

Poverty, Productivity, and Public Health: The Effects of “Right to Work” Laws on Key Standards of Living

by Darrell Minor

On February 1, 2012, Indiana Governor Mitch Daniels signed a “right to work” (RTW) provision in the state’s labor laws, making Indiana the 23rd RTW state in the nation.¹ In addition to becoming the 23rd RTW state in the nation, Indiana is the first in more than a decade to pass a law undermining the ability of unions to organize and represent their members. As I write this, at least half-a-dozen additional states are attempting to follow their example and further limit the rights of unions across the nation.

In RTW states, unions are prohibited from including “union security clauses” in their contracts, which are those clauses that require all employees in the bargaining unit to either join the union or pay a portion of its dues as a condition of employment. Thus, RTW laws are generally believed to weaken unions. Worker-friendly states (those states without RTW laws), on the other hand, allow provisions for the union to be the exclusive bargaining agent for those workers who are eligible for membership, and also require all eligible employees to pay at least a portion of the union dues. Indiana was the first state to enact RTW laws since Oklahoma enacted a similar measure in 2001.

Supporters of RTW have cited a number of reasons for enacting such laws, but mostly they rely on non-existent research and false conclusions. For example, the sponsor of the measure in Indiana, Republican State Representative Gerald

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Torr said “when you average all of the right-to-work states and make comparisons, their average unemployment rate is a full point lower than the rate of the states that don’t have right to work.”² When Torr’s office was contacted to provide the source of this information, a staff member indicated that it was from the Bureau of Labor Statistics (BLS) website.³ However, after reviewing the information available at the BLS website, the claim could not be verified.

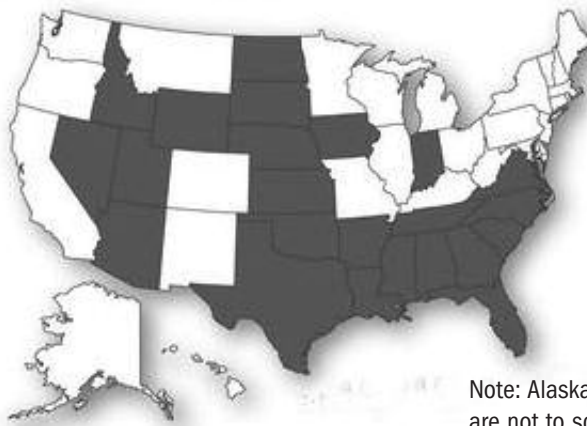
State Representative Sue Ellspermann, who also voted in favor of the Indiana legislation, cited her experience as a worker moving from Flint, Michigan, to Texas. “In Texas, the productivity was higher and the worker morale was higher,”

Those who oppose such RTW laws often disparagingly refer to such laws as “right to work (for less)” laws.

she claimed.⁴ Even aside from its anecdotal nature, her statement does imply that productivity and morale are higher in RTW states in general, and worker productivity is one measure that we will explore in this paper.

The day after Daniels signed the legislation into law in Indiana, Ohio’s Attorney General Mike DeWine certified a petition for a constitutional amendment that would also make neighboring Ohio another RTW state.⁵ Now, just months after defeating the anti-union, state-ballot Issue 2 (by the rather wide margin of 61 to 39 percent), union leaders in Ohio are preparing for another lengthy, drawn-out battle to protect the collective bargaining rights of their members. Efforts are also underway to pass RTW laws in Maine, Michigan, Minnesota, and Oregon.

STATES WITH RTW LAWS



Note: Alaska and Hawaii are not to scale

There are undoubtedly several non-economic reasons for people to support RTW laws. Some oppose unions for political reasons: unions tend to support Democrats over Republicans, because Democrat lawmakers tend to support the kinds of legislation like pension-protection laws and raising the minimum wage that are important to union leadership. Others support RTW laws for philosophical reasons, arguing that no one should be forced to pay dues to an organization against their will. Union supporters counter that all employees who are in a bargaining unit benefit from the contracts that are negotiated on their behalf, and should therefore pay their “fair share” of union dues to help offset the cost of rep-

The question of whether RTW laws benefit a state economically has remained largely unanswered. Most studies have focused on employee compensation.

resentation and prevent “free riders.” Those who support RTW laws often claim that individuals could negotiate their own contracts, and that those contracts would guarantee higher salaries and benefits than the contracts negotiated by a union on their behalf. Those who oppose such RTW laws dispute such claims, and often disparagingly refer to such laws as “right to work (for less)” laws.

