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# Tipping The Scales: Is Right-To-Work Legislation On The Path to Prosperity?

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TIPPING THE SCALES: IS RIGHT-TO-WORK LEGISLATION  
ON THE PATH TO PROSPERITY?

A Capstone Experience/Thesis Project

Presented in Partial Fulfillment of the Requirements for

The Degree Bachelor of Arts with

Honors College Graduate Distinction at Western Kentucky University

By:

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Western Kentucky University  
2016

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## ABSTRACT

With West Virginia having just become the twenty-sixth state to pass right-to-work (RTW) legislation, the U.S. labor relations movement is at a tipping point. Other policy makers are closely watching the recent revival of RTW laws that has occurred over the last five years and are analyzing relevant studies to determine whether passing legislation that would outlaw union shops in their states might be worth a second look.

With this paper I intend to examine one of the dominant arguments against enacting RTW legislation in a state, which is that this legislation results in a greater degree of state-level income inequality. I will also analyze the effects of RTW legislation on real per capita disposable income levels.

Keywords: right-to-work, income inequality, economics, econometrics

Dedicated to Jodie Canada

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## FIELDS OF STUDY

Major Field: Economics

Second Major Field: Business Administration, Human Resources Management

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## CHAPTER 1

### INTRODUCTION

With West Virginia having just become the twenty-sixth state to pass right-to-work (RTW) legislation, the U.S. labor relations movement is at a tipping point. Other policy makers are closely watching the recent revival of RTW laws and are analyzing relevant studies to determine whether passing legislation that would outlaw union shops in their states might be worth a second look.

The current literature is largely divided concerning the effects of RTW legislation on a state's economy. Many supporters of this legislation claim that RTW states experience greater economic growth and higher employment rates than non-RTW states. Those who oppose this legislation claim that it leads to greater income inequality by weakening union bargaining power, ultimately reducing wages for low-skilled workers.

While researchers have extensively examined the extent to which RTW legislation affects employment rates, wages, and union membership rates, very few researchers have examined whether or not RTW legislation contributes to an increase in income inequality for these states. The primary focus of this paper is to evaluate whether one of the arguments most frequently used by opponents of RTW legislation is actually supported by empirical evidence.

## CHAPTER 2

### LEGISLATIVE CONTEXT

The Taft-Hartley Act of 1947 made it illegal to require employees to be union members as a prior condition to their employment. This type of arrangement was known in industrial relations as a “closed shop” arrangement. However, arrangements known as “union shops” are still legal in the United States today even though they are almost unheard of in the rest of the industrialized world. Union shop arrangements are a form of union security clause in which workers must join a labor union within a designated time frame after their hire date and pay union membership dues as a condition of their continued employment.

Although the Taft-Hartley Act of 1947 did not abolish union shops, the act granted individual states the power to pass legislation that would make union shops illegal in facilities operating within their borders. These states, also known as RTW states, typically have employment arrangements known as “open shop” agreements where workers are free to choose to be union members or not at no risk to their employment status with the company. Workers in a RTW state are also exempt from paying union dues should they choose not to be a union member unless specific arrangements, known as “agency shop” agreements, are negotiated between the union and the company. Agency shop agreements require workers to pay a fee to cover the costs of collective bargaining whether or not a worker is actually a union member. This

type of arrangement is designed to combat workers who receive all of the benefits of a collective bargaining agreement but contribute nothing to help cover a union's expenses for negotiating such an agreement.

## CHAPTER 3

### LITERATURE REVIEW

There is an extensive amount of existing research on the economic effects of right to work legislation, but the existing research is largely divided on the issue. Most of the debate within the literature arises from methodological differences in how the researchers attempt to control for unobservable state-level variables in their models. Much of the differences in results can be attributed to the different methodologies used and how they impact the results of the empirical studies. Moore (1998) cautions that individual findings related to the economic impact of RTW legislation is highly sensitive to model specification.

