R E P O R T

Volume 28 Number 1 · February 2015

The Economic Impact of a Right-to-Work Law on Wisconsin

by Richard Vedder, Joseph Hartge, and Christopher Denhart

The Economic Impact of a Right-to-Work Law on the Wisconsin Economy

by Richard Vedder, Joseph Hartge, and Christopher Denhart

President's Notes

In 2012, Indiana and Michigan became the 23rd and 24th states to adopt right-to-work legislation that makes it illegal to require workers to join a union as a condition of employment.

In an effort to determine whether Wisconsin should consider similar legislation, the Wisconsin Policy Research Institute decided last fall to undertake two different lines of research: a poll of public opinion and an analysis of potential economic impacts.

In January, the 2015 WPRI Poll of Public Opinion determined that approximately twice as many Wisconsinites would vote in favor of right-to-work legislation as would vote against it (62% to 32%). Over three-quarters of respondents (77%), meanwhile, said they think no Americans should be required to join any private organization, such as a labor union, against his or her will.

In addition, a plurality of the 600 respondents said they believe a right-to-work law will be economically beneficial for the state. Four in 10 (40%) said such laws will "improve economic growth in Wisconsin," 29% said they believe the laws "will not affect economic growth" and 27% said such laws will "reduce economic growth."

This paper (the second vein of WPRI inquiry on the issue) shows that what a plurality of state residents intuitively believes – that right-to-work laws are economically beneficial – is backed up by statistical analysis.

WPRI commissioned this paper by one of America's foremost experts on right-to-work, Ohio University economist Richard Vedder, months ago. Dr. Vedder and his colleagues, Joe Hartge and Christopher Denhart, happened to be finishing it up just when legislative leaders decided to bring a right-to-work bill to the floor this week. While he did not see the bill prior to conducting this analysis, right-to-work is a straightforward concept that varies little from state to state. As a result, we believe this paper – by comparing economic growth in states that have had right-to-work to those that have not and calculating the potential impact in Wisconsin – provides the best, most nuanced and most accurate analysis that has been done in the Badger State.

It is our hope that legislators, as they engage in debate in the coming days, will consider both Dr. Vedder's findings and the fact that a majority of Wisconsinites support right-to-work as an issue of fundamental personal freedom.

Mike Nichols President Wisconsin Policy Research Institute

Lp.

Table of Contents

Executive Summary	2
Introduction	3
Organized Labor and "Right-to-Work" Legislation in the United States	4
Unionism in Wisconsin	
Right-to-Work Laws, Human Behavior and Economic Growth	7
Right-to-Work Laws and Economic Growth: Some Empirical Evidence	8
The Meaning of the Results: Right-to-Work and Wisconsin's Future10	0
Conclusions12	2
Endnotes13	3
About the Authors14	4

Executive Summary

Over the last 30 years, states with right-to-work (RTW) legislation have experienced greater per capita personal income growth than other states. And that positive correlation between right-to-work and higher incomes remains true even after controlling for other important variables (such as tax rates in various states) that might have had a simultaneous impact.

Our statistical results suggest that, in fact, the presence of a RTW law added about six percentage points to the growth rate of RTW states from 1983 to 2013. With such a law, Wisconsin's per capita personal income growth of 53.29% would have been, instead, about 59.29%. Wisconsin would have gone from having economic growth below the national average over those three decades to having slightly above average growth – enough above average that it would have erased the current income per capita deficit between Wisconsin and the nation as a whole.

Wisconsin's per capita personal income received from all sources in 2013 was \$43,244, according to the Bureau of Economic Analysis - \$1,521 less than the national average of \$44,765.

Our regression analysis suggests that had Wisconsin adopted a RTW law in 1983, per capita income would have been \$1,683 higher in 2013 than it actually was – and would have brought the state slightly over the national per capita personal income average.

There are some caveats that apply to all such analysis. Although the results are strong, the reader is urged to be very cautious in using the precise estimation. Some possible determinants of economic growth are very difficult or impossible to measure, such as the extent of statewide environmental regulations, and there may be a significant "omitted variable bias" in this simple regression model. At the same time, it is unlikely the inclusion of other variables would materially alter the estimations with respect to RTW.

