A Missouri Right to Work Law: Confronting Missouri's Growth Deficit

By Richard K. Vedder and Joseph Hartge

With Joshua Distel and Justin Strehle

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United for Missouri
P.O. Box 2193
Jefferson City, Missouri 65102

Executive Summary

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Missouri's growth in income in recent years trails that of all eight bordering states as well as the nation as a whole. Job opportunities are not particularly good –the state's unemployment rate well exceeds the national average and that of surrounding states. A right-to-work (RTW) law has been proposed as a policy that might help deal with the state's relative economic stagnation. This study suggests there is good empirical evidence supporting the proposition that a RTW law would lead to higher rates of growth in income, jobs and well-being for the people of Missouri.

Some specific findings:

- If Missouri had adopted a RTW law in 1983, personal income in the Show Me State would have been an estimated $11.286 billion higher in 2013 than it actually was, or $1,867 per person; even if the true figure were only one-fourth that amount, the positive economic impact of a RTW law would have been very strong, increasing average income by more than $100 a month for a household of three;

- Even controlling for other factors, we estimate migration into a state from 2010 and 2014 was 74,800 higher when the state had a RTW law; RTW laws appear to be associated with a perceived improvement in the quality of life;

- Missouri's per capita income growth deficit relative to the nation has grown sharply in recent decades; with a RTW law it is estimated that Missouri's economic growth rate would have exceeded the national average and nearly half the current income deficit between Missouri and the nation would have been eliminated;

- The higher economic growth associated with RTW would have led to higher tax revenues for Missouri governments, leading either to more government services, greater tax relief for citizens, or a combination of both of these factors.

According to the study's senior author, Richard Vedder, Distinguished Professor of Economics Emeritus at Ohio University, "right-to-work laws can be justified on philosophical grounds (providing more choices for workers in labor markets), on the grounds they force unions to be more effective (by increasing competition and reducing their monopoly power), but mainly in Missouri's case because of the big positive impact they have on economic growth and job formation."

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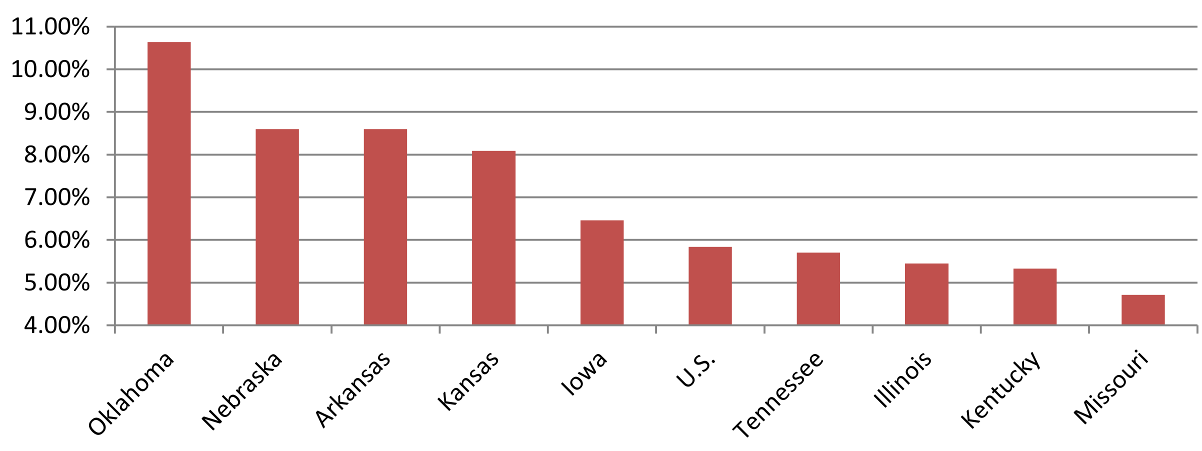
Introduction

The Economic Setting – the Underperforming Missouri Economy

Proponents of "right to work" laws advance several arguments in support of such legislation. There is a *philosophical* argument: workers should have the right to make their own decisions whether to join and/or pay dues to a labor union. There is a *union effectiveness* argument: unions will serve their workers more effectively when they have to compete for members. But above all, there is an *economic growth/prosperity* argument: both economic theory and empirical evidence suggests locations will be more successful economically – creating more jobs, providing higher incomes in the long run – when workers have the right to decide whether they want to join an organization for the purpose of collectively bargaining with employers.

