# Show-Me Right to Work: A regional comparison of right to work and non-right to work states.

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#### **Abstract**

The goal of this study is to see whether or not Right-to-Work (RTW) legislation is a factor in the socioeconomic performance of different states, focusing on Missouri and its eight neighboring states. The authors examined roughly 60 state-level socioeconomic measures, but only ten of these indicate statistically significant differences between the RTW- and non-RTW states.

Two of these measures pertain to income growth; they suggest that RTW states tend to have faster income growth rates in the period studied (the few years after the Great Recession). Another two of the statistically-significant factors are labor-force measures, indicating that RTW states tend to have a lower share of long-term unemployed and underemployed workers in their workforce. Two measures are for quality-of-life related to infrastructure and public services, with the RTW states tending to perform better. The final four measures are for "business environment". RTW states tend to have lower union membership, slightly higher workplace-injury rates, and relatively lower costs of doing business.

Keywords: --Missouri, Labor Unions, Right to Work, Economic Growth

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# **Background**

The U.S. Congress passed the National Labor Relations Act in 1935 as a measure to encourage greater collaboration between businesses and their employees by improving the status of workers through increased support for labor unions. This measure was viewed as necessary given the circumstances leading up to the Great Depression and the events taking place during its early years. Leading up to the Great Depression, labor union membership and strength had declined across the country during the pro-business and anti-labor positions of the conservative, Republican administrations of the 1920s. By 1933, union membership had decline to approximately 3 million nationwide, which was nearly 2 million less than a decade earlier. This decline was accompanied by an increase in the power of employers, who adopted large-scale manufacturing processes often leading to poor working conditions for workers and other practices designed to maximize profits. During this time, worker protests and strikes were typically met with arrests by police or acts of violence leading to a large number of deaths across the country. As the Great Depression intensified and unemployment soared, workers increasingly came together to protest the perceived government inaction and business excesses. This situation changed dramatically under the more worker-friendly administration of the Franklin Roosevelt presidency and Democratically-controlled Congress. Unlike the Republicanled federal government of the 1920s, which was largely antagonistic to organized labor, the FDR-led government sought to support workers through the adoption of the National Industrial Recovery Act (NIRA) which included many of the provisions of the National Labor Relations Act (NLRA).<sup>2</sup> The stated purpose of the NLRA, also known as the Wagner Act, was enacted to "to protect the rights of employees and employers, to encourage collective bargaining, and to curtail certain private sector labor and management practices, which can harm the general welfare of workers, businesses and the U.S. economy." In essence, the Act provided most private-sector workers' rights to unionize and collectively bargain over wages, benefits, and working conditions. In addition, it also permitted collective bargaining contracts between employers and labor organizations that required every individual covered by the collective bargaining contract to pay dues to the negotiating labor organization.<sup>4</sup>

While much of the NIRA was ultimately declared unconstitutional by the Supreme Court along with other New Deal policies, the NLRA was not. Instead, the NLRA was ruled constitutional by the Supreme Court in 1937 providing a legal foundation for the increase of power for labor unions.<sup>5</sup> This support led to a dramatic increase in union membership and power such that by 1945, 35% of American workers were in unions which was a 20% increase from a

<sup>&</sup>lt;sup>1</sup> http://www.loc.gov/teachers/classroommaterials/presentationsandactivities/presentations/timeline/depwwii/unions/(10:04 am, 1/7/2016)

<sup>&</sup>lt;sup>2</sup> Collins, B. (2012). Right to work laws: Legislative background and empirical research. Washington, DC: Congressional Research Service.

<sup>&</sup>lt;sup>3</sup> https://www.nlrb.gov/resources/national-labor-relations-act (10:50 am, 1/7/2016).

<sup>&</sup>lt;sup>4</sup> Collins, B. (2012). Right to work laws: Legislative background and empirical research. Washington, DC: Congressional Research Service.

<sup>&</sup>lt;sup>5</sup> Beik, M.A. (2005). *Labor Relations*. Westport, CT: Greenwood Press.

decade before.<sup>6</sup> With this increased power, labor unions could demand contracts that ranged across different levels of unionization for businesses. Some contracts allowed members and non-members to work in the same business (albeit with non-members paying dues for representation), others required employees to join the union after a stated period of time and still others demanded the hiring of only union members.