Finally, the results in question look at the past – the 1980s through 2013. Labor unions today have a smaller presence than they used to, so the effects of a RTW law might reasonably be expected to have a somewhat smaller impact in the future – especially in Wisconsin where Act 10 is already having an economic impact. That said, it is a fact that Wisconsin has fallen behind. As this study indicates, Wisconsin's role in the national economy has shrunk with the passage of time. Our analysis suggests that passage of a RTW law likely would slow and possibly reverse this trend.

<u>Introduction</u>

Residents of Wisconsin are among the luckiest people on earth, since living in the United States means they share in the fruits of American prosperity. By world and historical standards, those living in the Badger State today typically have high standards of living with a long life expectancy. Yet not all is good – by some measures, the state has not fully maximized its economic potential.

In 1950, over \$22 of every \$1,000 in personal income generated in the United States was earned by Wisconsin residents (see Figure 1). That figure fell steadily to only \$17.55 by 2013 – a decline of over 20%. Most of this reflects relatively slow population growth; Wisconsin has not attracted the in-migrants, including immigrants, typical in the nation as a whole, which, in itself might reflect a perception that Wisconsin is not a particularly attractive place to live. Secondarily, income growth for residents over the 1950-2013 period was modestly below the national average. In 1950, per capita income in Wisconsin was 1.63% below the national average; in 2013, the income deficit was more than double that.

Why is this? There are probably dozens of factors that help explain a state's economic performance relative to other states. Taxes, the proportion of the population in manufacturing or agriculture, educational attainment levels of the population, variations in the demographic characteristics of the population, natural resource availability, state regulatory policies, even the climate of the state – these are some of the factors often cited. But since goods and services are produced primarily from the use of labor, labor laws and regulations are potentially very important. In particular, this study focuses on right-towork (RTW) laws. Wisconsin and 25 other states have no RTW law, but 24 states do. Does the absence of a RTW law in Wisconsin help explain why its per capita income remains below the national average?

This study analyzes the impact of right-to-work laws on economic behavior. Do states with such laws fare better as a consequence of their adoption? Is the impact of a RTW law small or large? We conclude that Wisconsin would have fared better over the past several decades had it passed such a law. The implication is strong that the adoption of a RTW law in Wisconsin would stimulate economic activity, probably largely eradicating the gap in per capita income currently existing between Wisconsin and the rest of the nation. Econometric analysis is not error free, nor is future behavior necessarily going to precisely emulate that of the past. Nonetheless, the statistical results here are strong enough to suggest with a fairly high level of certainty that Wisconsin would benefit from having a right-to-work law.



Source: U.S. Bureau of Economic Analysis, authors' calculations

Organized Labor and "Right-to-Work" Legislation in the United States

The earliest record of an organized labor strike dates back well before New Deal era legislation strengthened collective bargaining. Indeed, in 1768, New York journeymen tailors protested wage reductions. In 1794 (only seven years after the Constitution of the United States was drafted¹), the Federal Society of Journeymen Cordwainers was formed in Philadelphia.² From here, organized labor took the form of local craft unions, which would publish prices for goods as a way to ensure high wages in the face of cheap labor influx.

In Commonwealth v. Hunt (1842), Chief Justice Lemuel Shaw opined that "A labor combination to raise wages is not inherently illegal," providing the legal basis for organized labor and collective bargaining. Business management would fight unionization by the use of blacklists to target agitators or pro-union laborers. However, with the high ratio of laborers to management, it was eventually inevitable that unionization would gain some traction. The National Labor Union was founded in 1866 by William Sylvis. While it was quickly dissolved, it was the first national labor federation in the United States, gave national attention to locally unionized labor and fought for higher wages and shorter hours.3 As the NLU declined, the Noble Order of the Knights of Labor took up the mantle. In 1869, the Knights of Labor was founded, accepting all wage workers, including African-Americans and women, skilled and unskilled, into its ranks. The Knights favored an eighthour workday, equal pay for equal work, the abolition of child and convict labor, and public ownership of utilities. Despite rapid growth in the mid-1880s, Knights members were tarred as radicals as a result of the Haymarket riots in Chicago in 1886. In that year, the American Federation of Labor (AFL) was organized and Knights of Labor membership deteriorated.⁴ While membership grew, unions remained relatively weak until the 1930s.

