

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

COMMENTARY NUMBER 377
June Employment, Unemployment and M3

July 8, 2011

Payroll Survey Employment Down by 26,000, Before Revisions

Household Survey Employment Plunged by 445,000

June Unemployment Rates: 9.2% (U.3), 16.2% (U.6), 22.7% (SGS)

Broad Money Supply Flattened in June

PLEASE NOTE: The next regular Commentary is scheduled for Thursday, July 14th, covering June retail sales and PPI and the May trade deficit. A subsequent Commentary on Friday July 15th will cover June CPI and industrial production.

—Best to all, John Williams

Opening Comments and Executive Summary. Economic reporting continues to show a renewed faltering in business activity, but there is nothing new about ongoing economic troubles. The weak data—now rattling the markets and consensus expectations—reflect some catch-up from the extremely poor quality of economic reporting in recent months. The poor-quality numbers largely were due to heavily distorted seasonal-factor adjustments. The current intensification of the economic downturn is

real, but the happier news of late-2010 simply was not as strong as earlier indicated. The reporting distortions continue.

June Employment and Unemployment. Today's (July 8th) employment and unemployment reporting disappointed market expectations. On the jobs front, the Bureau of Labor Statistics (BLS) payroll survey indicated June 2011 employment increased by 18,000 from May. That would have been a 26,000 monthly jobs loss, except for the 44,000 downside revision to the seasonally-adjusted May payroll level, which also was posted today. Against the historical employment picture known to the markets yesterday, today's report of June payroll employment was up by just 28,000 from April. None of those changes, though, were statistically meaningful.

Payroll levels have flattened out and have shown no significant recovery, and employment remains below levels of 10 years ago, despite 10% growth in the U.S. population during the same timespan. Year-to-year change rose by 0.9% in June, versus a 0.7% gain in May (those growth rates were distorted by last year's temporary census hiring).

The household survey, which generates the unemployment rate, showed a month-to-month seasonally-adjusted employment plunge of 445,000 for June 2011. The household survey measures the number of people who are employed; the payroll survey measures the number of nonfarm jobs (reflecting a count of individuals that is duplicated for those who hold multiple jobs).

The June 2011 headline U.3 unemployment rate (9.2%, up from 9.1% in May) and the broader U.6 unemployment rate (16.2%, up from 15.8%) both hit six-month highs, while the SGS-Alternate Unemployment Measure rose to about 22.7% in June (up from 22.3% in May), the highest level seen in the current, protracted economic downturn.

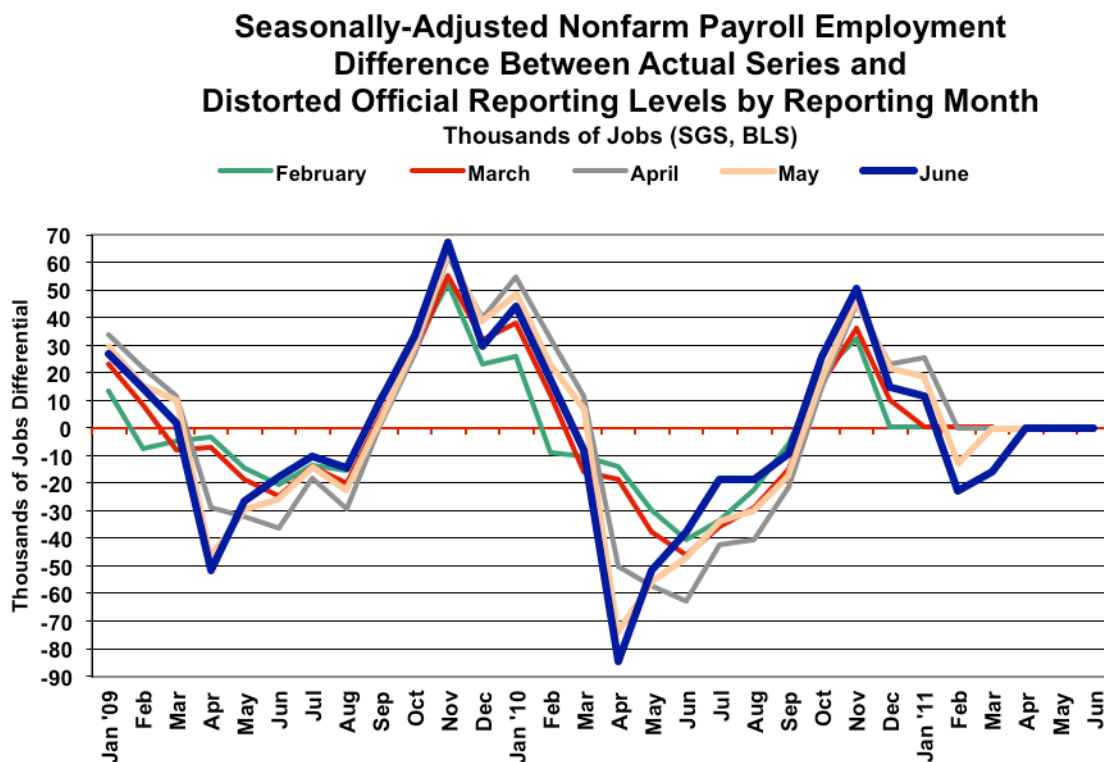
SGS Ongoing-M3 Estimate for June Likely Will Show Flattening Growth. The preliminary estimate for the SGS Ongoing-M3 Estimate for June 2011 will be published tomorrow (July 9th) in the [Alternate Data](#) section. At present, the series is on track for year-to-year growth of about 2.0%, the same level as seen in May. Seasonally-adjusted month-to-month change appears to be close to nil, with declines in large time deposits and institutional money funds largely offsetting an increase in M2. The estimated month-to-month changes, however, are less reliable than the estimates of annual growth.

