Measuring Wisconsin's Job Gap

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Summary

This paper uses data from the Bureau of Labor Statistic's (BLS) Quarterly Census of Employment and Wages (QCEW) to measure the size of Wisconsin's job gap, that is, the extent to which Wisconsin has or has not kept up with its neighboring states in job creation over the last 4 years. Using a variety of data techniques, I find:

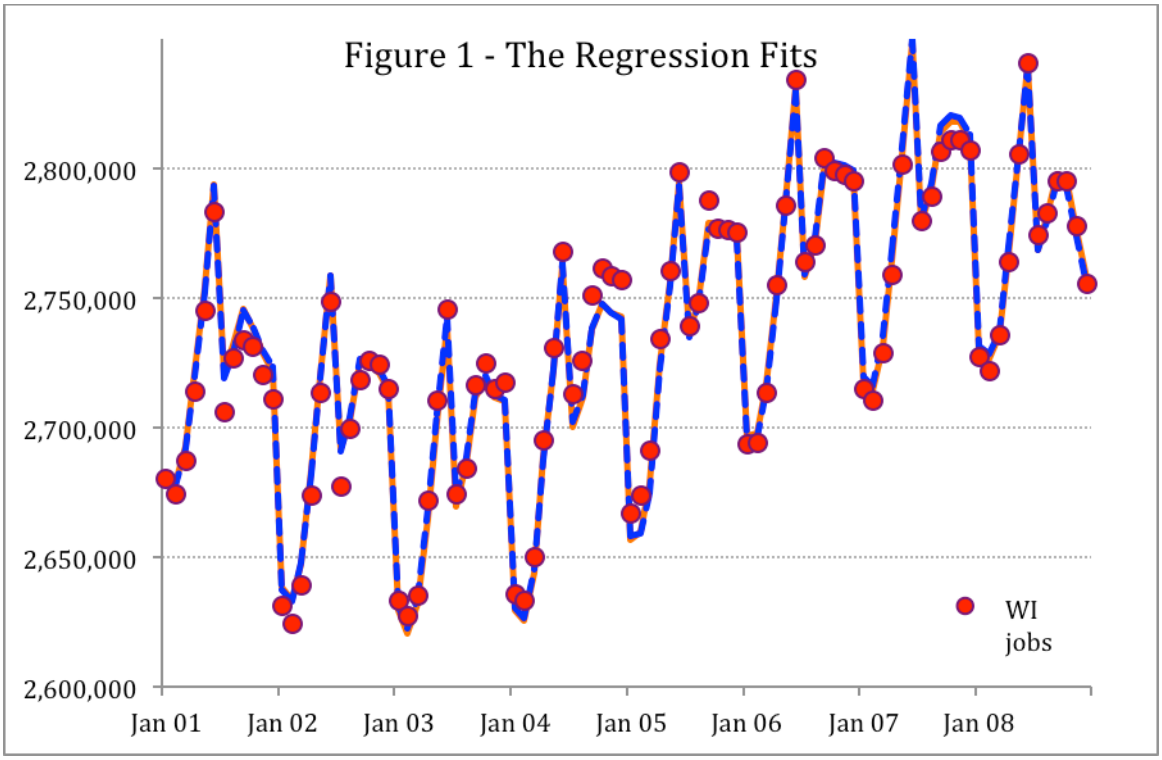
- In September 2009, one year into the Great Recession, Wisconsin had a job gap of about 34,000 jobs, relative to the US as a whole and its 6 neighboring states. By December 2010, at the end of Gov. Doyle's second term, Wisconsin was only about 13,000 jobs behind these peers.
- In 2011, during the first year of Gov. Walker's administration, Wisconsin fell an additional 15,000 jobs behind its neighbors, and in 2012 it fell back an extra 7,000 jobs. As a result, by December 2012 the job gap was about 35,000 jobs. By last September it had further grown, to about 45,000 jobs.
- To keep up with its neighbors, over the last 33 months (Dec. 2010 to September 2013) Wisconsin should have created about 112,000 jobs. It actually created 82,718 jobs, only 74% of the standard.
- During the economic downturn, Wisconsin lost 6.4% of its jobs. Only Iowa and Minnesota were less initially impacted by the downturn. Since then however, Wisconsin has only regained 62% of the lost jobs. It had recovered almost 20% of its job losses by the end of the Doyle administration, outpacing the US as a whole and all of its 6 neighboring states. Since then however, it has only recovered an additional 42% of its lost jobs, close to last among it peers, and well below the 66% nationally during that same time period.
- As a group, the 6 peers states recovered over 50% of their total job losses between Dec. 2010 and September 2013. Wisconsin's 42.3% was just under 84% of the group's performance.
- The increase in the job gap since the start of the Walker administration has primarily been in private, service sector jobs. Wisconsin has slightly outperformed its neighbors in manufacturing job creation over these 33 months, and slightly underperformed in construction job creation. The total increase in the job gap, of 35,000 jobs, in that 30-month period is roughly the same size as the underperformance in private, service sector job growth.
- Wisconsin's underperformance in creating private, service sector jobs is widespread, including jobs in retail, financial and business services, and leisure and hospitality employment. It has impacted Main Street across the board.
- My various measures generally suggest that Wisconsin has only created about 70 to 75% as many jobs as its peers have over the last 33 months. This can only be described as a far from satisfactory performance.

You may know that Wisconsin's job creation record over the last 3 years has been less than stellar. But how bad has Wisconsin's growth record been? Wisconsin seems to be trailing the US in general, and its neighboring states of Illinois, Indiana, Iowa, Michigan, Minnesota, and Ohio in particular, but is it behind by an inch or behind by a mile? How can the man on the street interpret the information he's gotten, and evaluate Wisconsin's job growth performance?

The purpose of this study is to create an easily interpretable measure of that performance, by quantifying Wisconsin's "job gap" – the difference between Wisconsin's actual job creation record and the level it would have been expected to have achieved, had the state kept up with its neighbors and the rest of the country. According to the Bureau of Labor Statistic's (BLS) Quarterly Census of Employment and Wages (QCEW), between December of 2010 and September of 2013, Wisconsin actually added 82,718 jobs. If keeping up had required 100,000 new jobs, then 82,700 is not all that bad. But if keeping up had meant 140,000 new jobs, then a mere 82,700 is definitely failing to perform.