The Norris-LaGuardia Act, signed by President Herbert Hoover in 1932, made agreements with management enforceable in federal court, restricted the use of court injunctions to stop strikes, and exempted unions from antitrust laws. Union activity expanded, as did the number of work stoppages, in the years to follow.⁵

But by far the most consequential step on this path to increased unionization came in 1935, when President Franklin Roosevelt signed the National Labor Relations Act (the Wagner Act). The Wagner Act, which granted collective bargaining rights to private-sector workers but not public-sector workers, allowed for elections to determine whether workers would be represented by a union and, if the majority voted in favor, allowed the union to arrange union security provisions within a firm. These provisions started with a "closed shop," which required workers to be unionized as a precondition of employment, but also included the "union shop," which allowed hiring of nonunion workers so long as they became unionized within a given time period (often 30 days), as well as the "agency shop," which allowed unions to collect dues from all workers but did not require all workers to become members.

Union membership swelled from 13.2% of non-agricultural workers in 1935 to 28.9% in 1939 following the passage of the Wagner Act. The Wagner Act granted monopoly power in labor supply to unions by allowing them to coerce workers to join or financially support their activities.

By 1947, the public had grown more skeptical of the unchecked power of the large national unions. The previous year, the nation suffered through a record volume of strikes, including in critical industries such as coal, and public sentiment toward unions cooled sharply from the 1930s. Accordingly, Congress passed (and overrode President Harry Truman's veto of) an amendment to the Wagner Act known as the Taft-Hartley Act.⁶ Taft-Hartley outlawed closed shop arrangements, though union and agency shop provisions lived on. Section 14(b) of Taft-Hartley allows individual states to pass legislation to override union and agency shop provisions, thus giving legal foundation for them to adopt right-to-work legislation.

1947 was not, however, the first instance of RTW laws. In 1944, Florida and Arkansas adopted RTW laws, followed by Arizona, Nebraska and South Dakota in 1946. In 1947, Georgia, Iowa, North Carolina, Texas, Tennessee and Virginia adopted RTW laws. These laws were challenged in court by union leaders in Arizona, Nebraska and North Carolina, which ultimately led to the 1949 U.S. Supreme Court case *Lincoln Federal Labor Union v. Northwestern Iron and Metal Co.*, 335 U.S. 525 (1949). In this case, the court upheld the constitutionality of RTW laws.⁷

RTW states have grown from two in 1944 to 24 today and have seen large growth in the proportion of American population, from only 29% as late as 1970 to 46% today.⁸ States that have RTW laws also have slightly higher fertility rates and considerable net migration from non-RTW states over time.

Union membership has been declining in relative terms since the 1960s, and while RTW legislation is a contributing factor in some places it is not the leading one. In the 1930s and '40s, the proportion of Americans working in large industrial environments was much greater than today. Workers were less likely to work in managerial, technical or professional jobs, women made up a much smaller portion of the workforce and educational attainment was much lower. Additionally, public (e.g., Social Security, worker's compensation, unemployment insurance, Supplemental Nutrition Assistance Program, etc.) and private (e.g., private pension plans, 401(k) accounts, IRAs, etc.) forms of income security were less available. Over time, fewer people as a percentage of the labor force have worked in large corporations, decreasing the communication chain between management and laborer, making it easier to quickly settle disputes.⁹

The rise of the global economy and globalization has further diminished the monopoly power of national labor unions to hold wages above a competitive market rate. Therefore, the relative decline in American labor-intensive industry (e.g., automobiles and manufacturing) is attributed in large part to American labor pricing itself out of competition through labor agreements dating to before the era of international labor competition. All of these factors reduce the attractiveness and strength of unions.¹⁰

Unionism in Wisconsin

Wisconsin has a long history of higher than average union density. As shown in Figure 2, union membership in Wisconsin has accounted for a larger percentage of non-farm laborers than typical in all states in every year since at least 1965, excepting 2012.

The strong union tradition in Wisconsin stretches back much further than that, however.

