

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

COMMENTARY NUMBER 355
February Employment and Unemployment

March 4, 2011

Crisis with Unstable Seasonal-Factors Diminishes Significance of Adjusted Labor Data

February Unemployment: 8.9% (U.3), 15.9% (U.6), 22.1% (SGS)

Contracting M3 and Rising Inflation

PLEASE NOTE: The next regular Commentary is scheduled for Friday, March 11th, following release of February Retail Sales and will include an assessment of the previous day's January Trade Deficit. The Hyperinflation Special Report (2011) will be published by Monday afternoon (March 7th).

Also, please see the note at the end of this Commentary for detail on the new Web site pages for the Withholding-Tax Series.

—Best wishes to all, John Williams

Openly Misleading Reporting from the Bureau of Labor Statistics. In today's (March 4th) press release on February labor conditions, the Bureau of Labor Statistics (BLS) reported that, "The change in total nonfarm payroll employment for December was revised from +121,000 to +152,000, ..." While that new December number was published that way, today, the December gain really was 120,000, and the BLS knows that. The difference is in the concurrent seasonal-factor adjustments made each month, where

history, consistent with current reporting, is revised back a number of years in internal BLS calculations, yet only revisions for the prior two months—December and January in today’s report—are published. November has been locked in place at last month’s reporting level, until next year’s benchmark revisions. Based on what should have been the seasonally-adjusted revision to November in BLS calculations, December’s revised monthly gain was 120,000, not 152,000.

Reporting of Employment and Unemployment Continues to Be Distorted by Unstable Seasonal Factors. As discussed in [Commentary No. 349](#), the extreme severity of the current economic downturn—both in terms of depth and duration—has distorted regular month-to-month reporting of seasonally-adjusted series, particularly the nonfarm payroll employment and the headline U.3 unemployment rate numbers.

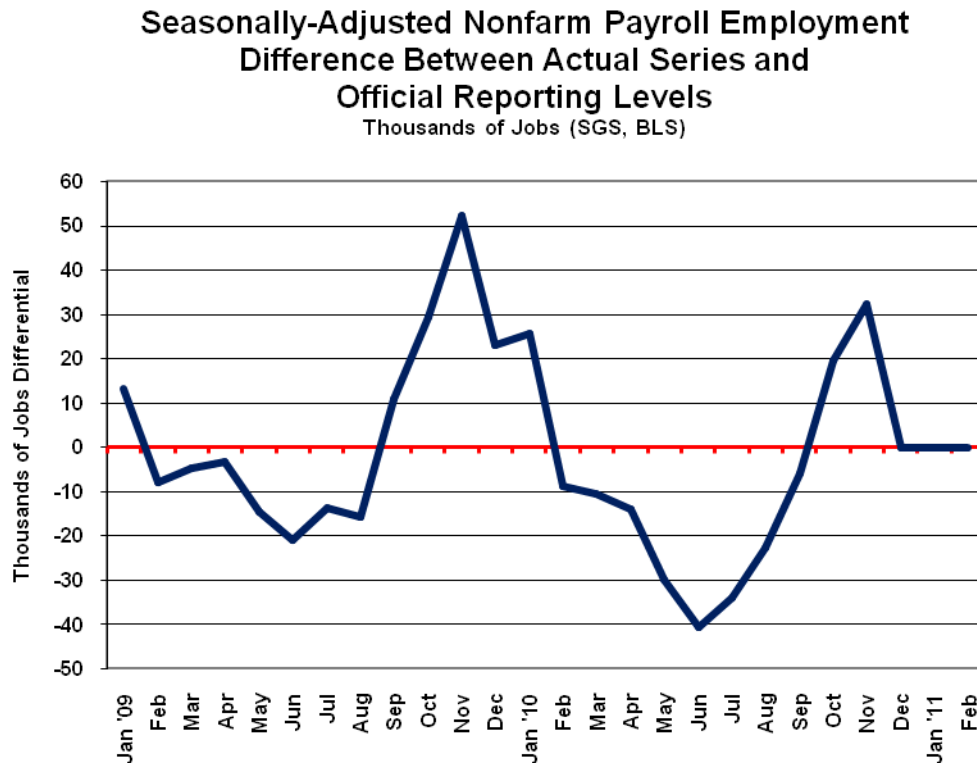
Meaningful seasonal-adjustments tend to be stable over time, without wild fluctuations every time the seasonals are re-estimated. This is true particularly for series like payroll employment and retail sales where the seasonal factors are concurrent, that is, the seasonal factors are recalculated each month for the current month’s reporting based on the current month’s raw data.