But the question of whether RTW laws benefit a state economically has remained largely unanswered. Most studies have focused on employee compensation, attempting to compare average salaries (either per household, or per capita) in RTW states vs. worker-friendly states. When this is done, the worker-friendly states have consistently come out with higher compensation averages. The RTW advocates then (correctly) counter that comparing average compensation isn’t a sufficient measure, because the cost of living varies from state to state, and an income of \$50,000 in California or New York may not go as far as an income of \$50,000 in Kentucky or Tennessee. When statewide cost-of-living indices are accounted for, the RTW states surge ahead of the worker-friendly states, to which the RTW opponents (correctly again) point out that accounting for a statewide cost-of-living index also isn’t sufficient, because those indices can vary widely even within a state. The cost-of-living index for Boulder, Colorado, in 2010 was a relatively high 124, while in Pueblo, Colorado, it was quite low at 83, where a score of 100 is normal.⁶

Clearly, compensation is a questionable measure for comparing standards of living between different states.⁷ So, in this paper, using the most recent data available from the U.S. Census, the BLS, the Bureau of Economic Analysis, and other public sources, I have instead analyzed a spectrum of seven measures for standard of living, and determined whether there are differences in these measures between the 22 RTW states (not including Indiana, which joined them after this data was collected) and the 28 worker-friendly states (including Indiana).



Protestors gather outside the Indiana Statehouse, Feb. 1, 2012. Source: AP Photo/Michael Conroy

Those seven measures are:

1) Gross Domestic Product (GDP), or the total amount of goods and services produced in a year; 2) poverty rates, specifically the percentage of a state’s residents who are living below the poverty level; 3) the percentage of state citizens who have basic health insurance; 4) employment rates; 5) home ownership rates; 6) life expectancy rates; and 7) income gap, which, as its name suggests, is a measure of how wide the spread is between those with the highest incomes vs. those with the lowest incomes.

There are other measures for standard of living, but many of them (such as inflation rates) are more appropriate for comparing differences between countries that have different political systems in place. It is also worth noting that “standard of living” measures tend to focus on economic standards, and are different from “quality of life” measures, which would include leisurely activities, social interactions, access to cultural and educational experiences, assessment of job security, and the like. For example, some have claimed that incidents of workplace fatalities are higher in RTW states, but because this is not a measure of standard of living it has not been analyzed here.⁸

To create more useful comparison, across each of the relevant measures, I applied each measure to the 50 states, ranking them from best to worst for each measure. The Mann-Whitney Rank Sums statistical test was then applied to determine whether worker-friendly states were more likely to “best” RTW states in these standards of living.⁹ The data do account for differences in population for each states, as necessary.¹⁰

AN ANALYSIS OF THE DATA

Gross Domestic Product (GDP): The GDP is probably the most accessible single measure of standard of living. A high GDP positively correlates with a high standard of living, and changes in living standards can be swiftly observed in corresponding changes in the GDP.

According to 2009 Bureau of Economic Analysis data (all data used throughout this article is the most recent available), the GDP per capita for the 28 worker-friendly states collectively was \$43,899 that year, while the GDP per capita for the 22 RTW states collectively was \$38,755.¹¹ The difference of \$5,144 represents a per capita GDP that is 13.3 percent higher in the worker-friendly states than the RTW states. It is worth emphasizing that GDP represents the amount of goods and services produced in a year, and is not the same as per capita income. Thus, the initial analysis of this measure indicates that the worker-friendly states appear to be significantly “more productive” than the RTW states.

Furthermore, a listing of the 50 states in decreasing order of GDP per capita (i.e., best to worst) reinforces this fact (see Table 1, next page). Indeed, 12 of the 14 most productive states are worker-friendly states, while five of the six least productive states are RTW states. The median GDP per capita for the worker-friend-

TABLE 1
GROSS DOMESTIC PRODUCT, PER CAPITA
(WORKER-FRIENDLY STATES ARE IN BOLD, ITALICS)