Many empirical studies are primarily focused on identifying a relationship between RTW legislation and wages. Some studies specifically set out to examine union wages while others examine average wages for the entire state. Most researchers agree that average wages in RTW states are lower than average wages in non-RTW states. Gould and Kimball (2015) followed up research conducted by Gould and Shierholz (2011) about the compensation disparities in RTW states. These studies controlled for differences in the cost of living between RTW states and non-RTW states as well as demographic differences between the populations which would affect average wages for the states. For example, in the sample of RTW states, the average level of educational attainment was lower than in non-RTW states and there was a larger demographic

composition of minority populations which, on average, receive lower wages. Both reports stated that wages are higher for union and non-union workers in non-RTW states than in RTW states. However, the authors admit that there may be some unobservable state-level characteristics other than those controlled for in the study that may lead to lower compensation for workers in a RTW state.

Sherk (2015) in his testimony for the Wisconsin Senate agreed that, on average, RTW states have lower wages than non-RTW states and hypothesized about some of the unobserved state-level characteristics that may attribute to this phenomenon that were not included in the model used by Gould and Kimball (2015). While Sherk (2015) agreed that cost-of-living adjustments are necessary when comparing RTW states and non-RTW states, he also stated that The Heritage Foundation recreated the analysis done by Gould and Kimball (2015) and found that their research contained mistakes concerning the state-level control variables used in the model and measurement errors in their cost-of-living variables. Once corrected, Sherk (2015) confirmed that The Heritage Foundation found no statistically significant correlation between wages and RTW legislation.

In contrast to the Gould and Kimball (2015) study which found a negative relationship between RTW legislation and wages and The Heritage Foundation's study communicated by Sherk (2015) which found no relationship at all, Reed (2003) analyzed state-level data to conclude that wages in RTW states were actually higher than wages in non-RTW states when one controls for state economic conditions prior to the RTW policy change. Reed (2003) points out in his discussion that states that adopt RTW legislation are typically poorer than other states and therefore have a historical trend of lower wages for various reasons. He then argues that failure to control for this may be the

reason why some studies have found a negative relationship between wages and RTW legislation. Sherk (2015) also examines the relationship between RTW legislation and state unemployment levels, finding that RTW legislation can be linked to a significant reduction in unemployment levels in these states.

Eren and Ozbeklik (2016) conducted a case study of Oklahoma using the recently developed synthetic control method to examine private sector wages and employment rate as well as private sector unionization rates before and after RTW legislation was passed in the state. Their analysis showed that RTW legislation had a negative impact on private sector unionization rates in Oklahoma and had no short run impact on total employment and average wages for Oklahoma's private sector. The narrow scope of this study is a limitation in that it only examines Oklahoma and does not account for the effects RTW legislation has had on other states that have adopted the same legislation.

While a majority of the research in done on RTW legislation involves the policy's effect on wages, there are a few other studies which delve into other economic issues. In his literature review of the economic effects of RTW legislation, Moore (1998) divides the areas of interest in the literature into five main categories. In his synopsis of the current literature up to that time, Moore stated that the empirical studies concerning RTW legislation predominantly dealt with one of the following topics: the impact of RTW legislation on unionization and union organizing efforts and successes, determinants of RTW legislation, the extent of free riding in RTW states, the influence of RTW legislation on state levels of industrial development, and the effects of RTW legislation on wages. From our previous discussion, we can surmise that more recent studies have been primarily focused on the effects of RTW legislation on wages and employment and

have used these measures as a basis for broader assumptions about the overall impact of RTW policies on states' economic health.

Very few studies of the economic effects of RTW legislation stray beyond an examination of wages and employment. One notable study that goes further, examines how RTW legislation affects industrial development in a state. A study conducted by Holmes (1998) examined the borders between RTW states and non-RTW states to determine the differences in location decisions made by manufacturing facilities. This study used RTW policy decisions to classify a state as either a pro-business or anti-business toward manufacturing. State-level characteristics that might affect manufacturing activity other than the RTW policy decision were controlled for through the use of border counties which would have similar geographic conditions and demographic populations. Holmes (1998) found that there was a significant correlation between RTW legislation and manufacturing activity between bordering states. He then theorized that an increase in industrial development would positively impact a state's economic outlook by increasing employment and long-term wages.

My research aims to broaden the scope of analysis even further than the studies mentioned above. I use state-level data to determine how RTW legislation affects states' real per capita disposable income levels and the degree of income inequality within the states.

