

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

**COMMENTARY NUMBER 803**  
**First-Quarter 2016 GDP, Velocity of Money, FOMC**

**April 28, 2016**

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**First-Quarter GDP Growth of 0.5% Was Absolute Nonsense**  
**Residential Investment Contributed 0.5% of the 0.5% Headline Growth,  
Yet, Housing Starts Contracted Quarter-to-Quarter**  
**Annual and Quarterly GDP Growth Slowed to Two-Year Lows**  
**Meaningful Downside Revisions Loom for the GDP**  
**Declining Velocity of Money Reflected Slowing GDP Activity**

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*PLEASE NOTE: A Supplemental Commentary covering the annual benchmark revisions to Retail Sales should follow over the weekend of April 30th/May 1st. The next regular Commentary, scheduled for Wednesday, May 4th, will cover the March Trade Balance and Construction Spending. It also will include the annual benchmark revisions to Housing Starts, if the data are available. A subsequent missive on May 6th will cover April labor conditions.*

*Best wishes to all — John Williams*

## OPENING COMMENTS AND EXECUTIVE SUMMARY

**Intensified FOMC Waffling Could Reach a Flipping Point.** Given the continued cautions out of yesterday's (April 27th) Federal Open Market Committee (FOMC) announcement, a further interest rate hike—subsequent to the sole “tightening” action of December 2015—likely is on hold until after the U.S. presidential election. With that election effectively five months off, the U.S. economy and the global financial system likely will face extreme difficulties and turmoil in the interim period. Accordingly, the question well may be whether the Fed's next monetary action will be one of tightening, or perhaps one of moving back into a more-intense form of quantitative easing. With the economy taking a hard hit, even in the context of fluffed-up first-quarter GDP numbers, odds increasingly favor renewed easing, with increased liquidity likely to be needed both by the global banking system and by the U.S. Treasury.

**Nonsense GDP Reporting in the Context of Highly-Charged Political Circumstances and Highly-Vulnerable Financial Markets.** Aside from the headline 0.54% “advance” estimate of annualized real quarterly growth in first- quarter 2015 Gross Domestic Product (GDP) being no more than statistical noise, the detail was nonsense in the context of the “fluff” otherwise built into the headline “guesstimate” by the Bureau of Economic Analysis (BEA). A clean report would have shown a headline quarterly GDP contraction well in excess of 1.0% (-1.0%).

Consider, for example, that first-quarter 2016 residential investment activity, by itself, contributed 0.5% to the headline GDP growth. That effectively was the full amount of the 0.5% annualized real growth just reported for first-quarter 2016 GDP. What is unusual is that residential construction, in the form of housing starts, actually contracted quarter-to-quarter in first-quarter 2016 (see [Commentary No. 801](#)).

The first-quarter residential investment (housing) category rose by 14.8%, in terms of annualized, seasonally- and inflation-adjusted real growth. Yet, the broad housing-starts category (measured in units, free of inflation) fell at a seasonally-adjusted annualized quarterly pace of 0.7% (-0.7%), while the less-comprehensive new home sales (also seasonally-adjusted in units) rose at an annualized pace of 6.2%.

Irrespective of the heavily-gimmicked GDP detail, underlying reality remains that broad U.S. economic activity has entered a renewed downturn, never having recovered its pre-recession peak. First-quarter 2016 GDP activity and other recent GDP reporting likely will revise to headline quarterly contractions in the July 29, 2016 GDP benchmarking, although first-quarter 2016 GDP likely will be in contraction by its May 27th or its June 28th revision.

In this most-politically-sensitive of the popularly followed domestic economic series, there was a particular element of note in the headline detail, where the weaker data tended to be the harder numbers. Growth largely was seen in the softer “services” data, generally fluff-based guesstimates (see the *Growth Distribution* section later in these *Opening Comments*).

Discussed frequently, the GDP does not reflect properly or accurately the changes to the underlying fundamentals that drive the economy. Underlying real-world economic activity has shown 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 late-2014.

The GDP (or the broader GNP 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 days when President Lyndon Johnson reportedly reviewed the numbers before their release, and then would return them to the Commerce Department, if Commerce had gotten them “wrong,” and would keep doing so until Commerce got the numbers “right.” Johnson may not have been the first, but he definitely was not the last president to have a direct interest in the headline GNP or GDP reporting.

Nonetheless, despite all the upside biases and gimmicks built into the GDP reporting, the real world occasionally surfaces in the formal GDP estimates. That likely is happening now, even if we should be in a Johnsonian environment. The “new” recession remains in the process of official unfolding. With major monthly economic series such as retail sales, industrial production, durable goods orders and housing-market measures showing regular quarterly contractions, underlying reality has become weak enough, once again, for headline GDP, GNP and/or GDI to show an ongoing, formal downturn. That initial recognition likely looms within the unfolding timeframe from now through the wake of the July 2016 GDP benchmarking.

**Today’s *Commentary* (April 28th).** The balance of these *Opening Comments* provides summary coverage of the “advance” or first estimate of first-quarter 2016 GDP, and a brief update to *Consumer Conditions*, reflecting March 2016 reporting of the Sentier Median Household Income Index.

The *Hyperinflation Watch* updates the velocity of money for M1, M2 and M3, which usually is done with the first estimate of new quarterly GDP growth. 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. These documents will be updated soon in a new *Special Report*.

The *Week Ahead* section reviews prospective reporting of the March trade deficit and construction spending, as well April employment and unemployment.

**Gross Domestic Product (GDP)—First-Quarter 2016, “Advance” or First Estimate—Growth Slowed Markedly; Downside Revision to Follow.** The “advance” or first estimate of first-quarter 2016 GDP showed a statistically-insignificant, real (inflation-adjusted), annualized, quarterly headline gain of 0.54%. The headline quarterly growth was at an eight-quarter low, down sharply from the headline annualized gains of 1.39% in fourth-quarter 2015, 1.98% in third-quarter 2015 and 3.92% in second-quarter 2015 GDP, as well down from the headline 0.64% growth in first-quarter 2015.

Year-to-year real GDP growth in first-quarter 2016 slowed minimally to 1.95%, still the slowest annual growth in two years, since the headline quarterly GDP contraction in first-quarter 2014. The latest annual growth rate was down from 1.98% in fourth-quarter 2015, from 2.15% in third-quarter 2015, from 2.72% in second-quarter 2015 and from 2.88% in first-quarter 2015.

*Graphs 9 to 12 in the Reporting Detail* plot the latest headline levels of and year-to-year change in real quarterly GDP activity.

***First-Quarter 2016 GDP, First Estimate - Growth Distribution.*** Despite the severely-limited significance of the following detail, it is included for those interested in the reported internal patterns of GDP growth, as indicated by the Bureau of Economic Analysis (BEA). The “advance” estimate of annualized quarterly real growth for first-quarter 2016 GDP was 0.54%, versus 1.39% in fourth-quarter 2015, 1.98% in third-quarter 2015, 3.92% in second-quarter 2015 and 0.64% in first-quarter 2015.

The BEA’s first guess at real first-quarter GDP growth is shown in the following aggregation of contributed growth, broken out by Personal Consumption, Business Investment, Net Exports and Government Spending. The annualized growth number in each sub-category is the additive contribution to the total, headline change in GDP, where  $1.27\% - 0.60\% - 0.34\% + 0.20\% = 0.54\%$ , with the usual rounding difference. [\*Commentary No. 795\*](#) of March 25th detailed the growth-distribution estimate for the third estimate of fourth-quarter GDP.

Regrouped by general product line, the BEA estimated that the headline 0.54% quarterly GDP growth rate included a 1.04% growth-rate contribution from services and a 0.41% contribution from structures, with a growth-rate subtraction of 0.91% (-0.91%) from goods.

***Contributing Growth Factors.*** Headline first-quarter 2016 GDP growth was dominated by the services side of personal consumption, residential investment and unusual investment activity by state and local governments. Everything else largely was in contraction, with the aggregate quarterly and annual growth rates in this heavily overstated GDP, slowing to the weakest headline activity in two years.

