

COMMENTARY NUMBER 451
GDP Revision, Unemployment Reporting Inconsistencies

June 28, 2012

Revised First-Quarter GNP Growth Plunged to 0.5% (Previously 1.3%)

**Actual Monthly Change in U.S. Unemployment Rate Masked
by Inconsistencies in Reporting**

PLEASE NOTE: The next regular Commentary is scheduled for Monday, July 2nd, covering May construction spending and the benchmark revision to that series, and the May PCE deflator. A subsequent Commentary on Friday, July 6th, will cover June employment and unemployment.

Best wishes to all — John Williams

Opening Comments and Executive Summary. *This morning's (June 27th) initial GDP press release from the Bureau of Economic Analysis had revised text but the attached data tables were the same ones issued last month. The analysis here of the second revision to first-quarter GDP is based on the data released in the Excel-version tables, which coincided with the revised text. The BEA advises that it has posted a corrected PDF version of the press release to their site (bea.gov).*

Discussed today are the GDP revisions, which were remarkable only in the sharp downside revision to reported growth in first-quarter GNP, the broadest measure of the economy in the national income accounts. Also covered are serious inconsistencies in the reporting of the headline unemployment rate

that make estimates of month-to-month changes in unemployment meaningless. A brief economic update will be included in the July 6th *Commentary* covering the June labor market conditions.

Unemployment Rates Are Not Comparable Month-to-Month. The Bureau of Labor Statistics (BLS) uses concurrent seasonal adjustments in calculating the headline unemployment rate and the other components of the household survey, but related monthly revisions are not published but one a year. What that means is that the headline unemployment rate is not consistent with the estimate published for the prior month. Accordingly, month-to-month comparisons are not meaningful and may be misleading.

Seasonal-adjustments are recalculated each month, and the latest headline number is estimated in the context of revised monthly data going back a number of years. Instead of publishing the revisions to prior months that would be consistent with the latest headline number, the BLS leaves the prior months' data unrevised and inconsistent, with revisions made to the historical data only once per year, in December.

BLS Explanation of Its System. As discussed in *Employment and Earnings (January 2004)*: “Beginning with the release of estimates for December 2003 in January 2004, BLS has adopted the practice of concurrent adjustment for seasonally adjusting current year labor force data from the Current Population Survey (CPS) [Household Survey] data as it becomes available each month. Under this practice, the current month's seasonally adjusted estimate is computed using all relevant original data up to and including those for the current month. [Publication of the] Revisions to estimates for previous months, however, are postponed until the end of the year.”

“The case for [publishing] revisions to previous-month seasonally adjusted estimates is less compelling for CPS series [than it is for the Payroll Survey], because the original sample data are normally not revised. Moreover, an empirical investigation indicated that there were no substantial gains in estimating month-to-month change by introducing revisions to the data for the previous month. For example, it was found that if previous-month revisions were made to the labor force series, the overall unemployment rate would be different in only 2 months between January 2001 and November 2002, in each case by only one-tenth of a percentage point.”

Present Day Reporting Distortions. Those comments were made in the halcyon days of 2004. I have contended, however, that the extreme duration and depth of the downturn that began in 2006/2007 threw off the usual stability and consistency seen in the seasonal-adjustment process, and that the concurrent-seasonal-factor system actually exacerbated those instabilities, as discussed and graphed regularly in *Commentaries* covering the labor data releases (see [Commentary No. 443](#) for example).

The stability suggested by the early testing of the process has disappeared. As the system is set up, there is a brief window of consistent reporting available each December, when the annual revisions are published in the unemployment report and consistent or near-consistent comparisons can be made.

Consider, for example, the December 2011 reporting and revisions, where the December headline unemployment rate of 8.5% declined by 0.2% against a revised November rate of 8.7%, which, at the time, was consistent with the December number on a one-shot basis. Had the circumstance been reported the in same manner that was applied to all previous months in the year, the December unemployment rate of 8.5% would have declined by just 0.1% against an unrevised November rate of 8.6%.