Currently there are only two other papers which examine how RTW legislation affects income inequality. The first paper, written by Nieswiadomy, Slottje, and Hayes (1991), utilizes a simultaneous equations model and state-level Gini coefficients calculated from data taken from the Census of the Population in 1970 and again in 1980.

The study found that states with RTW laws appeared to have higher levels of income inequality in 1970, but found no significant difference between levels of income inequality in RTW states when compared with non-RTW states in 1980.

A current working paper of the American Enterprise for Public Policy Research adopted the Synthetic Control Method to examine the effects of RTW legislation on state-level income inequality (Jordan, et al. 2016). The authors reported that RTW legislation did not contribute to the worsening of income inequality in Louisiana, Idaho, Texas, and Oklahoma (Jordan, et al. 2016).

This paper addresses the same question concerning the relationship between RTW legislation and state-level income inequality; however, this paper utilizes the Ordinary Least Squares method, which is different than the methods used by either of the previous studies discussed above. This study has an advantage over the study conducted by Nieswiadomy, Slottje, and Hayes (1991) due to the availability of more data, including additional states that have changed to RTW states since 1991, and yearly state-level Gini coefficients rather than Gini coefficients calculated once every ten-year census period. The study conducted by Jordan, et al. examines income inequality using Louisiana, Idaho, Texas, and Oklahoma, while the study presented in this paper focusses on Michigan, Indiana, and Oklahoma.

## CHAPTER 4

### DATA SOURCES

Hirsch, Macpherson, and Vroman (2001) estimated union membership and union coverage rates by state which were published in *The Monthly Labor Review*. Both measurements were taken because union membership and union coverage rates can actually be quite different in RTW states where workers can choose to be a union member or not at no risk to their employment with the company. The models used in this study focus on union membership rates, which are more likely to change as a result of RTW legislation than union coverage rates; however, union coverage rates were also examined.

Education levels and state-level Gini coefficients were taken from Frank (2009). The percentage of the population that graduated from college was used as a measurement for educational attainment, with the assumption that these college graduates would also have graduated from high school or earned an equivalent level of education.

Gini coefficients are used in the model as a measure of income inequality within a state. While Gini coefficients accurately measure the spread of how income is distributed throughout a state's population, a weakness of using the Gini coefficient measure is that it is a relative measure that ignores absolute wealth. The Gini coefficient cannot tell specifically how income inequality is changing, only that the spread of income distribution is getting wider or smaller. For example, it could be that the degree of

income inequality is getting higher while the absolute wealth is also increasing for the entire population.

Real per capita disposable income levels for the time period were taken from the Bureau of Economic Analysis (2015). Gross state product levels were also obtained from the Bureau of Economic Analysis (2015) from 1963 to 2014. It should be noted here that there is a break in this dataset in 1997 due to differences in calculation methods used before and after this date as well as sources of the data used for these calculations. Gross state product figures between 1963 and 1997 were calculated using the SIC industry definitions while the figures between 1997 and 2014 were calculated using NAICS industry definitions, which redefined several income components for gross state product. The discontinuity in the data limited the focus of this study to the NAICS definitions of gross state product from 1997 to 2014, during which time only three states passed RTW legislation. Having only three states within the sample time period that passed RTW legislation is certain to affect the reliability of the results, even assuming that most of the economic effects of RTW legislation would be most evident in the years following the passing of such legislation,

State-level data for civilian population, labor force, employment rates, and unemployment rates were obtained from the Bureau of Labor Statistics (n.d.). Data concerning which states have passed RTW legislation and when that legislation was passed was gathered from the National Conference of State Legislatures (2016). This information is summarized in Figure 1, which illustrates a map of the current RTW states, and Table 2, which provides a comprehensive list of the RTW states and the dates when the legislation was enacted in those states.

Summary statistics for this collection of data can be found in Table 1. The Gini coefficients range from zero, which represents perfect equality, to one, which represents perfect inequality. The Gini coefficients in this dataset range from .526 to .733. Measurements of each of the variables were taken for all fifty states and the District of Columbia for each year from 1997 to 2014, resulting in 867 observations. Population density was calculated by dividing the state population for each year by the number of square miles within that state. The average employment rate during this time period was 62.96%. The percent of the population that earned a bachelor's degree ranged from 9.8% to 45.3% during the period, which is reflective of the upward trend toward higher education between 1997 and 2014. The gross state product figures are measured in millions of chained 2009 dollars. Over the time period, the average gross state product was roughly \$268.694 billion dollars. Per capita disposable income was measured in real dollars and ranged from \$17,277 to as much as \$59,529.