My strategy will be to first estimate the relationship between Wisconsin's job growth and the country's and its neighbors' job creation, as it existed prior to December 2008, using data from the QCEW. Wisconsin's neighboring states, from Minnesota to Ohio, have similar mixes of agriculture and manufacturing; as we will see, this translates into an empirical relationship that very closely fits Wisconsin's actual job creation record prior to the economic crash. I will then project that observed relationship forward to this past June – the last available jobs numbers from the QCEW – to show what Wisconsin's job creation record would have been, had the previous relationship between it and both the country and its neighbors continued. The observed difference between Wisconsin's actual job creation numbers and these projected values will be my measure of Wisconsin's job gap.

It is my hope that this study will be sufficiently nontechnical that anyone can read and understand it, whatever their statistical background. However, for purposes of full disclosure, I feel that it is necessary and appropriate for me to report the details of the procedures I have followed. My solution to this problem will be to put all except the most important technical details in the footnotes, where they will not intrude upon the typical reader.



The job growth relationship

To create a baseline for comparison, I first estimated the relationship between Wisconsin's total employment and the employment of its neighbors and the total US, from Jan. 2001 to Dec. 2008, using multiple regression analysis. Regression analysis chooses the coefficients b_0, b_1, and so on in the equation

$$WI = b_0 + b_1\ US + \Sigma\ b_i\ State_i + \Sigma\ b_j\ Month_j,$$

to provide the best fit to Wisconsin's job numbers. Those fits can be seen in Figure 1, where the circles are Wisconsin's actual employment numbers each month over the 8 year period, and the two nearly identical lines are the fits provided by Models 2 and 3, discussed below. As can be seen in the figure, the two lines fit the observed employment values quite well. In the equation, WI is Wisconsin's QCEW job count, US is the total US job count, $State_i$ are the various neighboring state QCEW job counts, $Month_j$ represents indicator variables that capture regular seasonal employment fluctuations, and the b_i are the coefficients to be estimated.[1] Essentially, these coefficients represent the weights afforded to national job growth and to each state, in setting the standard for "normal" job growth for Wisconsin.

There are two reasonable approaches to estimating these weights. One is to require that all of the neighboring states should have equal weights, so the b_i for all six states should all be the same (Model #3, below). The other approach allows the regression to identify different weights for each state, in whatever way best fits the data. I will present results from both approaches; as we'll see, they lead to very similar conclusions.

In allowing the weights to differ between states, I initially used job numbers for all six states plus the total US (Model #1). However, since employment numbers are highly correlated with each other, several of the states had negative weights.[2] Therefore, I re-estimated the model without the offending states, to get a cleaner estimate of what "keeping up with its neighbors" should mean (Model #2). I report the estimated coefficients of both models in Table 1.

My data set begins in January 2001, the earliest QCEW data available from the BLS website. My preferred approach is to estimate the relationship between Wisconsin's job growth and that of the US and its neighbors for the Jan. 2001 to Dec. 2008 time period, and use those results as the "base period" to evaluate Wisconsin's performance since then. However, I have also estimated that relationship using a slightly longer Jan. 2001 to Dec. 2010 base period, giving a somewhat different picture of Wisconsin's performance in 2011 and 2012 (Model #4).

You can choose whichever story you find most believable. However, I would encourage you to focus primarily on the strong similarities between all of the models. They give somewhat different numbers for the exact size of the job gap, but provide very similar stories about how it has developed over the last 5 years. That pattern, common to the results from all of the approaches I've tried, is this study's strongest finding.

Table 1 reports the results of the four different regressions. For each regression, the left column reports estimated coefficients, and the right column the corresponding t-statistic. To interpret the latter, as a general rule a t-statistic above 2.0 or below -2.0 suggests that the variable definitely has a relationship with Wisconsin's job growth, while a t-statistic between -1.0 and +1.0 suggests that the variable can be safely ignored as irrelevant.

The state coefficients are the weights in the baseline job growth model. When I allow those coefficients to differ, Iowa consistently has the largest weight. This is because, during the base period, Wisconsin's job growth very closely mirrored Iowa's. The monthly coefficients suggest how

1 The usual Econometric practice would be to also include a deterministic time trend in the estimated model. However, that implicitly assumes that any deterministic trend existing prior to the 2008 crash has continued unchanged since then. For the purposes of this study, which is essentially a comparative one, I have omitted the deterministic trend, letting Wisconsin's trend be a function solely of the national trend as well as the other states' trends. Including a deterministic trend in the model substantially increases the size of the estimated job gap, approximately doubling it in the models based on 2001 to 2008 data.

2 This is a normal result, due to the high degree of inter-correlation between job growth in each of the various neighboring states. Initially only Illinois had a negative coefficient. But removing Illinois from Model 1 caused Indiana and Ohio's coefficients to turn negative, so those were dropped from Model 2 as well.

Wisconsin's seasonal job picture differs from the other states. Every March, Wisconsin has about 25,000 fewer jobs that if it had maintained pace with its neighbors. By June however, Wisconsin is typically 20,000 jobs ahead of them; by July there is no particular difference between them (notice the very small t-statistics for July).[3]

Table 1: Regression Results

	Using 2001 to 2008 QCEW baseline						2001-10 base	
	Model #1		Model #2		Model #3		Model #4	
	coeff	t-stat	coeff	t-stat	coeff	t-stat	coeff	t-stat
IL	-0.122	-3.38	--	--	0.028	4.00	--	--
IN	0.037	0.37	--	--	0.028	4.00	--	--
IA	0.561	3.08	0.545	2.74	0.028	4.00	0.418	2.55
MI	0.147	1.11	0.079	4.32	0.028	4.00	0.078	2.51
MN	0.108	1.67	0.077	1.18	0.028	4.00	0.123	2.09
OH	0.085	1.16	--	--	0.028	4.00	0.031	0.66
US	0.008	3.29	0.008	3.16	0.012	14.90	0.009	4.13
Jan	-20991	-6.18	-15694	-3.02	-20678	-4.06	-8713	-2.31
Feb	-26834	-6.62	-22098	-4.09	-29650	-5.91	-15863	-3.63
Mar	-27101	-7.17	-23517	-5.03	-30691	-7.41	-19304	-4.94
Apr	-14598	-5.44	-12670	-4.02	-12171	-3.94	-10295	-4.07
May	-4547	-1.38	-3552	-1.04	2606	0.94	-4279	-1.44
Jun	20606	4.33	19961	3.90	31935	10.71	18250	4.11
Jul	-4315	-0.75	647	0.13	5115	1.53	3044	0.60
Aug	-629	-0.16	4278	1.22	6681	2.33	5574	1.54
Sep	9321	3.06	9557	3.52	12760	5.21	8399	3.52
Oct	10233	3.94	10822	4.41	13821	6.52	10073	4.62
Nov	3248	1.71	3493	1.94	5932	3.72	3298	2.09
cons	533040	5.27	372743	2.21	501956	3.02	96250	0.80
rho	0.5496		0.8383		0.8223		0.8799	
R^2	0.9989		0.9988		0.9987		0.9984	

The first of the bottom two numbers in each column in Table 1 measures the degree of cyclicality in job growth.[4] The second one measures the model's fit – the percent of the variation in Wisconsin's jobs numbers that can be explained by the model. That fit is very good, in all 5 regressions at least 99.84%. That good fit is evident in Figure 1, where the lines for both Models 2 and 3 closely fit the actual job pattern, and in Figure 2, where the size of the estimated gap – the difference between Wisconsin's actual job numbers and the model's fitted values – is generally pretty small from Jan. 2001 through the end of 2008. Such a good fit is not particularly surprising, since we would normally expect a high degree of correlation between job growth measures between Wisconsin and the US, and with the various Midwestern states.

