

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

COMMENTARY NUMBER 528
First Revision to First-Quarter 2013 GDP

May 30, 2013

1.5% GNP versus 2.4% GDP Reflected Net-Debtor Nation Status of United States

First-Quarter Economic Growth Remained Statistically Insignificant

Real Disposable Income Contracted
Even Adjusted for Year-End Dividend Surge and
Renewed Payroll Tax Withholdings

PLEASE NOTE: The next regular Commentary is scheduled for tomorrow, Friday, May 31st, covering the benchmark revisions to the retail sales series.

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

As discussed in yesterday's (May 29th) [*No. 527: Special Commentary*](#), the broad U.S. economy remains in serious trouble. There was nothing in today's gross domestic product (GDP) reporting by the Bureau of Economic Analysis (BEA) that would alter that conclusion, although there were some interesting and negative twists in the new data.

The general outlooks for the economy, systemic stability, Fed policy, inflation, the U.S. dollar and gold all were covered in that *Special Commentary*, included here by reference and linked above.

GDP Revision Was Little More Than Statistical Noise, But First-Quarter GNP and Disposable Income Had Unusual Features. The revised annualized, real (inflation-adjusted) headline growth for first-quarter 2013 was 2.39%, versus initial reporting of 2.50%. The level of growth still was statistically insignificant, while the magnitude of the revision was little more than statistical noise. The headline first-quarter growth was against a 0.38% headline quarterly gain in fourth-quarter 2012. First-quarter 2013 year-to-year growth revised to 1.78% (initially 1.80%), versus 1.67% in the fourth-quarter.

In terms of inflation, the implicit price deflator (IPD or GDP inflation), revised to an annualized pace of 1.17% (previously 1.20%), versus 0.97% in the fourth-quarter. Year-to-year IPD inflation held at 1.60% in the first-quarter, versus 1.84% in the fourth-quarter.

Disposable Income Tumbled. An important personal income measure declined in first-quarter 2013, both before and after inflation adjustment. In real terms, a decline also was seen, net of significant special items that had exaggerated the contraction. Disposable income effectively is take-home pay, net of taxes, etc. When real disposable income contracts, that usually is a sign of mounting consumer financial stress and a harbinger of weaker economic activity ahead. Due to significant reporting gimmicks, the BEA standardly overstates personal income. That involves, for example, imputing income to individuals for nonexistent “interest income” received as a result of having free checking accounts, or for homeowners equivalent rent, where the BEA estimates what homeowners would pay to themselves to rent their own homes from themselves.

That said, real disposable personal income contracted at an annualized headline pace of 8.44% in first-quarter 2013, versus an 8.90% gain in fourth-quarter 2012. Special factors, however, were involved there. Due to pending year-end tax changes, a number of companies paid their dividends early, spiking fourth-quarter dividend income relative to both third-quarter 2012 and first-quarter 2013. Further, in first-quarter 2013, individuals resumed paying full payroll taxes, which lowered first-quarter take-home income relative to fourth-quarter 2012. Net of those one-time factors, however, the BEA still showed first-quarter real disposable personal income contracting at an annualized quarterly pace of 0.47%.

Slower Gross National Product Growth Should Become the Norm. The gross national product (GNP) once was the benchmark economic statistic. It standardly was used as the broadest measure of economic activity for the United States. President Lyndon Johnson purportedly previewed what then was the GNP reporting. If he did not like what he saw, he sent it back to the Commerce Department, and he kept doing so until they got it right. A variety of stories from both sides of the aisle reflect intermittent direct massaging of the GNP or GDP data, separate from economic-growth-boosting methodological reporting gimmicks that have been introduced over the decades, as well as those pending introduction in the July 31st “comprehensive” revision to the GDP (see the *Reporting Detail* section).

GNP still is the broadest measure in the national income accounts, where GDP is GNP net of trade in factor-income (interest and dividend payments). Global political problems with the GNP concept arose initially with third-world economies, where net-debtor nations usually showed much weaker GNP growth, than GDP growth, due to the net outflow of interest and dividend payments to the net-lender nations. As a result, the GDP became the international reporting standard. When the United States became a net-debtor nation, it shifted its headline reporting from GNP to GDP.