## CHAPTER 5

### ECONOMETRICS MODEL

An estimation of the impact of RTW legislation on per capita disposable income within a state can be estimated by the following model:

$$\text{Per Capita Disposable Income}_{it} = \beta_0 + \beta_1 \text{RTW}_{it} + \delta Z_{it} + \lambda_t + \alpha_i + \varepsilon_{it} \quad (1)$$

The independent variable RTW is a dummy variable for each state ( $i$ ) that is equal to one if the state had an established RTW policy in the year ( $i$ ) and zero if the state did not. If a state passed RTW legislation prior to June 30<sup>th</sup>, the date from the current year was used to determine the dummy variable. The year following the date RTW legislation was passed in the state was used if the legislation was passed after June 30<sup>th</sup> of that year. The other independent variables in the model are denoted by ( $\delta Z_{it}$ ). These independent variables include population density, employment rate, educational attainment at the collegiate level, union membership rates, and gross state product.

A second model, shown below, is used to estimate the effect RTW legislation has on the degree of income inequality within a state, where higher Gini coefficients correspond to higher degrees of income inequality:

$$\text{Gini}_{it} = \beta_0 + \beta_1 \text{RTW}_{it} + \delta Z_{it} + \lambda_t + \alpha_i + \varepsilon_{it} \quad (2)$$

The other independent variables in this model ( $\delta Z_{it}$ ) are population density, unemployment rate, educational attainment at the collegiate level, union membership rates, and gross state product. Time trends ( $\lambda_t$ ) were used in both models to control for both the upward trend in per capita disposable income and the upward trend in income inequality over time. State fixed effects ( $\alpha_i$ ) were used to control for unobservable characteristics within the states that most likely did not change over time but that may have an effect on the dependent variables. Standard errors ( $\varepsilon_{it}$ ) in both models were clustered at the state level.

I expect to find no significant change in per capita disposable income levels and no significant change in income inequality due to the enactment RTW legislation. Union membership rates are likely to fall after RTW legislation is passed in a state, but the percentage of employees covered under a collective bargaining agreement is not likely to change as a result of this legislation. In practice, companies rarely distinguish between union members and nonmembers when dealing with wages and benefits. So, even if an employee chooses not to join a union and pay union dues, that employee is likely still covered under the collective bargaining agreement negotiated between the union and the company (Sherk 2015). Therefore, union coverage rates are not as likely to fluctuate when RTW legislation is passed in that state, meaning that there should be no short-run effect on the income inequality within these states despite any changes that occur in union membership rates.

## CHAPTER 6

### FINDINGS

Regression results from the model used to estimate real per capita disposable income can be found in Table 3. A simple regression found in Column 1 finds that RTW states have lower per capita disposable income levels on average than states which do not have this legislation. When controlling for other variables such as population density, employment rates, educational attainment, union membership rates, and gross state product, there emerges a significant positive relationship between RTW legislation and per capita disposable income levels. The model used in Column 3 controls for the overall upward trend in real per capita disposable income levels using a time trend. While the positive impact of RTW is smaller when controlling for changes over time, the model in Column 3 suggests that RTW legislation could add about \$1,442 to real per capita disposable income.

However, when using state fixed effects along with these controls, this relationship dissolves and we see no statistically significant relationship between RTW legislation and per capita disposable income, as shown in Column 4. The models used in Column 4, Column 5, and Column 6 employ state fixed effects to control for unobserved characteristics of the states that might also impact per capita disposable income levels. There continues to be no relationship between RTW legislation and per capita disposable

income levels no matter how the model controls for time, whether by using year dummy variables or a time trend in conjunction with state fixed effects.

The regressions in these Column 5 and Column 6 specifically examine the three states which passed RTW legislation within the time period: Oklahoma, Indiana, and Michigan. In Column 5 we can see that there is a significant positive relationship between RTW states and per capita disposable income, but this regression does not control for time. Column 6 shows no relationship between RTW legislation and per capita disposable income levels when time controls are used in the model.