Unionization in Wisconsin began in 1847, when bricklayers formed a union in Milwaukee. Carpenters in 1848, and dock workers, warehouse laborers and others followed suit. Over the next century, unions and workers helped transform the workplace. In the 1880s, labor unions in Milwaukee lobbied to reduce daily work to eight hours. In 1911, the state Legislature passed the nation's first worker's compensation laws. These required employers to financially compensate and provide medical attention for loss of life and limb. In 1932, unemployment compensation was passed in Wisconsin, followed by the important 1937 Wisconsin Employment Relations Act, which added state support to workers' right to organize.¹¹ Wisconsin ushered in collective bargaining rights for public employees in 1959.



Source: Barry T. Hirsch, David A. Macpherson and Wayne G. Vroman, "Estimates of Union Density by State," *Monthly Labor Review*, 124 (7), July 2001, 51-55; U.S. Department of Labor, authors' calculations

Public Unionization in Wisconsin

Similar to most of the rest of the United States, Wisconsin has seen a decline in both private-sector and public-sector unionization. Public-sector members in 2010 (pre-Act 10) made up 49.6% of all union members in Wisconsin. By 2013, that figure had fallen to 43.6%.

Interestingly, though, the decline began long before legislative changes in state labor law instituted during the administration of Gov. Scott Walker. Since 2000, union representation among public-sector employees has fallen from 55% to 36%, wiping out just over one-third of union membership (see Figure 3). In that same period, Minnesota and Michigan have seen their percentage of public-sector employees in unions hold steady and rise, respectively.¹² The union membership rate in Wisconsin for both the public and private sector is about 11.7% and in the private sector alone it is slightly less than 7%, according to the federal Bureau of Labor Statistics.

However, the numbers of workers and businesses impacted is still large. There are still 306,000 workers in Wisconsin's public and private sectors who are union members, according to 2014 Bureau of Labor Statistics figures. And when you include workers who are not union members but are represented by a union contract — whether they want to be or not — that figure grows to 327,000 — 12.5% of the working population.



Source: Barry T. Hirsch, David A. Macpherson and Wayne G. Vroman, "Estimates of Union Density by State," *Monthly Labor Review*, 124(7), July 2001, 51-55, U.S. Department of Labor, authors' calculations

Right-to-Work Laws, Human Behavior and Economic Growth¹³

Since the first RTW law was passed over two-thirds of a century ago, economists have studied its impact on human behavior and economic growth. A wealth of research suggests that RTW laws are an important factor in explaining state variations in industry location, human migration and economic growth.

It is the goal of labor unions to increase wages and benefits for their members. A union that does not raise wages for workers above what exists in a non-union environment would rightly be perceived as being unsuccessful by its membership – particularly since workers have to pay dues to employ the union leadership that negotiates and administers labor contracts. Historically, there is some evidence that the *short-run* impact of unionization is to raise wages, perhaps by as much as 10% or more from what otherwise would exist.¹⁴

To the extent unionization increases labor costs, it makes a given location a less attractive place to invest new capital resources. Thus, other things being equal, capital will tend to migrate away from non-RTW states such as Wisconsin, where the perceived costs of unionization are relatively high. Over time, this works to lower the ratio of capital to labor in non-RTW states relative to ones with RTW laws. Since labor productivity is closely tied to the capital resources (machines and tools) that workers have available, labor productivity should grow more in RTW states, stimulating economic growth, including the growth in wages and employment. Thus, the long-term RTW/wage relationship is likely quite different than that observed based on initial unionization efforts.

Right-to-Work Laws and Economic Growth: Some Empirical Evidence

To the average citizen, the real issue is: Will a RTW law have a positive effect on my material welfare, my income? If the answer is yes, and if the cost of implementing such a law is essentially zero, then economic welfare is enhanced by having such a law. Therefore, the true "bottom line" question is: Do RTW laws promote the growth of incomes over time?

It's clear that RTW states have experienced greater growth than non-RTW states over time. We took personal income in the 22 RTW states that had laws for all or a significant portion of the period from 1970 and 2013, and compared their personal income growth, adjusting for inflation by the authoritative CPI-U price index of the Bureau of Labor Statistics, with that of the 28 non-RTW states (Indiana and Michigan adopted laws at the very end of the period that had not even survived court tests in 2013, so they are counted as non-RTW states for this calculation). The results, in Figure 4, reveal that the income growth rate was nearly twice as large in RTW states as in the other jurisdictions. Put differently, these 22 RTW states produced 28.75% of America's personal income in 1970, but over eight percentage points more, 37.32%, in 2013.