This change in relationship between workers and employers within the US was paralleled with events around the world including the rise of the Communist government of the United Soviet Socialist Republic (USSR). With the increased tensions between the USSR and the United States after World War II, popular sentiment within the nation began to turn against organized labor and the perceived excesses and claims of cronyism that accompanied it. The national Red Scare of Communism combined with increasing resistance from business interests to organized labor, ultimately lead to the 1947 Taft-Hartley Act passed by the Republican-controlled U.S. Congress. The Taft-Hartley Act overturned much of the NLRA through measures that sought to address the relationships between employers, employees and labor unions in negotiations and unfair labor practices for unions including the only-union closed shop. Section 14(b) of the Taft-Hartley Act also established the Right to Work (RTW) provisions which gave states the opportunity to pass laws that forbade the establishment of businesses and/or union contracts where union membership was a required condition of employment.

Since the passage of the Taft-Hartley Act, 25 states have now adopted RTW laws and/or Constitutional amendments during the past 69 years (see Table 1). The 10 states that immediately adopted RTW laws in 1947 were mostly in either the southern or western United States with largely non-unionized, non-manufacturing and largely agricultural economies. The next wave of RTW adoption took place during the mid-1950s with additional southern and western states passing legislation or Constitutional amendments. Four additional states in these regions also adopted RTW legislation each decade between the 1960s-90s suggesting a declining interest in the movement paralleling the declining power of unions nationwide. However this trend was reversed in the 2000s with five new states passing RTW legislations though now in more northern and Midwestern regions of the country. These states in particular had experienced a decline in manufacturing (largely a unionized sector of the economy) while also suffering through the Great Recession of 2007-2009. These declining economic conditions are thought to have supported more pro-business, Republican leadership in the state governments who supported the RTW legislation.

This recent adoption of RTW legislation reflects not only the historical and political trends of the past but also the current partisan polarization of the American people and their continuing concerns about the U.S. economy. A 2015 Pew Research Center poll found that the views of current economic conditions strongly follows along partisan lines with Republicans

<sup>&</sup>lt;sup>6</sup> Babson, S. (1999). The Unfinished Struggle: Turning Points in American Labor, 1877- Present. Lanham, MD: Rowan & Littlefield.

<sup>&</sup>lt;sup>7</sup> Collins, B. (2012). Right to work laws: Legislative background and empirical research. Washington, DC: Congressional Research Service.

<sup>&</sup>lt;sup>8</sup> Robinson, Cara, "Labor Unions, Corporations and Right-to-Work Laws: Impacts on the American Economy" (2012). Sociology, Social Work, & Urban Professions Faculty Research. Paper 2. http://digitalscholarship.tnstate.edu/sswandurbanp\_fac/2

holding more pessimistic views of the current and future economy than either Democrats or independents. On the whole, Pew found 28% of Americans rate current economic conditions as poor, 45% of Americans rate current economic conditions as fair and only 27% view them as excellent or good. In addition, 2014 Gallup polling found US economic confidence varies from state to state with some regional patterns. The Gallup Economic Confidence Index is based on state residents' views of economic conditions and whether they thought economic conditions in the country were getting better or getting worse. In the most recent survey, all states except Minnesota had a negative index rating. Nationally, the Confidence Index averaged -14 which suggests a general pessimistic view of the economy overall and confirming the Pew findings. Regionally, the states with the lowest confidence rating were in the south and middle of the country.

These feelings about the economy are important to the current debate about further adoption of Right to Work legislation because, as the history has shown, justification for or against RTW has often rested on beliefs about the impact of pro-business or pro-labor policies of economic prosperity and social well-being. Indeed, the claims put forth by both sides of the RTW debate continue to use these historical premises and fall along long-standing partisan divides. Those who are proponents of RTW largely justify their stance on three lines: 1) that it affirms American freedom to join or not join a union and pay its fees; 2) that it reduces the undue influence that labor unions can place on policies, politicians and workers and 3) that it has positive economic and standard of living results (e.g., wage and income growth). Alternatively, those who oppose RTW claim the opposite effect pointing to research that suggests RTW states have: a) lower wages and income growth rates; b) lower rates of health insurance coverage; c) higher poverty and infant mortality rates; d) less investment in education and worker-training; and 3) higher workplace fatalities. In keeping with these conflicting claims, Gallup found in a 2014 poll that 53% of Americans approve of labor unions while 71% of them also said they would vote for a right to work law.