State	GDP per capita	State	GDP per capita	State	GDP per capita
<i>Delaware</i>	<i>62080</i>	South Dakota	43773	Georgia	36677
Wyoming	60527	Iowa	43644	<i>Missouri</i>	<i>36420</i>
<i>Alaska</i>	<i>59638</i>	Nevada	42564	Florida	36065
<i>Connecticut</i>	<i>58476</i>	Texas	42526	Tennessee	35650
<i>Massachusetts</i>	<i>50566</i>	<i>Oregon</i>	<i>41949</i>	Arizona	35313
<i>New Jersey</i>	<i>50227</i>	Louisiana	41836	<i>Maine</i>	<i>35214</i>
<i>New York</i>	<i>50205</i>	<i>N. Hampshire</i>	<i>41110</i>	<i>Michigan</i>	<i>34157</i>
<i>California</i>	<i>47067</i>	<i>Rhode Island</i>	<i>40996</i>	<i>New Mexico</i>	<i>34056</i>
Virginia	46960	Kansas	40662	<i>Montana</i>	<i>32915</i>
<i>Washington</i>	<i>46352</i>	<i>Pennsylvania</i>	<i>39674</i>	<i>Kentucky</i>	<i>32848</i>
<i>Colorado</i>	<i>46150</i>	<i>Wisconsin</i>	<i>39617</i>	Alabama	32748
<i>Hawaii</i>	<i>45980</i>	North Carolina	38847	Idaho	32557
<i>Maryland</i>	<i>45495</i>	Oklahoma	38644	Arkansas	32191
<i>Minnesota</i>	<i>45392</i>	<i>Vermont</i>	<i>37579</i>	South Carolina	31618
North Dakota	45390	<i>Indiana</i>	<i>37495</i>	<i>West Virginia</i>	<i>30248</i>
<i>Illinois</i>	<i>44260</i>	<i>Ohio</i>	<i>37237</i>	Mississippi	29634
Nebraska	43990	Utah	36691		

SOURCE: BUREAU OF ECONOMIC ANALYSIS

ly states is \$41,529.50, compared to \$38,745.50 in RTW states, and an application of the Mann-Whitney test shows significance at the 0.05 level.¹²

Poverty rates: Obviously a state with a high standard of living would be expected to have fewer residents living below the poverty level. Using U.S. Census income data,¹³ and applying it to the two groups of states, we find again that RTW states have a lower standard of living. Eleven of the 15 states with the highest poverty rates are RTW, while nine of the 11 states with the lowest poverty rates are worker-friendly (see Table 2, on the opposite page.) The median poverty rate

TABLE 2
PERCENT OF PEOPLE BELOW POVERTY LEVEL IN LAST 12 MONTHS
(WORKER-FRIENDLY STATES ARE IN BOLD, ITALICS)

State	Poverty rate (percent)	State	Poverty rate (percent)	State	Poverty rate (percent)
<i>New Hampshire</i>	7.6	<i>Washington</i>	11.3	<i>Michigan</i>	14.4
<i>Maryland</i>	8.1	<i>Colorado</i>	11.4	N. Carolina	14.6
<i>Alaska</i>	8.4	Iowa	11.5	Arizona	14.7
<i>New Jersey</i>	8.7	<i>Rhode Island</i>	11.7	Georgia	14.7
<i>Hawaii</i>	9.1	N. Dakota	12	<i>Montana</i>	14.8
<i>Connecticut</i>	9.3	<i>Pennsylvania</i>	12.1	Tennessee	15.5
Wyoming	9.4	<i>Illinois</i>	12.2	Alabama	15.7
Utah	9.6	<i>Maine</i>	12.3	S. Carolina	15.7
<i>Minnesota</i>	9.6	S. Dakota	12.5	Texas	15.8
<i>Delaware</i>	10	Idaho	12.6	Oklahoma	15.9
<i>Massachusetts</i>	10	<i>Indiana</i>	13.1	<i>West Virginia</i>	17
Virginia	10.2	Florida	13.2	<i>New Mexico</i>	17.1
<i>Wisconsin</i>	10.4	<i>California</i>	13.3	Arkansas	17.3
<i>Vermont</i>	10.6	<i>Missouri</i>	13.4	Louisiana	17.3
Nebraska	10.8	<i>Ohio</i>	13.4	<i>Kentucky</i>	17.3
Kansas	11.3	<i>New York</i>	13.6	Mississippi	21.2
Nevada	11.3	<i>Oregon</i>	13.6		

SOURCE: U.S. CENSUS BUREAU

in worker-friendly states is 11.9 percent, while in RTW states it is 13.9 percent. The Mann-Whitney test indicates significance at the 0.025 level.¹⁴

Furthermore, the percentage of the 2008 population living in poverty in RTW states was 14.4 percent, while the percentage in worker-friendly states was 12.4 percent. To put this difference in perspective, if the rate of poverty in RTW states was extended across the nation, an additional 3,670,000 American men, women, and children would be living in poverty today.