The regression results for the second model to estimate income inequality can be found in Table 4. Column 1 shows the results of a simple linear regression using Gini coefficients as the dependent variable and only post RTW has the independent variable. As you can see from Column 1, RTW states have higher levels of income inequality than non-RTW states by about 1.3%. Once other variables, such as population density, unemployment rate, educational attainment, union membership rates, and gross state product, are controlled for, there is an even stronger positive relationship between RTW legislation and income inequality. However, due to the overall increase in income inequality in the United States that began in the 1980s (Frank 2014), any model that does not utilize some sort of time trend to control for this is likely to suffer from omitted variable bias and overestimate the effect of RTW legislation on income inequality.

The most extensive models used to estimate income inequality are found in Column 4, Column 5, and Column 6. All three models use state fixed effects and the multiple control variables listed above as well as a time trend or year dummy variables. The regression shown in Column 4 examines all fifty states and the District of Columbia

and shows that RTW legislation had no statistically significant impact on income inequality when one controls for the upward trend in income inequality in the U.S.

The regressions shown in Column 5 and Column 6 examine only those three states that changed to RTW states within the time period. As shown by the results in Table 4 when comparing these columns, the relationship between RTW legislation and income inequality is very sensitive to how one controls for the upward trend in income inequality in the United States. The regression in Column 5 uses a time trend to control for the overall increase in income inequality found in each state over time and finds no statistically significant correlation between RTW legislation and increases in income inequality. Column 6 uses year dummy variables to control for this trend, but finds a significant positive relationship between RTW legislation and income inequality within the three states that most recently passed RTW legislation.

The fact that the results are so sensitive to how the model controls for time variables calls these results into question. Since the regressions in Columns 5 and 6 only examined the states that recently passed RTW legislation, these results are from an incredibly small sample and should not be regarded as absolute. If the increase we see in income inequality is legitimate, this could be evidence that there is a short-run increase in income inequality for states soon after RTW legislation is passed. I hypothesize that this increase in income inequality could be a short-run phenomenon because of the lack of evidence from the model used in Column 4 that examined income inequality in all states and not just the most recent three states that passed RTW legislation.

## CHAPTER 7

### CONCLUSION

One of the most common arguments against RTW legislation is that it leads to greater income inequality by resulting in a reduction in the wages of low-skilled workers. According to the data presented here, there is no statistically significant difference in the degree of income inequality within states that pass RTW legislation. When looking solely at the three states that passed RTW legislation within the period from 1997 to 2014, we can see a significant positive correlation between RTW legislation and income inequality for these states. However, since this result is not present when all states are considered, including states that have been RTW states for decades, this result should be examined critically due to the small sample size. If this result has merit, I hypothesize that the relationship between RTW legislation and income inequality is short run. In the long-term, I conclude that RTW legislation does not have any significant effect on income inequality within a state when controlling for time and other variables affecting inequality. There was also no significant change in real per capita disposable income levels for states which passed RTW legislation when time variables are employed in the model, meaning that the after-tax income per citizen in RTW states did not change as a result of RTW legislation.

The positive effects of RTW legislation might potentially be dwindling as the manufacturing sector contributes less and less to a state's overall gross state product. A

state considering passing RTW legislation now would most likely not receive the same economic benefits of a state which passed such legislation in the 1940s or 1950s. An extension to this research would be to look at dates prior to 1997 to determine if the economic benefits of RTW legislation were greater in the past when the manufacturing sector contributed more to the U.S. economy.

Another potential line of inquiry would be to examine a proxy measure for industrial development and employment rates for states following a RTW policy change. One of the main arguments in support of RTW legislation is that it attracts businesses to the state, increasing the amount labor demanded, and by extension, wages. Revisiting this study in later years would allow for the inclusion of states like Wisconsin and West Virginia that only recently passed RTW legislation as there is currently not enough data following the enactment of the legislation in these states to include them in the current study.

