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Why Are There Revisions to the Jobs Numbers?

Abstract

At the beginning of each month, the Bureau of Labor Statistics (BLS) reports the change in payroll employment for the previous month. This estimate of jobs gained or lost over the month is closely watched by policymakers and those who work in financial markets and the media. When the estimate is revised in subsequent months, however, data users sometimes perceive a very different picture of the job market than what was initially reported. Data users frequently ask why the number was revised. The short answer is, the revised estimate includes additional information that was not available at the time of the initial release— information that makes the revised estimate more accurate.

This BEYOND THE NUMBERS article explains the data collection process that BLS conducts every month to produce the estimate of U.S. employment. The article also should help clarify why BLS releases revisions to the initial estimate so that users will understand the change, if any, in the data.

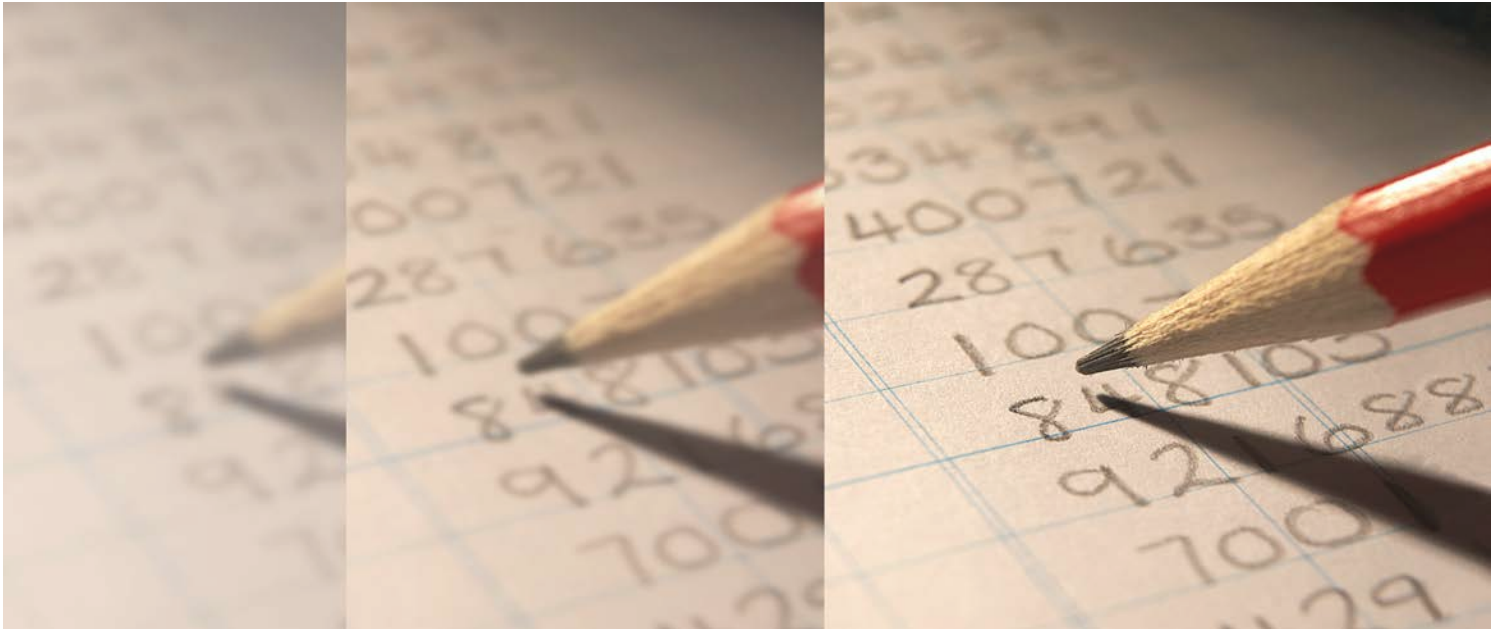
Keywords

payroll employment, data collection, Bureau of Labor Statistics, BLS

Comments

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Why are there revisions to the jobs numbers?

Authors: Thomas Nardone, Kenneth Robertson, and Julie Hatch Maxfield

At the beginning of each month, the Bureau of Labor Statistics (BLS) reports the change in payroll employment for the previous month.¹ This estimate of jobs gained or lost over the month is closely watched by policymakers and those who work in financial markets and the media. When the estimate is revised in subsequent months, however, data users sometimes perceive a very different picture of the job market than what was initially reported.² Data users frequently ask why the number was revised. The short answer is, the revised estimate includes additional information that was not available at the time of the initial release—information that makes the revised estimate more accurate.