To determine what these tell us about the job gap, I took each equation and calculated Wisconsin's "fitted" job value. For example, for model one, for July 2008, I took Iowa's July 2008 jobs and multiplied them by 0.561, Illinois' jobs by -0.122, and so on, subtracted 4315 for July, and added the constant of 533040. The resulting number was 2,765,699. In fact however, in July 2008 the QCEW reported that Wisconsin had 2,774,279 jobs. So the job gap was actually a job lead, a "gap" of +8580 jobs.

Table 2 shows the estimated job gap for each of the 4 models from Jan. 2009 to September 2013. As the first three models show, the economic collapse at the start of the Great Recession was harder on Wisconsin than the comparison group, with the state quickly falling about 30,000 jobs behind its neighbors by September 2009.[5] By early January 2010 however Wisconsin had turned a corner, and by the end of 2010 the state was only about 11,000 jobs in the hole.

3 It was not a mistake that December was left out. The other monthly measures have been calculated relative to December. This is standard Econometric technique, necessary to generate regression results.

4 That is, it is the estimate of autocorrelation for the model.

5 However, another way of looking at the data, presented below, suggests that the hit Wisconsin took was in fact milder than the US as a whole and 4 of our 6 neighboring states.

Table 2: Estimated Job Gap, by Month				
	Model #1	**Model #2**	**Model #3**	**Model #4**
Jan 09	-8,656	-6,650	-6,051	3,504
Feb 09	-16,305	-13,999	-10,164	-1,431
Mar 09	-23,012	-19,548	-15,824	-4,232
Apr 09	-30,292	-24,989	-20,363	-7,884
May 09	-30,289	-24,256	-19,661	-5,794
Jun 09	-32,096	-25,761	-21,540	-5,128
Jul 09	-32,964	-25,618	-20,134	-5,540
Aug 09	-36,042	-28,510	-21,914	-7,550
Sep 09	-41,673	-33,996	-27,601	-11,229
Oct 09	-37,579	-29,949	-22,444	-8,786
Nov 09	-37,281	-29,807	-23,664	-8,661
Dec 09	-35,699	-26,984	-22,589	-6,180
Jan 10	-39,236	-30,284	-26,322	-9,670
Feb 10	-33,746	-26,593	-20,627	-5,016
Mar 10	-36,191	-27,550	-21,668	-5,390
Apr 10	-34,336	-24,547	-18,243	-3,731
May 10	-35,415	-26,737	-23,349	-6,650
Jun 10	-36,946	-28,040	-24,076	-7,201
Jul 10	-33,741	-23,308	-15,178	-3,730
Aug 10	-25,411	-15,652	-12,335	3,028
Sep 10	-31,360	-21,875	-17,113	-1,243
Oct 10	-24,476	-16,464	-11,812	1,691
Nov 10	-20,084	-12,502	-8,110	5,317
Dec 10	-20,798	-13,199	-9,207	4,760
Jan 11	-24,337	-16,718	-11,591	372
Feb 11	-23,973	-16,276	-10,596	649
Mar 11	-20,511	-13,703	-7,781	4,078
Apr 11	-27,234	-19,209	-13,447	-3,059
May 11	-31,221	-22,958	-16,468	-6,168
Jun 11	-35,179	-28,701	-20,835	-11,061
Jul 11	-25,709	-19,564	-8,465	-2,876
Aug 11	-24,935	-18,578	-8,619	-3,758
Sep 11	-32,761	-26,029	-14,830	-10,039
Oct 11	-36,446	-30,343	-19,900	-15,619
Nov 11	-35,876	-29,541	-19,970	-15,610
Dec 11	-35,374	-28,211	-19,657	-14,589
Jan 12	-38,203	-32,053	-23,919	-19,460
Feb 12	-39,627	-32,617	-23,907	-20,283
Mar 12	-35,298	-28,985	-18,891	-16,388
Apr 12	-36,979	-29,204	-18,572	-16,992
May 12	-35,842	-27,328	-17,674	-14,910
Jun 12	-39,376	-31,377	-21,479	-18,669
Jul 12	-36,696	-31,007	-15,735	-18,204
Aug 12	-34,313	-29,354	-17,990	-18,225
Sep 12	-45,376	-39,754	-27,685	-27,487
Oct 12	-45,946	-38,370	-28,055	-28,513
Nov 12	-36,738	-30,421	-20,171	-21,252
Dec 12	-42,789	-35,825	-26,143	-26,853
Jan 13	-49,005	-43,594	-31,626	-35,552
Feb 13	-45,708	-40,593	-27,941	-32,919
Mar 13	-42,815	-37,954	-25,836	-29,712
Apr 13	-60,352	-51,576	-42,982	-45,182
May 13	-51,002	-42,183	-30,681	-36,283
Jun 13	-56,040	-48,537	-34,959	-41,187
Jul 13	-41,461	-34,369	-15,812	-26,707
Aug 13	-47,308	-41,433	-23,863	-34,646
Sep 13	-56,579	-48,923	-32,670	-42,081

After that however, Wisconsin's situation again began to deteriorate. Throughout 2011 the state fell an additional 13,000 jobs behind its neighbors, and although 2012 was not as bad, in that year Wisconsin fell back an extra 7,000 jobs. So over the first two years of the Walker administration, Wisconsin's job gap widened by about 20,000 jobs, to a December 2012 deficit of

about 31,000 jobs.[6] In the three quarters of 2013, it further increased by about 15,000 jobs, to about 46,000 jobs.