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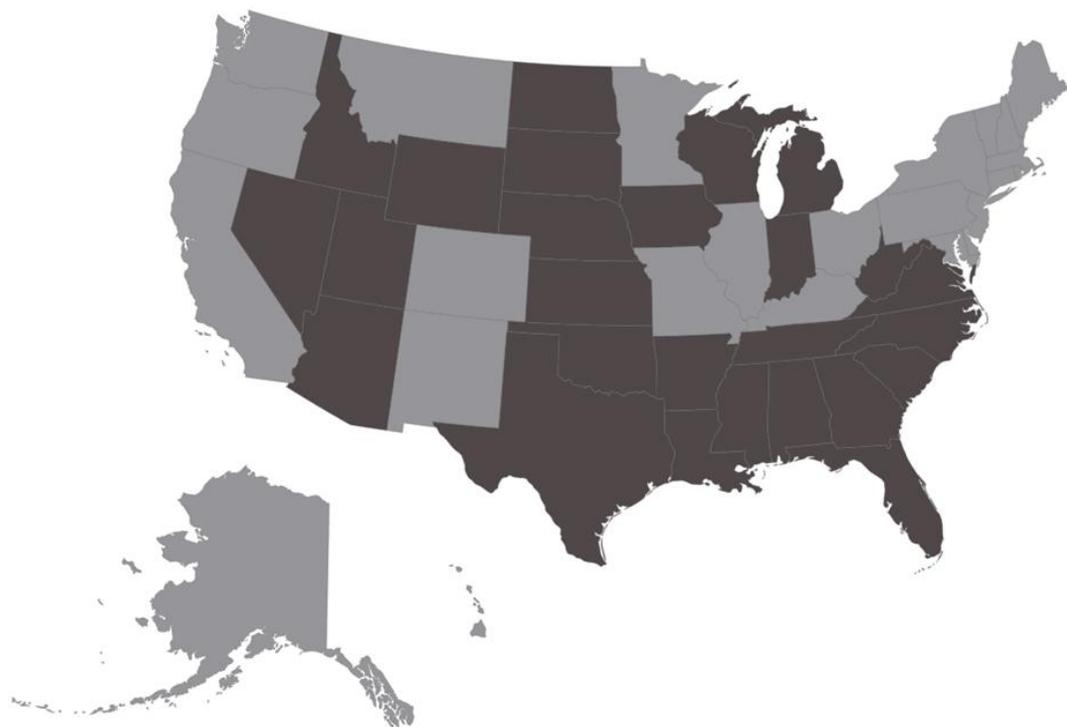
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## TABLES & FIGURES

**FIGURE 1: Map of Current Right-to-Work States**



■ Right-to-Work States  
■ Non-Right-to-Work States

**TABLE 1: Summary Statistics**

VARIABLES	(1) N	(2) Mean	(3) SD	(4) Min	(5) Max
Civilian Population	867	4.420e+06	4.898e+06	365,527	2.979e+07
Percent Employed of Population	867	62.96	4.586	50	73
Educational Attain. (High School)	867	0.632	0.0386	0.526	0.733
Educational Attain. (College)	867	0.185	0.0461	0.0979	0.453
Gross State Product	867	268,694	323,815	19,517	2.056e+06
Gini	867	0.593	0.0356	0.521	0.711
Per Capita Disposable Income	867	31,149	7,270	17,277	59,529
Percent Covered by Union	867	13.13	5.592	3.300	28.40
Percent Union Member	867	11.70	5.600	2.300	26.90
Population Density	867	296.5	1,085	0.742	8,791

**TABLE 2: Dates of RTW Legislation**

<b>Right-to-Work State</b>	<b>Date</b>
Arkansas	November 07, 1944
Florida	November 07, 1944
Arizona	November 05, 1946
Nebraska	December 11, 1946
Virginia	January 12, 1947
Tennessee	February 21, 1947
North Carolina	March 18, 1947
Georgia	March 27, 1947
Iowa	April 28, 1947
South Dakota	July 01, 1947
Texas	September 05, 1947
North Dakota	June 28, 1948
Nevada	December 04, 1952
Alabama	August 28, 1953
Mississippi	February 24, 1954*
South Carolina	March 19, 1954
Utah	May 10, 1955
Kansas	November 04, 1958
Wyoming	February 08, 1963
Louisiana	July 09, 1976
Idaho	January 31, 1985
Oklahoma	September 02, 2001
Indiana	February 01, 2012
Michigan	March 08, 2013
Wisconsin	March 09, 2015
West Virginia	February 12, 2016

\*Mississippi passed a statute in 1954, then a constitutional amendment in 1960.

