



WHY DO SOME STATES HAVE HIGHER UNEMPLOYMENT RATES?

The new Chamber of Commerce report doesn't provide the answer

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In a new report, the U.S. Chamber of Commerce purports to show¹ that dismantling state regulations that are protective of workers would lead to large reductions in states' unemployment rates by lessening costs on employers. It further describes such dismantling as a potential "free economic stimulus."

The chamber's report is misleading on two counts. First, there is no evidence that what are keeping state unemployment rates high today are high employment costs. Unit labor costs economy-wide were *lower* in 2010 (when we had a 9.6% unemployment rate) than in 2007 (when the unemployment rate was 4.4%).

Second, even if one gave the chamber the benefit of the doubt and assumed it is really talking about longer-run determinants of unemployment, its statistical approach is poorly constructed for untangling the true relationships between unemployment and its created index of employment regulation. Further, the finding does not stand up to a rudimentary check to confirm statistical robustness. In fact, the most robust finding to fall out of the chamber's dataset is that strong employment protection is associated with *higher* state income.

Given the thinness of the evidence in the chamber's report, it should have little bearing on debates about states' labor regulations.

The Chamber of Commerce employment regulation index (ERI)

The centerpiece of the chamber's report is an "employment regulation index" (ERI) that it has constructed for all 50 states. For the chamber, a perfect score in the ERI is a zero—meaning that the state has no regulations that exceed federal minimums in their stringency. Essentially, the chamber is advocating that states surrender their policymaking autonomy to achieve a better score on the index.

Some things that harm (inflate) a state's ERI? A high minimum wage, more-generous unemployment benefits, requirements that unemployed workers receive their benefits in a timely manner, requirements that employers pay employees' last paychecks in a timely manner, requirements for meal and rest periods during the workday, and prohibitions on employees' ability to construct work contracts that allow for reasonable collection of union dues (so-called "right-to-work" guarantees).

This will strike many as an odd list of things that are bad for a state's workers, but the chamber claims in its report to have found a durable statistical relationship between a low ERI and low unemployment. The chamber even goes so far as to call the complete surrender of state policymaking autonomy an opportunity for "free economic stimulus." There are (at least) two problems with these claims over and above the basic problem that they ignore the costs to affected workers of removing all state safeguards connected to their employment.

Today's unemployment problem is not about expensive labor

Labeling its finding that a lower ERI is associated with lower unemployment rates a potential "free stimulus" represents a fundamental misunderstanding of the *point* of economic stimulus, which is to return an economy to its long-run average unemployment rate after it has been hit by a shock. The overwhelming reason that national unemployment averaged 9.6% for 2010 instead of the 4.4% it averaged in 2007 was *not* a rising cost of labor; rather, it was the bursting housing bubble and the resulting decline in private demand for goods and services. Unit labor costs economy-wide were actually lower in 2010 than in 2007, even as unemployment was substantially higher.

The economics literature that the chamber cites (and frequently misrepresents²)—arguing that weakened employment protections can reduce unemployment rates—focuses on how employment regulations might, through their potential to make workers more expensive, increase the *long-run average* unemployment rate. But none of the studies argue that removing regulations will aid in moving a temporarily depressed economy back to this average. So the chamber's study provides no reasonable expectation, *even if its claimed statistical relationships held* (and they do not, as will be explained below), that following its policy advice would lead to a rapid recovery from the aftereffects of the Great Recession.

No statistical foundation for the Chamber of Commerce results

The chamber's claim about the statistical relationship between its employment regulation index and the unemployment rate seems dubious at best. Essentially, the chamber constructs an ERI for a single year, 2009, and then uses it to try to predict unemployment rates across the 50 states over the previous eight years, 2001-08. This is, out of the gate, a strange way to go. Why would an index constructed in 2009 capture influences that affect unemployment rates in 2001 and 2002? What if a state with a high ERI in 2009 had made substantial changes over the previous eight years?

Because of this problem, the chamber's statistical model is poorly constructed to answer the clear question: Does increasing the components of the ERI—enhancing protections and benefits for workers—hurt a state's unemployment performance? Since it cannot answer this question with its study design, the report should not form the basis of any policy change.

Further, the chamber uses 34 different indicators in constructing its ERI. Surely it would be odd if all 34 were equally important in driving the results, and interested policymakers might want to know which parts of the ERI seem to be most important in explaining the chamber's statistical findings. But, the chamber does not explore this important angle of the question either.

