

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

**SUPPLEMENTAL COMMENTARY NUMBER 784-A**  
**Payroll Benchmark Revisions and Reporting Biases**

**February 10, 2016**

---

**Payroll-Reporting's Upside Bias-Factors**  
**Were Boosted by 20% to an Annual Pace of 941,000 Jobs,**  
**Despite the Downside Benchmark Revision of 206,000 (-206,000)**

**Non-Comparability of Seasonally-Adjusted Data Coming Out of the 2015 Revision**  
**Showed Some Parallel Patterns versus the 2014 Circumstance**

---

*PLEASE NOTE: The next regular Commentary, scheduled for Friday, February 12th, will cover January nominal Retail Sales. Given recent financial-market developments, the U.S. dollar circumstance also will be updated.*

*Best wishes to all — John Williams*

## PAYROLL-EMPLOYMENT BENCHMARKING—UNDERLYING DETAIL

**Benchmarked Historical Monthly Payroll Employment Details Are Not Comparable.** The broad, headline details of the 2015 payroll-employment benchmark revisions were graphed and discussed in [Commentary No. 784](#) of February 6th. The supplemental discussion in today's missive looks at two underlying issues that are the primary drivers of the revisions as well as the primary elements involved in poor-quality reporting, and in the inconsistent, misreporting of the headline payroll-employment detail.

The first problem is the lack of comparability of the seasonally-adjusted monthly headline payroll numbers. Such results from the Bureau of Labor Statistics (BLS) using concurrent seasonal adjustment factors, a process that revises the last five years of seasonally-adjusted headline data, each and every month, but where BLS does not publish the revised historical data.

The second issue is the BLS use of the Birth-Death Model, which artificially inflates headline month-to-month payroll gains with add-factors that currently appear to be well in excess of 200,000 jobs per month.

**Headline Distortions from Shifting Concurrent-Seasonal Factors.** Discussed and graphed here, with extended commentary and the latest detail available from ShadowStats affiliate [ExpliStats](#), there are serious and deliberate flaws with the government's seasonally-adjusted, monthly reporting of both employment and unemployment. Each month, the BLS uses a concurrent-seasonal-adjustment process to adjust both the payroll and unemployment data for the latest seasonal patterns. As new headline data are seasonally-adjusted for each series, the re-adjustment process also revises the monthly history of each series. A new seasonally-adjusted history is recalculated for every month, going back five years, so as to be consistent with the new seasonal patterns generated for the current headline number.

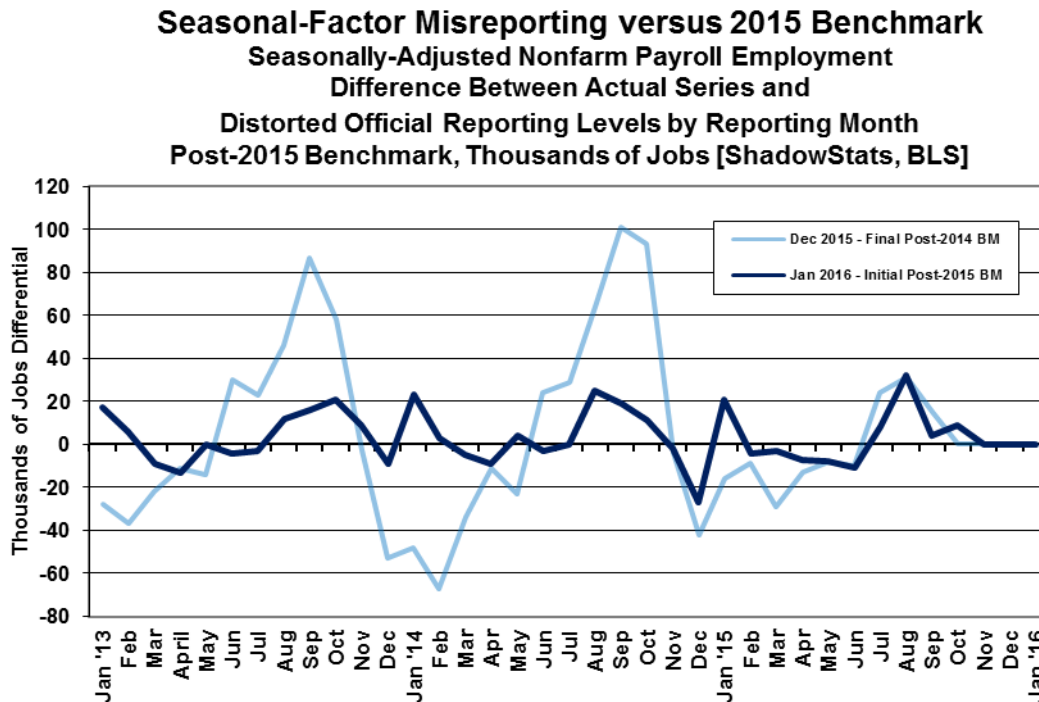
**Effective Reporting Fraud.** The problem remains that the BLS does not publish the monthly historical revisions along with the new headline data. As a result, current headline reporting is neither consistent nor comparable with prior data, and the unreported actual monthly variations versus headline detail can be meaningfully large. The deliberately-misleading reporting effectively is a fraud. The problem is not with the BLS using concurrent-seasonal-adjustment factors; it is with the BLS not publishing consistent data, where those data are calculated each month and are available internally to the Bureau.