But this sort of analysis does not suffice in telling us about right-to-work's impact on the growth in states that already have adopted it. In fact, most of the more rapid income growth in RTW states is the result of much greater growth in population. The population of the 22 RTW states nearly doubled, compared with less than a 40% growth in the non-RTW states.

The simple descriptive analysis presented in Figures 4 also fails to control for other factors that might help or hinder economic growth: climate, tax levels, more or less emphasis on manufacturing employment, for example. We might be attributing too much to RTW if we do not control for these other factors through regression analysis.

Regression Analysis

Accordingly, we used a multivariate form of analysis, ordinary least squares regression, to examine the relationship between RTW laws and income growth. We examined a large number of independent variables (introduced to control for non-RTW causes of variations in income growth between states) in various combinations. We most often examined the 48 contiguous states, since Alaska and Hawaii, in addition to being geographic outliers, had values on several independent variables dramatically different than those found in the contiguous states.

One of the many models examined is exhibited in Table 1. The model explains variations in per capita personal income (the most relevant variable from the standpoint of the economic welfare of the population) over the 30-year period from 1983 to 2013 in terms of eight explanatory variables, one of which was the presence of a RTW law (Indiana and Michigan are considered non-RTW states for the purpose of this analysis, since RTW laws in those states had not yet passed judicial review and become effective). In addition to the RTW variable, some seven other control variables were introduced. By introducing these variables into the model, we more closely approach the desirable condition of taking into account other factors that might have explained variations in economic growth.

The model explains nearly two-thirds of the considerable variation in state economic performance. The findings show that the presence of a RTW law was associated with about a 6.7 percentage point higher rate of economic growth, and that finding was statistically significant at the 5% level (we are at least 95% confident that the positive RTW/income growth relationship did not occur by chance). Taking into account the caveats cited below, this implies a very sizable positive income impact.



Before more fully assessing the RTW results, it is worth commenting on some of the seven control variables introduced into the model.

Of particular interest to policy-makers is the *AvgTaxRt* variable, showing a strong negative relationship between the average rate of state and local taxation (based on averaging the rates for the beginning and ending dates in the period) as a percentage of personal income and per capita income growth. The results confirm what voluminous numbers of studies have shown: States with high tax burdens, controlling for other variables, have lower rates of economic growth.¹⁵

Of interest as well are the results with respect to *ChgUnionDens* (the change in the proportion of workers belonging to labor unions). That variable generally had a negative sign (falling proportion of workers in unions) throughout the states (as discussed earlier), but the results show that where union membership decline was smallest, there were higher rates of economic growth.

Two observations about that conclusion are in order. First, the magnitude of the impact of the change in union density factor was small in size relative to the RTW variable. A state that adopted a RTW law and had a resulting decline in union membership from, say, from 13% to 10% of the labor force (a plausible but rather large proportion), still would have a strong overall positive growth effect, since negative growth effect of the union density decline would have been less than half the positive growth effect of the introduction of the RTW law. One possible perspective on this: When right-to-work laws combined with other factors such as low taxes cause an economy to grow, union density eventually can grow as well. There can be a correlation, then, between growing union density and per capita income growth – albeit a correlation that is not as significant as the correlation between RTW and per capita income growth.

The *HDDays* variable measured the number of heating degree days reported by state. A high number of heating degree days, such as is the case in Wisconsin (over 8,000), implies relatively colder climates – the number of heating days in Hawaii (zero) reflects its always warm temperatures.¹⁶ There is weak support that colder climate states such as Wisconsin, controlling for other variables in the model, had modestly higher rates of economic growth.

The *GrwthPop* variable suggests that states with high levels of population growth had their growth in per person income reduced as a consequence.

Three variables – *ChgCollAttain* (the growth in the proportion of the adult population with college degrees),

ChgManu (the change in the proportion of state output generated in manufacturing) and *ChgEmpPopRatio* (the change in the proportion of the population over age 16 who were employed) – were not statistically significant. This is not to say that college attainment, the percentage of output generated through manufacturing and the percentage of the population working are unimportant factors in economic growth. It merely indicates that the impact of the *change* in them over the time of our analysis was not significant.