The BEA just published its initial estimate of first-quarter 2013 GNP, with headline, annualized quarterly real growth of 1.46%, versus the headline GDP growth of 2.39%. While the difference there is in the net

relative net outflow of interest and dividend payments, the series has been heavily distorted and particularly volatile in the period following the 2008 financial panic. At such time as the financial system stabilizes, the GNP should settle into a regular pattern of weaker growth, relative to the GDP.

The 1.46% first-quarter 2013 headline GNP growth was against 0.93% headline growth in the fourth-quarter. On a year-to-year basis, first-quarter annual growth was 1.84%, versus 1.62% in the fourth-quarter.

Distribution of GDP Headline Growth. Despite the limited value of the following detail, it is included for those subscribers interested in the reported shifting patterns of GDP growth, as guessed at by the BEA. The revised, statistically-insignificant headline first-quarter GDP growth of 2.39% (previously 2.50%) reflected the following aggregation of contributed growth. Please note that the growth number in each sub-category is the additive contribution to the aggregate, headline change in GDP, where $2.40\% + 1.16\% - 0.21\% - 0.97\% = 2.38\%$, a rounding difference versus the headline 2.39%:

- ***Consumer Spending Contributed 2.40% (Previously 2.24%) to Growth.*** With consumption growth holding steady in the consumer goods sector, consumption in the heavily-modeled and guessed-at services sector still contributed 1.42% (previously 1.58%) of the headline GDP gain. The biggest categories contributing to the services growth remained problematic, including jumps in utility usage (due to unseasonably cold weather) and the heavily guesstimated financial-services and health-care categories.
- ***Business/Residential Investment Contributed 1.16% (Previously 1.56%) to Growth.*** The slowing of the business sector contribution was fully explained by a slowing of the build-up in the highly-volatile and unreliable “change in business inventories” category, to a contribution of 0.63% (previously 1.03%), plus increased residential investment.
- ***Net Exports Subtracted 0.21% (Previously) 0.50% from Growth.*** Although revised in a direction consistent with March 2013 trade-deficit reporting, the net-export account reduction in aggregate GDP growth appears to be overdone. The BEA, however, already knows the pending trade data revisions due to be published June 4th. That is suggestive of some negative trade revisions lurking there.
- ***Government Spending Subtracted 0.97% (Previously 0.80%) from Growth.*** Of the 0.97% reduction to aggregate GDP growth from cuts in government consumption, 0.63% (previously 0.60%) was attributed to reduced defense spending. The balance of government cuts largely was at state and local government levels.

The preceding numbers are official detail, subject still to one regular revision next month, and to a full revamping and restatement in the comprehensive GDP benchmark revision on July 31st.

Comprehensive GDP Benchmark Revision on July 31st. As more-fully discussed in the *Reporting Detail* section, and as discussed here previously, the annual GDP revisions due for release on July 31st will redefine the GDP series and restate historical information back to 1929. Revised economic data of recent years should show the severe recession to have been more protracted and more intense than previously reported, along with a fair chance of suggesting that the official GDP started to turn down anew, in 2012. Such revisions would be consistent with what likely will become recognized eventually as the second dip in a double- or multiple-dip recession, co-joined with the formal 2007-to-2009 recession.

Economic Reality. This most-worthless and most-heavily-politicized of government economic series does not reflect properly or accurately the changes to the underlying fundamentals that drive the numbers. Underlying real-world economic activity suggests 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 second- and third-quarter 2012 (see [Special Commentary \(No. 485\)](#) and [Hyperinflation 2012](#)). That pattern is shown in the “corrected” GDP graph in the next sub-section.