The economic arguments for a right-to-work law appear particularly compelling in the case of Missouri. The Show Me state has vastly underperformed the already slow growing American economy in recent years. Look at Figure 1, which compares the growth in real (inflation-adjusted) personal income per capita in Missouri, its eight neighboring states, and the nation as a whole since the economic recovery from the financial crisis began. From 2010 to 2014, Missouri ranked *last* among the 10 jurisdictions in terms of economic growth. The recovery from the Great Recession, tepid throughout the land, was especially weak in Missouri.

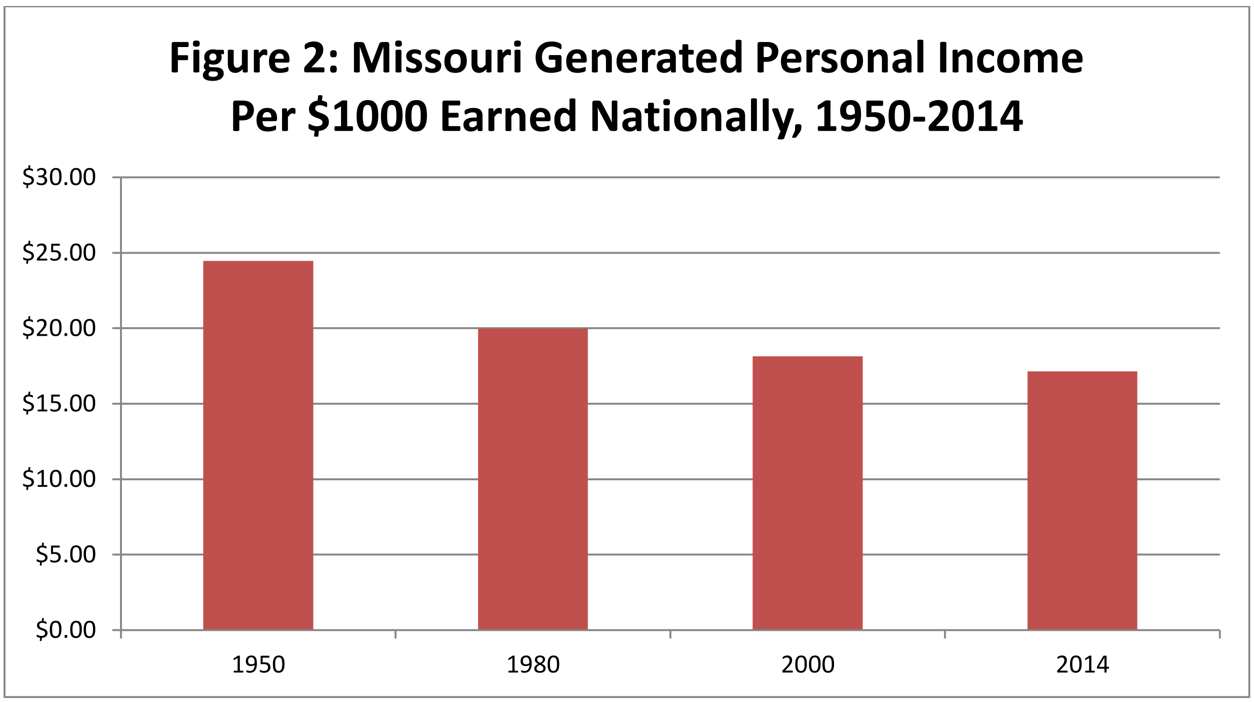
Figure 1: Real Per Capita Income Growth, 2010-2014



Source: U.S. Bureau of Economic Analysis, Bureau of Labor Statistics, Authors' Calculations

There is a very interesting characteristic of the three slowest growth states in Figure 1 – Missouri, Illinois, and Kentucky – all are states that have no right-to-work (hereafter, RTW) laws. By contrast, *all* the other faster growing states in Figure 1 do have RTW legislation. Legislation permitting labor market freedom seems to be associated with greater economic prosperity.