Even worse was what had been reported the month before, where the headline November 2011 unemployment rate purportedly plunged by 0.4%, from 9.0% in October, to 8.6% in November. The

revised data in December showed a more-consistent comparison of 0.2% drop in unemployment from 8.9% in October, to 8.7% in November.

In fairness, the October-November comparisons were one-month removed from being fully consistent. Nonetheless, a strong case can be made that month-to-month comparisons of inconsistent headline unemployment rates is not only worthless, but also dangerous. In an environment where a 0.1 percentage-point monthly swing in headline unemployment can cause wild financial-market gyrations or upheavals in domestic political hype, the inconsistent numbers can create unnecessary problems.

Where concurrent seasonals are used in other series such as payrolls, new orders for durable goods and retail sales, at least two months of revisions are supplied. On that basis, at least, there presumably is some month-to-month consistency in the data that allows for more-meaningful, near-term month-to-month comparisons.

The BLS might do well to reconsider publishing at least two months of revisions each month, as it does with the payroll data, or simply to stop using the concurrent seasonal factor approach all together.

GDP Revisions. The second revision to first-quarter 2012 GDP showed headline (annualized quarterly real) growth holding at 1.9%, as expected by the financial markets. That was down from 3.0% in the fourth-quarter. Year-to-year growth held 2.0% in the first-quarter, versus 1.6% in the fourth-quarter. All GDP and related data are subject to an annual revision on July 27th that will restate economic history since first-quarter 2009. The aggregate revisions should show an historically weaker economy.

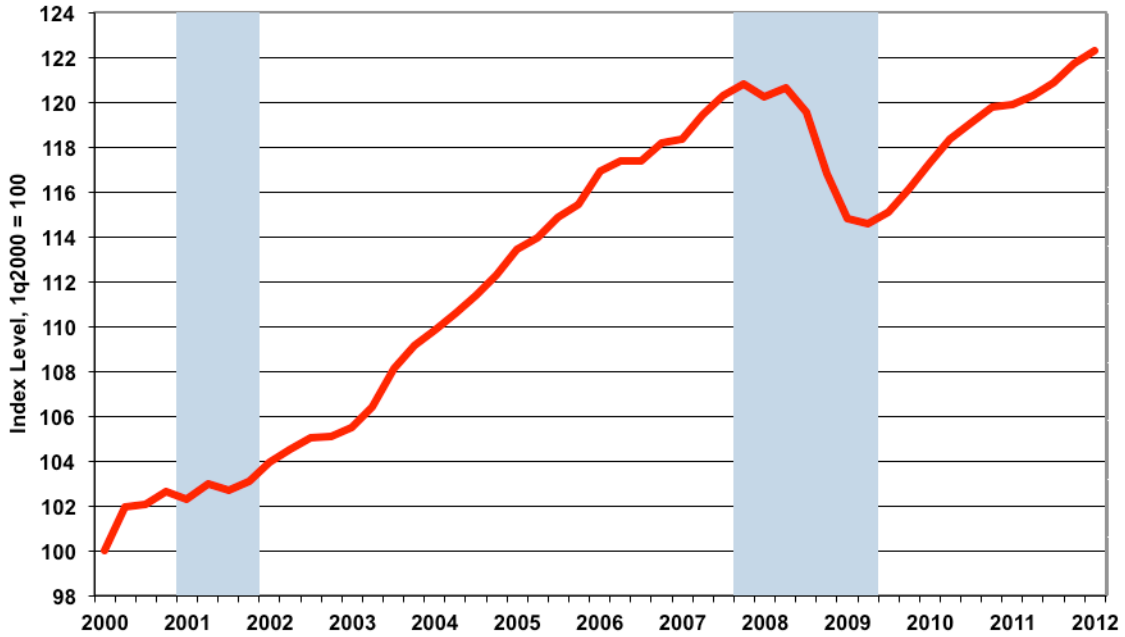
In contrast to the stabilized GDP estimate, growth in gross national product (GNP) revised sharply lower. GNP is the broadest national income measure of U.S. economic activity, where GDP is GNP net of trade in factor-income, or interest and dividend payments. The first revision to this number (initial GNP reporting was last month) showed headline growth slowing to 0.5%, from the first estimate of 1.3%, and against 1.8% in the fourth-quarter. Year-to-year growth was revised to 1.6% (previously 1.8%), versus an annual growth rate of 1.8% in the fourth-quarter.

