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

COMMENTARY NUMBER 411
December Employment and Unemployment

January 6, 2012

Seasonal-Adjustment Problems Spiked Jobs Growth,
Seasonal-Adjustment Revisions Artificially Lowered Unemployment Rates

December Jobs Reading Remained Well Below Pre-2007 and Pre-2001 Recession Levels

December Unemployment: 8.5% (U.3), 15.2% (U.6), 22.4% (SGS)

Money Supply M3 Annual Growth Tops 3.0% for First Time in 28 Months

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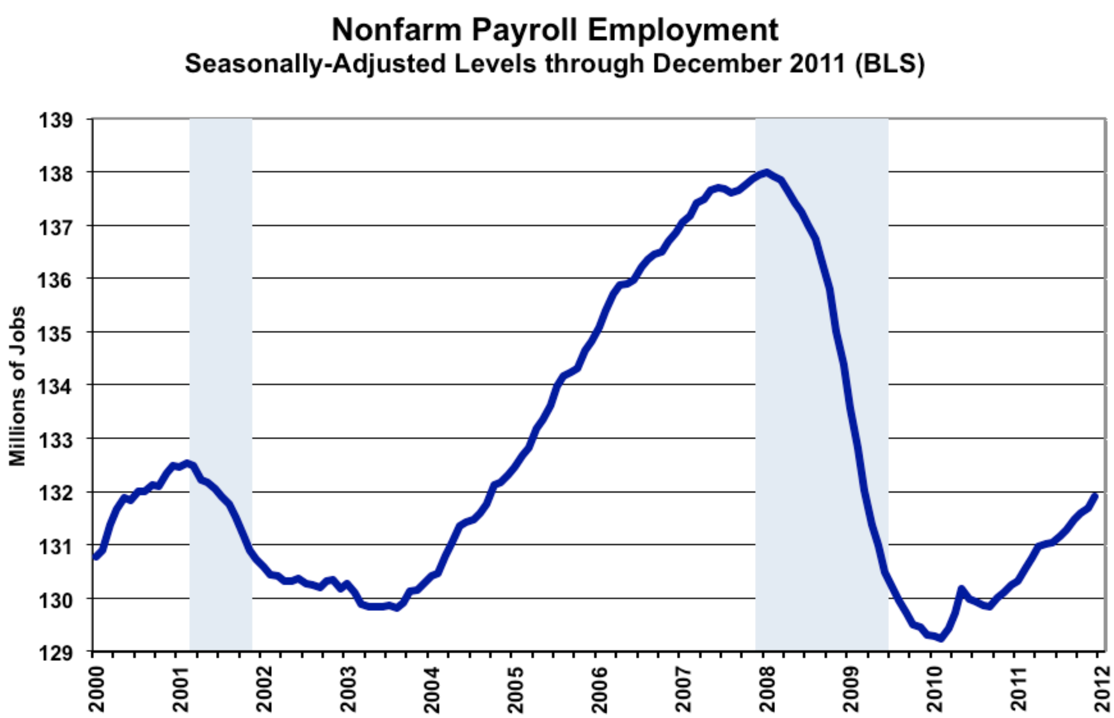
PLEASE NOTE: The next regular Commentary *is scheduled for Friday, January 13th, covering the estimates of December 2011 retail sales and the November trade deficit.* Hyperinflation 2012 *is planned for the week of January 9th, or possibly the week thereafter. As soon as a firm date is set, it will be posted in the* Next Regular Commentary *box on www.shadowstats.com and at the Schedule link.*

Happy New Year! — John Williams

Opening Comments and Executive Summary. Seasonal adjustment problems not only helped to boost the monthly headline gain for December 2011 payrolls, but seasonal-adjustment revisions created a slightly improved unemployment picture without any change to the underlying unadjusted data. The first point was discussed in this morning's (January 6th) *Flash Update* (see below). As to the second point, seasonal adjustments simply are supposed to redistribute unemployment so as to eliminate regular seasonal variations, not to improve the aggregate unemployment rates artificially. Over time the unadjusted and adjusted unemployment rate series should show the same aggregate information. Instead, the aggregated net revisions published today for the headline U.3 unemployment rate since 2007 were to the downside by 0.4 percentage point. For the broader U.6 measure, the net revisions aggregated to minus 1.1 percentage point.

