in March 2016, and from 10% (breakout not available) in April 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 24% of April 2016 activity. That was down from 25% in March 2016, but at the same level as 24% in April 2015.

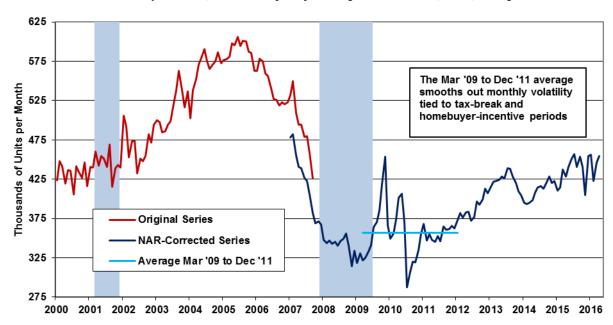
Existing-Home Sales Graphs. Graph 13 shows the traditional headline Existing-Home Sales monthly detail. Such is supplemented by Graph 15 of the Six-Month Moving Average of Existing-Home Sales. Unlike the levels shown Graph 13 of the monthly series, there are no special averages to smooth the effects 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 13.

Accompanying the Existing-Home Sales plots are comparative graphs of April 2016 aggregate Housing Starts activity, from yesterday's <u>Commentary No. 807</u>, where both series reflect activity in terms of single- and multiple-housing units (see *Graphs 14* and *15*).

Graph 13: Existing-Home Sales – Monthly Level

Existing-Home Sales (Monthly Rate)

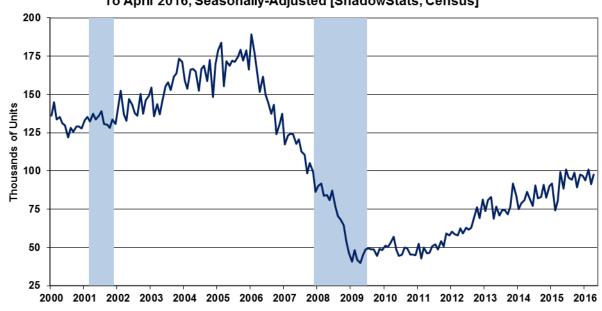
Single- and Multiple-Unit Sales, Non-Annualized Monthly Level To April 2016, Seasonally-Adjusted [ShadowStats, NAR, HUD]



Graph 14: Total Housing Starts - Monthly Level

Aggregate Housing Starts (Monthly Rate)

Single- and Multiple-Unit Starts
To April 2016, Seasonally-Adjusted [ShadowStats, Census]



Graph 15: Existing-Home Sales (Six-Month Moving Average)

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



Graph 16: Total Housing Starts (Six-Month Moving Average)

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



Please Note: The material here on April 2016 Existing Home Sales largely will be repeated in Commentary No. 808 of May 26th, supplementing coverage of the monthly release of April 2016 New-Home Sales.

WEEK AHEAD

Economic Deterioration Should Intensify, Increasingly Pummeling the U.S. Dollar and Boosting Gold, Silver and Oil Prices. Market expectations for business activity should deteriorate at an accelerating pace, amidst intensifying, negative headline economic reporting and Fed-policy waffling 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 the *Opening Comments*, *Commentary No. 807*, *Commentary No. 806*, *Commentary No. 805*, *Commentary No. 804*, *Commentary No. 804*, *Commentary No. 805*, *Commentary No. 806*, *Commentary No. 807*, *Commentary No. 808*, *Commentary No. 808*, *Commentary No. 808*, *Commentary No. 809*, *Commentary No. 799*, *Commentary No. 796* and in *No. 777 Year-End Special Commentary*.

In response to perpetual non-recovery and an intensifying downtrend in underlying economic activity, negative market reactions generally have surfaced in trading of the U.S. dollar and in related financial markets, with upside pressures on gold, silver and oil prices, as seen in recent market activity and as discussed in *Commentary No. 807* and *Commentary No. 799*. These reactions reflect, at least in part, a solidifying sense of Federal Reserve impotence, despite any near-term games being played by the U.S. central bank. Further tightening by the Fed before the election is unlikely—despite the continued "good cop" versus "bad cop" routine being used by Fed officials with the stock market—and renewed quantitative easing could become a target of intensified market speculation as the deepening recession unfolds.