**Household Survey.** In the case of the published Household Survey (unemployment rate and related data), the seasonally-adjusted headline numbers usually are not comparable with the prior monthly data or any month before. Accordingly, the published headline detail as to whether the unemployment rate was up, down or unchanged in a given month is not meaningful, and what actually happened is not knowable by the public. Month-to-month comparisons of these popular numbers are of no substance, other than for market hyping or political propaganda. The headline month-to-month reporting in the Household Survey is made consistent only in the once-per-year reporting of December data, with annual revisions back for five years. All historical comparability disappears, though, with the ensuing headline January reporting, and with each monthly estimate thereafter.

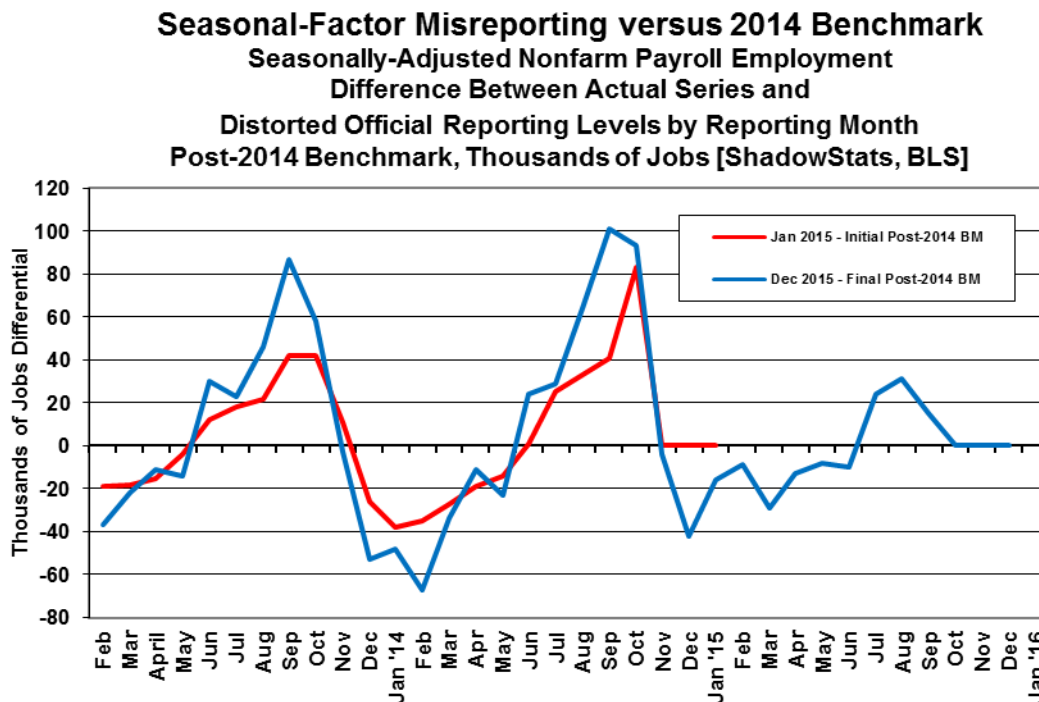
**Payroll or Establishment Survey.** In the case of the published Payroll Survey data (payroll-employment change and related detail), monthly changes in the seasonally-adjusted headline data are comparable only with the prior month's reporting, not before. Due to the BLS modeling process, the historical data never