The fourth model treated 2009 and 2010 as part of the initial base period. Since Wisconsin did relatively poorly in those two years, it sets a weaker standard for "normal" job growth for Wisconsin. Nevertheless, it similarly shows Wisconsin falling behind in the first 9 months of 2009, recovering in 2010, and then dropping behind by about 19,000 jobs in 2011 and an additional 12,000 jobs in 2012. Although this model reports a smaller current job gap than in the first 2 models, it also reports a substantially greater deterioration in the last two years, with Wisconsin's job gap widening by about 31,000 jobs between Dec. 2010 and Dec. 2012. Its September 2013 gap of 42,000 jobs is very close to the average of the gaps from Models 2 and 3.

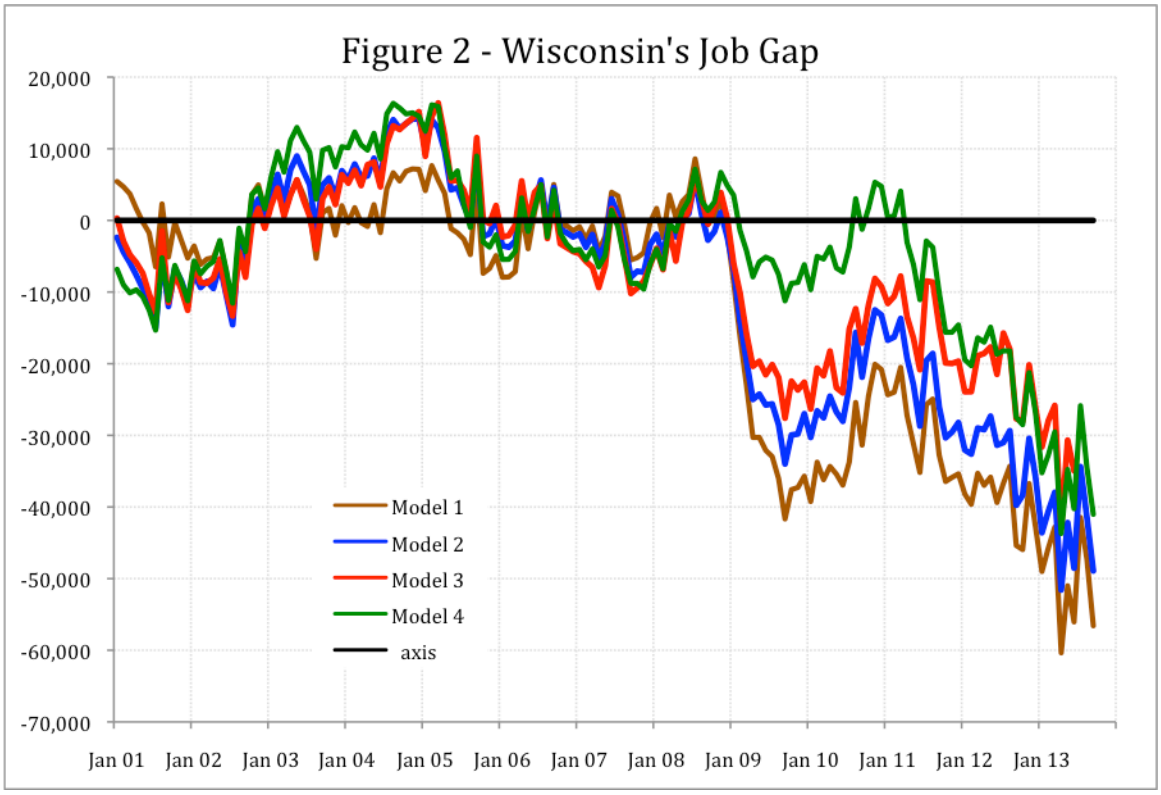
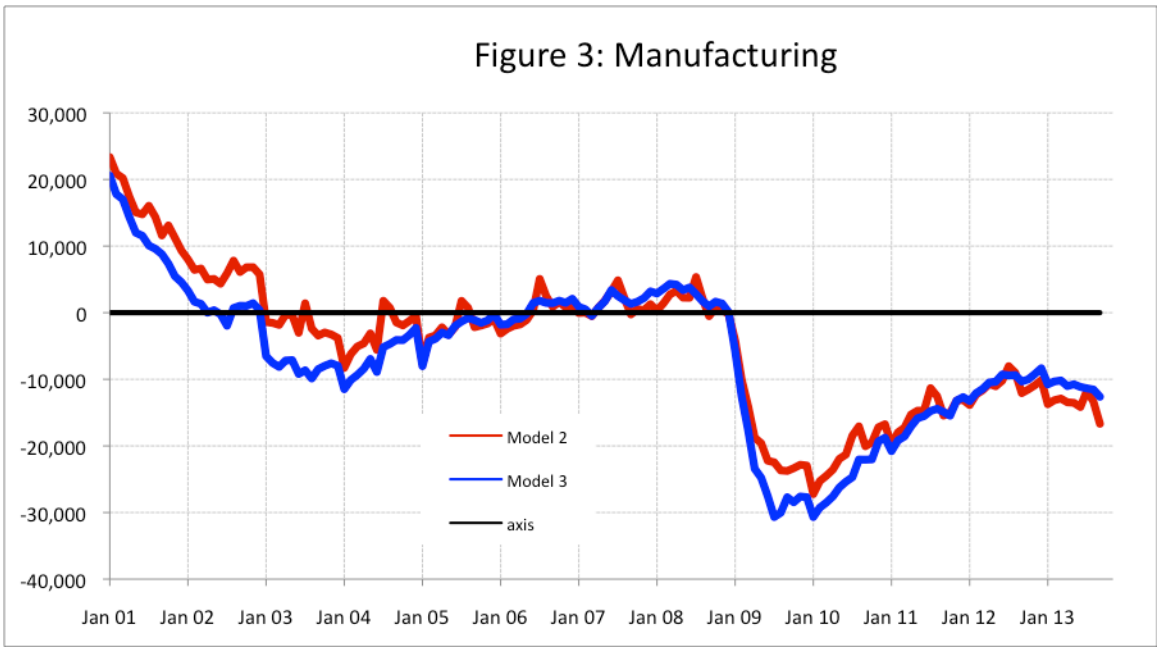


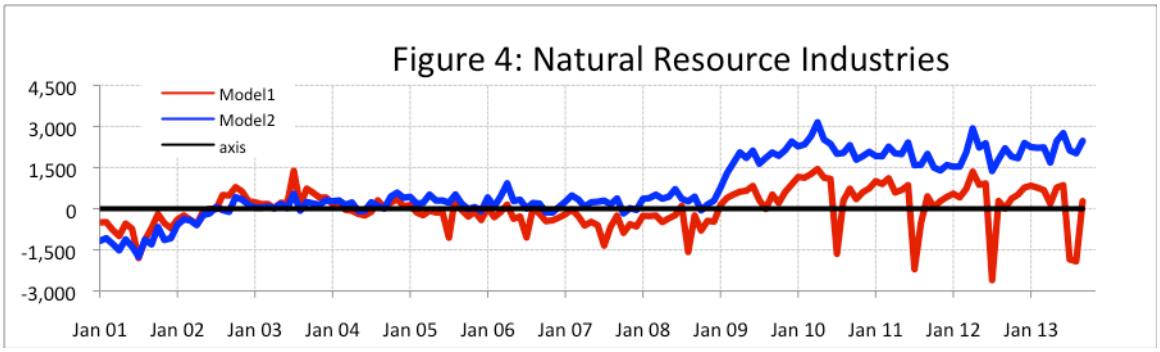
Figure 2 shows these job gap patterns graphically. All 4 models show Wisconsin doing better than its peers in 2003-05, falling well behind in 2009, recovering in 2010, and deteriorating considerably from January 2011 through September 2013.