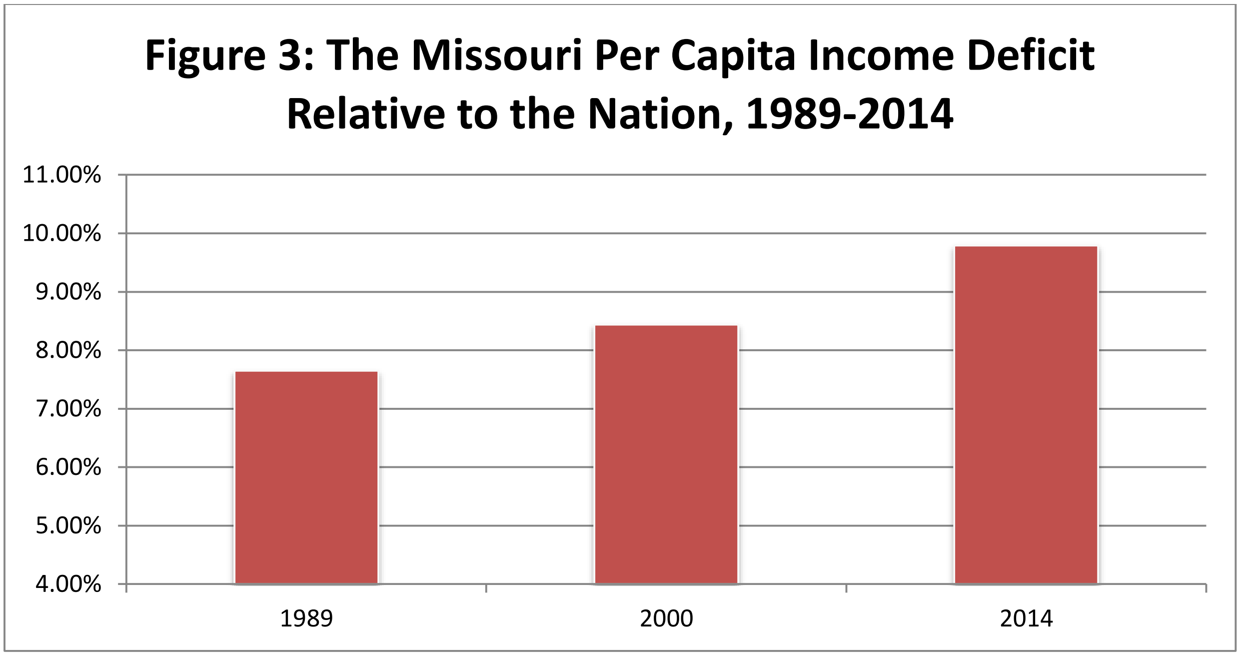
Unfortunately, the experience of the last few years is not some sort of aberration with respect to Missouri. The state has been losing ground relative to the nation as a whole for decades. Figure 2 looks at how many dollars of each $1,000 earned nationally were generated in the Show Me state. Note the continuous decline in the importance of Missouri in the national economy. The state's relative importance declined 30 percent between 1950 and 2014.



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

To be sure, a large part of the reason for the decline reported in Figure 2 is that population growth in Missouri has been below the national average, in turn reflecting the fact that Missouri has been less successful than the typical state in gaining new in-migration from other Americans or from immigrants (that, in itself, may be an indication that Missouri is viewed is perceived nationally and internationally as a relatively unattractive place to live). But the decline is observable also even correcting for population growth. Figure 3 looks at how much Missouri is below the national average in per capita income over the past quarter of a century.

Note the Missouri "growth deficit" has expanded slowly but surely. The income per capita deficit in 2014 was 28 percent larger than it was 25 years earlier in 1989.



Source: U.S. Bureau of Economic Analysis, Authors' Calculations

Employment and Unemployment

The underperformance of Missouri with respect to income growth extends to some extent to other economic dimensions. Table 1 looks at July 2015 unemployment rate data for Missouri, its eight neighbors, and the nation. Along with Illinois, the Show Me State has the highest unemployment rate of any of the ten jurisdictions, well above the national average. Interestingly, Illinois and Missouri are both non RTW states, whereas the four states with very low unemployment rates (less than five percent) – Nebraska, Iowa, Oklahoma, and Kansas – all have RTW laws.