- ***Consumer Spending Contributed 1.27% to First-Quarter GDP 2016 Growth; Fourth-Quarter Growth Contribution was 1.66%.*** With only 0.03% being contributed to GDP growth from personal consumption of goods, the less-productive personal consumption of services dominated the headline growth contribution. With unseasonable weather, the 0.26% positive contribution from utilities will be transient. The 0.37% “contribution” from the highly-questionable reporting of health services (ACA, health care and hospitals), remained a dead weight on economic activity. The not accountable “other” services category contributed 0.18% to the GDP growth rate. The remaining 0.43% growth contribution was spread fairly evenly between financial and insurance, food, accommodation, recreational and transportation services.
- ***Business/Residential Investment Subtracted 0.60% (-0.60%) from First-Quarter 2016 GDP Growth; Subtracted 0.16% (-0.16%) from Fourth-Quarter GDP Growth.*** Quarterly contractions were seen in nearly all areas, including inventory building, with the major exception of a 0.49% growth contribution to the GDP from residential investment. Discussed in the opening paragraphs of these *Opening Comments*, the purported housing gain ran directly counter to underlying headline activity in the quarter. With a slowing in inventory building reflecting a negative GDP growth contribution of 0.33% (-0.33%), headline final sales—GDP net of inventory change—rose at an annualized quarterly pace of 0.87% in first-quarter 2016.
- ***Net Exports Subtracted 0.34% (-0.34%) from First-Quarter 2016 GDP Growth; Subtracted 0.14% (-0.14%) from Fourth-Quarter Growth.*** In a questionable narrowing of the “advance” March 2016 trade deficit, the BEA picked up enough relative activity to keep the headline GDP

growth more than 0.1% above zero. This likely will revise sharply to the negative side, in the second estimate, first revision of May 27th, as discussed in the *Week Ahead*.

- ***Government Spending Contributed 0.20% to First-Quarter 2016 GDP Growth; Contributed 0.02% to Fourth-Quarter Growth.*** With seasonally-adjusted federal government spending subtracting 0.11% (-0.11%), of which defense spending subtracted 0.15% (-0.15%) from the headline GDP growth rate, state and local government spending contributed 0.31% to the headline growth number, dominated by the “gross investment” category.

***Implicit Price Deflator (IPD).*** As general guidance, the weaker the inflation rate used in deflating an economic series, the stronger will be the resulting inflation-adjusted growth. The headline reading on first-quarter 2016 GDP inflation, or the implicit price deflator (IPD), was an annualized quarterly increase of 0.70%. Such followed 0.94% in fourth-quarter 2015, 1.30% in third-quarter 2015, 2.13% in second-quarter 2015 and 0.12% in the first-quarter 2015.

Year-to-year, first-quarter 2016 IPD inflation was 1.27%, versus 1.12% in fourth-quarter 2015, 0.90% in third-quarter 2015, 0.98% in second-quarter 2015 and 1.01% in first-quarter 2015.

For comparison, on an annualized quarter-to-quarter basis, the seasonally-adjusted Consumer Price Index CPI-U fell by 0.31% (-0.31%) in first-quart 2016, versus a 0.77% gain in fourth-quarter 2015, 1.38% in the third quarter, 2.44% in the second quarter and a quarterly contraction of 2.86% (-2.86%) in the first quarter.

Unadjusted, year-to-year quarterly CPI-U inflation showed a year-to-year first-quarter 2016 gain of 1.08%, versus a fourth-quarter 2015 gain of 0.47%, a third-quarter 2015 gain of 0.11%, an annual contraction of 0.04% (-0.04%) in second-quarter 2015 and a year-to-year decline of 0.06% (-0.06%) in first-quarter 2015.

***Gross National Product (GNP) and Gross Domestic Income (GDI) Reporting on May 27th.*** Discussed in the *Reporting Detail*, initial reporting of first-quarter 2016 GNP and GDI are delayed one month until May 27th—such is standard practice—due to reporting-quality and data-availability issues.

***Underlying Economic Reality.*** The U.S. economy continued in an as-yet-unrecognized “new” recession, although headline monthly reporting activity in subsidiary economic series generally has continued to move market expectations in that direction (the ShadowStats contention remains that the “new” downturn is in reality just a continuation of the economic crash into 2009). The “advance” guesstimate of first-quarter 2016 GDP was a statistically-insignificant 0.54%. Initially in positive territory, that growth rate is a good bet to revise into negative territory in the May 27th first revision. Eventual, headline quarterly contractions loom not only for first-quarter 2016 GDP, but also, come the July 29th GDP benchmark revisions, at least minimally for first-quarter 2015 and fourth-quarter 2015.

The “advance” estimate of 0.54% first-quarter 2016 GDP growth followed headline growth of 1.39% fourth-quarter 2015 GDP, 1.98% in third-quarter 2015, 3.92% in second-quarter 2015 and 0.64% in first-quarter 2015. First-quarter 2015 GDP had turned negative in its first revision, only to be pushed back into positive territory with the GDP benchmarking of July 2015. The looming July 2016 benchmarking should not be so kind, and serves as an outside event for triggering formal recognition of a “new” recession that likely will be timed from December 2014. Recognition of the “new” recession otherwise



could follow shortly, upon any earlier reporting of a first-quarter 2016 GDP contraction, as may be seen with May 27th's first revision.

Formal headline GDP activity continues to run well above economic reality as signaled by a number of business indicators, such as corporate revenues, domestic freight activity, domestic consumption of petroleum products and a variety of better-quality economic series, such as industrial production, new orders for durable goods and real retail sales. Even housing starts signaled fourth-quarter 2015 and first-quarter 2016 contractions. These circumstances have been detailed most recently in [Commentary No. 801](#), [Commentary No. 800](#), [Commentary No. 799](#) and [Commentary No. 796](#).

Accordingly, the broad ShadowStats economic outlook has not changed, and the gist of most of the following text remains along the lines of other recent GDP *Commentaries*. The details and numbers, however, are updated to reflect today's reporting.

Discussed in [Commentary No. 739](#), which covered the 2015 GDP annual benchmark revisions, annual benchmarkings increasingly are reshaping the GDP-reporting history into a post-2007 collapse pattern of successive multiple dips. The looming July 29th revisions should do more of the same. By the likely next comprehensive GDP benchmark revision in July 2018, post-2007 historical GDP reporting should be confirming a non-recovering, multiple-dip economic collapse, although this year's benchmarking should leave the new historical headline detail showing at least a "new" recession.

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

Ongoing monthly economic-reporting detail for key series, however, increasingly are confirming the patterns of declining economic activity, which should engender a formal recession call, irrespective of the timing of actual, headline quarterly contractions in real GDP.

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 and July 2014 GDP benchmark revisions—including a recent pattern of inclusion and estimation of highly-questionable data on the Affordable Care Act (ACA)—a consistent, fundamental pattern of faltering historical activity is shown in the accompanying "corrected" GDP graphs.

Please note that the pattern of activity shown for the "corrected" GDP series is much closer to the patterns shown in the graphs of unemployment (see [No. 796](#)), monthly real median household income and other consumer measures (see [No. 777](#)). This also has been detailed in [No. 742 Special Commentary: A World Increasingly Out of Balance](#) and [No. 692 Special Commentary: 2015 - A World Out of Balance](#). Similar patterns are found in economic series not otherwise reliant on understated inflation for their reported growth, such as housing starts (see [No. 801](#) and [2014 Hyperinflation Report—Great Economic Tumble – Second Installment](#)).

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

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

The first set of graphs (2000-to-date) is the one that traditionally has been incorporated in the GDP *Commentaries*. *Graphs 1* and *2* show short-term detail, expressed on an index base where first-quarter 2000 = 100.0. The second set of graphs (*Graphs 3* and *4*) updates the longer-term detail (1970-to-date), expressed in billions of 2009 dollars as used in the headline GDP reporting. The graphs also show official periods of recession as shaded areas, with ShadowStats-defined recessions indicated by the lighter shading in *Graph 4*, the second graph of the second set, as detailed and published initially in [2014 Hyperinflation Report—Great Economic Tumble – Second Installment](#).