While these opposing groups will continue to dispute RTW's impact on a state's economic and social conditions, uncovering the true impact is particularly important in Missouri where it is an ongoing point of contention in state government. On June 4, 2015 Democratic Governor Jay Nixon vetoed House Bill 116 that came to him from the Republican legislature to make Missouri the 26<sup>th</sup> Right to Work state. While enough Republicans in the House of Representatives sided with Democrats to uphold the veto, the Republican-dominated legislature

<sup>&</sup>lt;sup>9</sup> As Election Year Nears, Public Sees Mixed Economic Picture. http://www.people-press.org/2015/12/22/as-election-year-nears-public-sees-mixed-economic-picture/(1:00, 1/7/2016).

<sup>&</sup>lt;sup>10</sup> http://www.gallup.com/poll/125066/State-States.aspx?g\_source=ECONOMY&g\_medium=topic&g\_campaign=tiles (1:50, 1/7/2016).

<sup>&</sup>lt;sup>11</sup> Published on National Right to Work Legal Defense Foundation (http://www.nrtw.org) Right to Work Frequently-Asked Questions. (2:00, 1/7/2016).

<sup>&</sup>lt;sup>12</sup> http://www.aflcio.org/Legislation-and-Politics/State-Legislative-Battles/Ongoing-State-Legislative-Attacks/Right-to-Work (2:10, 1/7/2016).

<sup>&</sup>lt;sup>13</sup> Americans Approve of Unions but Support "Right to Work". http://www.gallup.com/poll/175556/americans-approve-unions-support-right-work.aspx (2:33 pm, 1/7/2016)

is expected to raise the issue again when they convene in 2016.<sup>14</sup> This ongoing confrontation necessitates that Missourians have a clearer understanding of the impact of RTW before they go to the polls in what promises to be an enthusiastic and high turnout election year.

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**Source:** National Conference of State Legislatures website: http://www.ncsl.org/research/labor-and-employment/right-to-work-laws-and-

bills.aspx 1/7/2016: 11:58 am

<sup>&</sup>lt;sup>14</sup> Missouri legislators return to Capitol to fight old battles in 2016 session. Kansas City Star: http://www.kansascity.com/news/government-politics/article53007700.html#storylink=cpy (2:41 pm, 1/7/2016)

#### **Review of the Literature**

Research exploring the economic impacts of Right-to-Work (RTW) legislation goes back several decades and has produced a convoluted series of findings (see, for example, Moore & Newman, 1985 and Moore, 1998). These findings as such are largely the product of different methodologies used to test for the influences RTW legislation. A critical contributor is the extent to which RTW legislation is considered as an exogenous or endogenous variable. There appears to be considerable disagreement in the body of literature as to whether the presence of RTW legislation acts as an external force exerting negative influence on such things as union membership (Lumsden & Peterson, 1975, Moore & Newman 1975, Warren & Strauss, 1979, Hirsch, 1980, Farber, 1983, Hunt & White, 1983, Koeller, 1985, as cited in Moore & Newman, 1985) or whether pre-existing levels of union membership dictate the likelihood of a state adopting RTW legislation (Wessel, 1981, Hirsch, 1980, Carroll, 1983, as cited in Moore & Newman 1985) In each of these directional formulations, the findings have suggested that there is a negative association between RTW legislation and the level of union membership. States that have adopted RTW legislation generally report lower levels of union membership. These findings are rather consistent whether the studies focused on specific states or examined the effects of RTW legislation on union membership nationally (Stepina & Fiorito, 1986, Farber, 1985, Davis & Huston, 1995, as cited in Moore 1998).

The existing literature suggests that inferences from such findings be interpreted with caution. Because of the likely reciprocal relationship between existing levels of union membership and the adoption of RTW legislation some studies have treated both variables as jointly endogenous. These studies have produced mixed results. Studies by Moore & Newman (1975), Wessels (1981), and Koeller (1985) indicate that RTW legislation has no significant negative influence on the level of union membership at the state level. In contrast, studies by Warren & Strauss (1979), and Davis & Huston (1995) show RTW legislation related to lower levels of union membership at the state level. According to Moore & Newman (1985) what can likely be concluded is there is a "taste" aspect to consider in such analysis. They note that the significance of RTW legislation on union membership is likely overstated. In fact, a more consistent body of research literature suggests that it is the initial level of unionization in a state that appears to have the strongest predictive impact on whether a state adopts RTW legislation giving support for the notion that two-way causality exists (Moore 1998). It is argued that states with low levels of initial union membership are more inclined to support passage of RTW legislation because they are not inclined to join a union to begin with.