6 I believe Models 2 and 3 provide the best estimates of the job gap, and will generally average their results in describing the size of the job gap.



The job gap by sector

The preceding analysis shows that Wisconsin has a substantial and growing job gap. The next question is, why? In this paper I will not attempt to speculate on what policies may or may not have contributed to Wisconsin's poor showing. Rather, in this section I will follow the same methodology as above to examine various sectors of Wisconsin's economy – manufacturing, construction, agriculture and other natural resource industries, services, and government – to see whether the picture in Figure 2 is the result of a failure in just one economic sector, or whether it represents a more widespread problem.



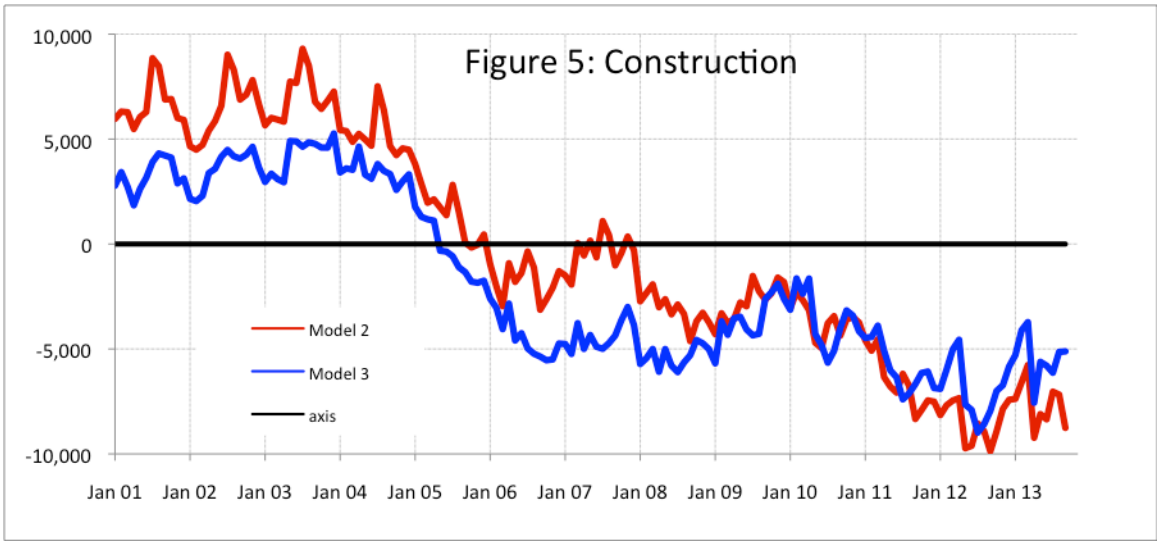
The QCEW measures jobs in a wide variety of sectors and subsectors of the economy. Jobs are first divided between goods-producing industries and the service sector. The goods-producing sector is then divided between manufacturing, construction, and agriculture/natural resources; the service sector between such subsectors as retail trade, financial services, and education.

I present two measures of the job gap for each sector, based on the state weights estimated in Table 1's Models 2 and 3. The job gaps from those measures will in fact add up exactly to the gaps reported in Table 2. Once again, I suggest you focus on the common features of both measures, and the common story that they tell.

Figures 3 through 7 present the resulting job gap pattern in five different economic sectors and subsectors: manufacturing, natural resources (primarily agriculture, mining, and logging), and construction (which together make up the goods sector), services, and government.

As Figure 3 shows, Wisconsin's poor showing at the beginning of the economic downturn, in early 2009, was principally due to a sharp drop in manufacturing jobs. However, the figure also shows that those jobs steadily recovered from late in 2009 until mid 2012, explaining why much of

Wisconsin's job gap relative to its neighbors disappeared in 2010. Figure 4 shows that Wisconsin's agriculture and other resource industries were never particularly hit by the downturn, and if anything have outpaced the neighboring states. (Notice also how much smaller the numbers along the left axis are in Figure 4, compared to Figure 3).



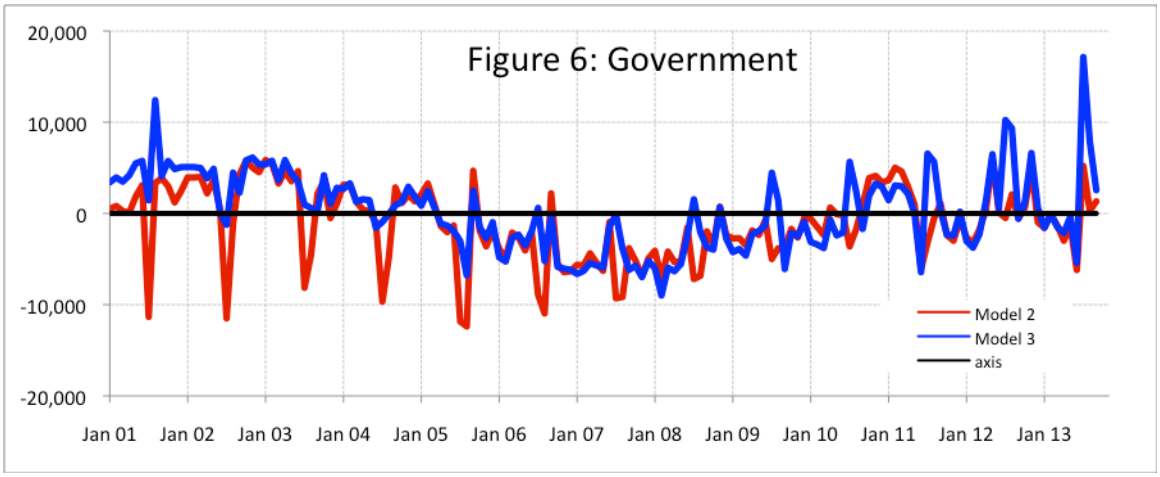


Figure 5 shows that construction was a small contributor to Wisconsin's weak job creation in 2010 and 2011, but accounts for none of the weakness since January 2012, since the job gap since then has been essentially flat. And Figure 6 suggests that the total number of government jobs (Federal, State, and Local) in Wisconsin have moved pretty much in par with its neighbors.