Hyperinflation Watch—Weakening Business Activity Suggests New Stimulus And QE3. The broad inflation and economic outlooks discussed in the [Hyperinflation Special Report \(2011\)](#) continue to unfold. Federal budget deficit projections and prospects for banking-system solvency are based on assumptions of ongoing, positive economic growth. Continued and intensifying economic weakness likely will push the federal government to new pre-2012 election stimulus, irrespective of near-term deficit reduction discussions. Similarly, the Fed likely will find the markets and the banking system pressuring it into some form of QE3, despite current protestations to the contrary. The broad inflation and economic outlooks continue unabated.

REPORTING DETAIL

EMPLOYMENT AND UNEMPLOYMENT (JUNE 2011)

Constant Recalculation of Payroll Seasonal Factors Continues to Exacerbate Reporting Distortions. As discussed in prior writings (see the *Hyperinflation Report*, for example), seasonal-factor estimation for most economic series has been severely distorted by the extreme depth and duration of the economic contraction. These distortions are exacerbated for payroll employment data based on the BLS's monthly seasonal-factor re-estimations and lack of full reporting.



While the BLS recalculates the monthly seasonal factors each month for payroll employment, going back a number of years, it only publishes revised data for the last two months of reporting (April and May 2011 with the June 2011 report). Shown in the preceding graph, the latest “concurrent” seasonal factor changes reduced the level of payrolls again in April 2010, upped June and July of 2010 (with implied stronger seasonals for the June 2011 reporting, along with downside changes to first-quarter 2011 data). With just

two months of prior reporting shown as revised, the changes pre-April 2011 were not published by the BLS, so as to avoid “confusing” people who use the data.

Meaningful seasonal-adjustments tend to be stable over time, without wild fluctuations every time the seasonals are re-estimated. This is true particularly for series like payroll employment and retail sales, where the seasonal factors are concurrent—recalculated each month for the current month’s raw data. If the payroll seasonals were stable, the lines in the preceding graph would be flat and coincident. Instead, the variations intensify with each successive month. The monthly recalculations of seasonally-adjusted payroll levels show irregular revisions, with monthly swings now of plus or minus 90,000 jobs shifting over time. To the extent the numbers affect current reporting, the differences are enough potentially to alter financial-market perceptions and reactions.

The big issue remains that the month-to-month seasonally-adjusted payroll data have become increasingly worthless, with reporting errors likely now well beyond the official 95% confidence interval of +/- 129,000 jobs in the reported monthly payroll change. Yet the media and the markets tout the data as meaningful, usually without question or qualification.