The United States holds net-debtor-nation status. The recent relative weakness in U.S. GNP versus GDP reflects an accelerating surge in interest and dividend payments to the rest of the world from the United States, along with a declining pace of payment inflows to the United States from the rest of the world.

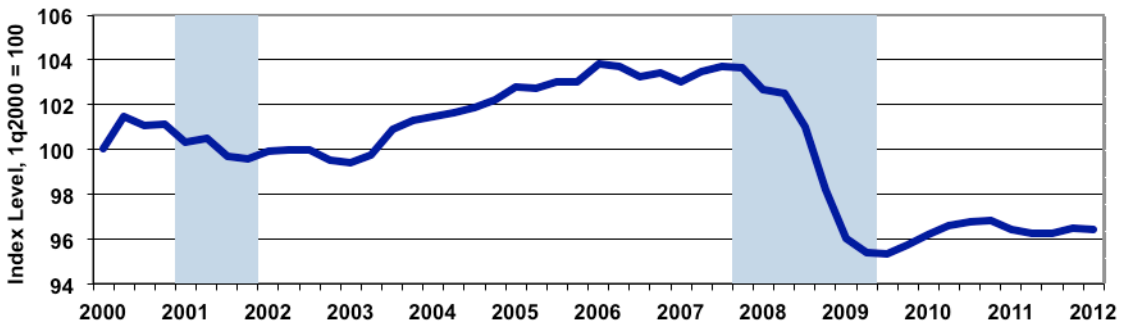
Updated Inflation-Corrected GDP Graphs. The following graphs reflect today's second revision to first-quarter GDP. The first graph shows the headline, real GDP level, as deflated by the implicit price deflator (IPD) or GDP inflation. Note that the recent recovery of activity versus pre-recession levels remains in place, although that may change in the upcoming July 27th benchmark revision to the series. No other major economic series supports the GDP's pattern of recovery, which raises serious issues as to GDP reporting quality. As suggested in the next graph, the recovery is nothing but an illusion created by the use of too-low inflation estimates in deflating series such as the GDP.

The second graph is inflation-corrected. It is the same as the first graph, but the IPD has been adjusted to add back roughly two-percentage points of annual inflation estimated to have been lost due to methodological changes of recent decades (see discussion in [Hyperinflation 2012](#) and [Special Report No. 445](#)). Both graphs are plotted to the same scale for purposes of comparison.

Headline Real GDP (Quarterly Index Level)
To 1q2012, Seasonally-Adjusted (ShadowStats.com, BEA)



Inflation-Corrected Real GDP (Quarterly Index Level)
To 1q2012, Seasonally-Adjusted (ShadowStats.com, BEA)



Hyperinflation Watch. Note: [Special Report No. 445](#) (June 12th) updated the hyperinflation outlook and the outlook for U.S. economic, U.S. dollar, and systemic-solvency conditions. The Special Report supplemented [Hyperinflation 2012](#) (January 25th), which remains the primary missive detailing the hyperinflation story. This circumstance will be updated further as new developments unfold.

REPORTING DETAIL

GROSS DOMESTIC PRODUCT—GDP (First-Quarter 2012, Third Estimate, Second Revision)

First-Quarter GDP Revision Was Statistical Noise, But the Broader GNP Plunged. The second—but not the last—revision of first-quarter 2012 GDP growth held at 1.9%, the same level as the first revision, which was down from the initial, annualized real (inflation-adjusted) quarterly growth rate of 2.2%. First-quarter headline growth slowed from the 3.0% growth currently estimated for the fourth-quarter.