The primary story behind Wisconsin's weak job creation record over the last two years appears in Figure 7. Relative to its neighbors, Wisconsin was well behind in private, service sector jobs in 2001, but by 2005 had moved from a position of weakness to a position of strength. Wisconsin mostly maintained that positive standing through the end of 2010. But over the last 3 years, Wisconsin slipped back down to the negative, creating about 28,000 fewer private, service sector jobs than what would have been needed to keep pace with its neighbors.

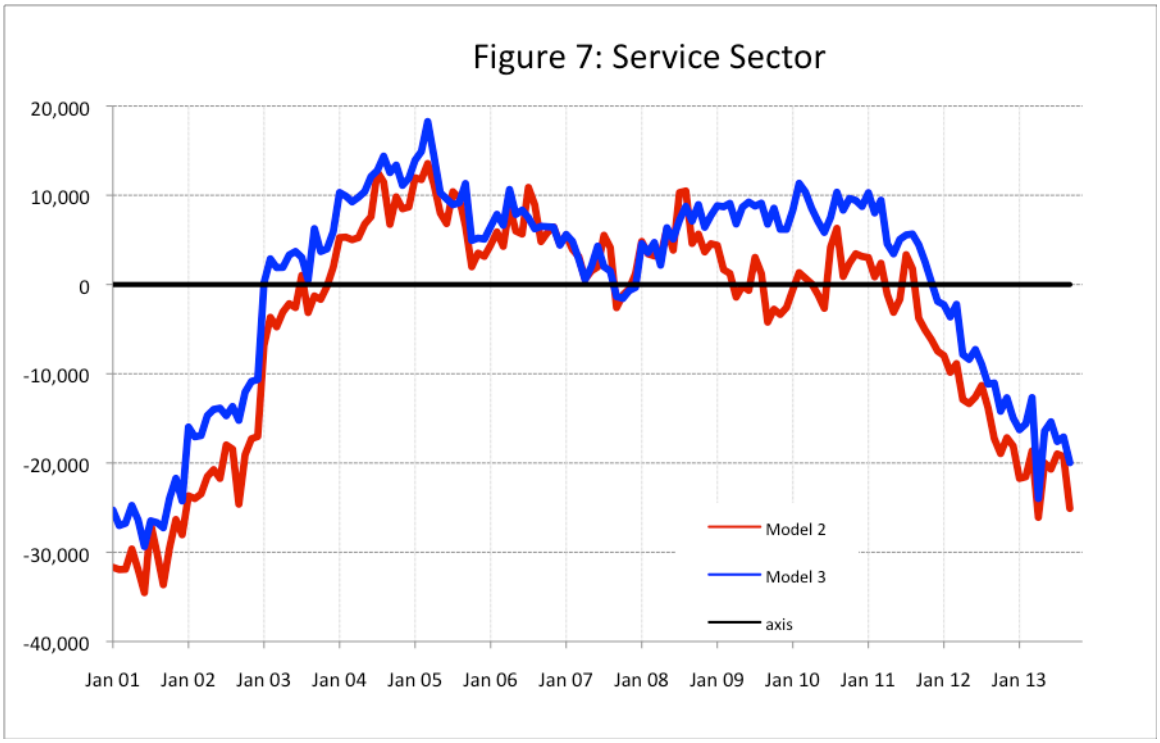


Table 3 summarizes the story in these five figures, by reporting the change in the job gap in each of these 5 areas over the last 4 years. Although job losses in construction and government contributed to the weak 2011 numbers, the failure to generate private, service sector jobs is the primary story behind Wisconsin's job gap.

Table 3: Change in the Job Gap, by Year and Sector

	Mfg	Nat Res	Constr	Gvt	Svcs		Total
Using Model 2 weights							
2009	-22,730	1,354	1,923	1,879	-7,144		-24,718
2010	6,204	-142	-1,927	3,933	5,718		13,785
2011	3,662	-312	-3,770	-3,987	-10,604		-15,012
2012	2,956	344	91	-377	-10,629		-7,615
2013 (9m)	-6,545	-499	-1,340	2,280	-6,994		-5,329
Using Model 3 weights							
2009	-27,765	2,152	2,400	1,870	-1,552		-22,895
2010	8,922	-377	-1,545	3,822	2,560		13,382
2011	6,100	-484	-2,702	-2,724	-10,640		-10,451
2012	4,333	805	1,028	416	-13,069		-6,486
2013 (9m)	-4,274	76	720	1,950	-4,998		-1,044

Which Services?

As the previous section showed, Wisconsin's job gap is primarily due to a failure to create private, service sector jobs. The next question is, what kind of private, service sector jobs is Wisconsin falling behind in? Is this failure across all the service subsectors, or is it more narrowly confined?

The BLS divides private, service sector jobs into 8 categories: trade, transportation and utilities (TTU); information; financial services; professional and business services; education and health

care; leisure and hospitality; and "other" and "unclassified" that I will combine into one group. I again applied the same methodology, using the weights from Models 2 and 3, to measure the job gap by subsector for each year.

Table 4 reports the change in the job gap by subsector over the last 4 years, first using Model 2 coefficients, and then Model 3 coefficients. Both sets of numbers tell the same story. Over the last two years, Wisconsin has underperformed in the creation of private, service sector jobs in almost all categories. Wisconsin has particularly lagged in such classic "Main Street" jobs as retail jobs (i.e. TTU), restaurant jobs (i.e Leis/Hosp) prior to 2013, and banking and financial services employment. After falling about 10,000 jobs behind its neighbors in these job categories in 2011, Wisconsin lagged an additional 10,000 jobs in 2012, and fell back another 6,000 jobs in the first three fourths of 2013.