**TABLE 3: Impact of RTW Legislation on Per Capita Disposable Income**

<i>VARIABLES</i>	(1) PCDI	(2) PCDI	(3) PCDI	(4) PCDI	(5) PCDI	(6) PCDI
<i>Post Right to Work</i>	-3,112*** (1,100)	3,790*** (1,096)	1,442** (578.9)	-358.2 (547.3)	3,768** (743.0)	-24.23 (390.9)
<i>Population Density</i>		-1.069*** (0.213)	1.078*** (0.326)	5.163*** (1.174)	-312.6 (454.5)	-253.6 (125.1)
<i>% Employed of Population</i>		-290.6*** (67.87)	305.0*** (82.98)	632.7*** (84.51)	-868.6 (431.7)	388.4* (106.9)
<i>Educational Attain. (College)</i>		148,454*** (9,116)	55,189*** (13,272)	5,639 (9,541)	87,834** (14,277)	-15,076 (8,570)
<i>% Union Member</i>		220.9* (112.2)	278.7*** (59.96)	83.51 (85.87)	292.1 (263.9)	350.8* (105.5)
<i>Time</i>			1,223*** (65.03)	1,315*** (74.86)		1,409** (146.2)
<i>Time Squared</i>			-8.154** (3.926)	1.576 (3.922)		1.326 (6.711)
<i>Gross State Product</i>		-2.44e-05 (0.000923)	0.00177*** (0.000648)	0.000894 (0.00155)	0.131 (0.0848)	0.0131 (0.0176)
<i>Constant</i>	32,485*** (919.6)	18,143*** (4,366)	-13,077*** (4,205)	-24,323*** (4,939)	59,886 (49,857)	12,093 (13,158)
<i>Observations</i>	867	867	867	867	51	51
<i>R-squared</i>	0.045	0.637	0.892	0.959	0.874	0.988
<i>Number of State_enc</i>				51	3	3

Robust standard errors in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**TABLE 4: Impact of RTW Legislation on Income Inequality**

<i>VARIABLES</i>	(1) Gini	(2) Gini	(3) Gini	(4) Gini	(5) Gini	(6) Gini
<i>Post Right to Work</i>	0.0131* (0.00707)	0.0222** (0.0102)	0.0191* (0.0104)	0.00588 (0.00832)	-0.000460 (0.00849)	0.0134** (0.00553)
<i>Population Density</i>		1.43e-06 (1.55e-06)	6.09e-06*** (2.13e-06)	1.36e-05 (1.30e-05)	0.00157 (0.00207)	-0.00342* (0.00194)
<i>%Unemployed</i>		0.00364*** (0.000917)	0.000169 (0.00117)	-0.00126** (0.000543)	-0.00797*** (0.00238)	0.00379 (0.00360)
<i>Educational Attain. (College)</i>		0.145* (0.0773)	-0.0271 (0.100)	-0.158** (0.0639)	-0.306 (0.258)	-0.118 (0.145)
<i>% In Union</i>		-0.000120 (0.000833)	0.000277 (0.000858)	-0.00139** (0.000702)	-0.00322 (0.00227)	-0.00280* (0.00140)
<i>Year = 1998</i>						0.0105 (0.00637)
<i>Year = 1999</i>						0.0165** (0.00683)
<i>Year = 2000</i>						0.0151** (0.00720)
<i>Year = 2001</i>						0.00387 (0.00764)
<i>Year = 2002</i>						0.000607 (0.0112)
<i>Year = 2003</i>						0.0113 (0.0140)
<i>Year = 2004</i>						0.0284** (0.0137)
<i>Year = 2005</i>						0.0482*** (0.0138)