In the case of nonfarm payrolls, those monthly seasonal-adjustment recalculations alter the seasonally-adjusted series going back a number of years. The BLS, however, only shows the revisions back two months, in an effort not to “confuse” data users. The problem arises where unstable seasonal factors—in this case resulting from extreme and non-seasonal shifts in economic activity—sharply shift the patterns of previously reported growth, related to current monthly activity, but the prior-period revisions are not reported to the public. As a result, current increases or decreases in activity may reflect nothing more than a shift in seasonal patterns that is not being reported by the BLS. The currently published seasonally-adjusted data are not consistent with the officially reported history, although the BLS has the consistent history available.

Once a year, with the annual benchmark revision, the reported history is brought current, almost. In last month’s benchmark, for example, the historical series was revised for updated survey information and for seasonal factors as well, through December 2010. Still, those numbers were not consistent with what was reported for January 2011, where the January concurrent seasonal adjustments left even the historical benchmark revision data inconsistent with the January numbers reported at that time. In the current post-benchmark cycle, the February jobs estimate is the second concurrent seasonal-factor adjustment.

The inconsistency differences can be 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—seasonal-factor instabilities from just two months of revisions—are shown in the following graph.

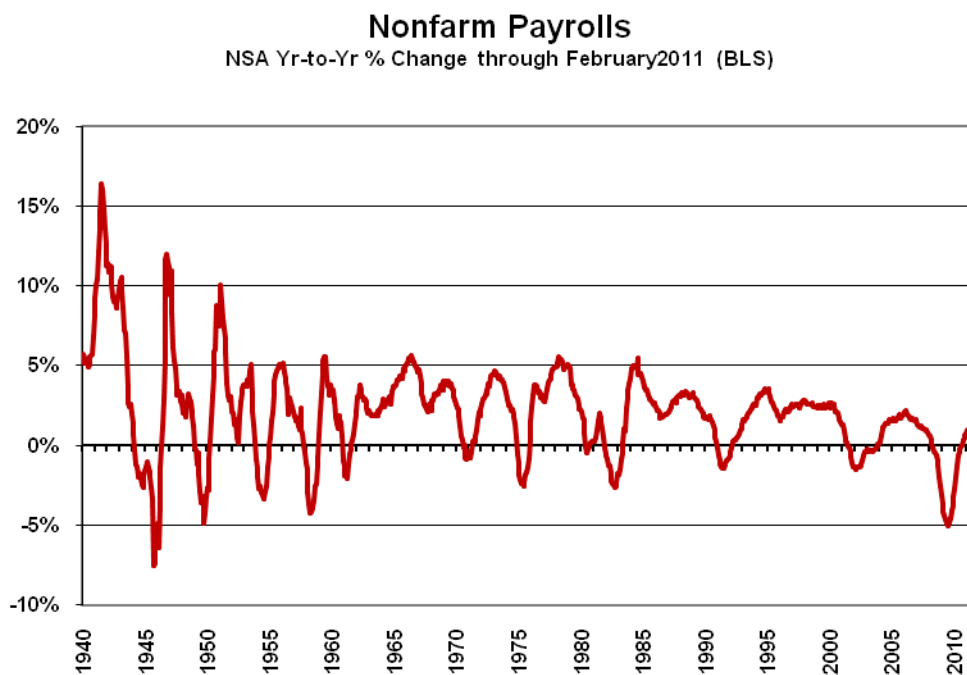
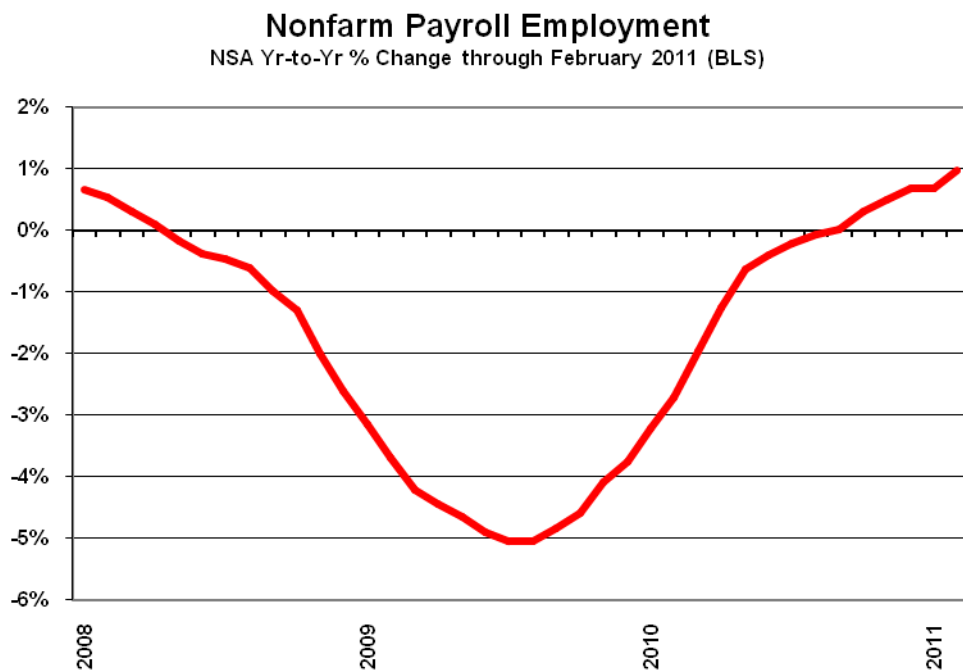
As can be seen in the plot (the difference is the consistent adjusted series less the official numbers), the latest reporting shows that the instability in the concurrent seasonal factors has shifted previously-reported relative economic strength in the general February to August period, to the September through January period. The differences will tend to shift over time, and we plan to publish this detail on a monthly basis, until such time as the BLS begins reporting the full monthly revisions to its seasonally-adjusted data. The shifting patterns go both ways, where one month becomes relatively weaker, another will become relatively stronger, and vice versa, including the relative strength or weakness of the latest number.