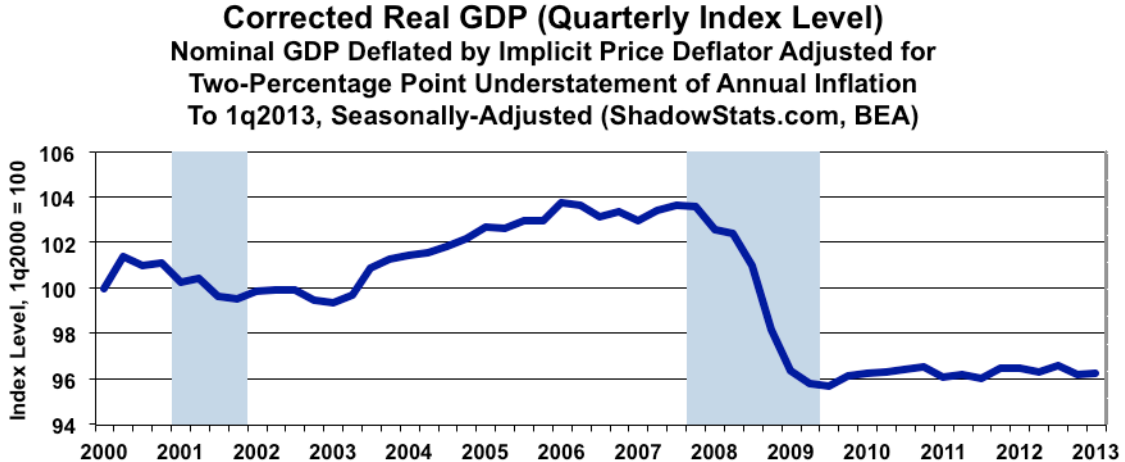
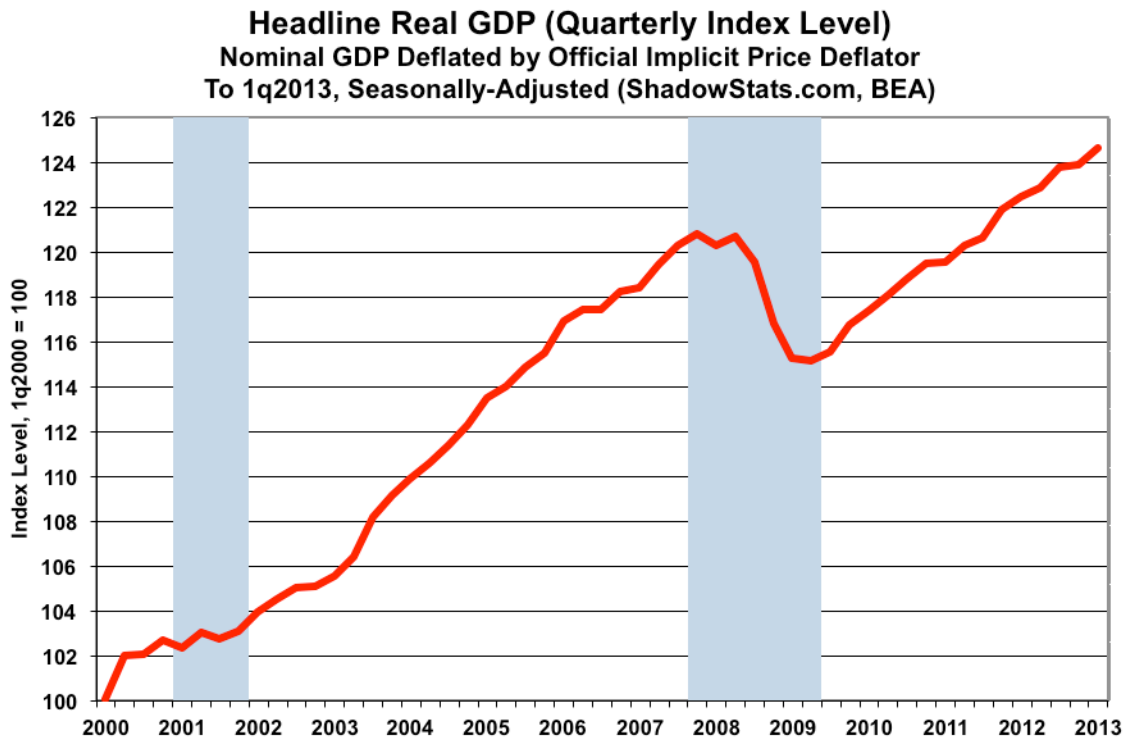
As suggested by the latest detail on household income and consumer, as graphed and discussed in the just-published [No. 527: Special Commentary](#), a sustainable recovery could not have taken place since 2009, and a recovery will not be forthcoming until the consumer’s structural income and liquidity problems are resolved.

Corrected Gross Domestic Product. As usually discussed in the *Commentaries* covering the monthly GDP reporting and revisions, the full economic recovery indicated by the official, real GDP numbers remains an illusion. It is a statistical illusion created by using too-low a rate of inflation in deflating (removing inflation effects) from the GDP series. The following two graphs tell that story, updated for the second estimate of first-quarter 2013 GDP. These graphs also update those in [No. 527: Special Commentary](#), although they are almost indistinguishable visually from the graphs based on the initial first-quarter GDP estimate.