While today's happy labor data likely will fuel financial-media and political talk of an improving economy, the underlying reality remains bleak, with data later this month and next generally tending to confirm the ongoing bottom-bouncing of the U.S. economy in a severe downturn. The broad economic outlook has not changed and will be reviewed fairly comprehensively in the soon-to-be-published *Hyperinflation 2012*.

Payroll Employment. As shown in the accompanying graph, despite the overstated 200,000 jobs gain reported for December 2011 (much of that will reverse next month despite the looming benchmark revision), current payroll employment remains well below the pre-recession peak levels of activity for both the 2001 and 2007 recessions.

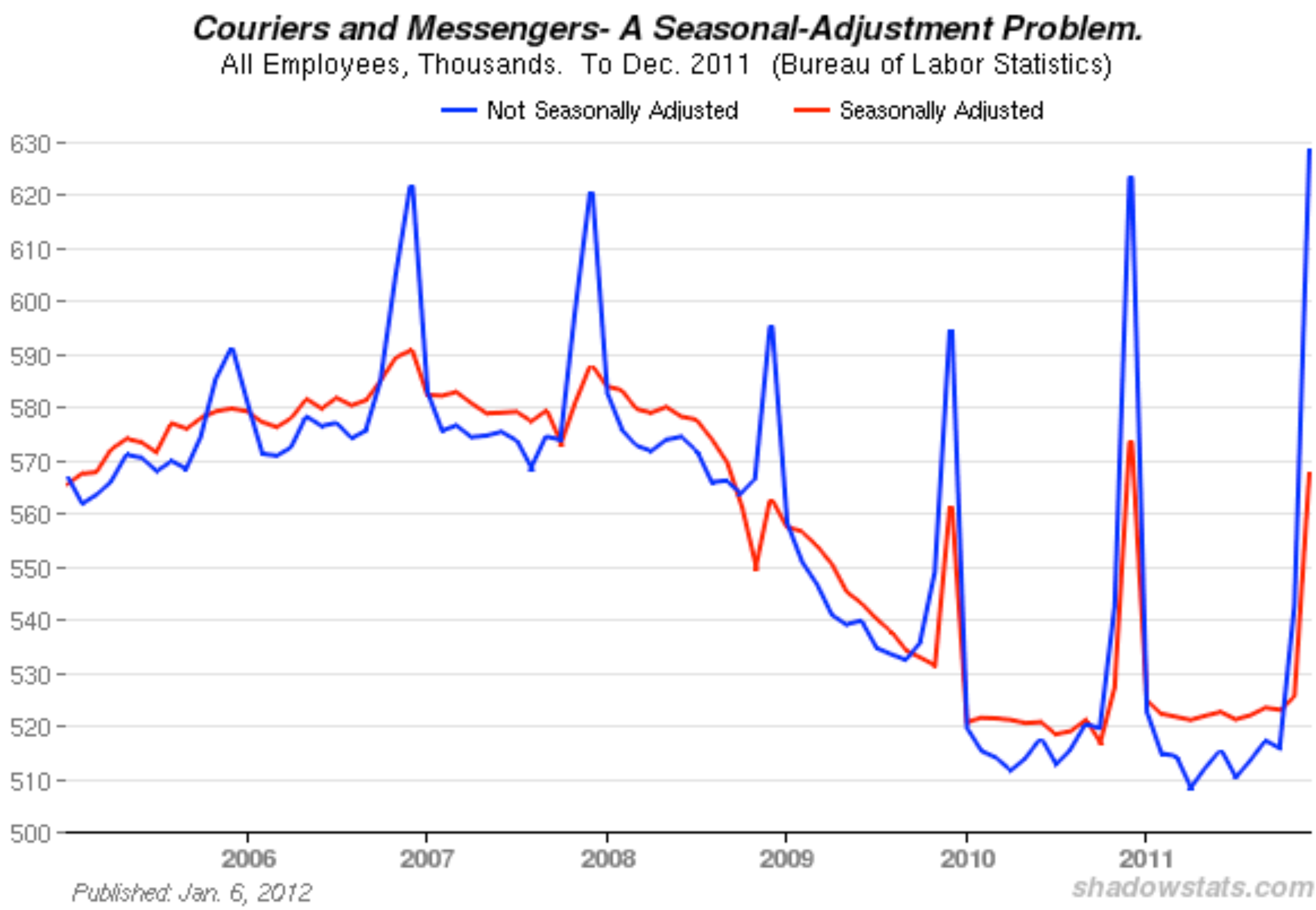


False Seasonal Boost Given to "Couriers and Messengers" Category. *Except for a revised graph and related text, the text in this section is the same as was published in this morning's* Flash Update. The reported seasonally-adjusted 200,000 jobs surge in December 2011 payrolls included a false, seasonally-adjusted gain of roughly 42,000 in the "Couriers and Messengers" category. That gain was an artifact of the seasonal-adjustment process and will remove itself in the January 2012 numbers.

We were aware of what seemed to be a buried modeling problem within the Bureau of Labor Statistics' (BLS) adjustment process, which we expected to come to the fore today and to be modified by the BLS, but the BLS did not correct the series. The "Couriers and Messengers" series has been suffering a problem with a seasonal December effect that has affected a couple of past Decembers, and today, it affected the December 2011 numbers.

As noted in the BLS press release of January 6th:

"Employment in transportation and warehousing rose sharply in December (+50,000). Almost all of the gain occurred in the couriers and messengers industry (+42,000); seasonal hiring was particularly strong in December."



The problem is that this 42,000 gain is part of a seasonal pattern that fully reverses itself each January, as shown in the above BLS graph. The shown detail is seasonally-adjusted (red line) and unadjusted (blue line). The issue, though, is that with proper seasonal adjustment, the spikes shown in December 2011 and prior Decembers in the adjusted series (red line) should not be there. The BLS forecast output for this series, based on past trends, predicted such an adjusted rise for December 2011. It also predicts a similar sized, corrective decline in January 2012.