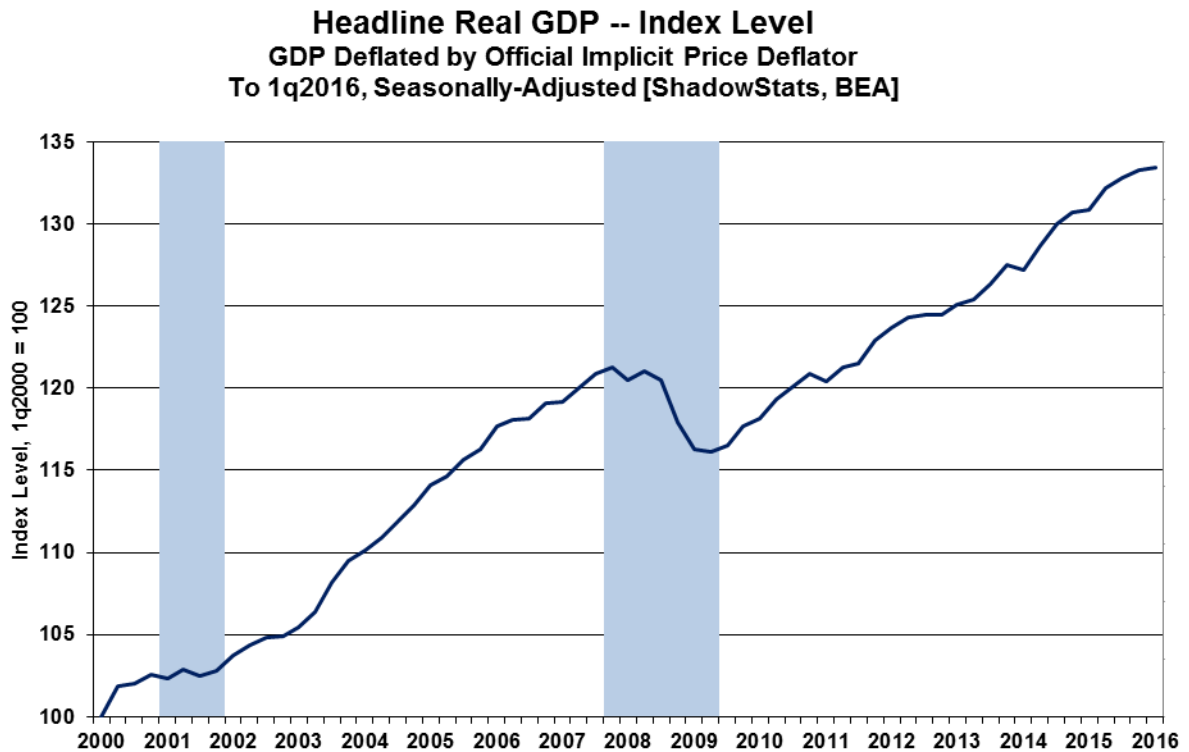
Shown in the first graph of each set (*Graphs 1* and *3*) of official *Headline Real GDP*, GDP activity has been reported above pre-2007 recession levels—in full recovery—since second-quarter 2011, and headline GDP has shown sustained growth since (growth pauses or interruptions for second-half 2012 and first-quarter 2014 excepted). Adjusted for official GDP inflation (the implicit price deflator - IPD), the headline first-quarter 2015 GDP currently stands at 10.0% above its pre-recession peak-GDP estimate of fourth-quarter 2007. In contrast, the “corrected” GDP version, in the second graph of each set (*Graphs 2* and *4*), shows first-quarter 2016 GDP activity down by 7.4% (-7.4%), from its pre-recession peak of first-quarter 2006.

Further, discussed broadly in the second installment of the *Hyperinflation Report*, no other major economic series has shown a pattern of official full economic recovery and meaningful expansion thereafter, consistent with the headline GDP reporting. Such is covered in the recent discussions on industrial production, real retail sales and real durable goods orders (see [No. 800](#), [No. 799](#) and [No. 802](#)). Either the GDP reporting is wrong, or all other major economic series are wrong. While the GDP is heavily modeled, imputed, theorized and gimmicked, it also encompasses reporting from those various major economic series and private surveys, which still attempt to measure real-world activity. Flaws in the GDP inflation methodologies and simplifying reporting assumptions have created the “recovery.”

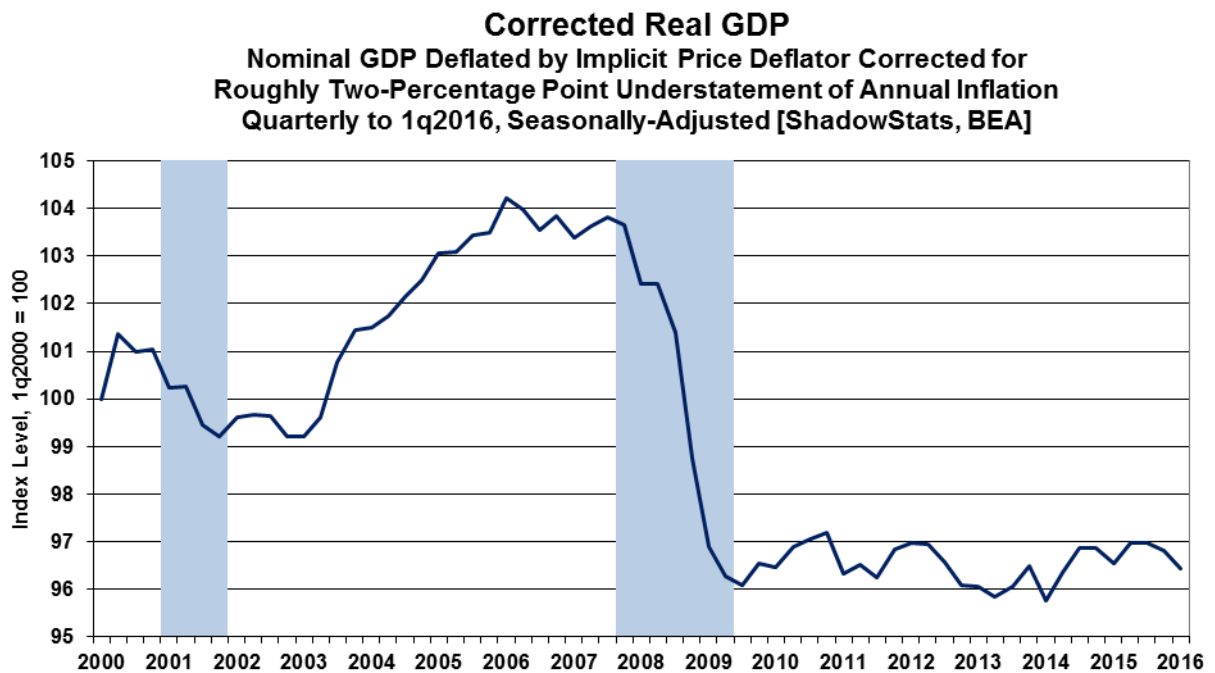
Again, the second graph in each series (*Graphs 2* and *4*) plots the *Corrected Real GDP*, corrected for the understatement inherent in official inflation estimates (see [Public Commentary on Inflation Measurement](#)), with the deflation by the implicit price deflator (IPD) adjusted for understatement of roughly two-percentage points of annual inflation in recent years. The inflation understatement has resulted from hedonic-quality adjustments, also as discussed in the *Hyperinflation Reports*.

[See Graphs 1 to 4 starting on the next page.]