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Related articles

More BLS articles and information about payroll employment are available at the following links:

- “Slow and steady: payroll employment grew moderately in 2012,” *Monthly Labor Review*, <http://www.bls.gov/opub/mlr/2013/03/art2full.pdf>
- Current Employment Statistics Highlights, <http://www.bls.gov/web/empsit/ceshighlights.pdf>

Ready or not?

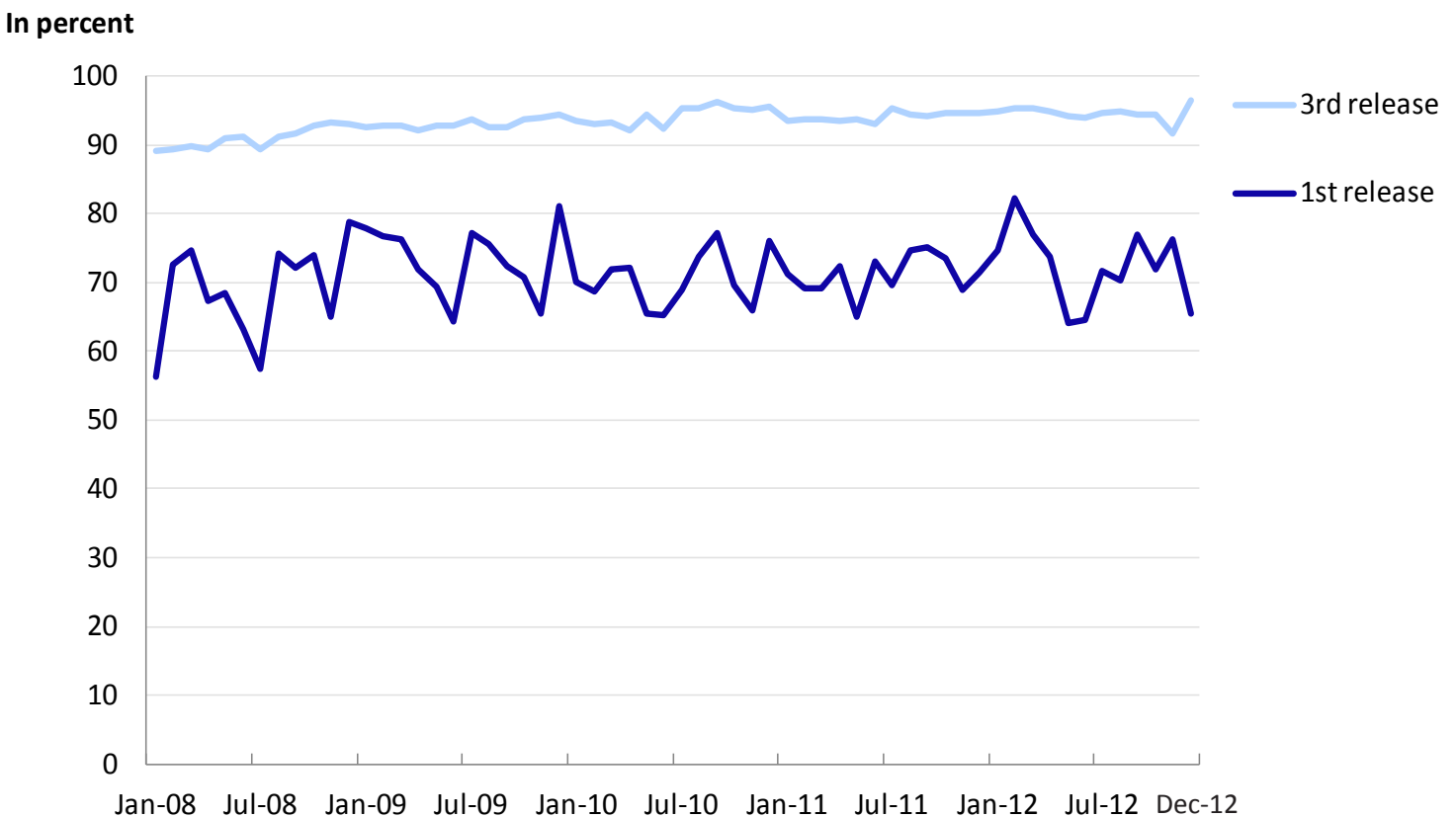
The estimate of employment change is based on a monthly survey of about 560,000 worksites, selected to represent the millions of businesses throughout the country. (For simplicity, we will refer to worksites as businesses even though many individual businesses provide data for multiple worksites.) In the survey sample, businesses report the total number of people who worked or received pay during the pay period that includes the 12th of the month. Although BLS uses a variety of methods to gather these reports as quickly as possible, many businesses do not have their payroll data ready to report by the scheduled date that BLS initially releases the data. In 2012, for example, the average collection rate at the time of the initial release was 73.1 percent.