Shown in the first graph, official real GDP activity has been reported above pre-2007 recession levels—in full recovery—since fourth-quarter 2011, and has shown sustained growth since. Adjusted for official gains in GDP inflation, the level of first-quarter 2013 GDP is now 3.2% above the pre-recession peak-GDP estimate of fourth-quarter 2007.

No other major economic series has shown a parallel pattern of full economic recovery and beyond (although current uncorrected real retail sales—subject to a benchmark revision tomorrow, May 31st—are just at that full-recovery point, but not beyond, five quarters later). 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 attempt to survey real-world activity. Flaws in the GDP inflation methodologies have created the “recovery.”

The second graph plots the GDP corrected for the understatement inherent in official inflation estimates, with the deflation by the implicit price deflator (IPD) adjusted for understatement of roughly two-percentage points of annual inflation. The inflation understatement has resulted from hedonic-quality adjustments, as discussed in [Hyperinflation 2012](#), [No. 485: Special Commentary](#) and [Public Comment on Inflation](#). Both graphs here are indexed to first-quarter 2000 = 100, with the plots to consistent scales.



[Further details on the second estimate, first revision of first-quarter 2013 GDP are found in the Reporting Detail section.]

HYPERINFLATION WATCH

Hyperinflation Outlook. The current hyperinflation outlook was revised and updated with new detail, yesterday (May 29th) in [No. 527: Special Commentary](#). Reflecting the content of that Special Report, the regular synopsis of the general outlook will be revamped with the first regular Commentary in the week of June 3rd (on June 4th). For the current broad outlook, please read or link back to [No. 527](#), or to [Commentary No. 525](#) for the prior synopsis.

REPORTING DETAIL

GROSS DOMESTIC PRODUCT—GDP (First-Quarter 2013, Second Estimate, First Revision)

First-Quarter Real Disposable Income Declined. Take-home pay declined in first-quarter 2013, and that was after adjusting for significant special circumstances that had the effect of exaggerating the decline. Disposable income effectively is take-home pay, net of taxes, etc. When real (inflation-adjusted) disposable income contracts, that usually is a sign of mounting consumer financial stress and a harbinger of weaker economic activity ahead. Due to significant reporting gimmicks, the Bureau of Economic Analysis (BEA) overstates personal income. That involves, for example, imputing income to individuals for nonexistent “interest income” received as a result of having free checking accounts, or for homeowners equivalent rent, where the BEA estimates what homeowners would pay to themselves to rent their own homes from themselves.

That said, real disposable personal income contracted at an annualized headline pace of 8.44% in first-quarter 2013, versus an 8.90% gain in the fourth-quarter 2012. Special factors, however, were involved there. Due to pending year-end tax changes, a number of companies paid their dividends early, spiking fourth-quarter income relative to both third-quarter 2012 and to first-quarter 2013. Further, in the first-quarter, individuals resumed paying full payroll taxes, which lowered first-quarter income relative to fourth-quarter 2012. Net of those one-time factors, however, the BEA still show first-quarter real disposable income contracting at an annualized 0.47% quarterly rate.

Otherwise, the GDP revisions were little more than statistical noise. Of some interest, though, was the initial reporting of 1.46% headline first-quarter 2013 GNP growth, which was at a slower pace than the GDP increase.

The headline-growth distribution by major sub-category is covered in the *Opening Comments*.

This most-worthless and most-heavily-politicized of government economic series does not reflect properly or accurately the changes to the underlying fundamentals that drive the series. The GDP remains the only major economic series to show a full economic recovery and meaningful renewed expansion, since the onset of official recession in December 2007. Adjusted for official gains in GDP inflation, first-quarter 2013 GDP was 3.2% above the pre-recession GDP peak estimate of fourth-quarter 2007.

Either the GDP numbers are wrong, or all the other major economic releases are wrong. As discussed and graphed in the *Opening Comments*, the real GDP's upswing in activity since mid-2009 has been no more than a statistical illusion resulting from the use of bad-quality inflation data.