Of continuing interest, however, was the reporting of the broader GNP measure. The first revision to this series lowered the headline growth of first-quarter GNP—the broadest measure of the economy in the national income accounts—to 0.5%, from initial reporting of 1.3%, down from 1.8% in fourth-quarter 2011, and at the weakest level of quarterly growth seen since the official end of the recession in second-quarter 2009. Also, the revised headline estimate of first-quarter GDI was 3.1%, versus initial reporting of 2.7%, and against a fourth-quarter 2011 estimate of 2.6%, complicated by unstable income data.

All these numbers are subject to the benchmark revision due for release on July 27th, along with the initial estimate of second-quarter 2012 GDP. The revisions will restate economic history from first-quarter 2009 on, and likely will show that the economy has been weaker than currently is estimated.

As discussed and graphed in the *Opening Comments and Executive Summary* section and in [Hyperinflation 2012](#) and [Special Report No. 445](#), the “recovery” is an illusion created by the use of understated inflation in deflating key dollar-denominated series, such as the GDP. The lower the rate of inflation that is used for the deflator, the stronger is the reported inflation-adjusted growth.

Consistent with this regular overstatement of broad economic activity by the Bureau of Economic Analysis (BEA), the GDP series remains the most worthless and the most heavily politicized of the government’s popularly followed economic reports.

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

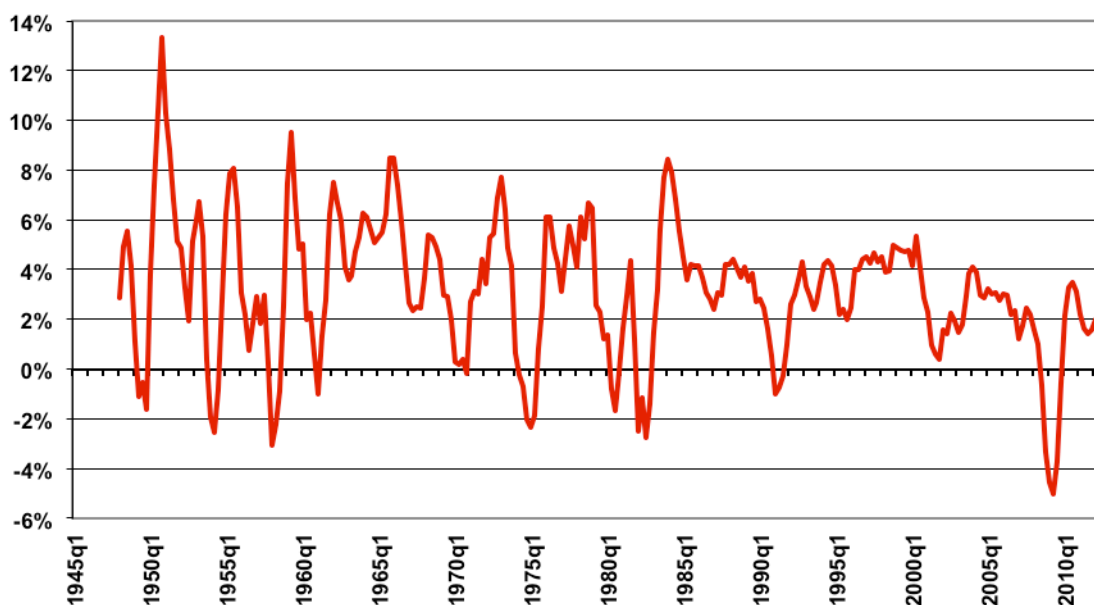
Annual growth refers to the year-to-year change of the referenced period versus the same period the year before.