Table 1: Unemployment Rates, Missouri and Its Neighbors, July 2015	
Political Jurisdiction	**Unemployment Rate**
MISSOURI	5.8%
Illinois	5.8%
Arkansas	5.7%
Tennessee	5.6%
U.S.	5.3%
Kentucky	5.2%
Kansas	4.6%
Oklahoma	4.5%
Iowa	3.8%
Nebraska	2.7%
Source: U.S. Bureau of Labor Statistics	

Organized Labor and Right to Work Laws in Historical Perspective

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 drafted[1]), 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 eight-hour 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 non- union 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 twenty-five 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 (more below).

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., automobile and steel 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 Missouri

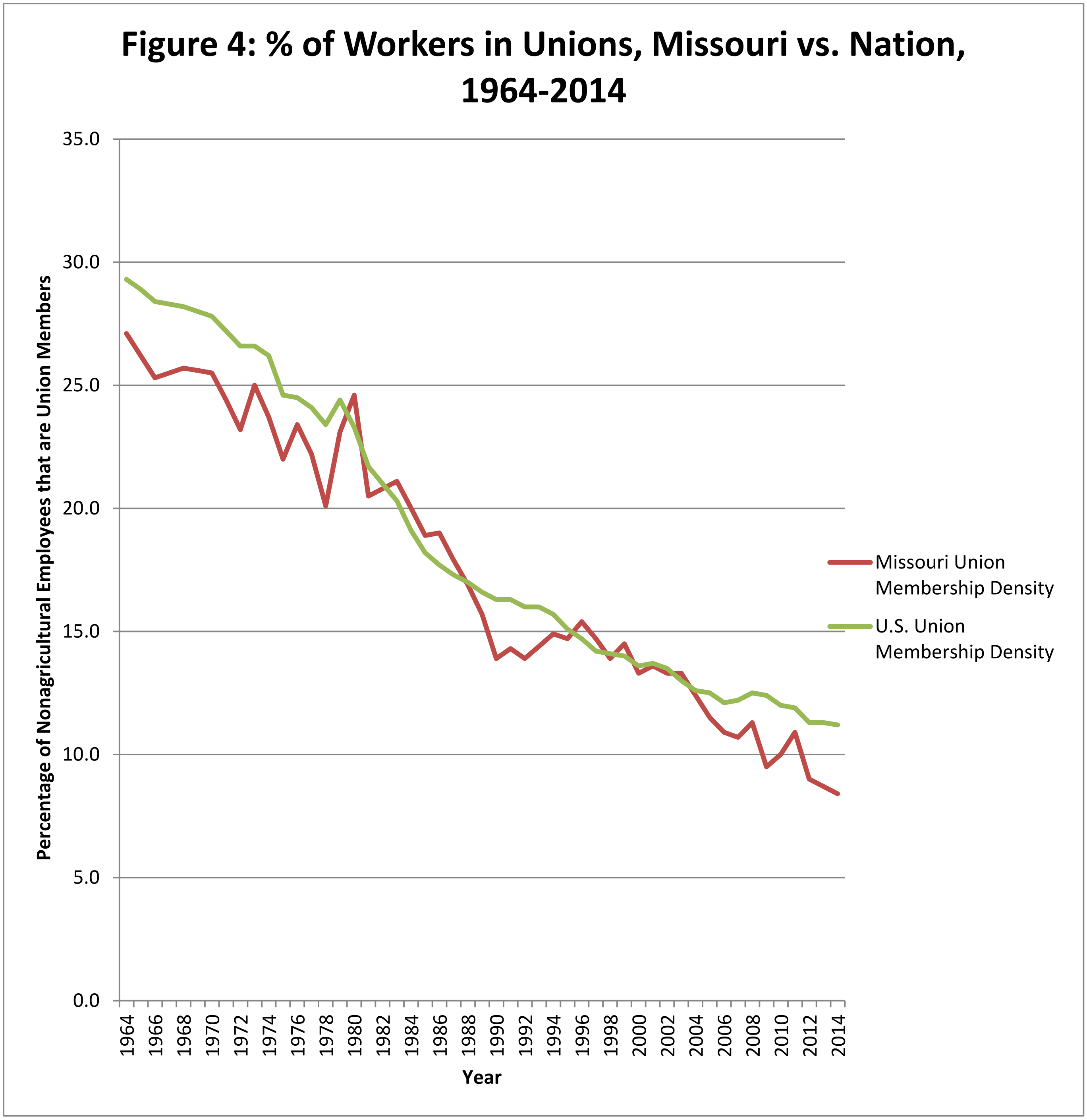
There is a tradition of organized labor in Missouri. However, there are also examples of resistance to participation in labor unions. The late 19th century saw the rise of larger labor organizations like the Knights of Labor, which grew especially well in the 1870s, and then the American Federation of Labor. Before these larger organizations took over, smaller craft unions in the building trades and railroad segment took care of themselves. Despite this, Missouri metal workers, along with metal workers in Oklahoma and Kansas, in this early era of unionization did not immediately turn to unionization as a means to solve their work-related problems.[11] It took them longer than the other trades to make that decision.