The Meaning of the Results: Right-to-Work and Wisconsin's Future

The analysis in Table I was replicated in other models, changing control variables to see if they materially altered the observed relationship between the presence of a RTW law and economic growth. We were gratified that the alternative model specifications only very modestly altered the observed RTW-growth relationship. Without exception, a positive relationship between RTW and growth was observed, in some cases statistically significant at the 1% level. The coefficient on the RTW variable was consistently between 0.05 and 0.08, with the coefficient generally around 0.06 or 0.07, meaning the presence of a RTW law added about six or seven percentage points to the rate of per capita income growth in the period from 1983 to 2013.

Demonstrating a significant statistical relationship between the presence of a right-to-work law and a jurisdiction's income per capita is interesting, but how meaningful is it in an economic sense? How much would the presence in 1983 of a RTW law in Wisconsin have affected the state's subsequent economic growth and the standard of living of Badger State residents?

The statistical results above suggest that the presence of a RTW law added about six percentage points to the growth rate of states from 1983 to 2013. With such a law, Wisconsin's per capita personal income growth of 53.29% would have been, instead, about 59.29%. As Figure 5 demonstrates, Wisconsin would have gone from having economic growth below the national average over those three decades to having slightly above average growth – enough above average that it would have erased the current income per capita deficit between Wisconsin and the nation as a whole.

Wisconsin's actual per capita personal income, income received from all sources, in 2013 was \$43,244, according to the Bureau of Economic Analysis – \$1,521 less than the national average of \$44,765.

The regression findings in Table 1 suggest that, had Wisconsin adopted a RTW law in 1983, per capita income would have been \$1,683 higher in 2013 than it actually was – and would have brought the state slightly over the national per capita personal income average. It would appear that the quality of material life of Wisconsin residents could be improved significantly by the passage of a RTW law.

Table 1: Factors Influencing Growth in Per Capita Personal Income		
Variable	Parameter Estimate	
Intercept	0.83648***	
,	(0.1696)	
RTW	0.06734**	
	(0.0324)	
ChgCollAttain	0.85518	
-	(0.7206)	
ChgManu	0.37485	
	(0.4965)	
GrwthPop	-0.18466***	
	(0.0444)	
ChgEmpPopRatio	0.00934	
	(0.0063)	
AvgTaxRt	-3.59410**	
	(1.5861)	
HDDays	0.00001531*	
,	(0.00000825)	
ChgUnionDens	0.00954**	
Ŭ	(0.00367)	
Sample	48	
R^2	0.6564	

Sample includes the focultagoods states. Standard errors are reported in parentheses. p < 0.01***, p < 0.05**, p < 0.10*

Although the above results are strong, the reader is urged to be very cautious in using the precise estimation of growth effects stated above. First, the results in Table 1 explain only about 65% of the variation in growth rates over the period, a large majority to be sure, but another 35% is still unexplained. There may be a significant "omitted variable bias" in this simple regression model. Some possible determinants of economic growth are very difficult or impossible to measure, such as the extent of statewide environmental regulations. It is unlikely the inclusion of other variables would materially alter the estimations with respect to RTW.

Related to that, there are many determinants of economic growth. Although labor laws are important, so are several other factors. Many prosperous states are without RTW laws, particularly in the Northeast, because they have benefited from booms in particular sectors, such as financial services or high technology, where unions never gained a foothold. Similarly, the findings in Table 1 show that tax policy is important to growth. While we are suggesting that right-to-work laws matter, we certainly



Source: Bureau of Economic Analysis, authors' calculations

are not suggesting that they *alone* matter, or even that they are the most important determinant of growth.

The fact that model estimations are susceptible to changes in sample size, the variables considered, the functional form of relationships (e.g., linear vs. nonlinear), data imperfections, etc., means it is inappropriate to claim too much of the results. Moreover, the results in question look at the past – the 1980s through early this decade. Labor unions today have a smaller presence than in some of the period examined, so the effects of labor laws affecting collective bargaining might reasonably be expected to have a somewhat smaller impact in the future – especially in Wisconsin, where Act 10 already is having an economic impact.