GDP. Published this morning, June 28th, by the Bureau of Economic Analysis (BEA), the third estimate (second revision) of first-quarter 2012 gross domestic product (GDP) showed real (inflation-adjusted) quarterly growth at a revised, statistically-insignificant 1.87% +/- 3% (95% confidence interval), effectively unchanged from the second estimate of 1.86%, and down from the initial estimate for the quarter of 2.20%. Fourth-quarter 2011 growth still is estimated at 2.95%. For each of the five quarters since first-quarter 2011, estimated growth rates have been little more than statistical noise around the unchanged level, and these heavily guessed-at numbers possibly have been massaged to keep the quarterly growth rates in minimally-positive, as opposed to minimally-negative territory.

Today’s changes reflected an upside revision to the nominal (not-adjusted-for-inflation) GDP annualized quarterly growth rate to 3.93% versus the prior 3.56% estimate, but that revision was fully offset by an equivalent upside revision to the GDP inflation measure, the implicit price deflator. In combination, those factors left the real GDP unchanged in revision.

As shown in the following graph, the year-to-year real change in first-quarter 2012 GDP was an unrevised 1.99% (initially 2.08%), up from 1.61% currently estimated for fourth-quarter 2011. The relative pick-up in annual growth is against a first-quarter 2011 number that was virtually flat. Current annual growth continued well off the near-term peak growth of 3.51% reported during third-quarter 2010. Again, all these numbers likely will revise to the downside in the upcoming July 27th annual revisions.

Real Quarterly Gross Domestic Product
Year-to-Year % Change, 1948q1 to 2012q1 (BEA)



Implicit Price Deflator (IPD) and PCE Deflator. The first-quarter 2012 GDP implicit price deflator (IPD) was revised to an annualized quarterly inflation rate of 2.02%, versus 1.67% in the prior estimate and 1.53% in the initial estimate, up versus the 0.85% reported for the fourth-quarter. Year-to-year inflation of 2.00% (previously 1.92% and initially 1.88%) was indicated for the first-quarter, versus 2.18% in the fourth-quarter.

For comparison purposes, annualized seasonally-adjusted quarterly inflation for the CPI-U in the first-quarter was 2.48%, versus 1.30% in the fourth-quarter, with year-to-year CPI-U at 2.82% in the first-quarter, versus 3.29% in the fourth-quarter.

The lower the inflation rate that is used in deflating the GDP, the stronger is the resulting inflation-adjusted number and vice versa. Inconsistencies in the BEA's recent handling of the Bureau of Labor Statistics' revisions to CPI seasonal adjustments (discussed in [Commentary No. 421](#)), promise revamped deflators in the upcoming July 27th annual revisions.

SGS-Alternate GDP. The SGS-Alternate GDP estimate for first-quarter 2012 remains an approximate annual contraction of 2.2% versus the official estimate of a 2.0% gain. Such is less-negative than the alternate 2.7% annual contraction estimate (1.6% official gain) for the fourth-quarter (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 the first-quarter, as it has been for the last five 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 inflation-corrected GDP graph (see the *Opening Comments and Executive Summary* section and [Hyperinflation 2012](#) and [Special Report No. 445](#)) is based on the removal of the impact of hedonic quality adjustments that have reduced the reporting of annual GDP inflation by roughly two-percentage points. It is not the same measure as the SGS-Alternate GDP, which reflects the impact of reversing additional methodological distortions of recent decades.

GNP. Gross national product (GNP) is the broadest measure of U.S. economic activity, where GDP is GNP net of trade in factor-income, or interest and dividend payments. Today's revised headline growth rate for first-quarter 2012 GNP was 0.53%, versus initial reporting last month of 1.35% (1.3% rounded to the first decimal point), down from 1.80% in fourth-quarter 2011, and at the lowest annualized quarterly growth rate seen since a 0.47% contraction in second-quarter 2009, the formal end of the 2007 recession. Year-to-year growth in first-quarter GNP stood was revised to 1.60%, against initial reporting of 1.80%, and against 1.83% in the fourth-quarter.