**Graph 1: Real GDP Index – Headline Real GDP (2000-2016)**

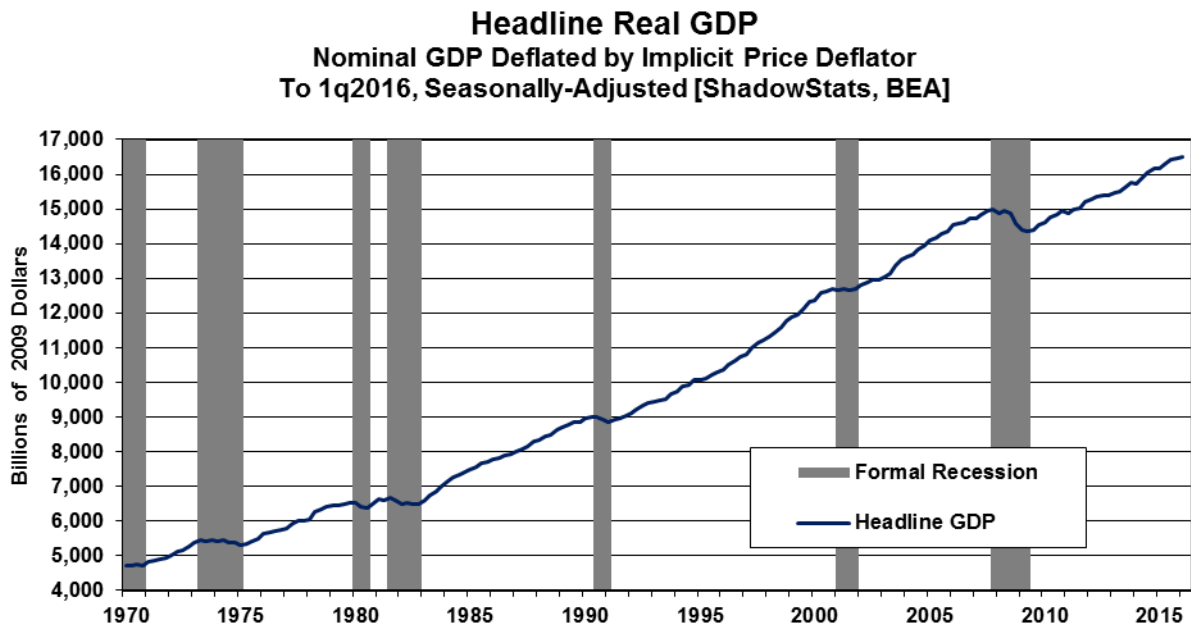


**Graph 2: "Corrected" Real GDP Index (2000-2016)**

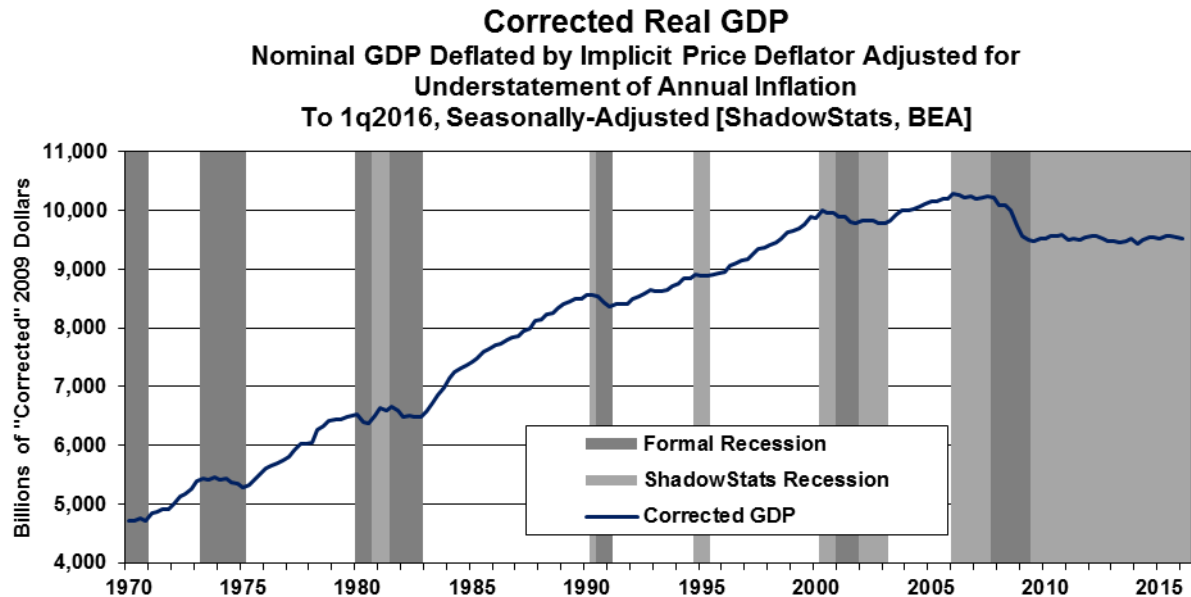




**Graph 3: Real GDP Index (1970-2016)**



**Graph 4: "Corrected" Real GDP (1970-2016)**



**Consumer Conditions: Updated for March 2016 Real Median Monthly Household Income.**

Continuing to constrain personal consumption expenditures, including retail sales, and investment in residential real estate, the ongoing the extreme liquidity bind besetting consumers, briefly is updated here for the March 2016 reading on monthly median household as published this morning (August 28th) by [www.SentierResearch.com](http://www.SentierResearch.com). General consumer conditions previously were updated in prior [Commentary](#)

[No. 802](#) for April 2016 Consumer Confidence from the Conference Board and Early-April Consumer Sentiment from the University of Michigan in [No. 801](#), and for February Consumer Credit Outstanding in [No. 798](#), *Consumer Conditions* last were reviewed fully in [No. 796](#). The next full update of consumer liquidity conditions should follow in *Commentary No. 806*, of May 13th.

Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for an income shortfall, the U.S. consumer is unable to sustain positive growth in domestic personal consumption, including retail sales, real or otherwise, 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.

Generally, the higher and stronger those measures are, the healthier is consumer spending. Although most measures of consumer liquidity and attitudes are off their lows, and one—real monthly median household income—as shown here (*Graph 5*) actually has been boosted to pre-recession levels by a temporary collapse in gasoline prices, these underlying economic fundamentals simply have not supported, and do not support a turnaround in broad economic activity. Never recovering in the post-Panic era, limited growth in household income and credit, and a faltering consumer outlook, have eviscerated and continue to impair broad, domestic U.S. business activity, which feeds off the financial health and liquidity of consumers.

Such has driven the housing-market collapse and ongoing stagnation in consumer-related real estate and construction activity, as well as constraining both nominal and real retail sales activity and the related, personal-consumption-expenditures and residential construction categories of the Gross Domestic Product (GDP), irrespective of today's gimmicked first-quarter GDP guesstimate. Together, those sectors account for more than 70% of total GDP activity in the United States.

With actual, underlying economic activity never having recovered fully from the collapse into 2009 (see *Graphs 2 and 4*), consumers are pulling back on consumption, once again, as evidenced by a renewed slowdown of broad, underlying activity. There has been no economic recovery, and there remains no chance of meaningful, broad economic growth, without a significant, fundamental upturn in consumer- and banking-liquidity conditions.

The relative distribution of income among the general population—income variance—also is a significant indicator of the health of an economy as well as the attendant financial markets. At its current extremes, the imbalances are consistent with continued economic disruption and significant, negative financial-market turmoil (see the general discussion in [No. 777 Year-End Special Commentary](#)).

***Household Income Measures Signal Broad-Based Economic Difficulties.*** Discussed and graphed in [Commentary No. 752](#) are the Census Bureau's most-recent (2014) annual measures of household income. Unexpected weakness in some of the headline annual income data, though partially masked by changes in survey questions, signaled increasing liquidity difficulties for U.S. households.

Shown first in *Graph 5* is the latest monthly real median household income detail through March 2016, as reported this morning (April 28th) by [www.SentierResearch.com](http://www.SentierResearch.com), stalling in statistically-insignificant flutterings around its near-term January 2016 peak .

This measure of real monthly median household income generally can be considered as a monthly version of the annual detail shown in *Graph 6*, but the monthly specifics are generated from separate surveying and questioning by the Census Bureau.

On a monthly basis, when headline GDP purportedly started its solid economic recovery in mid-2009, the monthly household income number nonetheless plunged to new lows. Generally, the income series had been in low-level stagnation, with the recent upturn in the monthly index boosted specifically by collapsing gasoline prices and related negative headline consumer inflation since mid-2014. The index reached pre-recession levels in the December 2015 reporting, but it remains minimally below the pre-recession highs for both the formal 2007 and 2001 recessions. It should continue to top out or turn down anew as consumer inflation rebounds in the months ahead.

Where lower gasoline prices have provided some minimal liquidity relief to the consumer, indications are that any effective extra cash generally has been used to pay down unsustainable debt or other obligations, not to fuel new consumption.

***Differences in the Monthly versus Annual Median Household Income.*** That general pattern of relative historical weakness also has been seen in the headline reporting of the annual Census numbers, shown in *Graph 6*, with the latest 2014 real annual median household income at a ten-year low. The monthly and annual series remain broadly consistent, although based on separate questions within the monthly Consumer Population Series (CPS), as conducted by the Census Bureau.

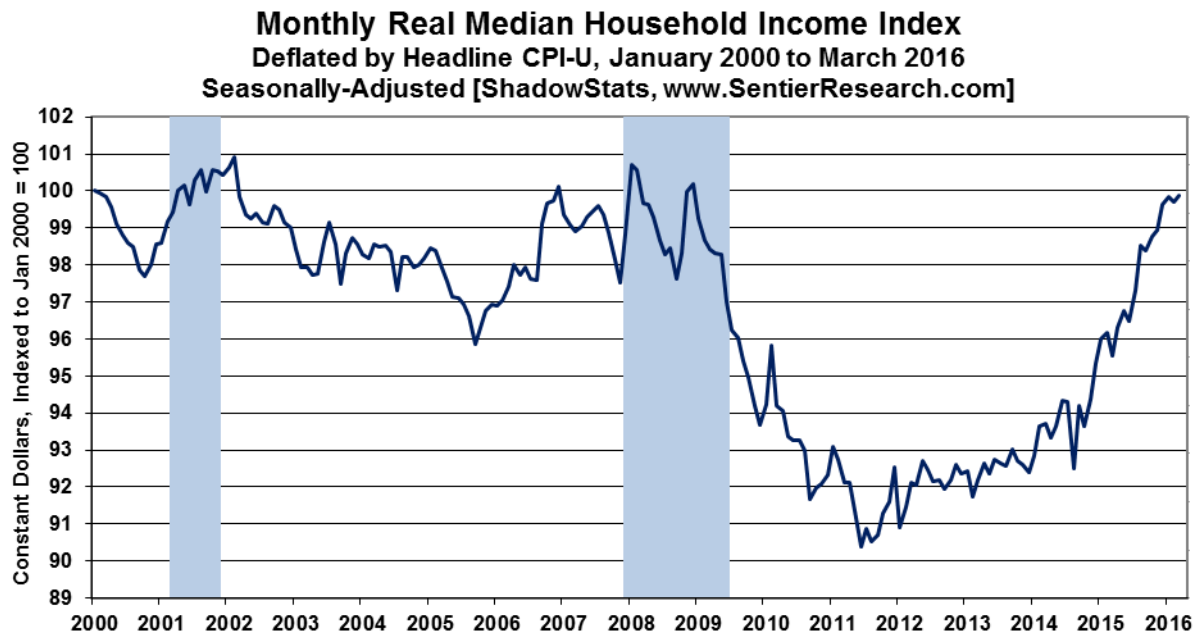
Where Sentier uses monthly questions surveying current annual household income, the headline annual Census detail is generated by a once-per-year question in the March CPS survey, as to the prior year's annual household income.