Health insurance: One would expect that a state with a high standard of living

TABLE 3
COMPARISON OF UNINSURED RATES BETWEEN STATES USING 3-YEAR AVERAGES: 2007 TO 2009 (WORKER-FRIENDLY STATES ARE IN BOLD, ITALICS)

State	Uninsured rate (percent)	State	Uninsured rate (percent)	State	Uninsured rate (percent)
<i>Massachusetts</i>	<i>5.1</i>	<i>Ohio</i>	<i>12.5</i>	<i>Colorado</i>	<i>15.9</i>
<i>Hawaii</i>	<i>7.8</i>	<i>Indiana</i>	<i>12.6</i>	S. Carolina	16.4
<i>Minnesota</i>	<i>8.6</i>	Kansas	12.7	N. Carolina	16.6
<i>Wisconsin</i>	<i>9.1</i>	<i>Maryland</i>	<i>13.2</i>	Oklahoma	16.6
<i>Maine</i>	<i>9.8</i>	Virginia	13.4	<i>Oregon</i>	<i>16.9</i>
Iowa	10	<i>Missouri</i>	<i>13.5</i>	Arkansas	17.7
<i>Vermont</i>	<i>10.1</i>	Alabama	13.6	Mississippi	18.1
<i>Pennsylvania</i>	<i>10.3</i>	Utah	13.6	Louisiana	18.2
<i>New Hampshire</i>	<i>10.4</i>	<i>Illinois</i>	<i>13.7</i>	Georgia	18.6
<i>Connecticut</i>	<i>10.5</i>	<i>New York</i>	<i>14</i>	<i>Alaska</i>	<i>18.6</i>
N. Dakota	10.8	Wyoming	14.3	Nevada	18.9
<i>Rhode Island</i>	<i>11.6</i>	<i>West Virginia</i>	<i>14.4</i>	<i>California</i>	<i>18.9</i>
<i>Delaware</i>	<i>11.8</i>	Idaho	14.9	Arizona	19.1
S. Dakota	12	Tennessee	14.9	Florida	20.9
Nebraska	12.2	<i>New Jersey</i>	<i>15.2</i>	<i>New Mexico</i>	<i>22.6</i>
<i>Washington</i>	<i>12.2</i>	<i>Kentucky</i>	<i>15.3</i>	Texas	25.5
<i>Michigan</i>	<i>12.4</i>	<i>Montana</i>	<i>15.7</i>		

SOURCE: U.S. CENSUS BUREAU

would have more of its citizens covered by basic health insurance, giving them access to preventative care and swift medical treatment. And, indeed, the data from the U.S. Census Bureau show that the worker-friendly states have a higher standard of living.¹⁵ Fully 11 of the 13 states with the lowest uninsured rates are worker-friendly states (see Table 3, above), while 11 of the 15 states with the high-

est uninsured rates are RTW states. The median uninsured rate for worker-friendly states is 12.6 percent, while for RTW it is 15.7 percent.¹⁶

Furthermore, we find that 18.6 percent of people in RTW states are uninsured, while only 13.9 percent of people in worker-friendly states are uninsured. The sharp increase in overall percentages of uninsured compared to the median percentages for each group is largely due to the fact that some highly-populated states (California and Texas) also have high rates of uninsured people (18.9 percent and 25.5 percent, respectively). Again, to put this in perspective, if the rates of non-insured citizens in RTW states were spread across the country, then an additional 8,640,480 Americans would be uninsured and suffer a lack of access to affordable health care.

Joblessness: The fourth measure is unemployment rates, with lower rates associated with a higher standard of living. In this case, an ordered listing of the 50 states, ranked in order of joblessness according to the Bureau of Labor Statistics, does not appear to show a strong tendency one way or the other.¹⁷ Only four of the 10 states with the best (or lowest) unemployment rates are worker-friendly states, while the 12 states with the worst (or highest) unemployment rates are evenly split between the two groups.¹⁸

Home ownership: The Census also provides information about home ownership rates for each state and, as with unemployment rates, no clear pattern around home ownership could be found between the two groups of states.¹⁹ Of the eight states with the highest levels of home ownership, five are worker-friendly states; of the 11 with the lowest levels of home ownership, eight are worker-friendly states. And, again, the Mann-Whitney test doesn't show any significant differences.²⁰