Underlying real-world economic activity suggests 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 second- and third-quarter 2012 (see [Special Commentary \(No. 485\)](#) and [Hyperinflation 2012](#)). The “comprehensive” GDP revisions, due to be published on July 31st, should alter historical GDP reporting so that it is more in line with those described patterns of activity

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 it generally is not followed by the popular press. 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 2005 Dollars,” at present, where the 2005 is the base year for inflation, and “chained” refers to the methodology which gimmicks the reported numbers so much that the total of

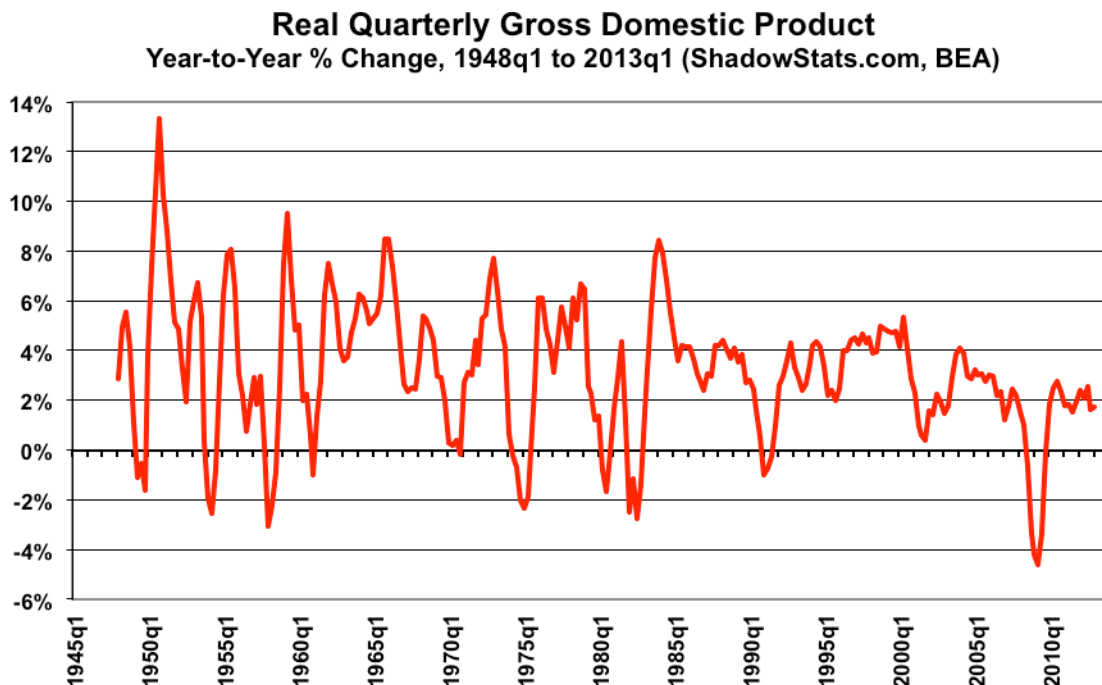
the deflated GDP sub-series misses the total of the deflated total GDP series by nearly \$107 billion in “residual” as of fourth-quarter 2011.

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.

GDP. Published this morning, May 30th, by the Bureau of Economic Analysis (BEA), the second estimate (first revision) of first-quarter 2013 gross domestic product (GDP) showed statistically-insignificant, real (inflation-adjusted), annualized quarterly growth of 2.39% (previously 2.50%) +/- 3.5% (95% confidence interval). That was against a 0.38% headline gain in fourth-quarter 2012. Those numbers and all related data released today will be fully revamped with the July 31st “comprehensive revision” and redefinition of the GDP series, with all data re-estimated back to 1929.

For eight of the nine quarters since first-quarter 2011 (fourth-quarter 2011 excepted), officially-estimated growth rates have been little more than statistical noise around the unchanged level, and these heavily guessed-at numbers possibly were massaged to keep the quarterly growth rates in politically-desirable territory.



Reflected in the preceding graph is the revised, year-to-year real change in first-quarter 2013 GDP of 1.78% (previously 1.80%). That was against 1.67% in fourth-quarter 2012. The latest year-to-year growth remains well off the near-term peak of 2.80% reported during third-quarter 2010. The current cycle trough was in second-quarter 2009 at a 4.58% year-to-year decline. That was the deepest annual contraction seen for any quarterly GDP in the history of the series, which began with first-quarter 1947.