Discussed in [Commentary No. 752](#), the Census Bureau changed its annual income questionnaire for 2014, with the effect of boosting income levels reported in 2014. The details on changes between 2013 and 2014, however, also were available on a consistent and comparable basis, and the consistent aggregate annual percentage change of median household income in 2014, versus 2013, was applied to the otherwise consistent historical series to generate *Graph 6*.

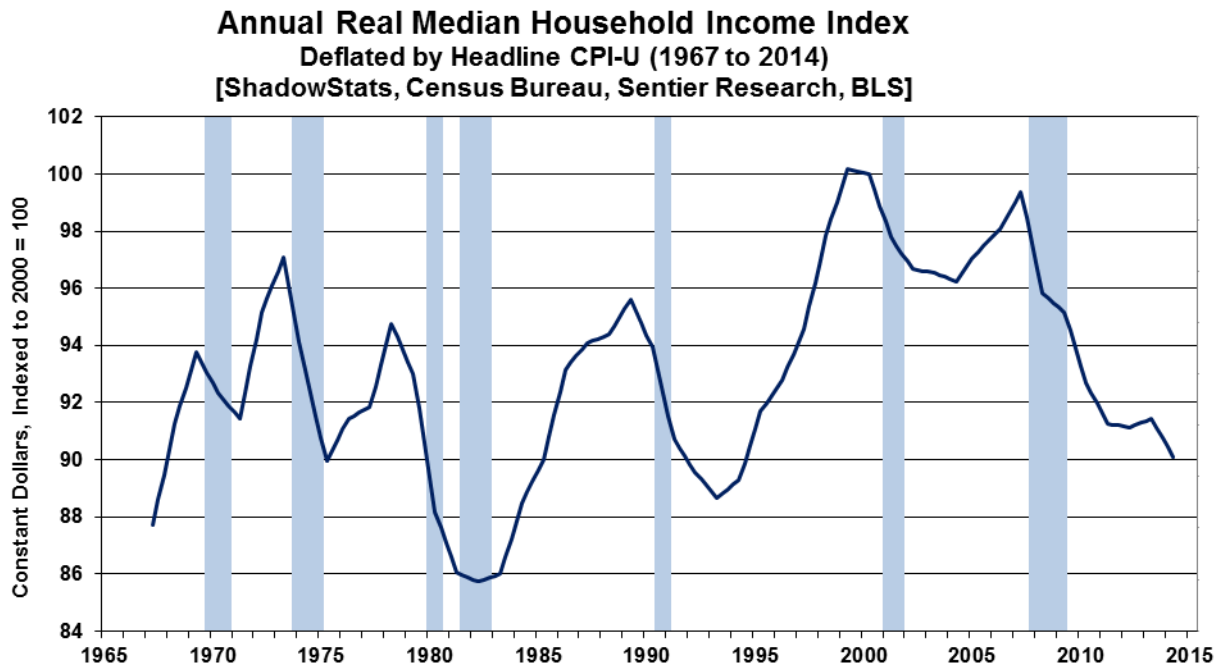
In historical perspective from *Graph 6*, 2011, 2012 and 2013 income levels were below levels seen in the late-1960s and early-1970s, with the 2014 income level below the readings through most of the 1970s, aside from being at a ten-year low.

Such indicates the long-term nature of the evolution of the major structural changes squeezing consumer liquidity and impairing the current economy (see related discussions in [2014 Hyperinflation Report—The End Game Begins](#) and particularly [2014 Hyperinflation Report—Great Economic Tumble](#)).

**Graph 5: Monthly Real Median U.S. Household Income through March 2016**



**Graph 6: Annual Real Median U.S. Household Income through 2014**



[The *Reporting Detail* section includes significant additional information and graphics on the “advance” estimate of first-quarter 2016 GDP.]

## HYPERINFLATION WATCH

### MONETARY CONDITIONS—VELOCITY OF MONEY

**The Velocity of Money Slowed Again in First-Quarter 2016.** Incorporating the headline detail of nominal first-quarter 2016 GDP, as well as detail from the latest Federal Reserve benchmark revisions to money-supply-related data through first-quarter 2016, *Graphs 7* and *8* 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 turns over in a year, versus the broad economy, as measured by the GDP. The velocity is calculated simply as the ratio of the nominal GDP (not adjusted for inflation) to the nominal money supply measure.

Generally, velocity notched lower into fourth-quarter 2015 and first-quarter 2016 for each money-supply measure. Where nominal GDP is in the numerator and the nominal money measure is in the denominator of the velocity ratio, the slowing velocity here indicates a relatively faster decline in nominal economic growth versus the money supply growth. Nominal headline annualized GDP growth slowed in first-quarter 2016 to 1.24%, from 2.34% in fourth-quarter 2015, while annualized growth in the money measures rose. Despite slowing year-to-year growth and downside benchmark revisions, annualized nominal M3 growth rose from 2.88% in the fourth-quarter 2015, to 3.45% in the first-quarter 2016.

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.

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).

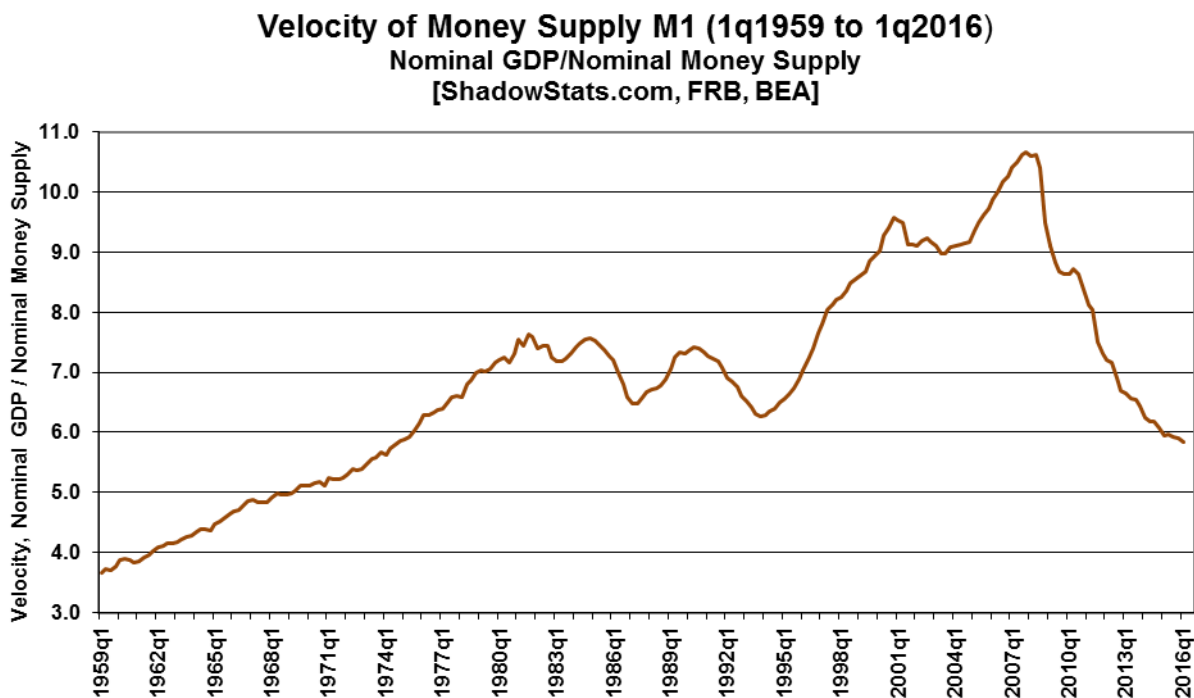
M3 versus M1 and M2 had been showing opposite patterns since 2011, because growth in M3 had been weaker than growth in M1 and M2. The reason behind that difference was that much of the relatively stronger M1 and M2 growth reflected cash moving out of M3 categories—such as large time deposits and institutional 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.