Increasingly-weak headline reporting of the regular monthly economic numbers 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 good odds of a reported outright quarterly contraction in first-quarter 2016 GDP by the June 28th second monthly revision, as well as pending downside revisions to GDP history (including headline quarterly contractions in first-quarter 2015, fourth-quarter 2015 and first-quarter 2016, should it still be in positive territory) come the July 29th annual GDP benchmark revisions.

Consistent with the relatively neutral benchmark revisions to retail sales and housing starts, and in line with recent sharp downside revisions to industrial production and durable goods orders (see the *Opening Comments*), and likely pending negative benchmark revisions to construction spending and trade,

expectations for the GDP benchmarking also should fall sharply. That GDP benchmarking now appears to be 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 and April 2016 detail moved into positive headline territory, in tandem with rising gasoline prices. CPI inflation is on track to rise further in May and likely going forward, still boosted by a 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 <u>Commentary No. 778</u>, a heretofore unheard of spate of "processing errors" surfaced in recent surveys of earnings (Bureau of Labor Statistics) and construction spending (Census Bureau). This is suggestive of deteriorating internal oversight and control of the U.S. government's headline economic reporting. 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 <u>Commentary No. 669</u>). John Crudele of the <u>New York Post</u> continues his investigations in reporting irregularities: <u>Crudele Investigation</u>.

PENDING RELEASES:

Existing- and New-Home Sales (April 2016). April 2016 Existing-Home Sales were released this morning, May 20th, from the National Association of Realtors (NAR) and are updated in today's *Reporting Detail*. The April 2016 New-Home Sales report is due from the Census Bureau on Wednesday, May 25th. Both the Existing-Sales results (summarized from today) and New-Home Sales will be covered in *Commentary No. 808* of May 26th.

Updated in <u>Commentary No. 806</u>, the consumer remains in an extreme liquidity bind, constraining residential real estate activity. 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 has been unable to sustain positive growth in broad U.S. economic activity, particularly as tied to residential real estate, as well as to retail sales and personal consumption.

Smoothed for regular extreme and nonsensical monthly gyrations, a continuing pattern of stagnation or downturn in New-Home Sales also remains likely. Its pattern of low-level stagnation turned from uptrending to down-trending or flat in September 2015. Monthly changes in activity here rarely are statistically-significant, amidst the otherwise unstable headline monthly reporting and revisions.

New Orders for Durable Goods (April 2016). The Census Bureau will report April 2016 New Orders for Durable Goods on Thursday, May 26th, which will be covered in *Commentary No. 808* of that date. In the context of the annual benchmark revisions covered in the opening section of today's missive, aggregate orders likely continued a pattern of down-trending stagnation, net of continuing irregular activity in commercial aircraft orders.

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

Gross Domestic Product (GDP)—First-Quarter 2016, First Revision, Second Estimate. The Bureau of Economic Analysis (BEA) will publish its first revision to, second estimate of first-quarter 2016 Gross Domestic Product (GDP) on Friday, May 27th, which will be covered in *Commentary No. 809* of that date. Initial estimates of the broader measure of first-quarter 2016 Gross National Product (GNP) and the theoretical GDP equivalent of the Gross Domestic Income (GDI) also are scheduled for release. They often offer some unpredictable surprise for the markets.

The outlook for the first revision is discussed in today's opening paragraphs. Despite limited downside revisions in hand for previously-reported first-quarter detail, chances remain good for some downside revision to the initial growth estimate of 0.54% (tied to looming trade detail revisions), but the BEA likely will keep the headline first-quarter GDP detail in positive territory for this revision, lacking a major shift to the downside, so far, in consensus expectations.

That said, the negative benchmark revisions to the series covering Manufacturers' Shipment, Orders and Inventories (including New Orders for Durable Goods) promise meaningful downside adjustments to historical and recent headline GDP growth, come the pending GDP benchmark revisions of July 29th. Formal recession recognition should follow in response to the GDP benchmarking being absorbed and assessed by the economics community and the financial markets.