Worse, even if the ERI was designed correctly for answering this question, the statistical findings do not seem to stand up to rudimentary robustness checks. While the chamber doesn't provide the data behind the ERI directly, one can back out the implied value of the overall index for each state by combining data from their first table (the unemployment effect of lowering a state's ERI) and their reported regression results (see the data appendix for how to do this).

This method of inferring the ERI index by state seemed to work. The overall sample properties of this inferred ERI were nearly identical to those reported by the report. Using this inferred ERI variable also allowed the replication of the apparent relationship between unemployment rates between 2001 and 2008 and the 2009 ERI.³

With this index in hand, the next step was to determine whether the relationship between a low index score and low unemployment was robust, meaning essentially that it holds consistently over time and places and is insensitive to small changes in the dataset. Specifically, we tested to see if the model held over most of the time period in the sample, or whether the relationship was driven by a select group of states or whether the relationship persisted when other reasonable controls were added to the model? The simple answer to all of these questions is no. If either 2007 or 2008 is excluded, the relationship between a low index score and low unemployment becomes indistinguishable from zero at conventional levels of statistical significance. If both years are excluded (leaving 75% of their observations), then the relationship moves well beyond any conventional measure of statistical significance.⁴

Further, if one includes controls for the structure of the state's economy—say, by including the share of a state's workers in various sectors like manufacturing and mining/natural resources—the connection between the index and unemployment also becomes indistinguishable from zero. The results seem particularly driven by the share of a state's workforce engaged in the mining/natural resource sector. If just two resource-intensive states—North and South Dakota (which together account for all of 0.48% of the U.S. population)—are excluded from the sample, even without including any further controls, the relationship between the index and unemployment is indistinguishable from zero.

To be clear, these are simple and undemanding robustness tests. To demonstrate this, the same dataset was used to test for a relationship between ERI scores and a state's per capita income. In other words, is there is a durable apparent statistical relationship between per capita income and the ERI even when controlling for everything else the authors put in their model? It turns out that there is—a high ERI (higher worker protection) is correlated with higher per capita income.

And, unlike the relationship between the ERI and unemployment highlighted by the chamber, this apparent relationship stays significant when 2007 and 2008 are excluded, when the Dakotas are excluded, and when the share of mining is controlled for. It even stays significant when all of these tests are used simultaneously.

Further, if one replicates the Chamber of Commerce strategy of constructing “but-for” per capita income measures, the implied effects are huge. If we use the regression that most resembles the chamber's baseline estimation for their unemployment effects, it implies that Mississippi (the state with the lowest ERI (21)), could raise its per capita income by about \$7,500 (a 77 point gain in the ERI multiplied by the regression coefficient of 100) if they raised their level of ERI to California's level. Of course, this finding on per capita income is not very persuasive *precisely because it is obtained by following the chamber's flawed statistical model*. But it does prove that the simple robustness tests conducted here are not unreasonable and/or guaranteed to destroy any obvious economic relationship in the data. But if one is determined to accept the chamber's methodology, one must also accept the larger and tighter relationship between stronger worker protection and higher per capita income.

All in all, the claims made by the Chamber of Commerce about the benefits of states completely surrendering their regulatory autonomy and economic policy when it comes to workers' welfare are based on a foundation of mud. We know nothing more about the determinants of state-level unemployment after the chamber's study than we did before.

Data Appendix

Backing out the "employment regulation index" requires first dividing the difference between the "actual" from the "but-for" unemployment rates presented by the Chamber of Commerce report on page 6 by the reported regression coefficient (.008) on the ERI variable from Table B-3. Then, the "actual" and "but-for" rates of new business formation per million residents from Table 1 on page 6 was divided by the reported regression coefficient on that variable from Table B-5. There are probably some rounding issues that led to different values from these two methods, but they correlate at over 95%. For the regressions I ran to test the results for robustness, I simply averaged these two inferred ERIs. This average displays sample properties very close to those that the chamber reports for their ERI (**Table 1**).

TABLE 1

Sample properties of the ERI, inferred and reported

	Inferred*	Reported
<i>Mean</i>	58.0	57.0
<i>Standard deviation</i>	18.0	17.6
<i>Minimum</i>	21.0	18.1
<i>Maximum</i>	99.5	100.0

* See description in text for how the inferred ERI was constructed.