Life expectancy: While there may seem to be little reason for a correlation to exist between RTW laws and the life expectancy of citizens in those states, life expectancy data from the Harvard School of Public Health was included here because it is a very common measure of standard of living.²¹ And, as it turns out, the data reveal a possibly-surprising trend. Of the 13 states with the highest life expectancy rates, 10 are worker-friendly states. Conversely, of the 12 states with the lowest life expectancy rates, only two are worker-friendly states. In worker-friendly states, citizens can expect to live 77.6 years (the median), while citizens in RTW states can expect to die at 76.7 (see Table 4, next page.) These are significant results, according to the Mann-Whitney test.²²

Income gap: The final measure is “income gap,” which is a measure of the spread between those with the highest incomes vs. those with the lowest. The currently widening income gap is believed to compound societal challenges such as crime rates, an increased reliance on welfare and other safety nets, and substandard education opportunities, and is a development that former U.S. Federal Reserve Chair Alan Greenspan called a “very disturbing trend.”²³ Using data from the U.S. Census,²⁴ this study determines whether the income gap in RTW states is larger than in worker-friendly states—a larger income gap would indicate a lower standard of living—and again it ranks our states from best to worst. This listing does not give a strong indication that there is much of a difference between the two

TABLE 4
U.S. STATES RANKED BY LIFE EXPECTANCY
(WORKER-FRIENDLY STATES ARE IN BOLD, ITALICS)


State	Life Expectancy (years)	State	Life Expectancy (years)	State	Life Expectancy (years)
<i>Hawaii</i>	80	S. Dakota	77.7	<i>Michigan</i>	76.3
<i>Minnesota</i>	78.8	<i>New York</i>	77.7	<i>Ohio</i>	76.2
Utah	78.7	<i>Maine</i>	77.6	<i>Indiana</i>	76.1
<i>Connecticut</i>	78.7	Arizona	77.5	<i>Missouri</i>	75.9
<i>Massachusetts</i>	78.4	Florida	77.5	Nevada	75.8
Iowa	78.3	<i>New Jersey</i>	77.5	N. Carolina	75.8
N. Dakota	78.3	Kansas	77.3	Georgia	75.3
<i>New Hampshire</i>	78.3	<i>Montana</i>	77.2	Arkansas	75.2
<i>Rhode Island</i>	78.3	<i>Alaska</i>	77.1	Oklahoma	75.2
<i>California</i>	78.2	<i>New Mexico</i>	77	<i>Kentucky</i>	75.2
<i>Colorado</i>	78.2	Virginia	76.8	Tennessee	75.1
<i>Vermont</i>	78.2	<i>Delaware</i>	76.8	<i>West Virginia</i>	75.1
<i>Washington</i>	78.2	Texas	76.7	South Carolina	74.8
Idaho	77.9	Wyoming	76.7	Alabama	74.4
<i>Wisconsin</i>	77.9	<i>Pennsylvania</i>	76.7	Louisiana	74.2
Nebraska	77.8	<i>Illinois</i>	76.4	Mississippi	73.6
<i>Oregon</i>	77.8	<i>Maryland</i>	76.3		

SOURCE: BLOOMBERG BUSINESSWEEK

groups of states. Specifically, the top three states are all RTW states, but 10 of the top 15 are worker-friendly; meanwhile, the 12 states with the most inequitable income gaps are evenly split.²⁵

WHAT WE KNOW ABOUT RTW

To sum up, this study has found that worker-friendly states are significantly healthier, are more productive, have less poverty, and with citizens who enjoy longer life spans. In four of the seven measures (GDP per capita, poverty, insurance and life expectancy rates) so-called “right-to-work” states come out significantly (and statistically) worse.

These findings have broad policy implications in those states where lawmakers are wrongly considering RTW measures, and should inform the good efforts of union members and allies to quell those efforts. Instead of pursuing laws that actually lower the standard of living in their states, policy makers should look for ways to elevate everyone’s standard of living. Enacting RTW laws is not only misguided, but in fact counterproductive to achieving such ends. Dr. Martin Luther King, Jr. once said, “In our glorious fight for civil rights, we must guard against being fooled by false slogans, as ‘right to work.’ It provides no ‘rights’ and no ‘works’. Its purpose is to destroy labor unions and the freedom of collective bargaining.”²⁶ The evidence suggests that Dr. King was correct in this belief, and that those who would advocate for a state to enact RTW laws would also be lowering the standard of living for that state’s residents. 