The initial estimate of job change for a month is based on the growth or loss of jobs at the businesses that have reported their data. Generally, BLS assumes that the employment situation at businesses that had reported is representative of the situation at those that had not yet reported. BLS continues to collect outstanding reports from the businesses in the sample as it prepares a second and then a third estimate for the month. With each subsequent estimate, more businesses have provided their information. In 2012, the average collection rate at the time of the third estimate for a month was 94.6 percent. (See chart 1.)

Differences between the initial and revised estimates generally indicate that the employment change that occurred at the businesses that had not initially reported

Chart 1

Percentage of monthly employment reports received from businesses, by closing date of the first and third releases of BLS data, January 2008 – December 2012



Note: The second releases of BLS data are not shown because the second and third release rates are usually very similar. A complete listing of CES registry receipts by release is available at <http://www.bls.gov/web/empsit/cesregrec.htm>.

Source: U.S. Bureau of Labor Statistics.

was different than the change that occurred at the businesses that had initially reported. For example, if less employment growth occurred among those who had not reported at the time of the first estimate, the initial estimate would be revised down. If more growth occurred among the late responders, the initial estimate would be revised up. The estimation process is more complicated than this simple explanation, however; the key thing for users to remember is that the revised estimates represent a more complete and therefore more accurate picture of developments in the job market.

A quick look at employment

So why doesn't BLS wait until it has all the reports to make the estimate and avoid revisions? Users of the data are intensely interested in the earliest possible read on labor market developments, and experience suggests that the initial

estimate is generally very good. For example, in 2012, the average monthly employment change using the first estimate would have been +142,000, compared with a monthly average change of +165,000 using the third estimate. (See table 1.) Nevertheless, it is true that in some months, revisions are large enough that they change the users' perspectives on the current state of the economy. In November 2012, for example, the initial estimate of over-the-month change was +146,000, while the third estimate was +247,000.

In summary, data users should remember that the initial estimates of payroll employment are a preliminary look at what occurred in each month. It is the quick but lower-resolution snapshot of what went on in the job market for a particular month. Because the revised estimates are based on more complete data, they create a higher resolution picture—and occasionally the revised data produce a different picture altogether. ■

Table 1

Revisions between over-the-month estimates in nonfarm payroll employment, 2012

Month	Year	Seasonally adjusted					
		Over-the-month change			Revision in over-the-month change		
		1st release	2nd release	3rd release	2nd - 1st	3rd - 2nd	3rd - 1st
January	2012	243	284	275	41	-9	32
February	2012	227	240	259	13	19	32
March	2012	120	154	143	34	-11	23
April	2012	115	77	68	-38	-9	-47
May	2012	69	77	87	8	10	18
June	2012	80	64	45	-16	-19	-35
July	2012	163	141	181	-22	40	18
August	2012	96	142	192	46	50	96
September	2012	114	148	132	34	-16	18
October	2012	171	138	137	-33	-1	-34
November	2012	146	161	247	15	86	101
December	2012	155	196	219	41	23	64
Mean revision	2012	...	...	...	10	14	24
Mean absolute revision	2012	...	...	...	28	24	43

Note: A full set of revision information is available at <http://www.bls.gov/web/empst/cesnaicsrev.htm>.

Source: U.S. Bureau of Labor Statistics.

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Notes

1. Payroll employment from the Current Employment Statistics (CES) program excludes proprietors, the unincorporated self-employed, unpaid volunteer or family employees, farm employees, and domestic employees. Salaried officers of corporations are included. Government employment covers only civilian employees; military personnel are excluded. Employees of the Central Intelligence Agency, the National Security Agency, the National Imagery and Mapping Agency, and the Defense Intelligence Agency also are excluded. CES is a monthly survey of about 145,000 businesses and government agencies, representing approximately 557,000 individual worksites. For more information on the program's concepts and methodology, see "Technical notes to establishment survey data," <http://www.bls.gov/ces/#technical>. To access CES data, see "Current Employment Statistics—CES (national)," <http://www.bls.gov/ces>.
2. Second preliminary estimates for a reference month are published the month following the initial release, and final sample-based estimates are published 2 months after the initial release.