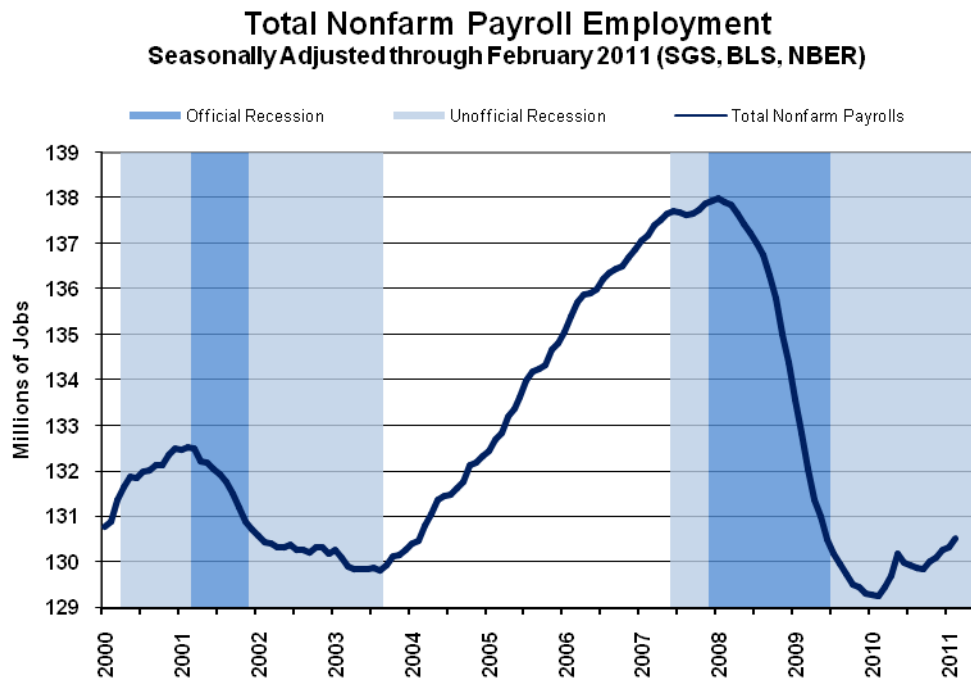
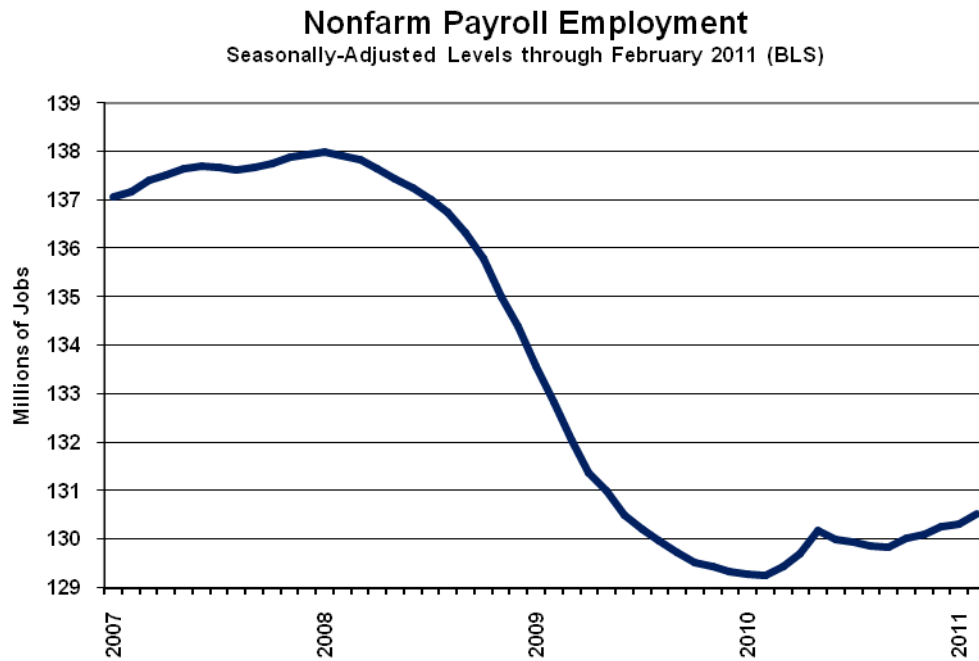


While minor differences in reporting will move the financial markets, these shifting variations, in combination with the BLS's recognized inability to assess the Birth-Death effects accurately (see the Birth-Death Model section), and an otherwise estimated 95% confidence interval of $\pm 129,000$ jobs in the reported monthly payroll change, means that the headline reporting usually seen for payrolls should not be taken too seriously. Issues with seasonal factors also cloud the significance of the reported monthly levels in the seasonally-adjusted headline U.3 unemployment rate.

Payroll Survey Detail. The BLS reported a statistically-significant, seasonally-adjusted February 2011 jobs gain of 192,000 (an increase of 250,000 jobs before prior-period revisions) $\pm 129,000$ (95% confidence interval). January payrolls showed a revised 63,000 (previously 36,000) gain. In terms of year-to-year change, the unadjusted February 2011 number was up by 0.98% from the year before, which was up from January's revised 0.69% (previously 0.68%) increase.

The graphs of long-term year-to-year payroll change show a recent increase in annual growth, which primarily reflects recent, protracted bottom-bouncing in the payroll series. 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.





As shown in the preceding graphs of seasonally-adjusted payroll levels (as reported by the BLS), however, the current data continue to reflect bottom-bouncing, with the payroll level still below where it was a decade ago, despite a 10% increase in the U.S. population in the same period.