Railroad workers in Missouri participated in the great Southwest railroad strike of 1885, which involved more than 200,000 workers on Arkansas, Illinois, Kansas, Missouri, and Texas.

A Missouri Right to Work Law: Confronting Missouri's Growth Deficit

The governor of Missouri mobilized the state militia after incidents of union violence. Union members retaliated against the power of the state siding with the railroads. The strike ended by September 1886. It was at about this time that the American Federation of Labor became important in Missouri unionization. Missouri unions in the early decades were often blatantly racially discriminatory: in 1901 the St. Louis Trade and Labor Council refused to endorse the credentials of an African-American seeking to be a union organizer, presumably on racial grounds. Another noteworthy moment from Missouri's organized labor history was in 1945 when the state added a clause to its constitution that said that employees had the right to bargain collectively through representatives that they choose. In the Missouri Supreme Court case, *City of Springfield v. Clouse* the court held that the added clause did not apply to public employees. This Missouri Supreme Court reversed that decision in 2007.

As Figure 4 shows, trends in labor union representation in Missouri in modern times parallels that of the nation as a whole. The big story is one of decline: the proportion of residents of Missouri belonging to unions is nearly two-thirds below that of a half century ago. Even with a pro-union statutory environment (no right-to-work law), Missouri historically has had a slightly smaller proportion of its labor force belonging to unions than the national average, with the gap growing somewhat in recent years.



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; post-2000 data, U.S. Department of Labor, authors' calculations

A Missouri Right to Work Law: Confronting Missouri's Growth Deficit

Right-to-Work Laws, Human Behavior, and Economic Growth[12]

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.[13]

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 Missouri, 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, that is to say 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, 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; Wisconsin adopted RTW in 2015.) The results, in Figure 5, 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 Figure 5 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.

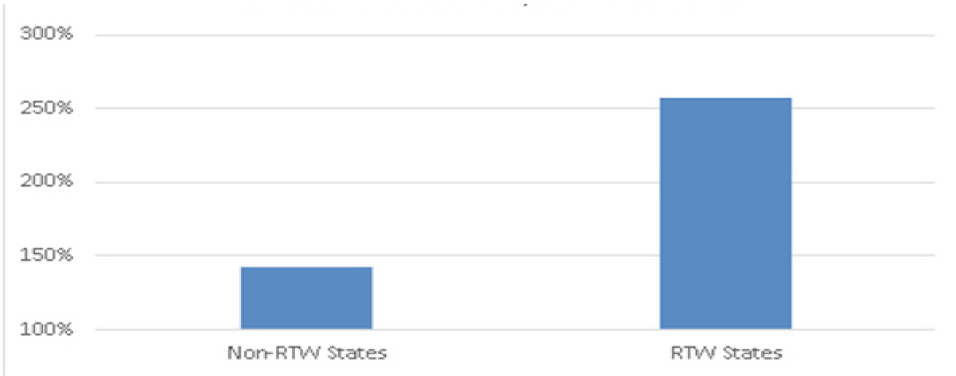
Regression Analysis

Accordingly, we used a multivariate form of analysis, ordinary least squares regression, to examine the relation- ship 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 2. 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.