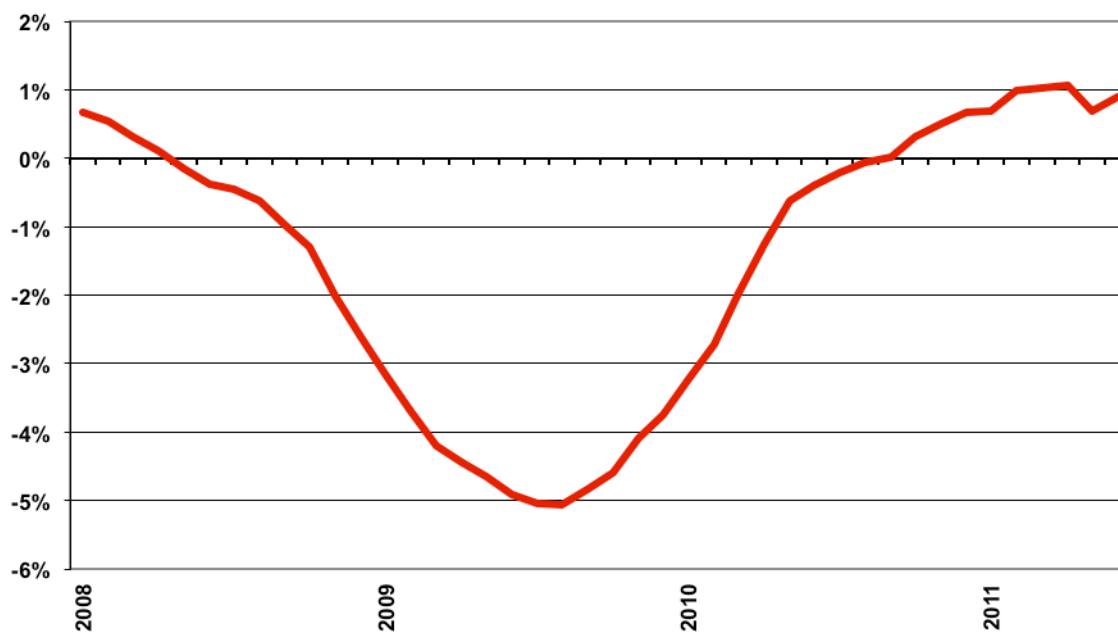
The inconsistency differences in the graph were calculated based on the raw data and the seasonal-adjustment program available to the public on the BLS Web site. Using the BLS data, we have calculated the seasonally-adjusted numbers as the BLS should be showing them, as of the current reporting, and the differences between official reporting and the consistent seasonally-adjusted series.

Payroll Survey Detail. The BLS reported a statistically-insignificant, seasonally-adjusted June 2011 month-to-month jobs gain of 18,000 (a jobs loss of 26,000 jobs before prior-period revisions) +/- 129,000 (95% confidence interval). May payrolls showed a revised 25,000 (previously 54,000) gain.

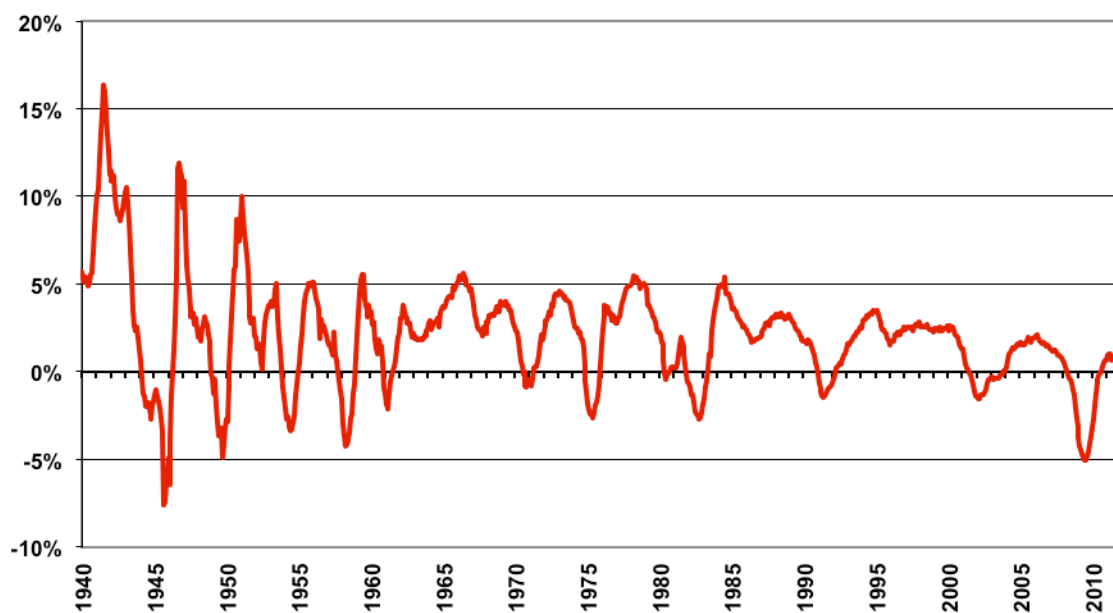
As discussed earlier, some of the continued softening in growth was due to minor catch up in the ongoing statistical distortions from the monthly recasting of seasonal-adjustment factors, which shift seasonally-adjusted jobs around with earlier months, but where the BLS does not publish the earlier revisions. Once again, it is not so much that jobs growth suddenly is slowing—although the economy indeed continues to falter into a renewed downturn—it is that previously reported jobs growth never was as strong as advertised.