Table 4: Change in Job Gap by Service Subsector

	TTU	Info	Fin Svc	Prf & Bus	Ed & Hlth	Leis/Hosp	Other		Total
Using Model 2 weights									
2009	-4,287	1,092	-440	-1,956	-2,913	-230	1,589		-7,144
2010	-3,480	1,415	-1,592	9,439	2,109	606	-2,780		5,718
2011	-5,095	497	-2,471	-3,294	-1,666	-5,088	6,512		-10,604
2012	-2,787	231	-2,323	-2,828	-288	-648	-1,987		-10,629
2013 (9m)	-4,188	357	-1,791	3,394	-4,138	9,756	-5,642		-6,994
Using Model 3 weights									
2009	-2,904	438	739	1,629	-2,647	-975	2,167		-1,552
2010	-3,612	1,185	-1,223	9,443	943	-1,331	-2,845		2,560
2011	-4,117	306	-2,537	-3,781	-2,152	-5,193	6,833		-10,640
2012	-2,726	-600	-1,674	-4,095	49	-1,469	-2,554		-13,069
2013 (9m)	-3,563	88	-1,546	3,834	-5,976	11,309	-5,999		-4,998

The job gap as a percentage

As of June 2013, Wisconsin's job gap, that is, the difference between its actual job growth and the job growth needed to keep pace with its neighboring states, was about 45,000 jobs. Table 5 restates that value, by measuring Wisconsin's job growth during various 12-month periods as a percentage the growth needed to keep pace.[7]

As the table shows, in the 12-month period between June 2010 and June 2011, Wisconsin added 25,315 jobs, 5% better than its neighbors' pace of job growth. By the following December, the first 12-month period falling entirely in Gov. Walker's administration, Wisconsin's job growth had fallen to 63% of that needed to match its neighbors. Although there were a few 12-month stretches where Wisconsin nearly matched its neighbors – notably those ending in Jun 2012, Nov 2012, and Jul 2013 – the state has in general consistently fallen short. Hence, Wisconsin's job growth over the last 3 years can clearly be categorized as below average.

Table 5: WI job growth as %

	WI job growth, previous 12 months	Job growth needed to keep pace	WI growth as a percent of keeping pace growth
Jan 11	38,600	24,451	158%
Feb 11	39,301	29,127	135%
Mar 11	42,506	28,638	148%
Apr 11	33,345	28,278	118%
May 11	26,517	21,187	125%
Jun 11	25,315	24,026	105%
Jul 11	33,230	28,002	119%
Aug 11	35,731	35,336	101%
Sep 11	39,592	40,527	98%
Oct 11	20,691	31,675	65%
Nov 11	19,691	34,141	58%
Dec 11	21,662	34,393	63%
Jan 12	24,440	38,272	64%
Feb 12	25,247	40,073	63%
Mar 12	30,557	43,754	70%
Apr 12	27,856	35,416	79%
May 12	37,272	40,060	93%
Jun 12	40,244	41,904	96%
Jul 12	27,515	36,871	75%
Aug 12	29,523	39,596	75%
Sep 12	20,779	34,069	61%
Oct 12	29,735	37,826	79%
Nov 12	39,287	39,827	99%
Dec 12	33,353	40,403	83%
Jan 13	26,535	36,159	73%
Feb 13	32,676	38,681	84%
Mar 13	25,259	33,216	76%
Apr 13	8,521	31,912	27%
May 13	22,771	36,702	62%
Jun 13	20,655	35,975	57%
Jul 13	36,575	38,294	96%
Aug 13	33,114	42,090	79%
Sep 13	31,033	38,110	81%

A Different, Seasonally Adjusted Look

An alternative way to look at Wisconsin's job performance is to examine its percentage job gains over the last several years, relative to either its jobs peak in 2007 or its jobs nadir in 2010. To get a cleaner picture, for this look I have seasonally adjusted all the jobs numbers, that is, eliminated

7 The values for job growth needed to keep pace are calculated as the average of the results of Models 2 and 3.

the regular monthly seasonal fluctuations in the data.[8]

I then identified, for Wisconsin, its neighbors, and the total US, the employment peak in 2007-8 and the employment nadir in 2009-10. The seasonally adjusted values were then divided by the peak for Figure 8, and the nadir for Figure 9. Table 6 reports for each state and for the US as a whole the percentage drop from the 2007-8 peak, how far below the peak they were in June 2013, and the two percentage increases from the 2009-10 nadir.[9]

As Figure 8 shows, Wisconsin was in the middle of the pack, losing 6.4% of its jobs between June 2007 and Jan. 2010. This nearly matched the 6.6% job loss for the US as a whole, and only trailed Iowa and Minnesota for being the mildest drop off. But as off Sep. 2013, Wisconsin was still 2.4% below its job peak, having fallen to 5th place behind Iowa, Minnesota, the US as a whole, and Indiana.

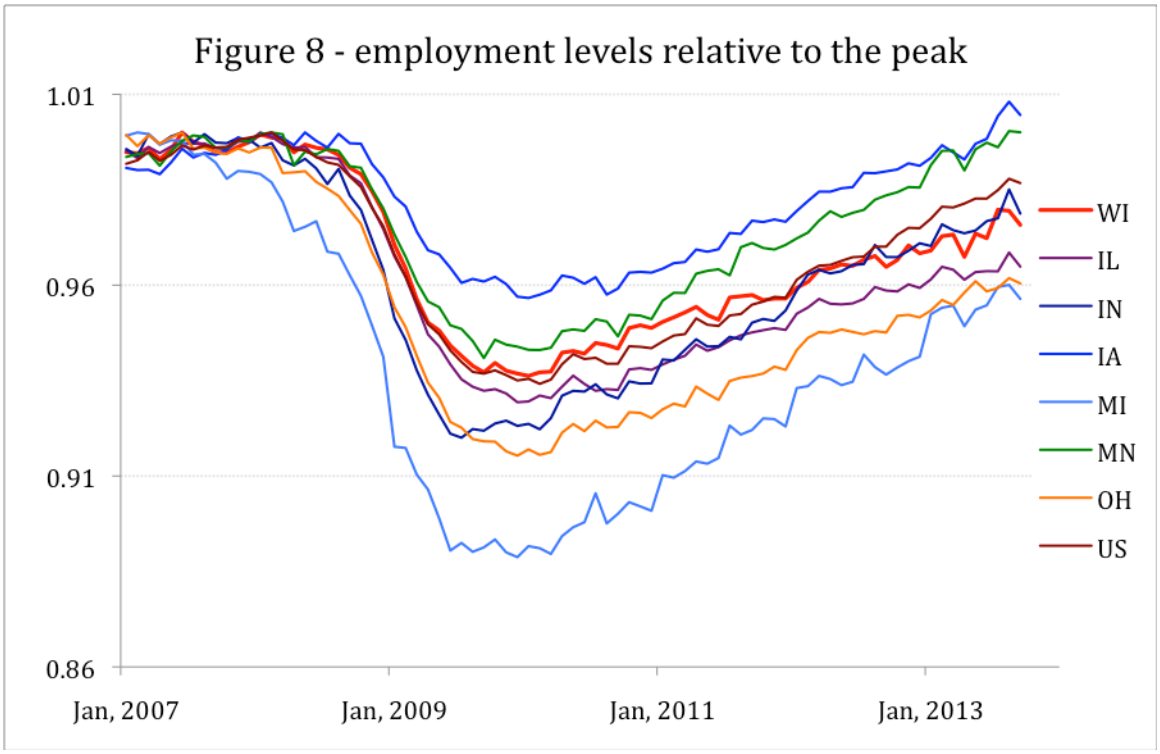


Figure 9 shows the percent recoveries from the lowest points of 2009-10. Again, the left side of the figure suggests that Wisconsin had the third smallest negative impact from the Great Recession. But its recovery, while initially nearly as strong as Michigan's and Indiana's, has since fallen to a tie for last place with Illinois.