Figure 5: Growth in Real Personal Income: RTW vs. Non-RTW States, 1970 to 2013



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.[14]

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 membership 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 states like Minnesota or Wisconsin (over 8,000), implies relatively colder climates – the number of heating days in Hawaii (zero) reflects its always warm temperatures.[15] There is weak support that colder climate states, 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 Missouri's Future

Table 2:
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**
	(0.00367)
Sample	48
R^2	0.6564

Sample includes the 48 contiguous states.
Standard errors are reported in parentheses.
P < 0.01 ***, p < 0.05 **, p < 0.10 *

The analysis in Table 2 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.

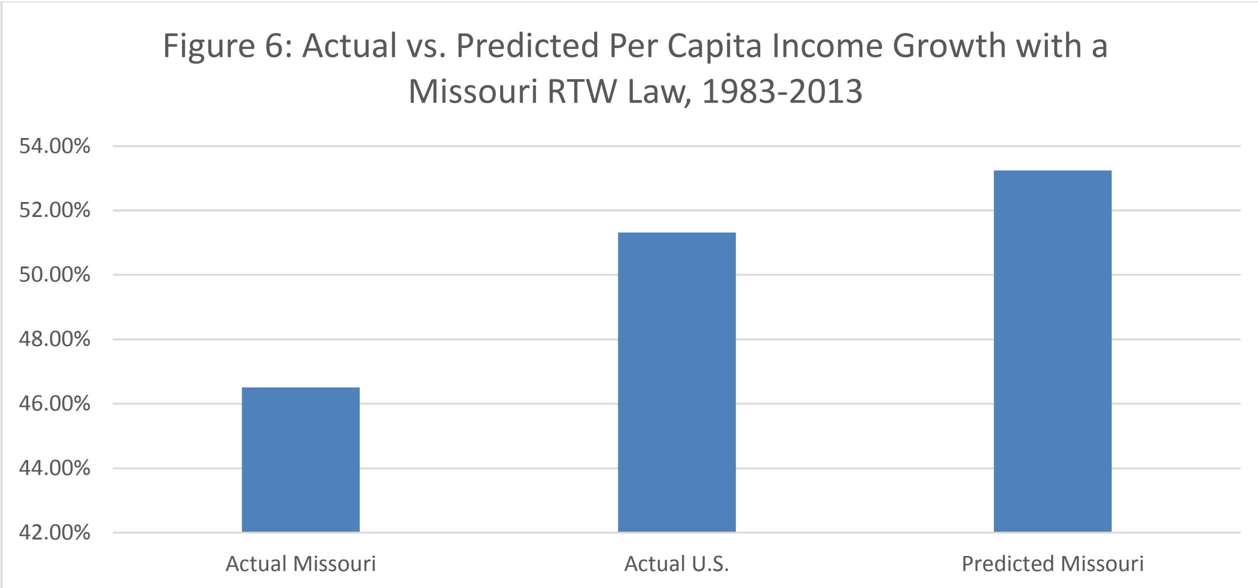
Demonstrating a significant statistical relationship between the presence of a right-to-work law and a jurisdiction's income per capita is interesting, but how meaningful is it in an economic sense? How much would the presence in 1983 of a RTW law in Missouri have affected the state's subsequent economic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

The statistical results above suggest that the presence of a RTW law added about 6.7 percentage points to the growth rate of states from 1983 to 2013. With such a law, Missouri's per capita personal income growth of 46.64% would have been, instead, about 53.37%. As Figure 6 demonstrates, Missouri 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 over 45 percent of the current income per capita deficit between Missouri and the nation as a whole.

Missouri's actual per capita personal income, income received from all sources, in 2013 was $40,663, according to the Bureau of Economic Analysis – $4,102 less than the national average of $44,765. The regression findings in Table 2 suggest that, had Missouri adopted a RTW law in 1983, per capita income would have been $1,867 higher in 2013 than it actually was. Since there were 6,044,927 persons living in Missouri in 2013 according to the Census Bureau, the estimates suggest total person income in Missouri would have been $11,286 billion higher. That is an astonishingly high figure for the passage of a single piece of legislation. It would appear that the quality of material life of Missouri residents could be improved significantly by the passage of a RTW law.

