

TECHNICAL NOTE: COMPARING CES AND QCEW SECTOR DYNAMICS IN WISCONSIN

During the last few months there has been controversy around the employment figures for Wisconsin. For most of the year—but more intensively in the weeks prior to the gubernatorial recall election—the Wisconsin Department of Workforce Development highlighted systematic differences between the figures provided by the Current Employment Statistics (CES), published on a monthly basis from the Bureau of Labor Statistics (BLS), and the figures from the Quarterly Census of Employment and Wages (QCEW), also published by the BLS. The CES showed job losses across 2011 in the state; the QCEW showed gains. (Though using either data source, Wisconsin's growth was weak relative to the national standard and lagged all states in the region.)

The CES is a monthly survey of “about 141,000 businesses and government agencies, representing approximately 486,000 individual worksites, in order to provide detailed industry data on employment, hours, and earnings of workers on nonfarm payrolls,”¹ including “nonfarm employment series for all employees, production and nonsupervisory employees, and women employees, as well as average hourly earnings, average weekly hours, and average weekly overtime hours (in manufacturing industries) for both all employees and production and nonsupervisory employees.”² The QCEW, on the other hand, “publishes a quarterly count of employment and wages reported by employers covering 98 percent of U.S. jobs, available at the county, MSA, state, and national levels by industry,”³ providing researchers and the public with a “comprehensive tabulation of employment and wage information for workers covered by State unemployment insurance (UI) laws and Federal workers covered by the Unemployment Compensation for Federal Employees (UCFE) program.”⁴

The near-census character of the QCEW (in Wisconsin, it covers approximately 96 percent of Wisconsin business establishments)⁵ makes it the most accurate source of data for studying employment and jobs at the state and national levels. Given its quarterly frequency and release lag time, however, the QCEW is not the best tool to keep track of the current economic conditions. The CES, even though it is based in a much smaller sample, provides reliable and statistically representative information on employment on a monthly basis. Like most analysts and media outlets, COWS employs the CES for assessing the state of labor markets at the national and state levels.

Given the controversy generated by the differences between the QCEW and the CES when looking at the changes in employment in Wisconsin during 2011, we have decided to provide this technical note, so readers can draw their own conclusions about these sources.

Counterfactual Analysis Using ACS

In order to assess Wisconsin's performance in terms of job creation, we analyzed what the hypothetical changes in employment would be in the state if Wisconsin had followed the national trends in (percent) changes in employment at the national level (see table on next page). For that, we use the last available data from CES, which allows us to compare changes from January 2011 to June 2012. (This analysis is also presented in *The State of Working Wisconsin 2012*.)

1 www.bls.gov/ces

2 www.bls.gov/ces/cesprog.htm#Data_Available

3 www.bls.gov/cew

4 www.bls.gov/cew/cewover.htm

5 www.thewheelerreport.com/releases/August12/0816/0816dwd.pdf

WISCONSIN'S MISSING JOBS BY INDUSTRY: COMPARING ACTUAL JOB CHANGES IN WISCONSIN TO CHANGE THAT WOULD HAVE BEEN GENERATED BY NATIONAL INDUSTRY TRENDS, FOR KEY SECTORS, JANUARY 2011 TO JUNE 2012

<i>Industry</i>	<i>Jan. 2011 to Jun. 2012 Actual</i>	<i>Hypothetical</i>	<i>Difference</i>
Leisure and Hospitality	-14,300	1,679	-15,979
Construction	-11,500	-924	-10,576
Government	-9,500	-908	-8,592
Other Services	-3,600	102	-3,702
Professional, Scientific, and Technical Services	-3,100	1,196	-4,296
Retail Trade	-2,400	-183	-2,217
Professional and Business Services	-2,000	3,571	-5,571
Information	-1,100	0	-1,100
Real Estate, Rental, and Leasing	-900	275	-1,175
Transportation and Utilities	0	740	-740
Administrative, Support, and Waste Management	900	1,980	-1,080
Educational Services	2,100	528	1,572
Wholesale Trade	5,100	987	4,113
Health Care and Social Assistance	6,400	3,158	3,242
Manufacturing	13,300	3,759	9,541