Furthermore, it is argued that the possible influence of RTW legislation may be limited in its effects on unionization over time. For example when Koeller (1994, as cited in Moore 1998), looked at the effects of RTW legislation across two historical periods he found that RTW legislation had a significant negative effect during his first period of analysis (1958-1972), but that such legislation ceased to have an effect for the later period (1974-1982). A similar diminishing effects finding was documented by Ellwood and Fine (1987). They found that RTW legislation has a significant negative effect in the first five years after its passages but that such effects ceased to be found after 10 years. Moore (1998) in his summary review of the existing research literature on RTW legislation's effects on union membership remains an open one. However, Devinatz (2011) in a similar review of studies conducted decade later conclude that a minimum RTW legislation has moderately impacted the scope of unionization in the United States.

Aside from the exploration of its effects on union membership another common thread in the research literature on the economic impacts of RTW legislation concerns whether such legislation negatively impacts wages. Much like the above led discussion on how RTW legislation should be treated as a variable (exogenous vs. endogenous) in the examination of its effects on union membership, the same debate exists exploring its effects on wages (see, for example, Moore, 1980, and Carroll, 1983). Studies using RTW legislation as an exogenous variable offers support for the idea that wages in states with RTW legislation are lower (Wessels, 1981, Carroll, 1983, and Garofalo & Malhotra, 1992). Yet, the question remains are these lower wages a consequence of the passage of RTW legislation or are states that already have lower wages (due to less economic development and/or union activity) more likely to pass RTW legislation? When RTW legislation is used as an endogenous variable there does not appear to be any relationship between RTW legislation and lower wages, suggesting that RTW legislation is more likely to be adopted in lower wage states negating the possible inference that RTW legislation is responsible for such suppressed wages (Wessels, 1981, and Moore, Dunlevy, & Newman, 1986). Moore (1998) concludes that RTW legislation appears to have no decisive impact on the lowering of wages. Further, those studies where a relationship was found to exist Moore argues, the likely relationship with union membership and its negative effect on wages appears to diminish over time. This limited effects on wages is found regardless of whether one is looking at union or non-union wages or public vs. private sector wages (Devinatz, 2011).

A final theme in assessing the impacts of RTW legislation and one that is at the heart of why most states pursue passage of RTW legislation, is whether or not such legislation positively affects economic development. One way this influence is assessed is by examining if influence on passage of RTW legislation and the relocation of businesses (Moore & Newman, 1985). There is an operating belief held by some that passage of RTW legislation is attractive way to "attract industry and to promote economic growth" (Moore, 1998, p. 460). Existing research suggests that states with RTW legislation have grown faster and that businesses have historically given consideration to the presence of such legislation when locating businesses (Moore, 1998). Vedder (2011) found similar support for this idea examining the effects of RTW legislation and growth in gross domestic product (GDP). He found that states that had RTW legislation witnessed higher rates of growth in GDP compared to non-RTW states. From the period of 1980 to 2010, Vedder found that RTW states had a yearly growth rate for their GDP of 3.32% compared to 2.58% for non-RTW states (2011, p. 308).

Interestingly, Newman (1984, as cited in Moore & Newman, 1985) found RTW legislation's influence on business development may be industry specific. His findings suggests that RTW legislation may enhance labor intensive development only, having little to no influence on capital intensive industries. Holmes (1998), found a similar finding noting an increase in employment in the manufacturing sector after a state adopted RTW legislation. Curiously, a more recent study by Vedder (2011) examining statewide data on Fortune 500 company movement from 1984 to 2011, found that states with RTW legislation experienced a doubling of their Fortune 500 companies and there was a net migration of such corporations from non-RTW legislation states.