ENDNOTES

1. Davey, “Indiana Governor Signs a Law Creating a ‘Right to Work’ State.”
2. Spencer, “Indiana House Passes Right-to-Work Bill — Measure To Become Law Soon.”
3. Phone conversation with “Grant.” (February 14), 2012.
4. Spencer, op cit.
5. Eggert, “DeWine Certifies Petition for Right-to-Work Amendment.”
6. Editors, “How Does Your City Stack Up?”, *Kiplinger’s Personal Finance*, July 2010, www.kiplinger.com/tools/bestcities_sort/index.php?sortBy=cost&sortorder=DESC&si=1
7. Studies also may not account for differences in population and, thus, are subject to questions about validity due to a failure to weight the data accordingly. For example, if one group had a population of nine people, each earning \$50,000, and a second group had a population of one person earning \$100,000, it would be incorrect to say that the “average income” of these two groups is \$75,000 [obtained by computing $(\$50,000 + \$100,000)/2$]. Rather, if one accounts for the differences in population, we find that the “average income” for the two groups would be \$55,000. Other studies have attempted to account for differences in the cost of living and the population in each state. [See Poulson, “The Standard of Living in Right to Work States” and Bennett, “Right to Work—Prescription for Prosperity and Opportunity,” for example]. However, they are often done by sampling metropolitan areas within each state, omitting large swaths of less-densely populated regions found within most states.
8. See DeGroat, “Researcher: Right to Work Laws Endanger Workers.”
9. The Mann-Whitney Rank Sums statistical test is a non-parametric statistical hypothesis test for determining whether one of two samples of independent observations tends to have either larger or smaller values than the other.
10. For example, rather than adding up the poverty rates of each right to work state, and dividing by the number of right to work states (which would give a skewed “average of averages” number), as some studies have done, we instead use the poverty rates and the state’s population from the 2010 census to determine the number of people in each right to work state that live in poverty. We then add the number of people living in poverty, and divide by the total population

of right to work states, to get a true poverty rate for all right to work states. Similar steps are taken for each of the seven measures studied in this paper, for both the right to work states and the worker-friendly states.

11. Bureau of Economic Analysis, "Gross Domestic Product by State." GDP per capita is used since the populations of the states, and the two groups of states, are not all the same. All data used in this article are the most recent available.
12. Applying the Mann-Whitney test to the data gives us a value of $z = 1.69$, indicating significance at the 0.05 level ($P = 0.0455$).
13. U.S. Census Bureau, "Persons Below Poverty Level."
14. Conducting a Mann-Whitney test to determine if the distribution of poverty rates in the worker-friendly states is lower than in the right to work states yields a z value of $z = 2.05$, indicating significance at the 0.025 level ($P = 0.0202$).
15. U.S. Census Bureau, "Income, Poverty, and Health Insurance Coverage: Tables and Figures."
16. Conducting a Mann-Whitney test to determine if the distribution of uninsured rates is lower in the worker-friendly states than in the right to work states produces a z value of $z = 2.60$, indicating significance at the 0.005 level ($P = 0.0047$).
17. Bureau of Labor Statistics, "Local Area Unemployment Statistics."
18. If anything, there appears to be a slight edge to the RTW states in this measure, but a Mann-Whitney test shows that this difference is not significant at any acceptable level ($z = 0.49$, $P = 0.3121$).
19. U.S. Census Bureau, "Housing Units."
20. An analysis to see if the right to work states have higher rates of home ownership than worker-friendly states using the Mann-Whitney test indicates that the differences in home ownership rates are not significant at any acceptable level, with a z value of $z = 0.47$ ($P = 0.3192$).
21. *Business Week*, "Table: U.S. States Ranked by Life Expectancy."
22. Testing to see if the distribution of life expectancy is higher in worker-friendly states than in right to work states using Mann-Whitney, we find that $z = 2.16$, which is significant at the 0.025 level ($P = 0.0154$).
23. *The Washington Times*, "Tying skills to wages."
24. U.S. Census Bureau, "Household Income for States." The income gap is most commonly measured using a "Gini coefficient", which measures the inequality of a distribution. The Gini coefficient takes on a value between 0 and 1, with 0 meaning total equality (all households have the same income) and 1 meaning that one household has all the income and all other households have no income (maximum inequality). An ordered listing of all 50 states from lowest Gini coefficient to highest Gini coefficient does not give a strong indication that there is a difference between the two groups of states.
25. A Mann-Whitney test also does not indicate a significance difference. on whether there is a difference reveals a z -value of $z = 0.46$, which is not significant at any acceptable level ($P = 0.3228$).
26. Quoted in William Clay and Reed Larson, "Does America Need a National Right-to-Work Law?"

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