COWS analysis of BLS, CES data

Comparing Trends: QCEW vs. CES

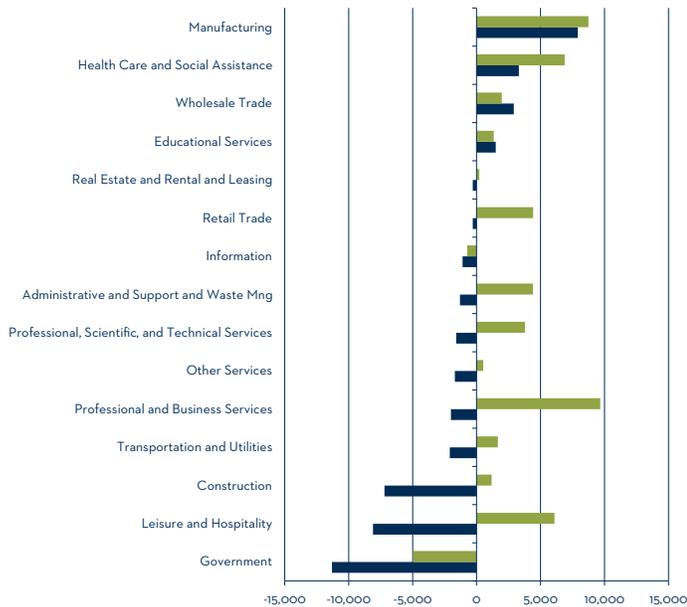
The CES and QCEW are different in several ways. Most of these differences make the comparison between the two data sources—which have been at the heart of the controversy over employment figures in Wisconsin—extremely difficult. Here are some of the differences:

- As we have mentioned, the sample sizes are different. While QCEW is a near-census survey, the CES is based upon a much smaller sample.
- The data is collected at different frequencies.
- The data produced by the CES is used by most analysts in the country after seasonally adjusting the figures. The QCEW does not provide seasonally adjusted data.
- The industry classification in both data sources is different—even though both are published by the federal BLS—making sector comparisons difficult.

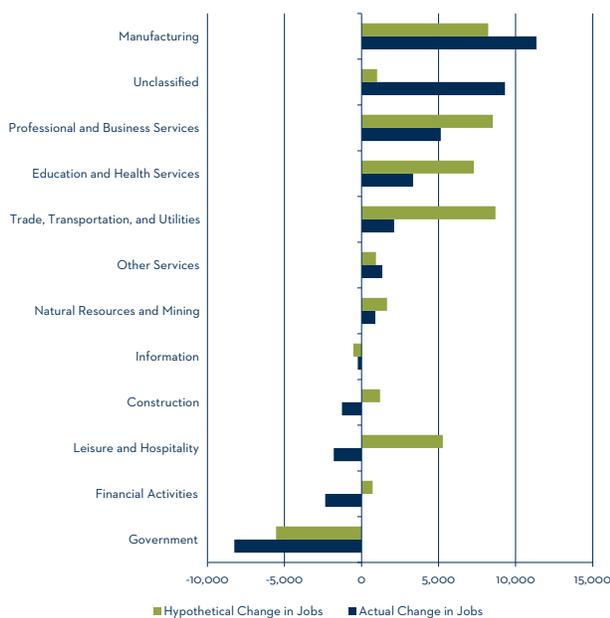
Despite these differences, we have conducted similar analyses (as similar as possible) using both data sources. Repeating the counterfactual analysis using the CES, though this time for the December 2010 to December 2011 period, and comparing our results with the ones we obtain using the QCEW for the same period, we obtain results showing the extent to which the trend in a sector in Wisconsin deviates from the trend that would be expected, given the national trajectory of that sector. The results are shown on the next page.

CHANGE IN WISCONSIN JOBS BY INDUSTRY AND HYPOTHETICAL CHANGE PEGGED TO U.S. INDUSTRY TRENDS USING DIFFERENT DATA SOURCES, DECEMBER 2010 TO DECEMBER 2011

Using CES Data



Using QCEW Data



As the figures show, despite the major differences between the CES and QCEW, several consistent conclusions can be drawn from both data sources. Both CES and QCEW data show an important increase in manufacturing jobs, more or less in line with the national trend. The same can be said about the health services sector, despite the fact that they are classified in different ways. In terms of accounting for the weakness of Wisconsin’s job growth, both sources show losses in government jobs that exceed the national trend. Both data sources show big losses in leisure and hospitality jobs, and both show that these losses go against the national trend of gains in this sector. Despite differences in the scale of jobs lost, the same is true for the construction sector, where Wisconsin shows job losses against the national trend toward job growth. A similar conclusion can be reached by looking at the trade sector, though the categories here are not exactly comparable.

In sum, and despite important methodological and definitional differences that make the QCEW and the CES hardly comparable, both data sources show similar trends in terms of jobs gains and losses across sectors. It is worth noting that the QCEW offers a somewhat more positive picture (more sectors with actual gains) than the CES, but the general picture is the same: gains in manufacturing and health care jobs, and losses in government, construction, and leisure and hospitality. Moreover, the picture shown for 2011 by both the CES and QCEW puts Wisconsin way behind the U.S. in terms of job creation in most industries, despite the differences in the scale of job gains and losses. Finally, it is worth mentioning that an important part of the job gains accounted for in the QCEW are under the “Unclassified” category, which makes it even more difficult to compare it with the CES data.