We asked the BLS for a comment this morning and were told that it was a modeling issue, which the BLS cannot override. There may be other related problems in current reporting, but the 42,000 jobs surge in "Couriers and Messengers" appears to have been the biggest single issue.

Unemployment. With continued shifting of unemployed individuals moving into short-term and long-term "discouraged" worker categories in the respective government's U.6 unemployment rate and SGS-Alternate Unemployment Measure, both of the broader measures should be jumping sharply relative to the BLS's headline U.3 rate. The reason they are not is due to a seasonal-adjustment aberration that has reduced the level of those working part-time for economic reasons (in U.6). As that reverses, the broader unemployment rates should soar.

As estimated today, in the context of annual revisions, headline unemployment (U.3) was at 8.5% in December, versus 8.7% in November; U.6 was at 15.2% in December, versus 15.6% in November; and the SGS-Alternate was at 22.4% in December, versus 22.6% in November.

Hyperinflation Watch—Outlook is Unchanged. The general outlooks on the economy, inflation and systemic-stability remain unaltered from the discussions in *Hyperinflation Special Report (2011)*. The soon-to-be-published *Hyperinflation 2012* will review fully and expand upon the key issues discussed in that prior report.

Money Supply M3 (December 2011). Bank lending remains impaired and broad money growth still is not picking up as it would with a healthy banking system. Yet, based on roughly three weeks of data, the preliminary estimate of annual growth for the December 2011 SGS Ongoing-M3 Estimate—to be published tomorrow (January 7th) in the Alternate Data section—is on track to hit 3.2%. That would be the strongest annual growth since August 2009, and is up from the revised annual 2.8% (previously 2.7%) growth estimated for November. The increase in annual growth reflects slightly positive month-to-month change in the seasonally-adjusted monthly average levels of November and December 2011, versus monthly declines in the same period one year ago.

The seasonally-adjusted, month-to-month change estimated for December 2011 M3 likely will round up to 0.1%, against similar gain in November, with monthly change otherwise virtually stalled since September. The estimated month-to-month M3 changes, however, remain less reliable than the estimates of annual growth.