This may not be completely surprising when considering the shift in the share of the overall employment based in labor and capital intensive industries since the 1970s. As the economy has moved away from labor intensive industries as a share of the overall economy it would seem more natural that corporate movement which is more capital intensive would be more of the norm since the 1980s. Like the discussion on union membership and wages, the

effects of RTW legislation appears to be time sensitive. For example, national level studies suggest that the effects of RTW legislation on the redistribution of industries appears to have diminished after the 1970s (Moore & Newman, 1985). Yet, studies at the state level suggest that RTW legislation maintains some utility in promoting economic growth. For example, Newman (1983) notes that the effects of RTW legislation takes at least 10 years before they are found to bear economic fruit. The conclusion reached in this limited direction of inquiry suggests RTW legislation does have a positive effect on economic development but the effect is largely symbolic rather than tangible (Moore & Newman, 1985 and Moore, 1998).

As noted earlier, a big question in the literature on RTW legislation is whether it should be understood as having economic impacts, or instead be viewed as a consequence of the very economic aspects it is argued to impact. Moore points out that some believe such laws are "enacted to enhance the attractiveness of the state's labor force to new industry and to promote a faster economic growth rate" (1998, p. 448). This position implies that there should be some identifiable predictive variables regarding which states are more likely to adopt or pursue adoption of RTW legislation. In his review of the literature on the determinants of RTW legislation, Moore (1998) found that states that were poorer in wages and income, less urbanized, and had a larger agricultural sector were more likely to adopt RTW legislation. Vedder (2011) argues that the debate is whether such growth is directly caused by passage of RTW legislation or whether RTW legislation is part of a larger package of pro-business friendly factors such as lower taxes and various subsidies (Holmes, 1998, and Devinatz, 2011). For example, he found that "six of the nation's nine states that do not have a comprehensive income tax are RTW states, including populous Texas and Florida. There is an abundant literature suggesting economic resources tend to move away from high tax, especially income tax, jurisdictions (2011, p. 308).

Overall, it appears that the presence of RTW legislation has impacted the level of unionization within in a state and has likely contributed to the larger decline in union membership nationally. What is still up for contention is just what if any influence RTW legislation has on the suppression of wages. The existing evidence is contradictory and there is not clear agreement as to whether any appearance of the impact on wages is not in fact conditioned by the pre-existing economic development level that exists in a state. Although there is the appearance of greater consensus in the literature on the impacts on RTW legislation on economic development, the effects appear to be historically specific on the national level, and limited in their long term impact at the state level. Although not studied in great depth, the impact of RTW legislation has been found to have no impact on levels of employment. Vedder (2011), found that RTW and non-RTW states had no difference in their median employment and unemployment rates. In the face of so much convoluted and historically sensitive findings it's been concluded that the debate over RTW legislation is more symbolic than tangible (Moore 1998).

# **Data Used in the Study**

Many studies exploring the RTW debate have examined this issue at the national level. Our study chose a regional focus because we believe the geographical proximity of states implies socioeconomic and cultural similarities that make comparisons among them more relevant. We specifically examined Missouri and its neighboring eight states (Arkansas, Illinois, Iowa, Kansas, Kentucky, Nebraska, Oklahoma, and Tennessee). Six of the states in our analysis are RTW (AR, IA, KS, NE, OK, and TN) and three are not (IL, MO, and KY). By comparing the

relative performance of the RTW versus non-RTW groups on various socioeconomic measures, we hope to identify any significant differences between them.

The common arguments in favor of, or against, RTW laws served as our guide in identifying the data sets to look into. We studied state-level data groups in three dimensions: (1) economic performance and standard-of-living indicators, (2) quality-of-life indicators, and (3) business environment indicators. We looked at an extensive set of roughly sixty variables (see Table 2 below).

#### **Table 2: Research Indicators**

#### **Economic Performance Indicators**

- Real State Gross Domestic Product (2014 level and 2011-14 %-growth rate)
- Cost of Living index (2015) and Regional Price Parity index (2013)
- Real Median Household Income (2013 level and 2009-13 %-growth rate)
- Real Mean Weekly Wage (level and 2007-12 %-growth rate)
- Total Non-Farm Employment (level and 2013-2014 %-growth rate)
- Unemployment Data (for 2014: the unemployment rate, long-term share of total unemployment, unemployment rate with discouraged workers, and the employed part-time for economic reasons)
- State GINI Coefficients (for 2013)