In terms of year-to-year change, the unadjusted June 2011 growth rate was at 0.89%, versus the revised 0.69% (previously 0.73%) annual growth reported in May. Although the graphs of long-term year-to-year unadjusted payroll change had shown a recent rising trend in annual growth, which primarily reflected the still-protracted bottom-bouncing in the payroll series, that pattern had flattened out in the last several months and now has begun to soften, as shown in the first graph following of the near-term detail in year-to-year change. These numbers reflect short-lived muting as a result the year-ago hiring surge of temporary census workers.

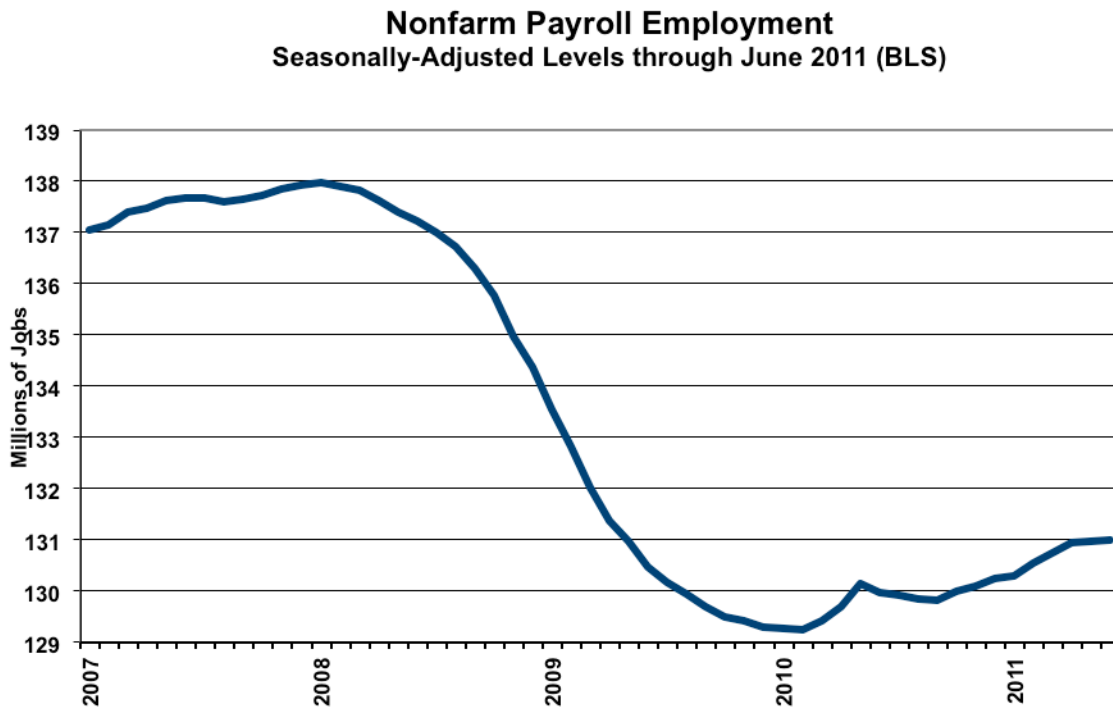
Nonfarm Payroll Employment
NSA Yr-to-Yr % Change through June 2011 (BLS)