A flattening or softening in the relative monthly estimates of annual growth, with flat-to-plus month-to-month changes, likely continued for the narrower M1 and M2 measures (M2 includes M1, M3 includes M2). M2 for December is on track to show year-to-year growth of about 9.8%, versus 9.7% in November, with month-to-month growth estimated at roughly 0.4% in December, up from 0.2% in November. The early estimate on M1 for November shows year-to-year growth of roughly 18.3%, up from 17.7% in November, with month-to-month change showing a likely gain rounding up to 0.1% in

December versus unchanged in November. The relatively stronger annual growth rates in M1 and M2 still reflect the earlier shifting of funds out of M3 accounts into M1 and M2 accounts.

REPORTING DETAIL

EMPLOYMENT AND UNEMPLOYMENT (December 2011)

Seasonal-Factor Problems Weigh Upon Headline Labor-Data Accuracy. Beyond the usual issues raised with seasonal-adjustments to the labor data (*i.e.*, concurrent seasonal factor adjustments, and distortions from the severity of the economic downturn), problems with obvious seasonal variations in payrolls not being adjusted, and with annual seasonal factor revisions not being neutral in their impact on the aggregate household survey data, raise further questions as to the accuracy and stability of the labor data reporting. A review of related issues will follow in next month's employment *Commentary*, which also will cover the annual benchmark revisions to payrolls, and the annual resetting of household data, based upon shifting population estimates.

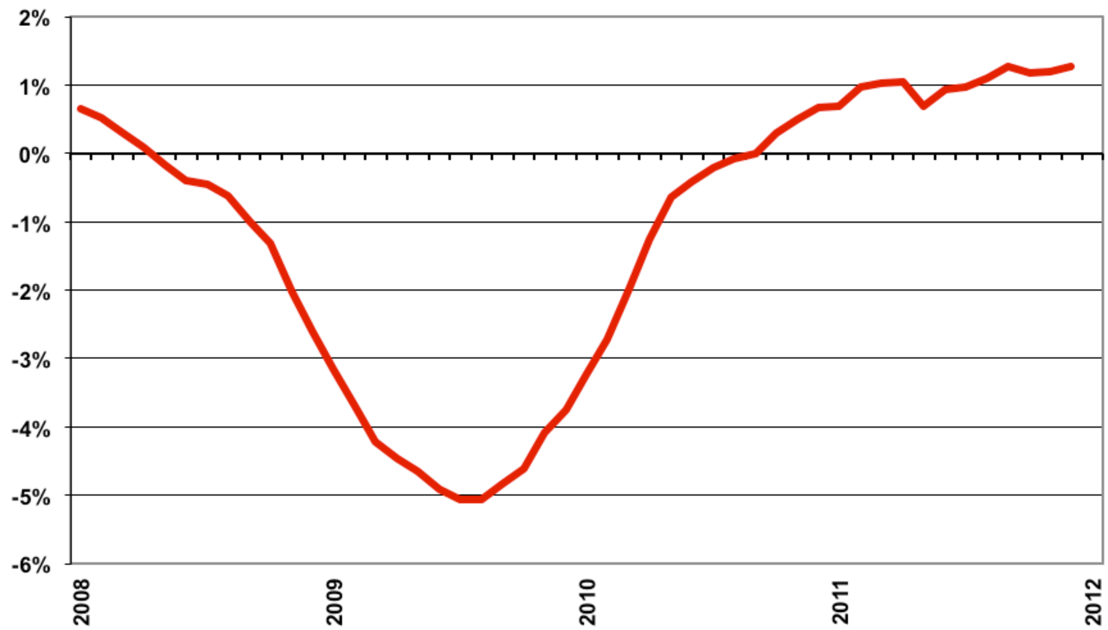
PAYROLL SURVEY DETAIL. The BLS reported today (January 6th) a statistically-significant, seasonally-adjusted December 2011 month-to-month payroll employment gain of 200,000 (a gain of 192,000 jobs before prior-period revisions) +/- 129,000 (95% confidence interval). November payrolls showed a revised 100,000 gain (previously a gain of 120,000), while October's monthly gain revised to 112,000 (previously 100,000). See the *Opening Comments and Executive Summary* for a discussion of seasonal factor problems that boosted the monthly payroll gain.