Implicit Price Deflator (IPD). First-quarter 2013 GDP inflation, or the implicit price deflator (IPD), was reported at a revised annualized pace of 1.17% (previously 1.20%), versus 0.97% in the fourth-quarter. Year-to-year IPD inflation held effectively unrevised at 1.60% in the first-quarter, versus 1.84% in the fourth-quarter. Again, these numbers will be recast completely come July 31st.

For comparison purposes, the annualized seasonally-adjusted quarterly inflation for the CPI-U in first-quarter 2013 was 1.44%, versus 2.19% in fourth-quarter 2012, with year-to-year first-quarter CPI-U (unadjusted) at 1.68%, versus annual inflation of 1.89% in the fourth-quarter.

The weaker the inflation rate used in deflating an economic series, the stronger will be the resulting inflation-adjusted growth.

Pending GDP “Comprehensive Revision” and Redefinitions. As discussed in the prior *Commentary* covering the GDP, the July 31st GDP overhaul will reflect much more than the revisions to existing GDP data, based on the availability of better-quality underlying data, and a restating of the real or inflation-adjusted numbers from a 2005- to a 2009-base. Better-quality underlying data for the current GDP series should result in downside revisions to reported economic activity of recent years, showing the economic downturn since 2006 to have been deeper and more-protracted than previously estimated. There is a fair chance of those revisions showing that the economy started to turn down anew, officially, in 2012.

Beyond the standard data revisions, the BEA also is redefining and recalculating the GDP back to 1929, so as to include “capitalization of research and development expenditures,” “capitalization of entertainment, literary and other artistic originals,” and “capitalization of ownership transfer costs of residential fixed assets.” Those three items previously were expensed. By themselves, they are estimated to add about \$430 billion or 2.7% to the current nominal GDP level, per the BEA.

Where the impact of the definitional changes on estimated quarterly growth rates most likely will be positive, that effects of better-quality data revisions still should dominate the revamped historical reporting of recent years, showing weaker than previously estimated economic growth. The redefinition issues also were discussed in [Commentary No. 518](#), where, for example it was noted that the resulting:

“...higher level of nominal (not-adjusted-for-inflation) GDP will reduce slightly the federal debt-to-GDP ratio. It also will increase estimates of the velocity of money (GDP/money supply), or how many times the money supply turns over in the economy in a given year. Separately, the changes will boost the reported size of the U.S. economy on a comparative basis versus the rest of the world, although the underlying economic reality will not have changed at all.

“These methodological shifts also should result in the reporting of a somewhat less-severe Great Depression, as a result of ‘Pollyanna Creep’ that is discussed in the [GDP Primer Series](#).”

The BEA description of the pending changes can be found here: [GDP Comprehensive Revision](#).

ShadowStats-Alternate GDP. The ShadowStats-Alternate GDP estimate for first-quarter 2013 remains a 2.0% year-to-year contraction, versus the headline gain of 1.8%. The alternate first-quarter estimate is a narrower contraction than the 2.2% estimated for fourth-quarter 2012, versus the official estimate then of 1.7% year-to-year growth (see the [Alternate Data](#) tab).

While annualized real quarterly growth is not estimated formally on an alternate basis, a quarter-to-quarter contraction once again appears to have been a realistic possibility for first-quarter 2013, as it has been for eight of the last nine quarters, a period of protracted business bottom-bouncing in the real world.

Adjusted for gimmicked inflation and other methodological changes, the business downturn that began in 2006/2007 is ongoing; there has been no meaningful economic rebound. The corrected real GDP graph (see the *Opening Comments* section and [Hyperinflation 2012](#) and [No. 485: Special Commentary](#)) is 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, which reflects reversing additional methodological distortions of recent decades.

GDI. The BEA's initial estimate of first-quarter 2013 gross domestic income (GDI), which is the income-side reporting equivalent of the consumption-side GDP, came in at a headline real growth rate of 2.50%, versus a revised 5.47% (previously 2.63%) gain in fourth-quarter 2012. This reporting reflected wild gyrations in income numbers that BEA is not otherwise offsetting (see discussion on disposable income in the *Opening Comments* section). One can hope for more stable reporting out of the July 31st benchmark revision. First-quarter 2013 year-to-year growth was 2.17%, versus an upwardly revised 2.50% (previously 1.81%) in the fourth-quarter 2012.