Nonfarm Payrolls
NSA Yr-to-Yr % Change through June 2011 (BLS)



As shown in the preceding longer-term graph (historical detail back to World War II), with the bottom-bouncing of recent years, current annual growth has recovered from the post-World War II record 5.06% decline in August 2009, which was the most severe annual contraction seen since the production shutdown at the end of World War II (a trough of a 7.59% annual contraction in September 1945). Disallowing the post-war shutdown as a normal business cycle, the August 2009 annual decline remains the worst since the Great Depression, yet the current level of employment is far from any recovery.



In the above plot of seasonally-adjusted payroll levels (as reported by the BLS) the current level of nonfarm payrolls shows a recent flattening and certainly no recovery to pre-recession highs. The data continue to bottom-bounce along a plateau of low-level activity, with the latest payroll level still well below where it was a decade ago, even though the U.S. population has increased by more than 10% in the same period.

Birth-Death/Bias Factor Adjustment. Despite the ongoing and regular overstatement of monthly payroll employment—as evidenced by the regular and massive, annual downward benchmark revisions to the reported payroll numbers—the BLS generally has upped its monthly biases in post-benchmark reporting. For June 2011, however, the positive monthly bias used was 131,000, the same revised bias as used in June 2010. June was the first month this year where the bias was not increased from the year before. In May 2011, the upside bias was 206,000. These upside biases reflect an ongoing assumption of a net positive jobs creation by new companies versus those going out business. Such becomes a self-fulfilling

system, as the upside biases boost reporting for financial-market and political needs, with relatively good headline data, while also setting up the next year's downside benchmark revisions, which traditionally are ignored by the media and the politicians.

Where the BLS cannot measure the impact of jobs loss and jobs creation from employers starting up or going out of business, on a timely basis (within at least five years, if ever), such information is estimated by the addition of a bias-factor generated by the Birth-Death Model (a model of the effects of new business creation and old business bankruptcies). The fundamental defects of the Birth-Death Model are discussed as usual in the ensuing paragraphs.

Positive assumptions—commonly built into government statistical reporting and modeling—can become self-fulfilling prophecies, with “stronger” economic data being reported as a result of happy guesstimates, or underlying assumptions of ongoing economic recovery. Indeed, historically, the Birth-Death Model biases have tended to overstate payroll employment levels—to understate employment declines—during recessions. There is a faulty underlying premise here that jobs created by start-up companies in this downturn have more than offset jobs lost by companies going out of business. So, if a company fails to report its payrolls because it has gone out of business, the BLS assumes it still has its previously-reported employees and adjusts those numbers for the trend in the company's industry.

Further, presumed additional “surplus” jobs, created by start-up firms, get added on to the payroll estimates each month as a special add-factor. These add-factors have averaged 40,000 jobs per month over the last 12 months. I still estimate this monthly bias should be negative by roughly 200,000 or so, on average. Since it is not, the BLS overestimates monthly growth in payroll employment by roughly 240,000 jobs. Much of that misreporting was not picked up in the 2010 benchmarking, and now will not be corrected until at least the 2011 benchmark revision (based on the upcoming March 2011 benchmarking) to be published in February 2012.

Household Survey. The usually statistically-sounder household survey, which counts the number of people with jobs, as opposed to the payroll survey that counts the number of jobs (counting multiple job holders more than once), showed a June 2011 employment plunge of 445,000 versus May, which in turn was up by 105,000 from April. Issues with seasonal factors still cloud the significance of the reported monthly levels in the adjusted headline U.3 unemployment rate and other adjusted household-survey numbers. Again, adjusted data have been moved by highly unstable seasonal factors that are artifacts of the severe and extraordinarily protracted downturn in U.S. economic activity, not by the regular and stable seasonal patterns that were in place before the current economic crisis. Accordingly, what is seen here is some catch-up in data that never were as “strong” as indicated by the BLS; significant further catch-up should be seen in the months ahead.