In terms of year-to-year change, the unadjusted December 2011 growth rate was 1.28%, up versus the revised 1.19% (previously 1.21%) reported for November, and against a revised 1.19% (previously 1.18%) annual growth reported for October.

Although the graphs of year-to-year unadjusted payroll change had shown a rising trend in annual growth, which primarily reflected the still-protracted bottom-bouncing in the payroll series, that pattern has flattened out in recent months, as shown in the first graph following of the near-term detail in year-to-year change. These numbers recently have reflected short-lived year-to-year distortions as a result of the year-ago hiring surge and full layoffs of temporary census workers.

As shown in the 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.

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



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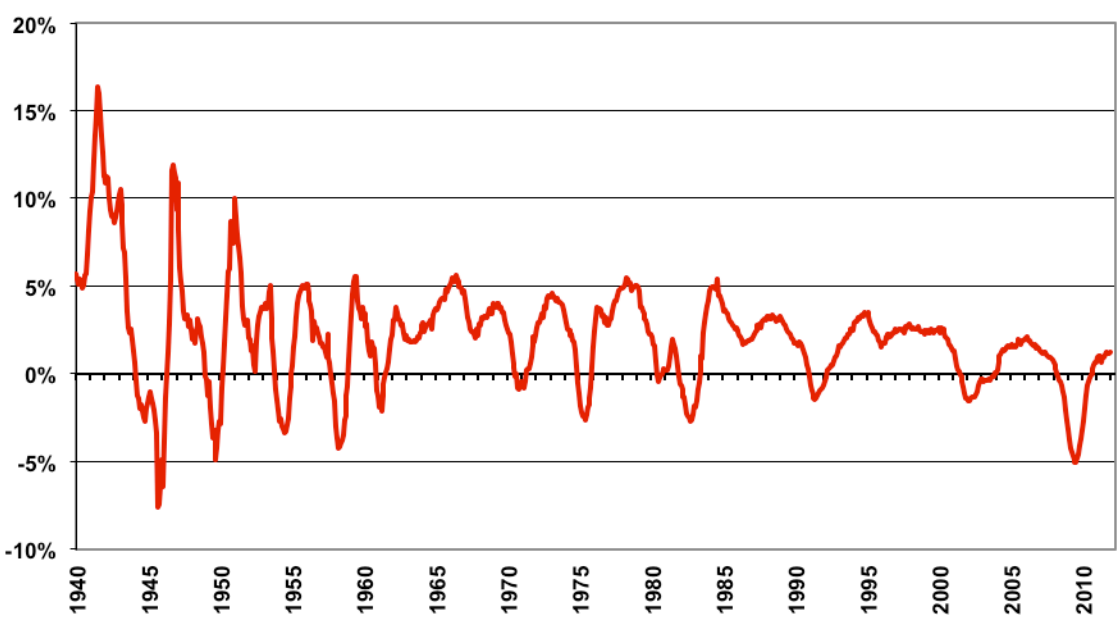
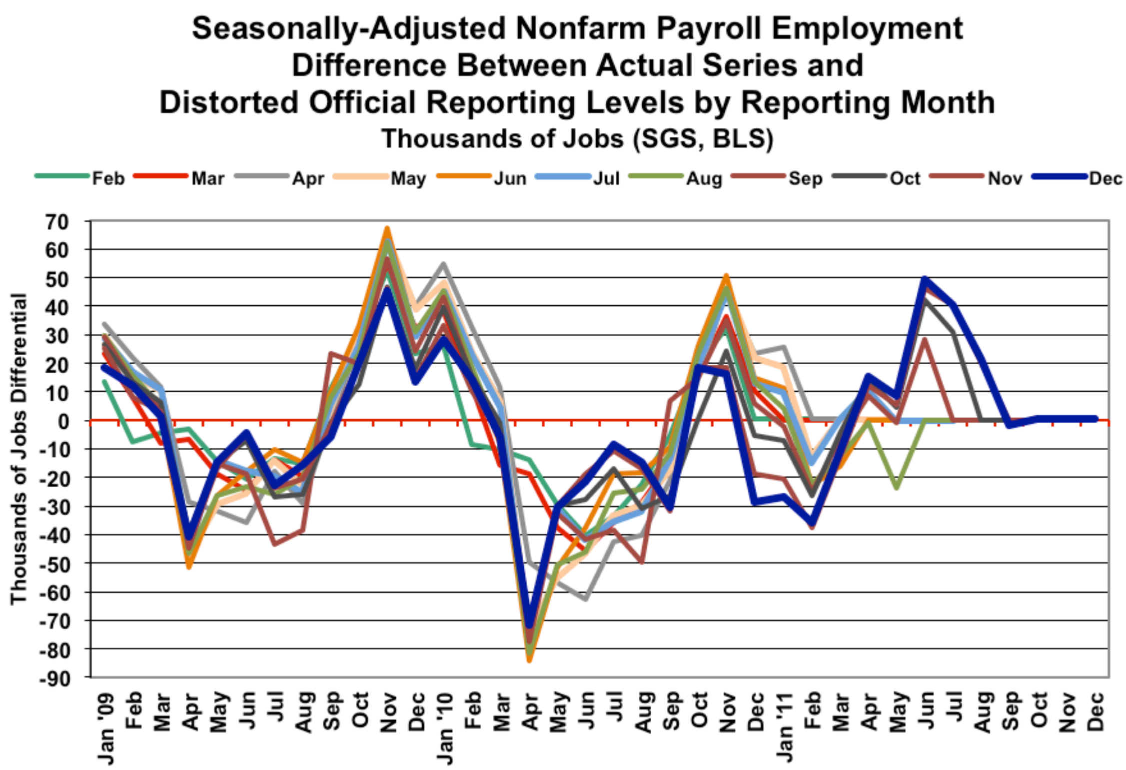