That said, the fact that the positive RTW/growth relationship is consistently observed with different model specifications leads us to be reasonably confident that

the passage of a right-to-work law would have a positive impact on the Wisconsin economy. Moreover, the costs of implementing a RTW law are very low, so even if the benefits are one-half or even one-fourth of those estimated above, the net impact of RTW enactment would be positive on the Wisconsin economy.

Indeed, the results above imply such a large RTW/ income creation relationship that, even if one were to cut them in half, they are still quite large. Instead of increasing annual per capita personal income by \$1,683 over 30 years, it would have increased by *only* \$840.

Are there any losers from a RTW law adoption? Those who derive their income directly from a union could be affected. But rank-and-file union members should benefit from the higher rate of economic growth as much as non-union residents of Wisconsin.

Conclusions

It is for the citizens of Wisconsin, using the processes of representative government, to decide whether they wish to adopt a right-to-work law. One factor that needs to be considered in deciding whether to adopt such a law is the impact the law would have on the economic well-being of residents of the Badger State. A series of empirical examinations of the impact of RTW laws performed in this study suggest that such laws can have strong positive effects on the creation of income and, thus, on the ability of Wisconsin residents to fund both private and public needs.

Since tax revenues are strongly positively related to income (particularly in Wisconsin with its strongly progressive income tax), one long-term side benefit of RTW law adoption likely would be increased tax revenues. If the goal were to make RTW law adoption revenueneutral to the state government, passage of such a law ultimately would make tax reduction more possible. Since, as Table 1 and numerous other studies show, economic growth generally expands when taxes are reduced, there are potentially significant positive secondary effects of right-to-work laws. Another such secondary impact relates to incomes of local businesses: Since migrants move to areas with high incomes and employment opportunities, and if RTW laws expand income, they likely will expand population as well, with consequential positive effects on existing commercial enterprises.

As this study indicated in the introduction, Wisconsin's role in the national economy has shrunk with the passage of time. Enactment of a RTW law likely would slow and possibly reverse this trend.

Endnotes

'A majority of delegates to the Constitutional Convention approved their draft on Sept. 17, 1787. The document was "laid before the United States in Congress assembled" on Sept. 20, and it was debated for two days on the 26th and 27th. *Teaching with Documents: The Ratification of the Constitution*. National Archives of the United States

²History.com Staff, *Labor Movement*, History.com, 2009, www.history.com/topics/labor

³Ushistory.org, "Early National Organizations" *U.S. History Outline Textbook*http://www.ushistory.org/us/37c.asp. Accessed Monday, December 15, 2014. (2014)

⁴"Knights of Labor." *Dictionary of American History*. 2003. *Encyclopedia.com*. (December 15, 2014). http://www.encyclopedia.com/doc/1G2-3401802262.html

⁵*Historical Statistics of the United States, Earliest Times to Present, Millennium Edition, Vol. 2, Part B: Work and Welfare* (New York: Cambridge University Press, 2006), p. 2-354.

⁶For the language of the veto see Harry S. Truman: "Veto of the Taft-Hartley Labor Bill.," June 20, 1947. Online by Gerhard Peters and John T. Woolley, *The American Presidency Project*. http://www.presidency.ucsb.edu/ws/?pid=12675. For information on the veto override see Nicholson, Phillip, "Labor's Story in the United States," *Temple University Press* (2004).

⁷"Lincoln Federal Labor Union v. Northwestern Iron & Metal Co.," The Oyez Project at IIT Chicago-Kent College of Law, accessed Dec. 12, 2014, http://www.oyez.org/cases/1940-1949/1948/1948_47

⁸Right-to-work states are Alabama, Arizona, Arkansas, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Mississippi, Nebraska, Nevada, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia and Wyoming, and the U.S. territory Guam.

⁹Vedder, Denhart and Robe, 2012

¹⁰Ibid.

пIbid.

¹²Minnesota saw a very slight decline from 53.7% to 53.1%, while Michigan rose from 53.9% to 54.8% from 2000 to 2013.