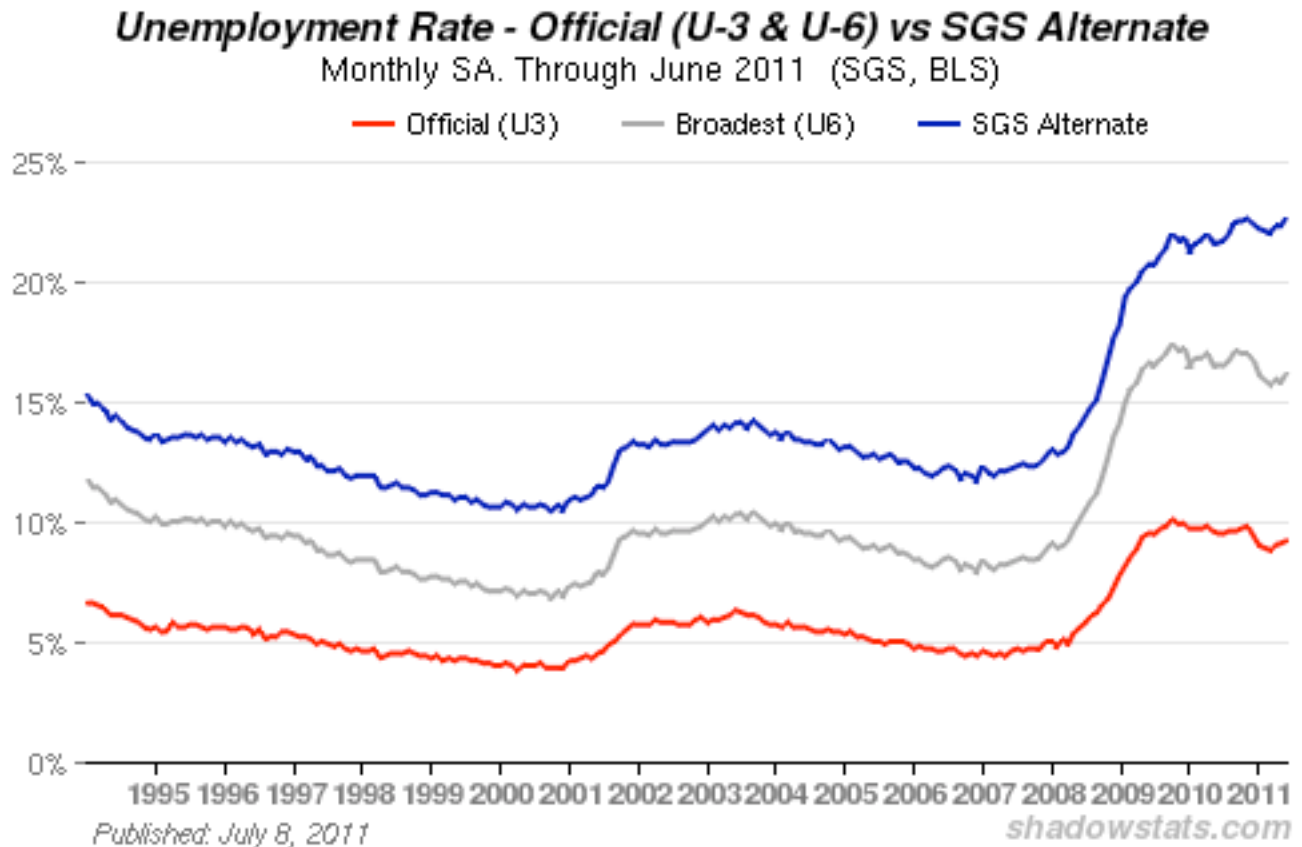
The headline U.3 unemployment rate and the BLS's broadest U.6 measure both moved to their highest readings since December 2010, in the June 2011 reporting. The SGS-Alternate Unemployment Measure moved to its highest reading of the current downturn.

The June 2011 seasonally-adjusted headline (U.3) unemployment rate rose by a statistically-insignificant 0.13 percentage point to 9.18% +/- 0.23% (95% confidence interval), from 9.05% in May. Not-seasonally-adjusted, June's U.3 unemployment rate was 9.3%, versus 8.7% in May.