#### **Quality of Life Indicators**

- Educational Attainment (2013 population distribution by education less than 9th grade (or dropout rate), 9th-12th grade, high school, some college, associate's degree, bachelor's degree, graduate/professional degree)
- Infant Mortality Rates (2014 deaths per 1000 live births)
- Health Insurance Population Coverage Rate (2013, % of population uninsured and Medicaid coverage rate)
- Poverty Rates (2013 % of population living below poverty, and also those below 185% of federal poverty threshold to reflect the working poor)
- Crime Rates (2013) incidence of violent crimes and property crimes per 100,000 inhabitants)
- Participation in SNAP (2013 % of population), SNAP monthly benefits per person, and Funding for SNAP (2013 per capita)
- Food-Insecurity Rates (2011-13 average % of households)
- School Lunch Program: Free-&-Reduced-Price Participation Rate (2013-2014 % student participation)
- Suicide Rates (2013 rate per 100,000 population)
- WalletHub State Rankings for Taxpayer ROI (2015 rankings for Quality of Life Indicators (Infrastructure (Roads, Bridges, Parks, etc.), Education, Health, Safety, Pollution, Economy, Government Services, Taxes, Return On Government Investment [ROI-Gov]. Source: <a href="https://wallethub.com/edu/state-taxpayer-roi-report/3283/#methodology">https://wallethub.com/edu/state-taxpayer-roi-report/3283/#methodology</a>)

#### **Business Environment Indicators**

- Mobile Capital Investment (2012 % of state GDP)
- Union Membership and Representation (2014 % of employment)
- Workplace Injury Rates, Non-Fatal and Fatal (2013 incidence per 100 workers)
- CNBC State Rankings for Economic Climate (2014 Rankings for Cost of Doing Business, Cost of Living, Quality of Life, Business Friendliness and Access to Capital, Workforce).
  - Source: http://www.cnbc.com/2015/05/27/americas-top-states-for-business-2015-our-methodology.html)

# **Methodology and Findings**

For each indicator or variable in the data set, we arranged the states in either ascending or descending order of the indicator values, and determined whether or not the RTW states clearly clustered on one end. This allowed us to quickly see whether or not there might be a pattern to analyze further. If only one of the states separated from the cluster in the ordinal ranking, then we took a closer look at the data set and performed the Mann-Whitney test. Given our small

sample size, we used the rank-sum statistic to determine which of our variables showed a statistically significant difference between the RTW- versus the non-RTW states.

At a 10%-level of significance, our methodology identified only 10 indicators (out of the roughly sixty that we considered across the three dimensions) showing a statistical difference between the RTW states and the non-RTW ones. Identifying these variables provides us the opportunity to consider to what extent being an RTW state has on the economic, quality of life and business environment for Missouri and its contiguous states. More importantly, it also allows us to consider whether the RTW states demonstrate differences consistent with the claims made by its proponents -- or those claimed by its detractors. This information is particularly critical for the citizens of Missouri where legislation has recently come up for consideration and is expected to be raised again in the near future.

The first finding we made in our study is that there is very little difference between the RTW and non-RTW states in the Missouri region. Only ten variables showed significant differences, which suggests that RTW status has limited impact on a given state – at least in the region that we focused on. Of the ten variables that were found to be significant, four were economic-performance indicators, two were quality-of-life indicators, and four were business environment indicators. So while the vast majority of indicators did not demonstrate significant differences across the nine-state region, those that did were ones that measured economic factors at either the individual or institutional level. Likewise, although we included a large number of quality of life indicators, in our analysis only two proved to show any significant difference between RTW and non-RTW states in the Missouri region. In fact, these two indicators are indexes of multiple factors instead of one of the many, more direct quality of life indicators that we reviewed suggesting that the significant differences we found even on these indicators were not particularly easy to isolate nor obviously strong (see Table 3 below).