are published on a consistent basis, even with publication of the annual benchmark revision (see comments on *Graph 1*).

**Graph 1: Concurrent-Seasonal-Factor Irregularities - Headline Detail in January 2016 versus 2015 Benchmark**



**Graph 2: Concurrent-Seasonal-Factor Irregularities - Headline Detail in 2015 versus 2014 Benchmark**



Where the BLS does provide modeling detail for the Payroll Survey, allowing for third-party calculations, no such accommodation has been made for the Household Survey. Again, ShadowStats affiliate ExpliStats does such third-party calculations for the payroll series, and the resulting detail of the differences between the current headline reporting and the constantly-shifting, consistent and comparable history are reflected here in *Graphs 1* and *2*.

Consider in the latest headline (and benchmarked) payroll detail that the January 2016 data were comparable only with the headline changes in the December 2015 numbers, not with November 2015 or any earlier months. Per BLS headline reporting, seasonally-adjusted January payrolls rose month-to-month by 151,000 from December, while December payrolls rose by 262,000 from November, and November payrolls rose by 280,000 from October. That headline November monthly gain was not accurate and not comparable with the headline details for January and December, because the October payroll level was not adjusted for the new seasonal adjustments. Had the BLS revised headline October reporting to be on a consistent basis with the headline reporting, the October-to-November change would have been a comparable gain of 271,000, instead of the purported 280,000 increase.

The differences go both ways and often are larger, as was seen in the case of November 2014, coming out of the 2014 benchmark revision. That particular incident is detailed at the [ExpliStats](#) link, and it was discussed in the *Opening Comments* of prior [Commentary No. 784](#).

*Graph 1* details how far the monthly payroll employment data already have strayed from being consistent with the actual, most recent benchmark revision, which was in October but not published. The revised series is run in the background in October, November and December, with January being the first month where the new numbers are published. Yet, at that point, the headline detail already has three months of inconsistent seasonal adjustments in play.

If the historical data were consistent, the dark blue line would be flat and at zero. The light-blue line shows the final inconsistency readings as of the December 2015 headline reporting.

*Graph 2* shows the initial headline inconsistencies in January 2015 reporting (red line) following the 2014 benchmarking, with the final inconsistencies in December 2015 (dark-blue line), the same series again as the light-blue line in *Graph 1*.

While the tendency for a shift towards spiked seasonals in third-quarter activity has held between the 2014 and 2015 revisions, fortuitously for January 2016, there appears to have been a new upside spike to historical January seasonals, which would have helped to spike the adjusted January 2016 jobs gain.

Again, if the headline monthly payroll-employment reporting were comparable and stable, month-after-month, all the lines in *Graphs 1* and *2* would be flat and at zero.

***Birth-Death/Bias-Factor Adjustment.*** Despite the ongoing, general overstatement of monthly payroll employment, the BLS adds in upside monthly biases to the payroll employment numbers. The continual overstatement is evidenced usually by regular and massive, annual downward benchmark revisions (2011 and 2012 and 2014 excepted). Even with the just-published downside revision of 206,000 (-206,000) to March 2015 payrolls in the 2015 benchmarking, the BLS upped its annual upside bias factors by 160,000 jobs. Such discrepancies, however, are not unusual.