¹³This section is substantially derived, with some updating and new empirical analysis, from Richard Vedder, Matthew Denhart and Jonathan Robe, *Minnesota Right-to-Work: How the Freedom of Workers in the Workplace Enhances Prosperity* (Minnesota, MN: Center for the American Experiment, January 2012).

¹⁴For the pioneering work, see H. Gregg Lewis, Unionism and Relative Wages in the United States (Chicago, IL: University of Chicago Press, 1963). For a review of the literature confirming, for the most part, Lewis' observation, see C.J. Parsley, "Labor Union Effects on Wage Gains: A Survey of Recent Literature," Journal of Economic Literature, 18 (1), March 1980, 1-31. There is, however, a large distinction, which Lewis himself emphasizes, from the micro effects that unions have on newly organized workers and the broader economic or "macro" effects. See, for example, Lewis' Union Relative Wage Effects: A Survey of Macro Estimates," Journal of Labor Economics 1 (1), January 1983, 1-27. Others have examined the matter, refining, but not usually refuting, the Lewis conclusions. To cite one example, David Card shows the wage effects are greater among lower-skilled workers and that the attractiveness of unionism varies with the skill background of workers. See his "The Effect of Unions of the Structure of Wages: A Longitudinal Analysis," Econometrica 64 (4), July 1996, 957-79.

¹⁵Let us cite just four examples: Richard K. Vedder, *State and Local Development Strategies: A "Supply Side" Perspective*, Staff Study, Joint Economic Committee of Congress (Washington, D.C.: Government Printing Office, 1981); L. Jay Helms, "The Effect of State and Local Taxes of Economic Growth: A Time-Series-Cross-Section Approach," *Review of Economics and Statistics*, 67 (4), 1985, 654-82; Paul Cashin, "Government Spending, Taxes and Economic Growth," *International Monetary Fund Staff Papers*, 42 (2), 1995, 237-69; and Arthur Laffer, Stephen Moore, Rex Sinquefield and Travis Brown, *An Inquiry into the Nature and Causes of the Wealth of States* (Hoboken, NJ: Wiley, 2014).

¹⁶ Heating degree days are calculated by subtracting the average daily temperature from 65 degrees Fahrenheit. If on a given winter day, temperatures vary between 25 and 35 degrees, averaging 30 degrees, the heating degree days for that particular day will be 30 (65-30). The totals are summed for each day of the year, usually based on averages accumulated from 50 or more years of data.

About the Authors

RICHARD VEDDER is Edwin and Ruth Kennedy Distinguished Professor Emeritus at Ohio University. A graduate of Northwestern University and the University of Illinois, Dr. Vedder is the author of approximately 200 academic studies in journals and edited volumes, as well as the author or editor of seven books, including "Out of Work: Unemployment and Government in Twentieth Century America" (New York U. Press). Dr. Vedder has served at a number of institutions as an economist, including the Joint Economic Committee of Congress, and has served as a John M. Olin Visiting Professor of Labor Economics at Washington University in St. Louis. He has authored a large number of studies on labor issues, including the impact of right-to-work laws. He is well-known for his work on the economics of higher education and directs the Center for College Affordability and Productivity. His articles have been published in many popular media outlets, such as the Wall Street Journal, New York Times, Washington Post, Los Angeles Times, USA Today, Forbes, Chicago Tribune, National Review, etc. He has appeared on "PBS NewsHour," "NBC Nightly News," "ABC World News Tonight," NPR's "Morning Edition" and "All Things Considered," John Stossel's Fox News investigative reports, Neil Cavuto and Lou Dobbs on Fox Business, etc.

JOSEPH HARTGE is completing his B.A. in the Honors Tutorial College at Ohio University and will be pursuing a PhD in economics this fall. Mr. Hartge has authored or co-authored several studies and is a research associate at the Center for College Affordability and Productivity in Washington, D.C. Along with the other co-authors, Mr. Hartge authored "Dollars, Cents, and Nonsense: The Harmful Effects of Federal Student Aid" for the Center for College Affordability and Productivity.

CHRISTOPHER DENHART is a graduate of Ohio University in economics. He subsequently has served as administrative director of the Center for College Affordability and Productivity and is now in private consulting with a Washington, D.C., area firm. He has written a number of articles on economic subjects, including a 2014 Wall Street Journal opinion piece with Dr. Vedder.