The regular graph of seasonally-adjusted payroll levels, showing that current employment still is below where it was pre-2001 and pre-2007 recessions is located again in the *Opening Comments and Executive Summary* section.

Concurrent Seasonal Factor Distortions. As discussed in prior writings (see the *Hyperinflation Special Report (2011)*, for example), seasonal-factor estimation for most economic series has been distorted severely 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.

Where 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 (October 2011 and November, with the December 2011 report), so as to avoid "confusing" people using the data. Shown in the following graph, the latest "concurrent" seasonal factor changes. These numbers all will get reset with next month's publication of the 2011 payroll employment benchmark revision.



As discussed repeatedly in the employment *Commentaries*, 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 graph would be flat and coincident. Instead, the variations shift and intensify with each successive month. The monthly recalculations of seasonally-adjusted payroll levels show irregular revisions, with monthly swings now of plus or minus 70,000 to 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.

A further 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 unadjusted 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 Employment Benchmark Revisions Due on February 3rd. The annual payroll benchmark revisions, based to March 2011, will be published by the BLS—along with the release of the January 2012 jobs data—on February 3rd. The initial estimate of revision was for a 192,000 upside adjustment to the not-seasonally-adjusted estimate of March 2011 payrolls. Changes back in time to March 2010 and forward in time to the present will be imputed by the BLS, along with restated seasonal-factor adjustments, which never get caught up in terms of public reporting (see the *Concurrent Seasonal Factor* section).

Birth-Death/Bias Factor Adjustment. Despite the ongoing and regular overstatement of monthly payroll employment—as evidenced usually by regular and massive, annual downward benchmark revisions—the BLS generally upped its monthly biases in post-benchmark reportings of recent years. With an upside benchmark pending, however, the most recent numbers have been slightly more negative. The December 2011 bias was an 11,000 monthly subtraction, versus a 6,000 upside bias in December 2010, and a 29,000 negative bias in November 2011. One would expect bias shifts, however, to go in the direction opposite of the revisions, in order to compensate for underestimating or overestimating previous data.

The aggregated upside annual bias still reflects 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 often also setting downside benchmark revisions for the next year, 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 prophesies, 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, the presumed net 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. With the economy continuing to falter, I expect a significant downside benchmark revision for next year (March 2012), given current details of the BLS's overly positive estimates.

HOUSEHOLD SURVEY DETAILS. 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 (including multiple job holders more than once) just went through its regular seasonal-factor revisions. December 2011 showed a 176,000 employment gain, versus a revised 317,000 (previously 278,000) gain in November 2011. Severe issues with monthly seasonal factors continue and still meaningfully cloud the significance of the reported monthly levels in the adjusted headline U.3 unemployment rate and other adjusted household-survey numbers.