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

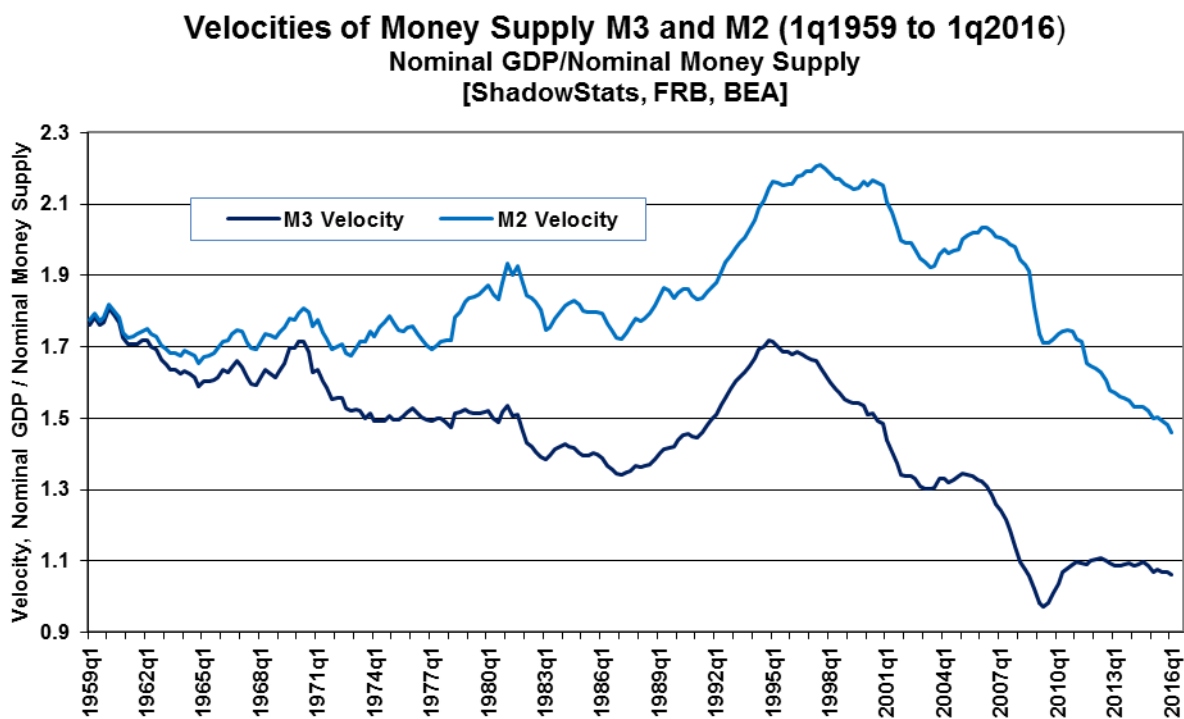


year, or the ratio in nominal terms (not adjusted for inflation) of GDP to the money supply. It is a residual number, not otherwise open to calculation or independent surveying.

**Graph 7: Velocity of Money Supply M1**



**Graph 8: Velocities of Money Supply M2 and M3**



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](#).

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## REPORTING DETAIL

### GROSS DOMESTIC PRODUCT—GDP (First-Quarter 2016, “Advance” or First Estimate)

**Gross Domestic Product—Nonsense Reporting in the Context of Highly-Charged Political Circumstances and Highly-Vulnerable Financial Markets.** *[This section through the “Notes” comes largely from elements of the Opening Comments.]* Aside from the headline 0.54% “advance” estimate of annualized real quarterly growth in first- quarter 2015 Gross Domestic Product (GDP) being no more than statistical noise, the detail was nonsense in the context of the “fluff” built into the headline “guesstimate” by the Bureau of Economic Analysis (BEA). A clean reporting would have shown a headline quarterly contraction well in excess of 1.0% (-1.0%).

Consider, for example, that first-quarter 2016 residential investment activity, by itself, contributed 0.5% to the headline GDP growth, effectively the full amount of the headline 0.5% annualized real growth just reported for first-quarter 2016 GDP. What is unusual with that number is that residential construction, in the form of housing starts, contracted quarter-to-quarter in first-quarter 2016 (see [Commentary No. 801](#)).

The first-quarter residential investment (housing) category rose by 14.8%, in terms of annualized, seasonally- and inflation-adjusted real growth. Yet, the broad housing-starts category (measured in units, free of inflation) fell at a seasonally-adjusted annualized quarterly pace of 0.7% (-0.7%), while the less-comprehensive new home sales (also seasonally-adjusted in units) rose at an annualized pace of 6.2%.

Irrespective of the heavily gimmicked GDP detail, underlying reality remains that broad U.S. economic activity has entered a renewed downturn, never having recovered its pre-recession peak. First-quarter 2016 GDP activity and other recent GDP reporting likely will revise to headline quarterly contractions in the July 29, 2016 GDP benchmarking, although the first-quarter 2016 GDP likely will be in contraction by its May 27th or its June 28th revision.

In this most-politically-sensitive of the popularly followed domestic economic series, there was a particular element of note in the headline detail, where the weaker data tended to be the harder numbers.

Growth largely was seen in the softer “services” data, generally fluff-based guesstimates (see the *Growth Distribution* section in the *Opening Comments*).

Discussed frequently, the GDP does not reflect properly or accurately the changes to the underlying fundamentals that drive the economy. Underlying real-world economic activity has shown 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 late-2014.

The GDP (or the broader GNP 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 days when President Lyndon Johnson reportedly reviewed the numbers before their release, and then would return them to the Commerce Department, if Commerce had gotten them “wrong,” and would keep doing so until Commerce got the numbers “right.” Johnson may not have been the first, but he definitely was not the last president to have a direct interest in the headline GNP or GDP reporting.

Nonetheless, despite all the upside biases and gimmicks built into the GDP reporting, the real world occasionally surfaces in the formal GDP estimates. That likely is happening now, even if we should be in a Johnsonian environment. The “new” recession remains in the process of official unfolding. With major monthly economic series such as retail sales, industrial production, durable goods orders and housing-market measures showing regular quarterly contractions, underlying reality has become weak enough, once again, for headline GDP, GNP and/or GDI to show an ongoing, formal downturn. That initial recognition likely looms within the unfolding timeframe from now through the wake of the July GDP benchmarking.

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### ***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 \$60.4 billion in “residual,” as of the second estimate of fourth-quarter 2014.

**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  $1.01 \times 1.01 \times 1.01 \times 1.01 = 1.0406$  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.

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**Gross Domestic Product (GDP).** Published today, April 28th, by the Bureau of Economic Analysis (BEA), the “advance” or first estimate of first-quarter 2016 GDP showed a statistically-insignificant, real (inflation-adjusted), annualized, quarterly headline gain of 0.54% +/- 3.5% (95% confidence interval). Distribution of first-quarter 2016 GDP growth by major category is detailed in the *Opening Comments*.

The new headline quarterly growth was at a two-year low, down sharply from the headline annualized gains of 1.39% in fourth-quarter 2015, 1.98% in third-quarter 2015 and 3.92% in second-quarter 2015 GDP, as well down from the headline 0.64% growth in first-quarter 2015.

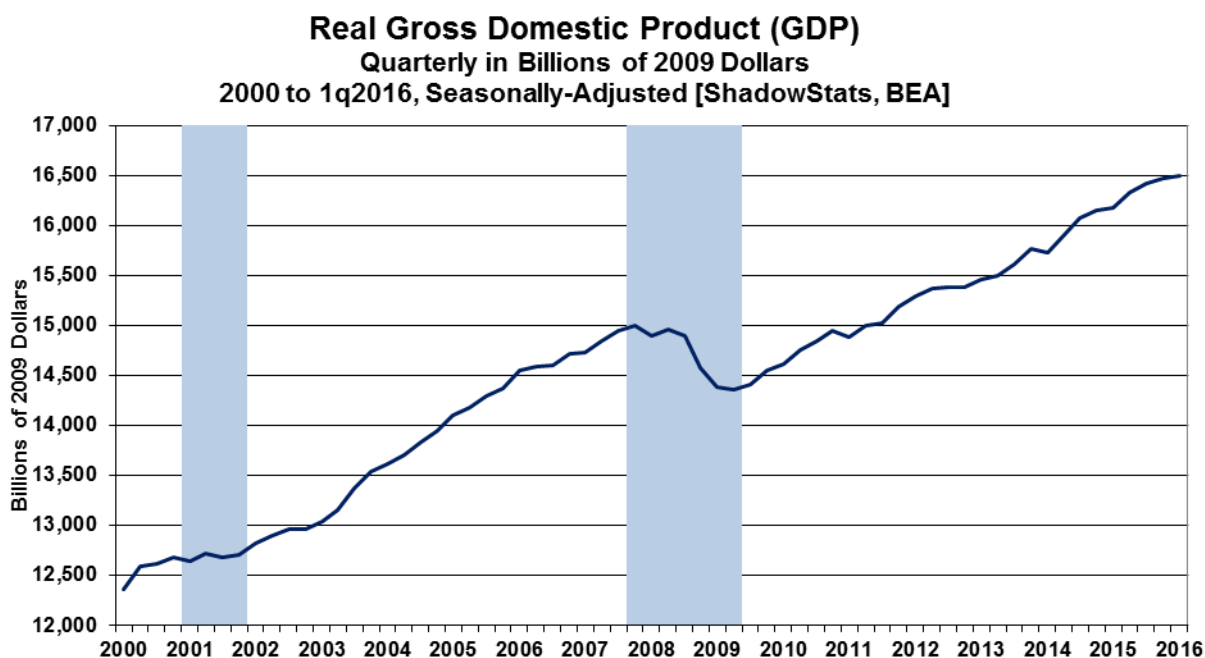
*Graphs 9* and *11* plot the latest headline levels of real quarterly GDP activity, respectively showing short-term (since 2000) and long-term (since the historical onset of the quarterly GDP series in 1947) perspectives.