The recent relative weakness in U.S. GNP versus GDP reflects an accelerating surge in interest and dividend payments to the rest of the world from the United States, which holds net-debtor status. At the same time U.S. receipts from the rest of the world have been plummeting since second-quarter 2011.

GDI. Gross domestic income (GDI) is the income-side reporting equivalent of the consumption-side GDP. Today's revised headline growth rate for first-quarter 2012 GDI was 3.09%, versus an initial estimate of 2.68%, and against 2.62% currently estimated for the fourth-quarter. Year-to-year growth revised to 2.11% from the initial estimate of 2.01% in the first-quarter, and versus a 1.96% annual gain estimated for the fourth-quarter.

Recent gyrations in GDI have reflected extraordinary revisions to, and wild fluctuations in, estimations of personal income in the last several quarters. Recent monthly revisions to personal and disposable income appear to have been somewhat stabilizing in nature and in a direction consistent with weaker income growth.

Real Disposable Income. Reflecting the extraordinary volatility in fourth- and first-quarter BEA estimates (based on BLS reporting) of wages and salaries, annualized real quarterly growth in disposable income for first-quarter 2012 was 0.68%, versus prior reporting of 0.44% and initial reporting of 0.39%, with year-to-year growth of 0.26%, versus prior reporting of 0.20% and initial estimation of 0.58%. That was against a fourth-quarter annualized quarterly estimate of 0.16% (virtually no growth) and a year-to-year growth estimate of 0.40%. All these data will be revamped in the July 27th benchmark revision.

Since the first publication of annual disposable income data in 1929, no incumbent party has retained the White House, when annual real disposable income growth has been below 3.0% in a presidential election year. So far, the current circumstance is developing against the incumbent party for the 2012 election.

Week Ahead. *Market recognition of an intensifying double-dip recession has started to take a stronger hold, at the moment, while recognition of a mounting inflation threat remains sparse. The political system would like to see the issues disappear until after the election; the media does its best to avoid publicizing unhappy economic news or to put a happy spin on the numbers; and the financial markets will*

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.

Until such time as financial-market expectations move to catch up fully with underlying reality, or underlying reality catches up with the markets, reporting generally will continue to show higher-than-expected inflation and weaker-than-expected economic results in the months and year ahead. Increasingly, previously unreported economic weakness should show up in prior-period revisions.

Construction Spending (May 2012, Benchmark Revision). Due for release on Monday, July 2nd, by the Census Bureau, May construction spending likely will show ongoing patterns of bottom-bouncing at low levels of activity for the series, particularly after inflation-adjustment. Once again, monthly changes should not be statistically significant.

The accompanying benchmark revision likely will reflect a weaker history of construction activity than currently is reported.

Personal Consumption Expenditures (PCE) Deflator (May 2012). The Bureau of Economic Analysis is scheduled to release the May 2012 PCE deflator guesstimate tomorrow, Friday, June 29th. The Federal Reserve's targeted inflation measure likely will fall further below its 2.0% annual growth target, reflecting lower gasoline prices. Nonetheless, as discussed previously, the current concept of an inflation target serves only as pabulum for the financial markets, not as a defining priority that drives Fed policy.

Employment and Unemployment (June 2012). June labor data are due for release on Friday, July 6th, from the Bureau of Labor Statistics (BLS). The consensus jobs estimate usually comes in close to the trend estimate that comes out of the BLS seasonal-adjustment models. The payroll trend number for June is 113,000 as discussed in [Commentary No. 443](#).

Nonetheless, June data likely will disappoint market expectations, again, given intensifying underlying weakness in related economic fundamentals. Payroll growth could be even weaker than the initial reporting of a 69,000 jobs gain reported in May. Another upside tick in the unemployment rate—to 8.3%—also is possible, but the concurrent seasonal-factor issues raise serious questions as to the significance of any monthly changes to either series (see the concurrent-seasonal-factor discussion in the *Opening Comments and Executive Summary*).