As with earlier data versions, the adjusted data have been shifted by highly unstable seasonal factors that are artifacts of the severe and extraordinarily protracted downturn in U.S. economic activity (as well as distortions created by last year's census hiring and firing effects), not by the regular and stable seasonal patterns that were in place before the current economic crisis. Unlike the payroll or establishment series, the household survey does not use the concurrent seasonal factor adjustment series. The household series, however, does go through other revisions and distortions.

As noted last month, "Effective with the release of The Employment Situation for January 2012, scheduled for February 3, 2012, population controls that reflect the results of Census 2010 will be used in the monthly household survey estimation process. Historical data will not be revised to incorporate the new controls; consequently, household survey data for January 2012 will not be directly comparable with that for December 2011 or earlier periods."

Lack of direct comparability is a major flaw in the household data and is why current unemployment series generally cannot be compared meaningfully with BLS series that pre-date the 1994 overhaul of the survey's methodology.

Unemployment Rates. The December 2011 seasonally-adjusted headline (U.3) unemployment rate eased, with a statistically-insignificant 0.14 percentage point decline to 8.51% +/- 0.23% (95% confidence interval), from a revised 8.65% (previously 8.64%) in November, and a revised 8.93% (previously 9.01%) in October. As noted in the *Opening Comments and Executive Summary*, where a rebalancing or revision of the seasonal factors since January 2007 should have netted out to zero, a sum of the plus and minuses showed a 0.4% imbalance in favor of revising the headline unemployment rates to the downside.

As with November unemployment, the decline in the December headline number reflected an ongoing flow of unemployed workers moving to discouraged-worker status and moving out of the headline labor force.

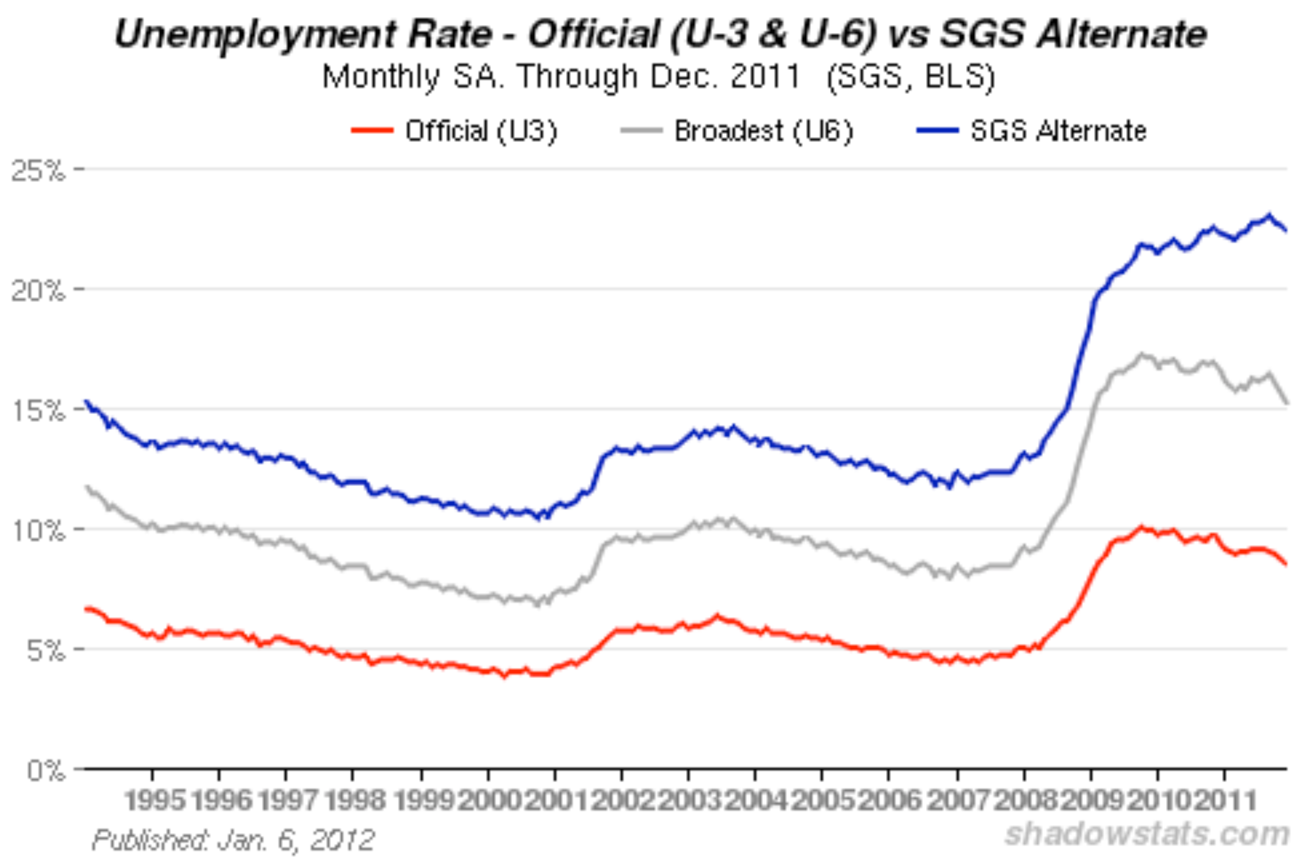
On an unadjusted basis, December's U.3 unemployment was 8.3%, versus 8.2% in November.