<i>Year = 2006</i>						0.0625*** (0.0128)
<i>Year = 2007</i>						0.0712*** (0.0124)
<i>Year = 2008</i>						0.0705*** (0.0127)
<i>Year = 2009</i>						0.0407* (0.0203)
<i>Year = 2010</i>						0.0242 (0.0221)
<i>Year = 2011</i>						0.0438** (0.0180)
<i>Year = 2012</i>						0.0541*** (0.0176)
<i>Year = 2013</i>						0.0415** (0.0184)
<i>Gross State Product</i>		3.51e-08*** (8.57e-09)	3.80e-08*** (8.62e-09)	9.62e-09 (1.84e-08)	-8.40e-07*** (2.80e-07)	-3.57e-08 (2.76e-07)
<i>Time</i>			0.00462*** (0.00151)	0.00493*** (0.000687)	0.0153*** (0.00290)	
<i>Time Squared</i>			-0.000103 (7.19e-05)	-8.13e-05** (3.38e-05)	-0.000471*** (0.000119)	
<i>Constant</i>	0.587*** (0.00491)	0.528*** (0.0204)	0.543*** (0.0219)	0.601*** (0.0146)	0.697*** (0.181)	0.942*** (0.136)
<i>Observations</i>	867	867	867	867	51	51
<i>R-squared</i>	0.033	0.264	0.336	0.361	0.726	0.950
<i>Number of State_enc</i>				51	3	3

Robust standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**TABLE 5: Impact of RTW Legislation on Union Membership Rates**

<i>VARIABLES</i>	(1) % Union Member	(2) % Union Member	(3) % Union Member
<i>Post Right to Work</i>	-1.160 (0.734)	-0.932** (0.189)	-0.892 (0.992)
<i>Population Density</i>	-0.00381*** (0.000552)	-0.186 (0.161)	-0.275 (0.376)
<i>% Employed of Population</i>	0.0512 (0.0438)	0.152 (0.0538)	0.0411 (0.558)
<i>Educational Attain. (College)</i>	6.023 (5.688)	-26.40 (11.47)	-28.00*** (1.426)
<i>Year = 1998</i>			0.0938 (1.194)
<i>Year = 1999</i>			-0.237 (1.539)
<i>Year = 2000</i>			-1.195 (1.288)
<i>Year = 2001</i>			-0.0613 (0.489)
<i>Year = 2002</i>			-0.188 (1.872)
<i>Year = 2003</i>			-1.136 (2.410)
<i>Year = 2004</i>			-1.654 (2.397)
<i>Year = 2005</i>			-1.680 (1.328)
<i>Year = 2006</i>			-1.718 (1.784)
<i>Year = 2007</i>			-1.294 (2.104)
<i>Year = 2008</i>			-0.908 (1.551)
<i>Year = 2009</i>			-0.825

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<i>Year = 2010</i>			(2.644)
			-1.787
			(3.440)
<i>Year = 2011</i>			-0.959
			(3.598)
<i>Year = 2012</i>			-1.167
			(4.631)
<i>Year = 2013</i>			-1.065
			(4.548)
<i>Gross State Product</i>	3.09e-06**	2.04e-05	3.77e-05
	(1.35e-06)	(1.15e-05)	(4.75e-05)
<i>Time</i>	-0.286***	-0.249	
	(0.0518)	(0.170)	
<i>Time Squared</i>	0.00676***	0.0118	
	(0.00204)	(0.0153)	
<i>Constant</i>	10.02***	22.98	34.48
	(2.855)	(9.780)	(58.52)
<i>Observations</i>	867	51	51
<i>R-squared</i>	0.418	0.773	0.817
<i>Number of State_enc</i>	51	3	3

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Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**TABLE 6: Impact of RTW Legislation on Union Coverage Rates**

<i>VARIABLES</i>	(1) % Covered by Union	(2) % Covered by Union
<i>Post Right to Work</i>	-1.143** (0.258)	-0.979 (0.922)
<i>Population Density</i>	-0.237 (0.224)	-0.00504*** (0.000637)
<i>% Employed of Population</i>	0.147** (0.0216)	0.0582 (0.0495)
<i>Educational Attain. (College)</i>	-37.43 (13.22)	10.94* (5.701)
<i>Gross State Product</i>	2.35e-05 (1.99e-05)	2.74e-06** (1.17e-06)
<i>Time</i>	-0.249 (0.233)	-0.345*** (0.0512)
<i>Time Squared</i>	0.0151 (0.0187)	0.00838*** (0.00236)
<i>Constant</i>	30.24 (16.52)	10.84*** (3.234)
<i>Observations</i>	51	867
<i>R-squared</i>	0.734	0.422
<i>Number of State_enc</i>	3	51

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1