Shown in *Graphs 10* and *12*, headline year-to-year real GDP growth in first-quarter 2016 slowed minimally to 1.95%, the slowest annual growth in eight quarters, since the headline quarterly GDP contraction in first-quarter 2014. The latest annual growth rate was down from 1.98% in fourth-quarter 2015, from 2.15% in third-quarter 2015, from 2.72% in second-quarter 2015 and from 2.88% in first-quarter 2015.

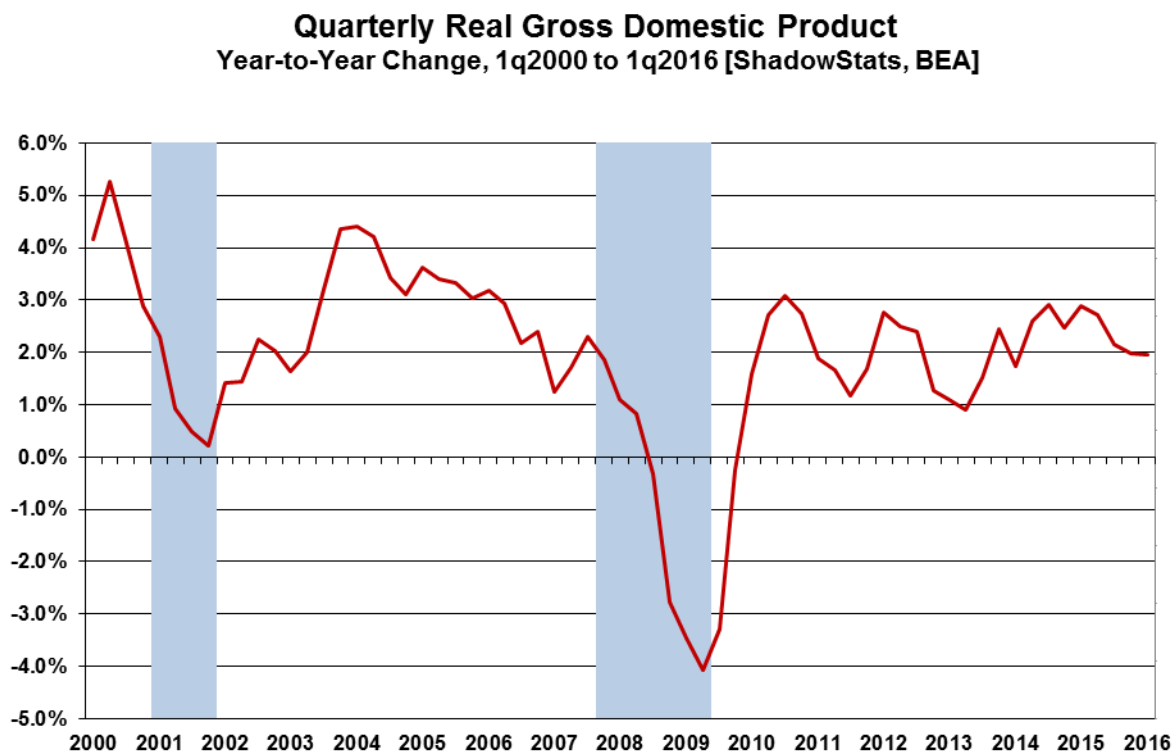
The current quarterly year-to-year growth remained well below the near-term peak of 3.08% in third-quarter 2010. The current-cycle trough in annual change was in second-quarter 2009, reflecting a year-to-year decline of 4.09% (-4.09%). That was the deepest year-to-year contraction for any quarterly GDP in the history of the series, which began with first-quarter 1947 (1948 in terms of available year-to-year detail).

*Graph 10* shows current year-to-year quarterly detail, from 2000-to-date, where *Graph 12* shows the same series in terms of its full quarterly, year-to-year history back to 1948.