Discussed in the benchmark detail of [Commentary No. 598](#), the regular benchmark revision to March 2013 payroll employment was to the downside by 119,000 (-119,000), where the BLS had overestimated standard payroll employment growth.

With the March 2013 revision, though, the BLS separately redefined the Payroll Survey so as to include 466,000 workers who had been in a category not previously counted in payroll employment. The latter event was little more than a gimmicked, upside fudge-factor, used to mask the effects of the regular downside revisions to employment surveying, and likely was the excuse behind an increase then in the annual bias factor, where the new category could not be surveyed easily or regularly by the BLS. Elements here likely had impact on the unusual issues with the 2014 benchmark revision.

Abuses from the 2014 benchmarking were detailed in [Commentary No. 694](#) and [Commentary No. 695](#). With the headline benchmark revision for March 2014 showing understated payrolls of 67,000 (-67,000), the BLS upped its annual add-factor bias by 161,000 for the year ahead.

Historically, the upside-bias process was created simply by adding in a monthly “bias factor,” so as to prevent the otherwise potential political embarrassment to the BLS of understating monthly jobs growth. The “bias factor” process resulted from such an actual embarrassment, with the underestimation of jobs growth coming out of the 1983 recession. That process eventually was recast as the now infamous Birth-Death Model (BDM), which purportedly models the relative effects on payroll employment of jobs creation due to new businesses starting up, versus jobs lost due to bankruptcies or closings of existing businesses.

January 2016 Add-Factor Bias. The not-seasonally-adjusted January 2016 bias was a negative monthly add-factor of 233,000 (-233,000), versus a revised negative add-factor of 16,000 (-16,000) [previously a negative 23,000 (-23,000)] in December 2015, and a negative add-factor of 275,000 (-275,000) in January 2015.

The revamped, aggregate upside bias for the trailing twelve months through January 2016 was 941,000, up by 160,000 or 20% from 781,000 in December 2015 (February and March 2016 were imputed proportionately based on the other revisions). That is a rough, monthly average of 78,400 in January 2016 (versus 65,100 pre-2015 benchmarking) jobs created out of thin air, on top of some indeterminable amount of other jobs that are lost in the economy from business closings. Those losses simply are assumed away by the BLS in the BDM, as discussed below.

Problems with the Model. The aggregated upside annual reporting bias in the BDM reflects an ongoing assumption of a net positive jobs creation by new companies versus those going out of 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 up downside benchmark revisions for the next year, which traditionally are ignored by the media and the politicians. The BLS cannot measure meaningfully 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), or by changes in household employment that were incorporated into the 2015 redefined payroll series. Such information simply is guesstimated by the BLS, along with the addition of a bias-factor generated by the BDM.

Positive assumptions—commonly built into government statistical reporting and modeling—tend to result in overstated official estimates of general economic growth. Along with these happy guesstimates, there

usually are underlying assumptions of perpetual economic growth in most models. Accordingly, the functioning and relevance of those models become impaired during periods of economic downturn, and the current, ongoing downturn has been the most severe—in depth as well as duration—since the Great Depression.

Indeed, historically, the BDM 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. Recent studies have suggested that there has been a net jobs loss, not gain, in this circumstance. Nonetheless, if a company fails to report its payrolls because it has gone out of business (or has been devastated by a hurricane), the BLS assumes the firm still has its previously-reported employees and adjusts those numbers for the trend in the company's industry.

The presumed net additional “surplus” jobs created by start-up firms are added on to the payroll estimates each month as a special add-factor. On top of that, the monthly BDM add-factors have been increased now to an average of 78,400 jobs per month for the current year. As a result, in current reporting, the aggregate average overstatement of employment change easily exceeds 200,000 jobs per month (the underlying positive base-assumption upside bias, plus the monthly Birth-Death Model add-factor).

---