Table 3: Significant Variables										
Significant Variables		N		Mean Rank	Sum of Ranks	Mann- Whitney U	Z	Asymp. Sig. (2-tailed)	Exact Sig. [2*(1-tailed Sig.)]	
Economic Standard-of- Living	Real Median Household Income (per cent change, 2009-13)	Non-RTW RTW	6	2.83 6.08	8.50 36.50	2.500	-1.685	.092	.095 <sup>b</sup>	
	Real Mean Weekly Wage (per cent growth, 2007-12)	Non-RTW RTW	6	2.00 6.50	6.00 39.00	0.000	-2.324	.020	.024 <sup>b</sup>	
	Long-term share of total unemployment (2014)	Non-RTW RTW	3 6	8.00 3.50	24.00 21.00	0.000	-2.324	.020	.024 <sup>b</sup>	
	Employed part-time for economic reasons (2014)	Non-RTW RTW	6	7.00	21.00	3.000	-1.583	.114	.167 <sup>b</sup>	
Quality-of-Life	WalletHub Infrastructure Rank (Quality of Roads & Bridges, Average Commute Time and Park & Recreation Expenses Per Capita, 2015 report)	Non-RTW RTW	6	7.67 3.67	23.00	1.000	-2.066	.039	.048 <sup>b</sup>	
	WalletHub ROI Rank (Tax Rate Rank compared to Government Services Rank, 2015 report)	Non-RTW RTW	6	7.00	21.00	3.000	-1.549	.121	.167 <sup>b</sup>	
Busi	Union Membership (per cent of employment, 2014)	Non-RTW RTW	6	7.67 3.67	23.00 22.00	1.000	-2.066	.039	.048 <sup>b</sup>	

	n-fatal Injury Rate dents per 100 workers, 2013)	Non-RTW	3	4.00	12.00	6.000	450	.653	.786 <sup>b</sup>
(mer	(meidents per 100 workers, 2015)	RTW	5	4.80	24.00	0.000	.430	.033	.,00
	BC Cost of Doing	Non-RTW	3	7.00	21.00				
wage	siness (Utility costs, cost of es and rental costs for office industrial space)	RTW	6	4.00	24.00	3.000	-1.549	.121	.167 <sup>b</sup>
	BC Business-friendly	Non-RTW	3	7.00	21.00	3.000	1.540	101	.167 <sup>b</sup>
, ,	(Regulation and litigation freedom for business)	RTW	6	4.00	24.00	3.000	-1.549	.121	.10/

a. Grouping Variable: RTW

While we did not identify a large number of differences between the RTW and Non-RTW states in the Missouri region, the ones we did locate provide insight into the current status and potential benefits and drawbacks of each position. Interpreting these findings will help Missourian policymakers and citizens better understand the expected impact of becoming an RTW state.

## **Interpretation of Results**

The first two indicators that suggest a difference between RTW- and non-RTW states in the Missouri region (listed in Table 3) are indicators of income growth. One interesting thing is that both of these indicators show that the income levels are not statistically significant differentiators, but their growth rates are. Thus, while median household real-income level and weekly real-wage level in recent years do not differentiate the RTW states from the non-RTW, our results suggest that the RTW states did experience faster recoveries (from the economic crisis) in household income and wages. Economists refer to the period 2007-09 as the Great Recession. What we found was that in the Missouri region, while there was no significant difference between RTW and non-RTW states in terms of real income and wages levels, the distinction between the two groups appears in the growth rates of income and wages: both household income and wages grew faster in RTW states in the first few years after the recession ended. This is consistent with the argument that RTW allows more competitive bidding of wages.

This finding is consistent with the story suggested by the two labor-market indicators in Table 3. Our study found that RTW states in the Missouri region tended to have a lower share of long-term unemployed (i.e., persons unemployed 15 weeks or longer) in their workforces. The RTW states also have a lower share of workers "employed part-time for economic reasons". These are workers who had to make do with part-time work, even though they would have taken a full-time job if it were available. Both these findings lend some support to the pro-RTW argument that RTW allows business firms to be more willing to hire workers if they have more flexibility in hiring.

The two quality-of-life indicators that we found to reflect a difference between RTW and non-RTW states pertain to public sector infrastructure quality and government's efficiency in providing public services. RTW states in the Missouri region performed better than the non-RTW ones in both indicators. Other quality of life indicators pertaining to educational attainment, poverty, and crimes rates, were not found to be significant differentiators.

The final four indicators that showed a separation between RTW states and non-RTW states are in the dimension of "business environment". Like many other studies, we too found that RTW states tend to have lower union membership in their workforces although we cannot posit the direction of the causation at this time.

b. Not corrected for ties.

Our second finding in the dimension of business environment is that workplace-injury rates in RTW states tend to be slightly higher than in non-RTW states. This lends some support to the oft-heard argument from the anti-RTW camp that RTW tends to weaken unions' efforts to improve work-related conditions, particularly safety, and that therefore RTW states tend to have laxer work-safety enforcement.