Again, heavily skewed by bad seasonal factors that sharply cut the adjusted count of those working part-time for economic reasons, and reflecting a surge in short-term discouraged workers moving into long-term discouraged worker status, the December U.6 unemployment rate fell to a seasonally-adjusted 15.2% from an revised 15.6% in November, and from a revised 16.0% (previously 16.2%) in October. The unadjusted U.6 rate rose to 15.2%, from to 15.0% in November.

As noted in the *Opening Comments and Executive Summary*, where a rebalancing or revision of the seasonal factors since January 2007 should have netted out to zero, the sum of the plus and minuses showed a 1.1% imbalance in favor of revising the U.6 unemployment rates lower.

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—eased to 22.4% in December from an unrevised 22.6% in November, and from a revised 22.7% (previously 22.9%) in October. The SGS estimate generally is built on top of the official U.6 reporting, and tends to follow its relative monthly movements and annual seasonal-factor revisions. Accordingly, it will suffer some of the current seasonal-adjustment woes afflicting the base series, such as the November and December distortions in part-time employment for economic reasons. There should be catch-up reporting the months ahead, since the series and underlying do not use the concurrent-seasonal-factor methodology that is used with the payroll series.

Nonetheless, there continues to be a noticeable divergence in the SGS series versus U.6. The reason for this is that U.6, again, only includes discouraged workers who have been discouraged for less than a year. As the discouraged-worker status ages, those that go beyond one year, fall off the government counting, and new workers enter "discouraged" status. Accordingly, with the continual rollover, the discouraged workers counted in U.6 continue had not been changing much in aggregate recently, but the November number showed an ominous net surge and December an ominous decline. Further, the long-term discouraged worker component in the SGS estimate continued to increase, as few of those that have dropped out of U.6 are gaining active employment. See the Alternate Data tab for more detail.

As discussed in previous writings, an unemployment rate above 22% 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 that 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. Recognition of an intensifying double-dip recession as well as an escalating inflation problem still is sporadic. The political system would like to see the issues disappear until after the 2012 election, the media does its best to avoid publicizing unhappy economic news during the holiday shopping season, 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.

Retail Sales (December 2011). December 2011 retail sales are due for release on Thursday, January 12th. This dominant month of retail activity should disappoint market expectations, and it likely will be flat-to-minus after adjustment for inflation.

Trade Balance (November 2011). The November 2011 trade deficit detail is due for release on Friday, January 13th. The second month of fourth-quarter 2011, November, along with October, will the basis for estimating the net export account in the "advance" fourth-quarter GDP estimate on January 27th.

Accordingly, any significant widening of the deficit beyond market expectations would tend to dampen expectations for fourth-quarter GDP. My betting would be on a worse-than-expected deficit.