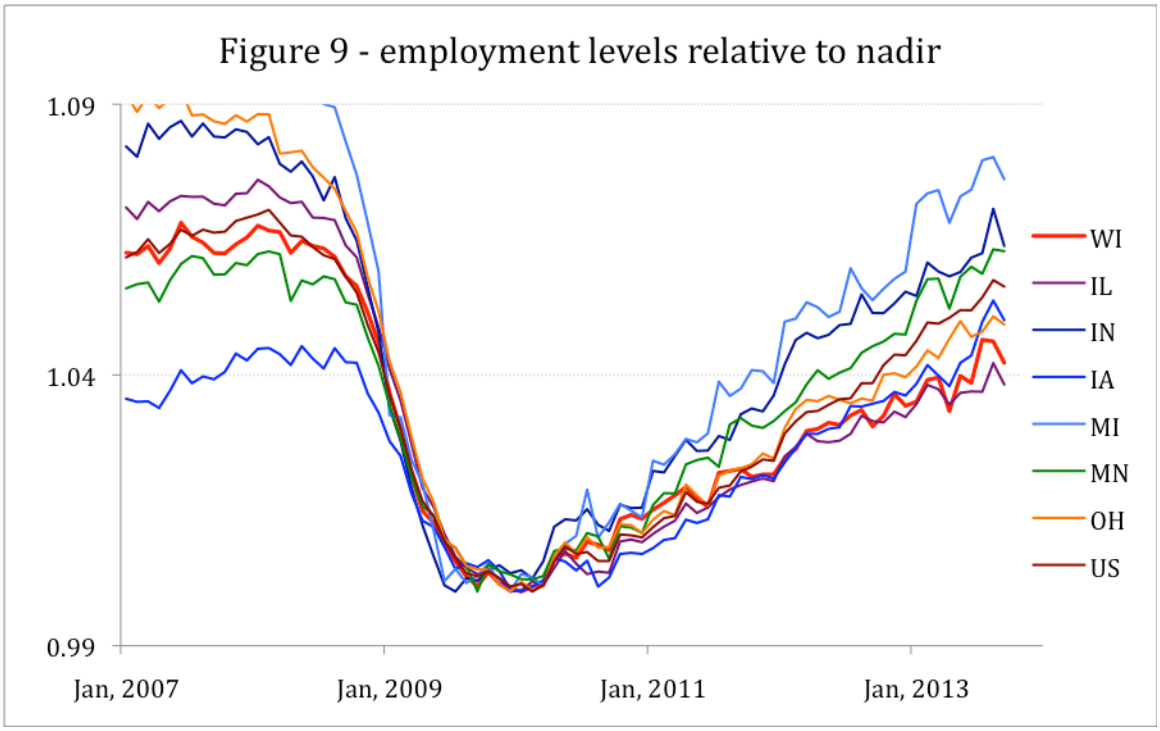
The final two rows of Table 6 calculate the percent of job losses that had been regained by Dec. 2010 and by June 2013. At the end of the Doyle second term in Dec. 2010, Wisconsin led the pack, having recovered almost 20% of the jobs it had lost in the previous 3 plus years, after seasonal adjustment. Since then however, over the first 33 months of Walker's term, Wisconsin has only recovered an additional 42.3% of the lost jobs. This is near to last, surpassing only Illinois, and Ohio, which during that same time frame recovered 38.3% and 41.6% of their job losses, respectively.[10]

8 I used a 12 month centered moving average to identify seasonal factors, dividing them out of the data. This is the usual approach to seasonal adjustment used in times series decomposition.

9 The first two rows in Table 6 are calculated as percentages of the peak value, while the last two rows are calculated as percentages of the nadir value. Hence, the differences between the first and second rows are somewhat smaller than the values in the fourth row.

10 As a group, the 6 neighbor states had recovered 13.0% of their total job losses by Dec. 2010. Between then and June 2013, they recovered as a group an additional 47.6% of their lost jobs, from a group total of 60.6% recovered. Wisconsin's 34.2% gain is less than seven tenths of the group's gain during these last 30 months.

Table 6: % job decline and recovery								
	WI	IL	IN	IA	MI	MN	OH	US
% drop from 2007/8 peak	-6.4%	-7.1%	-8.0%	-4.3%	-11.1%	-5.9%	-8.5%	-6.6%
% below peak, 2013	-2.4%	-3.5%	-2.1%	+0.5%	-4.4%	0.0%	-4.0%	-1.3%
% recovery, Dec. 2010	1.3%	0.9%	1.5%	0.7%	1.4%	1.1%	1.1%	1.0%
% growth from nadir	4.2%	3.8%	6.4%	5.0%	7.6%	6.3%	4.9%	5.6%
% job loss recovered, Dec. 2010	19.7%	12.0%	17.8%	15.4%	10.9%	17.3%	11.7%	14.2%
% job loss recovered, Sep. 2013	62.0%	50.3%	73.4%	110.6%	60.8%	100.1%	53.3%	79.9%



Conclusion

In this paper, I have tried to put Wisconsin's recent job creation record into context, by comparing to that of its neighbors. The results all lead to a single conclusion: Wisconsin is severely underperforming relative to its neighbors.

Over the last 33 months of jobs data, from Dec. 2010 to September 2013, to just keep up, Wisconsin should have created about 112,000 jobs. It actually created only 82,718 jobs, just 74% of the standard. And after recovering 19.7% (after seasonal adjustment) of its recession job losses by Dec. 2010, it has since then recovered only an additional 42.3% of its recession job losses, behind the US as a whole (65.7%) and its 6 neighbors as a group (50.4%).

I don't think that anyone in the state will consider that to be acceptable or satisfactory.