Birth-Death/Bias Factor Adjustment. Despite the ongoing and regular overstatement of monthly payroll employment—as evidenced by the regular annual downward benchmark revisions to the reported payroll numbers, including the benchmark published last month—the BLS has upped its monthly biases in post-benchmark reporting. For February 2011, there was a positive monthly bias used of 112,000, up from the revised estimate of 97,000 used in February 2010. In January 2011, the net bias was a contraction of 339,000, narrowed from the 427,000 contraction now estimated for January 2010

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 likely are running now above 30,000 per month (seasonally-adjusted). I still estimate this monthly bias should be negative by 200,000 or so, on average. Since it is not, the BLS continues regularly to overestimate monthly growth in payroll employment by roughly 230,000 jobs. Much of that misreporting, which was not picked up in the 2010 benchmarking, 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). February 2011 showed a 250,000 employment gain from January, which was reported up by 117,000 (estimated as a 589,000 gain, adjusted for breaks in the reporting consistency of the series) from December.

As noted in the opening comments, the U.3 unemployment still likely has been affected by highly unstable seasonal factors that are artifacts of the severe and extraordinarily protracted downturn in U.S. economic activity, not from changing seasonal patterns.

The February 2011 seasonally-adjusted headline (U.3) unemployment rate declined by a statistically-insignificant 0.13 percentage point to 8.92% +/- 0.23% (95% confidence interval), from 9.05% in January. Not-seasonally-adjusted, February's U.3 unemployment fell to 9.5% from 9.8% in January.

The February U.6 unemployment rate declined to a seasonally-adjusted 15.9% from 16.1% in January, again suffering from seasonal-maladjustment. The unadjusted rate fell to 16.7% in February, down from 17.3% in January. 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—notched lower to about 22.1% in February, from 22.2% in January 2011. 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 a graph and more detail.

As discussed in earlier writings, while an unemployment rate around 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 than 2% work on farms. Accordingly, for purposes of a Great Depression comparison, I would look at the estimated peak nonfarm unemployment rate in 1933 of 34% to 35%.

February M3 Likely Down Year-to-Year, With the Monthly Level Little Changed versus January.

The preliminary estimates for the February money supply will be published over the coming weekend, on the [Money Supply page](#) at the Alternate Data tab of www.shadowstats.com. The SGS Ongoing M3 Estimate for the February 2011 monthly average is on track to show a 2.1% year-to-year contraction, versus a 2.2% contraction in January. Seasonally-adjusted, the February number appears likely to show little change from January, with recent gains in M2 largely offset by, and reflecting a shift in funds from, declining institutional money funds and large time deposits.

As will be discussed in some detail in the upcoming *Hyperinflation Report (2011)*, declining money supply can be consistent with rising inflation, if the pace of contraction in constant-dollar GDP is more severe than the money supply contraction. Given the current nature of the overstatement of GDP growth, this unusual circumstance may be in play.

Week Ahead. Given the unfolding reality of an intensifying double-dip recession and more-serious inflation problems than generally are anticipated by the financial markets, risks to reporting will tend

towards higher-than-expected inflation and weaker-than-expected economic reporting in the month and months ahead. Increasingly, previously unreported economic weakness should show up in prior-period revisions.

Trade Balance (January 2011). The January trade deficit is scheduled for release on Thursday, March 10th. Odds favor ongoing deterioration in the U.S. trade position.

Retail Sales (February 2011). February retail sales are due for release on Friday, March 11th. Briefing.com is indicating a consensus forecast of a 0.4% monthly gain, following a 0.3% increase in January. Odds favor not only another downside reporting surprise versus consensus, but also an outright monthly contraction net of rising prices.

NOTE: New Pages for the Withholding-Tax Series.

The new Withholding-Tax Series, which was discussed in last week's [Commentary](#), now has its own set of pages. An overview page with two frequently updated charts at:

<http://www.shadowstats.com/charts/employment/federal-withholding-taxes>,

and links to a more detailed description of the data, and to occasional comments and updates as the data shows features of interest. We hope to elicit feedback from subscribers and non-subscribers alike, which will help guide our decisions on what further work is undertaken in this area.