The remaining two indicators in our study suggesting a differentiation between RTW states and non-RTW states are indexes that CNBC developed to measure business competitiveness among states in 2014. The first is the "cost of doing business" index, which considers the tax burdens in each state, along with utility costs, wage costs, and the cost of space – office, commercial, and industrial space. On this count, the RTW states performed better than the non-RTW states.

The other significant indicator (or differentiator) we found in our study, from the CNBC group of indexes, is the "business friendliness" index which reflects the amount of freedom that the different states' regulatory framework allow business firms, as well as the "perceived friendliness of the states' legal and tort liability systems" (as CNBC's report phrases it). On this count, too, the RTW states ranked better than the non-RTW ones in the Missouri region. Our findings on these last two indicators provide some support to the commonly-cited argument from the pro side that RTW tends to foster business competitiveness.

#### **Conclusions**

We pursued this inquiry largely because of the ongoing debate within the state of Missouri over adoption of Right to Work laws. Our desire was to identify the impact adopting such a law might have on our state by comparing the RTW and non-RTW states in our region. In particular, we have sought to identify to what extent the claims of those who favor adoption of RTW to be supported by evidence from our surrounding region. In doing so, we recognized that we were taking a different approach from much of the prior research which has tended to focus on national-level data and analysis. However, given our desire to better understand the potential impacts on our state, concentrating on the contiguous states in our region provided us a more direct comparison, given the similar history and socio-economic conditions of region. While this focus differs from much of the prior research we believe that it better fit our needs and also reduced the obvious inconsistencies one would find in comparing the economics of dissimilar states.

Although our sample differed from much of the other prior research, we surprisingly identified many of the same results that these larger scale studies had returned. Our regional study supports prior national research that RTW states have lower union membership. We also found additional support to the conclusion that RTW states have higher economic development. Prior research identified this in terms of factors such as economic expansion, GDP growth and even an increase in Fortune 500 companies. In our study, we found higher economic development demonstrated by RTW states having greater income and wage growth, a lower share of long-term unemployment and a lower share of workers employed part-time for economic reasons. In addition, we found support for the claim that RTW states are more business-friendly than non-RTW states in our region based on two different indices. At the same time we did not find that this business-friendliness came at a cost to overall quality of life in the RTW states. In fact, we found that the RTW states in our region actually had higher levels of government efficiency and public infrastructure on two different indices of quality of life

indicators. Thus, nearly all of our regional research findings support the predominant findings of national-level research: 1) few differences between RTW and Non-RTW states; 2) RTW states have higher overall economic growth; 3) RTW states have more business-friendly conditions; and 4) RTW states have lower union membership.

At the same time we recognize that taking a regional approach to our research also has its limitations which might have influenced our findings. Considering only a nine-state sample does provide us a more analogous comparison but it also limits the amount and quality of data that we could consider. This limitation led us to often use indices constructed by others for different purposes than our own research agenda. For instance, when looking for a measurement of quality of life, we utilized existing data from CNBC and WalletHub. The CNBC research was conducted to using "measures of [business] competitiveness" and based on a methodology that "ranks the states based on the criteria they use to sell themselves." Likewise, the WalletHub research was to measure "where do taxpayers get the most and least bang for their buck?" including indicators for quality of life. So while both of these sources provided useful data, it is also possible that the construction of their indices did not provide a precise fit with our research question biased the outcomes in favor of pro-business perspectives that more favor RTW laws and states.

Our goal in undertaking this research was to consider the difference between RTW states and Non-RTW states contiguous to Missouri as a way to inform both the public and policymakers regarding the RTW debate. Regardless of the limitations of the data, we have succeeded in accomplishing this goal by providing a clear and thorough comparison of the nine-state region along economic, quality of life and business indicators. Through this comparison we have affirmed other research that there are few differences between the RTW and Non-RTW states overall. We have also found that RTW states in the Missouri region do enjoy some economic, quality of life and business-friendliness benefits as well as some labor disadvantages in terms injuries and union membership. While our findings are substantively significant they do not provide conclusive statistical evidence of whether states with or without RTW laws enjoy substantively better economic, quality of life or business benefits. Ultimately, our findings suggest that after examining a host of variables that there are some modest benefits for RTW states in the Missouri region that coincide with some modest disadvantages. This leads us to conclude that the decision of whether Missouri should adopt Right to Work legislation is unlikely to have much if any impact on the state other than a political one.

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