**Graph 9: Quarterly GDP in Billions of 2009 Dollars (2000 to First-Quarter 2016)**

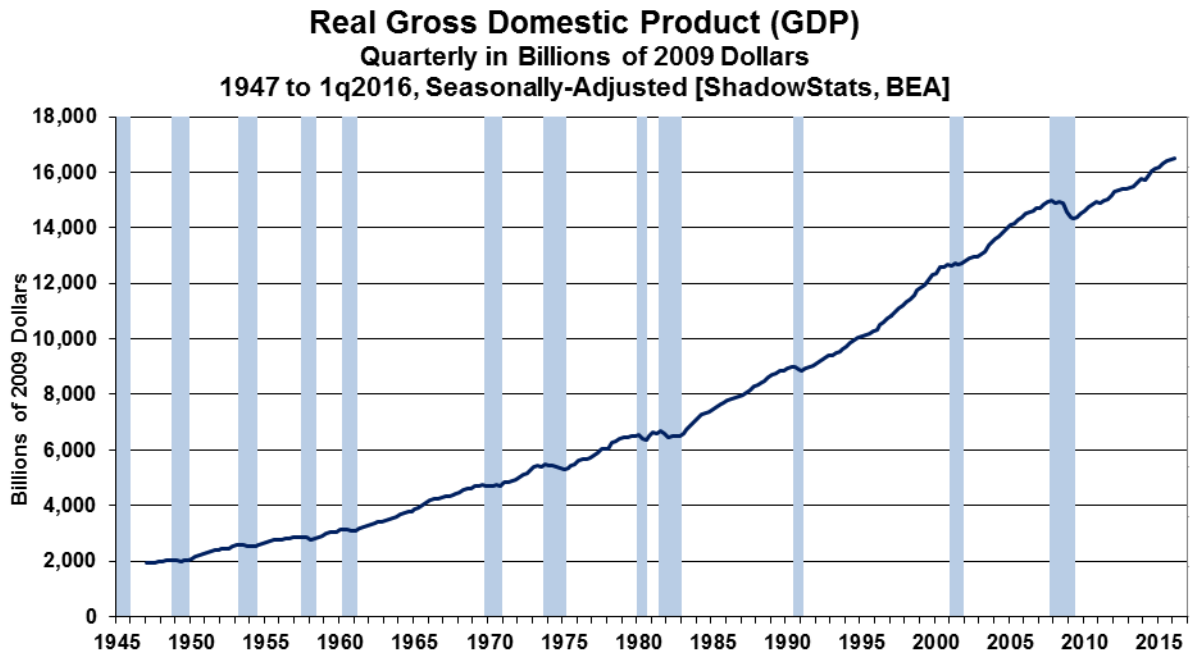


**Graph 10: Quarterly GDP Real Year-to-Year Change (2000 to First-Quarter 2016)**

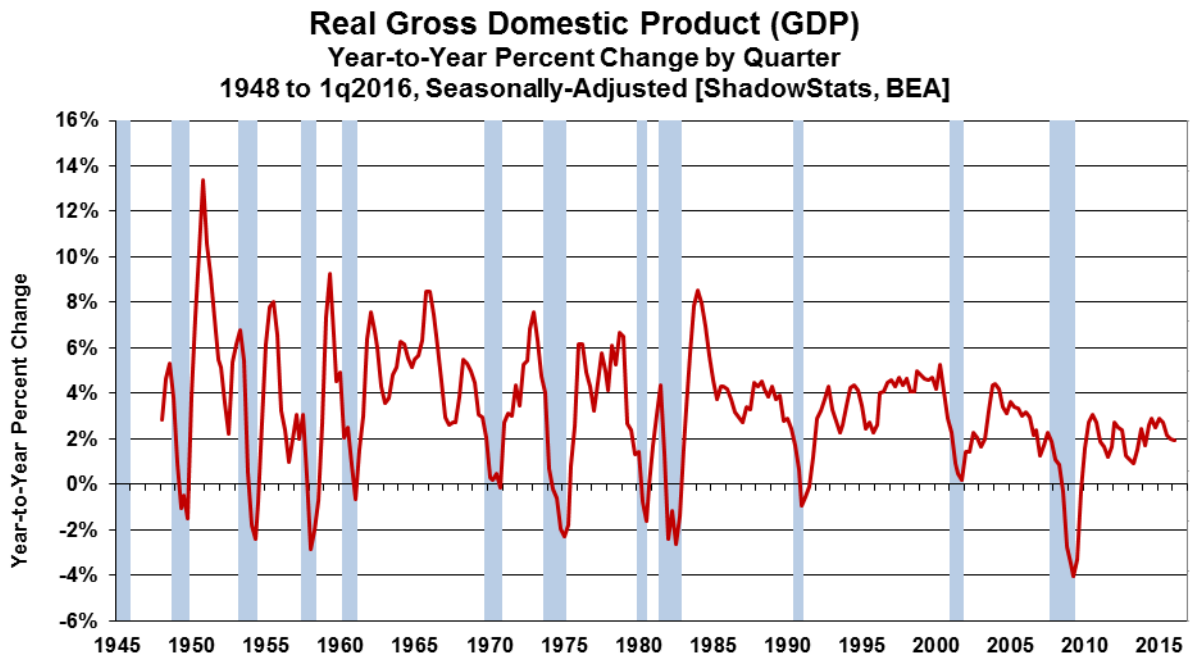




**Graph 11: Quarterly GDP in Billions of 2009 Dollars (1947-2016)**



**Graph 12: Quarterly GDP Real Year-to-Year Change (1948-2016)**



**Implicit Price Deflator (IPD).** As general guidance, the weaker the inflation rate used in deflating an economic series, the stronger will be the resulting inflation-adjusted growth. The initial reading on first-quarter 2016 GDP inflation, or the implicit price deflator (IPD), was an annualized quarterly increase of

0.70%. Such followed 0.94% in fourth-quarter 2015, versus 1.30% in third-quarter 2015, 2.13% in second-quarter 2015 and a benchmarked gain of 0.12% in the first-quarter 2015.

Year-to-year, first-quarter IPD inflation was 1.27%, versus 1.12% in fourth-quarter 2015, 0.90% in third-quarter 2015, 0.98% in second-quarter 2015 and a benchmarked 1.01% annual gain in first-quarter 2015.

For purposes of comparison, on an annualized quarter-to-quarter basis, the seasonally-adjusted Consumer Price Index CPI-U fell by 0.31% (-0.31%) in first-quart 2016, versus a 0.77% gain in fourth-quarter 2015, 1.38% in the third quarter, 2.44% in the second quarter and a quarterly contraction of 2.86% (-2.86%) in the first quarter.

Unadjusted, year-to-year quarterly CPI-U inflation showed a year-to-year first-quarter 2016 gain of 1.08%, versus a fourth-quarter 2015 gain of 0.47%, a third-quarter 2015 gain of 0.11%, an annual contraction of 0.04% (-0.04%) in second-quarter 2015 and a year-to-year decline of 0.06% (-0.06%) in first-quarter 2015 (see [Commentary No. 799](#)).

**Gross National Product (GNP).** The initial estimate of first-quarter 2016 GNP will not be published until the May 27th first-revision to first-quarter 2016 GDP, given data-quality issues, a problem consistent with the headline GDP. Gross National Product (GNP) is 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 Greece and the United States, international reporting standards were shifted some decades back to reporting headline GDP instead of GNP. The unrevised, headline fourth-quarter 2015 annualized real growth was 1.13%, versus 1.35% in third-quarter 2015.

**Gross Domestic Income (GDI).** The initial estimate of first-quarter 2016 GDI also will not be published until the May 27th first-revision to first-quarter 2016 GDP, given the same data-quality issues as with the GNP. Gross Domestic Income (GDI) is the theoretical income-side equivalent of 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, but the discrepancy just as easily could be added to the GDP number. The first and only estimate of headline, annualized real fourth-quarter 2015 GDI growth was 0.91%, down from a third -quarter 2015 annualized growth estimate of 2.04%.

**ShadowStats-Alternate GDP.** The ShadowStats-Alternate GDP estimate for first-quarter 2016 GDP was a year-to-year contraction of 1.8% (-1.8%) versus the annual gain of 1.9% seen in the headline number. Such was against a ShadowStats estimate of a 1.7% (-1.7%) annul decline in fourth-quarter 2015, versus the official fourth-quarter GDP year-to-year gain of 2.0% (see the [Alternate Data](#) tab). The differences between the ShadowStats estimate and the current headline reporting should narrow markedly come the annual GDP benchmark revisions scheduled for July 29, 2016.

While the annualized, real quarterly growth rate is not estimated formally on an alternate basis, the 0.5% annualized, headline quarter-to-quarter gain in first-quarter 2016 was much weaker, net of all the happy assumptions and regular reporting gimmicks coming into today. It is of high risk of revising into an outright quarterly contraction in the second estimate, due on May 27th, and certainly in the benchmark revisions, if it has not happened prior to same. 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 graph, and the longer-term “corrected” graph (see *Graphs 2 and 4*), updated from [2014 Hyperinflation Report—Great Economic Tumble – Second Installment](#) (see also the *Opening Comments* section), 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.

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## 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 begin to deteriorate at an accelerating pace, amidst intensifying, negative headline reporting 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* and [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, negative market reactions have surfaced in trading of the U.S. dollar and in related financial markets, with upside pressures on gold, silver and oil prices, as discussed in [Commentary No. 799](#). These reactions reflect, at least in part, a solidifying 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.

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 an high odds of an outright quarterly contraction for first-quarter 2016 GDP activity in the May 27th 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 benchmark revisions.

In line with recent downside revisions to industrial production and the pending negative benchmark revisions to retail sales, construction, durable goods orders and trade, expectations for the GDP

benchmarking also should fall sharply in the weeks ahead. 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 RELEASES:**

**Construction Spending (March 2016).** The Commerce Department will release its estimate of March 2016 construction spending on Monday, May 2nd. Detail will be covered in *ShadowStats Commentary No. 804* of May 4th. As usual, headline monthly changes should not be statistically-significant. Previous data often are subject to large and irregular revisions. Irrespective of almost perpetually-positive market expectations for this series, the detail should continue in down-trending stagnation, net of inflation.

In what will have some impact on nominal (not-inflation-adjusted) growth, relative to real (inflation-adjusted) growth, inflation (PPI – Final Demand Construction) in March 2016 rose month-to-month by a seasonally-adjusted 0.09% in the aggregate construction spending category. That will reduce the headline monthly real growth, accordingly, versus the nominal performance. Again, in the aggregate construction category, seasonally-adjusted annual inflation for March 2016 was 1.88%, about two percentage points

shy of private surveying. The headline annual inflation will subtract accordingly from the nominal annual growth to generate the real year-to-year growth rate.

**U.S. Trade Balance (March 2016).** The Commerce Department and Bureau of Economic Analysis (BEA) will release their full version of the monthly U.S. trade balance for March 2016 on Wednesday, May 4th, to be covered in *Commentary No. 804* of that date. Such will update the limited and highly suspect “advance” March merchandise trade detail published on April 27th, which was used to help keep the “advance” first-quarter GDP reporting minimally in positive territory. A significantly worse trade number in the full report, which is likely and which has been seen fairly consistently, would do a great deal to move expectations for the May 27th first-quarter GDP revision into an outright quarterly contraction.

**Employment and Unemployment (April 2016).** The Bureau of Labor Statistics (BLS) will publish its April 2016 labor data on Friday, May 6th. Headline detail will be covered in *Commentary No. 805* of the same date. Both the more-inclusive unemployment-rate numbers, as well as the headline payroll-employment details, remain open for negative, headline surprises, given the ongoing, general weakening tone in a number of business indicators, other than has been seen yet in the headline employment and unemployment detail.

Established monthly distortions to payroll employment (excessive upside biases, and publishing irregularities with the concurrent-seasonal-factor process) continue, as do the regular monthly distortions to headline unemployment (definitional issues with “discouraged workers,” and publishing irregularities with the concurrent-seasonal-factor process).

Underlying economic fundamentals continue to deteriorate, suggesting slowing or negative month-to-month growth in headline payrolls, as well as stagnation or deterioration in the broader unemployment rates such as U.6 and particularly the ShadowStats Alternate Unemployment Measure.

As seen with reductions in the narrowly-defined, headline U.3 unemployment rate of recent months and years, any near-term reduction in the U.3 unemployment rate, from the headline 5.0% of March 2016, likely would encompass more unemployed being redefined off the headline unemployment rolls and out of the headline labor force, than the number of unemployed gaining employment.

To the extent that underlying fundamentals continue to shine through all the regular monthly volatility and distortions, headline April activity should continue to favor much weaker-than-expected payroll gains, where consensus forecasts likely will come in below what was a still a heavily-overstated, headline payroll gain of 215,000 in March 2016.

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