GNP. The gross national product (GNP) once was the benchmark economic statistic used as the broadest measure of economic activity in the United States. GNP still is the broadest measure in the national income accounts, where GDP is GNP net of trade in factor-income (interest and dividend payments). Global political problems with GNP concept arose initially with third-world economies, where net-debtor nations usually showed much weaker GNP growth, than GDP growth, due to the net outflow of interest and dividend payments to the net-lender nations. Accordingly, the GDP became the international reporting standard. As the United States became a net-debtor nation, it shifted its headline reporting from GNP to GDP.

The just-published initial headline estimate of first-quarter 2013 GNP showed annualized quarterly real growth of 1.46%, versus the headline GDP growth of 2.39%. While the difference there is in the net relative outflow of interest and dividend payments, the series has been heavily distorted and particularly volatile in the period following the 2008 financial panic. At such time as the financial system stabilizes, the GNP should settle into a more regular pattern of weaker growth relative to the GDP.

The 1.46% first-quarter 2013 headline GNP growth was against 0.93% headline growth in the fourth-quarter. On a year-to-year basis, first-quarter annual growth was 1.84%, versus 1.62% in the fourth-quarter.

WEEK AHEAD

Weaker Economic and Inflation Data Likely in the Month Ahead [*No meaningful changes from prior version*]. As seen in more recent months of consumer inflation reporting, May 2013 consumer inflation also should be muted by seasonally-adjustment constraints on oil and gasoline prices. That said, the highly irregular oil and gasoline price movements, once again, appear to have bottomed out. Distortions from increasingly irrelevant, shifting and severely-negative gasoline and oil price seasonal adjustments should flip to positive-side distortions with June and July's adjusted CPI reporting, and to neutral in May and then to positive in June for the PPI. Going forward, reflecting the still-likely negative impact on the U.S. dollar in the currency markets from the continuing QE3 and the still-festering fiscal crisis/debt-ceiling negotiations, reporting in the ensuing months and year generally should reflect much higher-than-expected inflation.

Where expectations for economic data in the months and year ahead should tend to soften, weaker-than-expected economic results still remain likely, given intensifying structural liquidity constraints on the consumer. Increasingly, previous estimates of economic activity should revise lower, particularly in upcoming annual benchmark revisions, as has been seen already in industrial production and new orders for durable goods, and as pending for retail sales (May 31st), the trade deficit (June 4th), construction spending (July 1st) and the GDP (July 31st—comprehensive overhaul and redefinition back to 1929).

Reporting Quality Issues and Systemic Reporting Biases. Significant reporting-quality problems continue with most major economic series. Headline reporting issues remain tied largely to systemic distortions of seasonal adjustments. Distortions have been induced by the still-ongoing economic turmoil of the last six-to-seven years, which has been without precedent in the post-World War II era of modern economic reporting. These distortions provide particularly unstable reporting results, where concurrent seasonal adjustments are used (as with retail sales, durable goods orders, employment and unemployment data), and they have thrown into question the statistical-significance of the headline month-to-month reporting for many popular economic series.

With an increasing trend towards intensifying downside surprises in near-term economic reporting, recognition of an intensifying double-dip recession should continue to gain. Nascent concerns of a mounting inflation threat, though muted, increasingly have been rekindled by the Fed's monetary policies. Again, though, significant inflation shocks are looming in response to the fiscal crisis and a likely, severe negative response in the global currency markets against the U.S. dollar.

The political system and Wall Street would like to see the issues disappear, and the popular media do their best to avoid publicizing unhappy economic news, putting happy spins on otherwise negative numbers. Pushing the politicians and media, the financial markets and their related spinmeisters do their best to avoid recognition of the problems for as long as possible, problems that have horrendous implications for the markets and for systemic stability, as discussed in [Hyperinflation 2012, No. 485: Special Commentary](#) and [No. 527: Special Commentary](#).

Retail Sales (2013 Benchmark Revision) [*Unchanged from prior version*]. The annual benchmark revision to the retail sales series is due for release tomorrow, Friday, May 31st. The benchmark will

include new samples, revamped seasonal factors and data from the 2011 Annual Retail Trade Survey. As with most annual benchmarks of series that have internal, overly-optimistic assumptions, the bulk of the revisions should be to the downside, particularly those tied to the 2011 survey.