SOURCE: "The Impact of State Employment Policies on Job Growth: A 50-State Review," U.S. Chamber of Commerce and author's calculations.

Using this inferred ERI index, one is able to replicate the chamber's core finding; a coefficient and significance level almost perfectly in line with the chamber's is derived (**Table 2**). Note, however, that when basic robustness tests are undertaken that the significance of the ERI coefficient erodes—confidence intervals constructed at the 95% level of significance *include zero* for the ERI coefficient—meaning that one cannot reject the hypothesis that ERI is *uncorrelated* with unemployment. This inclusion of zero in the confidence interval is what researchers mean when labeling a regression coefficient statistically insignificant.

TABLE 2

Robustness checks of ERI influence on unemployment

	Inferred		Reported	
	<i>Estimate</i>	<i>95% confidence interval</i>	<i>Estimate</i>	<i>95% confidence interval</i>
<i>Chamber's model (CM)</i>	0.009	0.0003 — 0.0155	0.008	0.0002 — 0.0158
<i>CM minus 2007 and 2008</i>	0.006	-0.0029 — 0.0149	-	-
<i>CM minus North Dakota and South Dakota</i>	0.007	-0.0013 — 0.0148	-	-
<i>CM with mining control</i>	0.005	-0.0025 — 0.0122	-	-
<i>CM minus 2007, 2008, and the Dakotas; plus mining controls</i>	-0.0009	-0.0089 — 0.0070		

SOURCE: "The Impact of State Employment Policies on Job Growth: A 50-State Review," U.S. Chamber of Commerce and author's calculations.

However, **Table 3** shows that ERI and per capita income are *positively* correlated and meet all conventional significance thresholds no matter the other controls or robustness checks performed on the data.

TABLE 3

**Replicating Chamber of Commerce regressions
but using per capita income as dependant variable**

	Inferred		
	Estimate	95% confidence interval	
<i>Chamber's model (CM)</i>	103.0	53.0	— 152.9
<i>CM minus 2007 and 2008</i>	99.7	42.4	— 157.1
<i>CM minus Dakotas</i>	94.7	43.6	— 145.8
<i>CM with mining control</i>	50.3	10.7	— 89.7
<i>CM minus 2007, 2008, and the Dakotas; plus mining controls</i>	50.2	3.9	— 96.6

SOURCE: “The Impact of State Employment Policies on Job Growth: A 50-State Review,” U.S. Chamber of Commerce and author’s calculations.

Endnotes

1. “The Impact of State Employment Policies on Job Growth: A 50-State Review” is available from the U.S. Chamber of Commerce website. (http://www.uschamber.com/sites/default/files/reports/201103WFI_StateBook.pdf)
2. For example, the chamber’s report (p. 21), in citing a study that compared manufacturing employment in counties on both sides of a border between right-to-work (RTW) and non-RTW states, describes the finding as follows: “Holmes used a novel approach to separate out the effects of right-to-work statutes from those of other state-specific policies.” In fact, the author of the study says explicitly that his research does not separate out the effects of RTW from other state policies: “Right-to-Work states historically have pursued a number of other smokestack-chasing policies, such as low taxes, aggressive subsidies and even, in some cases, lax environmental regulations. Thus, my results do not say that it is right-to-work laws that matter, but rather that the ‘pro-business package’ offered by right-to-work states seems to matter.” Further, it should be noted that the Holmes results do not say that “pro-business policies” create more jobs nationally; rather, variation in these policies by state may just affect where the jobs are located. So, if all states adopted them, it is likely that there would be no net effect on national job creation and no influence on which state saw more job creation.
3. Besides the ERI, all the data used in the chamber’s regression model were based on publicly available data, except for the “small business tax climate index,” which the chamber says it obtained from the Tax Foundation. An Internet search that included the Tax Foundation website did not find this index, although it did find several references to the Tax Foundation’s “state business tax climate index.” The data on this index between 2006 and 2009 (2006 being the earliest year found) seem to match the sample properties of the tax index described in the chamber’s report very closely, so this measure is used in the regression here.
4. It should be noted that removing, say, 2001 and 2002 leaves the report’s results intact, so the movement of the ERI coefficient’s value from statistical significance to insignificance is not being driven simply by a smaller sample size.