The June U.6 unemployment rate jumped to a seasonally-adjusted 16.2%, from 15.8% in May. The unadjusted U.6 rate rose to 16.4% in June, from 15.4% in May. The broadest unemployment rate published by the BLS, U.6 includes accounting for those marginally attached to the labor force (including short-term discouraged workers) and those who are employed part-time for economic reasons (they cannot find a full-time job).

In 1994, during the Clinton Administration, “discouraged workers”—those who had given up looking for a job because there were no jobs to be had—were redefined so as to be counted only if they had been “discouraged” for less than a year. This time qualification defined away the long-term discouraged workers. The remaining short-term discouraged workers (less than one year) are included in U.6.

Adding the SGS estimate of excluded long-term discouraged workers back into the total unemployed and labor force, unemployment—more in line with common experience as estimated by the SGS-Alternate Unemployment Measure—rose to about 22.7% in June, up from 22.3% in May. The SGS estimate generally is built on top of the official U.6 reporting, and tends to follow its relative monthly movements. Accordingly, it will suffer some of the current seasonal-adjustment woes afflicting the base series. See the [Alternate Data](#) tab for more detail.



As discussed in previous writings, an unemployment rate nearing 23% might raise questions in terms of a comparison with the purported peak unemployment in the Great Depression (1933) of 25%. The SGS level likely is about as bad as the peak unemployment seen in the 1973 to 1975 recession. The Great Depression unemployment rate was estimated well after the fact, with 27% of those employed working on farms. Today, less than 2% work on farms. Accordingly, for purposes of Great Depression comparison, I would look at the estimated peak nonfarm unemployment rate in 1933 of 34% to 35%.

Week Ahead. Though still not widely acknowledged, there is both an intensifying double-dip recession and a rapidly escalating inflation problem. Until such time as financial-market expectations fully catch up with underlying reality, reporting generally will continue to show higher-than-expected inflation and weaker-than-expected economic results in the month and months ahead. Increasingly, previously unreported economic weakness should show up in prior-period revisions.

Trade Balance (May 2011). The May trade deficit is due for release on Tuesday, July 12th. Monthly deterioration is likely both before and after adjustment for inflation. The April and May shortfalls, in theory, will provide the reporting basis for official guessing of the second-quarter net export account in the July 29th “advance” estimate of second-quarter 2011 GDP.

Retail Sales (June 2011). Due for release on Thursday, July 14th, June retail sales continue to face a downside reporting risk versus what likely will be soft expectations. Whatever gain may be reported likely will be offset by June CPI-U inflation.

Producer Price Index—PPI (June 2011). Due for release on Thursday, July 14th, the headline number from the regularly volatile PPI series should be muted by the temporary reduction in oil prices, which still will see minor exacerbation from oil-price-dampening seasonal-factor adjustments. Nonetheless, there is some risk for an upside surprise versus likely tepid consensus expectations, as inflationary pressures increasingly move outside the direct energy sector.

Consumer Price Index—CPI (June 2011). Due for release on Friday, July 15th, June’s CPI headline number also is at risk of surprising likely muted consensus expectations on the upside. Although the monthly average gasoline price in June was down by 5.7% (per the Department of Energy), seasonal factors in June move to neutral, having depressed adjusted gasoline prices in May. The seasonals begin to boost gasoline prices in July. Higher food prices and otherwise spreading inflationary pressures in the broad economy should keep the CPI-U in positive territory and likely above expectations.

Year-to-year inflation would increase or decrease in June 2011 reporting, dependent on the seasonally-adjusted monthly change, versus the 0.17% gain in the adjusted monthly level reported for June 2010. I use the adjusted change here, since that is how consensus expectations are expressed. To approximate the annual inflation rate for June 2011, the difference in June’s headline monthly change (or forecast of same) versus the year-ago monthly change should be added to or subtracted directly from May 2011’s reported annual inflation rate of 3.57%. For example an adjusted 0.2% monthly gain in the June CPI-U would keep annual CPI-U inflation at about 3.6%. That inflation pace should move to top 4% in the next couple of months. The CPI-W broke that barrier, hitting 4.12% last month’s reporting.

Industrial Production (June 2011). Due for release on Friday, July 15th, June's industrial production could show an outright monthly contraction, as the "stall" in recent activity rolls into renewed downturn. In any event, a downside reporting surprise again is a fair bet for what likely will be moderately positive consensus expectations.