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 2 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. That said, 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 2 show that tax policy is important to growth. While we are suggesting that right-to-work laws matter, we certainly are not suggesting that they *alone* matter, or even that they are the most important determinant of growth.



Source: Bureau of Economic Analysis, authors' calculations

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.

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 Missouri 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 very positive on the Missouri 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 $1,867 over 30 years, it would have increased by *only* $933, or about $2,800 annually for a household of three persons.

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 Missouri.

Right to Work and the Quality of Life: The Migration Experience

Public policies are successful if, on balance, they make people happier. But happiness (what economists call "cardinal utility") is impossible to measure with any precision. But individuals can "reveal their preference" for something, meaning they are happier with those things than alternatives. Human migration provides great data for measuring the quality of life of an area. If more people move into an area than leave, on balance individuals are expecting to be better off in some sense in the new community than the old one (this assumes people aim to become more satisfied by moving, a very reasonable assumption).

With this is mind, we looked at recent (2010 to 2014) net migration statistics for the 48 contiguous states. There were 22 states that had RTW laws throughout the period, 25 states that had no RTW laws, and three states –Indiana, Michigan, and Wisconsin –that passed RTW laws during those years. We exclude those three states from the analysis since they were in the transition to an RTW environment, with most not truly operating under RTW under the end of the period.

There was, in fact, over a time a large migration to the RTW states, and away from the non-RTW jurisdictions. It is true, however, that people might have moved into the RTW states for other factors, such as the climate or the size of the tax burden. To control for some of these other factors, we performed ordinary least squares regression analysis (Table 3). We examined job opportunity variables (*FiveYrAvgUnempl)* such as the average unemployment rate, the change in the tax burden (*GrwthTaxBurd20101980)*, the level of the state minimum wage (*ExcessMinWage2013)* the presence of warm days (*HDDays)* as well as, of course, the presence of a right-to-work law (*RTW).*

The results show that states with a RTW law, controlling for the other factors in the analysis, had typically 74,800 more in-migrants as a consequence of the legislation. The result was statistically significant at the five percent level –we are 95 percent certain that it the result was not some random occurrence but reflected a true positive relationship between in-migration and RTW laws.

The model here is merely suggestive that a relatively powerful relationship exists between RTW laws and a positive quality of life environment. A fuller more extensive analysis might change the values on the estimate, but given the strong movement towards RTW states it is very likely that a more comprehensive statistical analysis would affirm these findings.

Table 3: Regression Results: Net Domestic Migration

Heteroskedasticity-robust standard errors, variant HC1

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	399873	212772	1.8794	0.06732	*
RTW	74800.4	36207.2	2.0659	0.04520	**
ExcessMinWage2013	93352.6	38547.5	2.4218	0.01995	**
HDDays	-42.2697	20.0856	-2.1045	0.04151	**
FiveYrAvgUnempl	-39049.5	17885	-2.1834	0.03479	**
ChgEmpPopRatio20102014	33269.1	19065.3	1.7450	0.08848	*
GrwthTaxBurd20101980	46142	100320	0.4599	0.64798	

Mean dependent var	61.77083	S.D. dependent var	152290.7
Sum squared resid	6.80e+11	S.E. of regression	128780.4
R-squared	0.376210	Adjusted R-squared	0.284924
F(6, 41)	2.809294	P-value(F)	0.022056

*Significant at the 10 percent level.

**Significant at the 5 percent level.

Conclusions

It is for the citizens of Missouri, using the processes of representative government, to decide whether they wish to adopt a right-to-work law. As of this writing, the legislature has indicated its support of a RTW law, but Governor Jay Nixon has vetoed it, although the legislature has the opportunity to override that veto. 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 Show Me 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 Missouri residents to fund both private and public needs. Also, additional analysis suggests RTW laws promote in-migration of human resources and population growth.

Since tax revenues are strongly positively related to income (particularly in Missouri with its 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 revenue- neutral to the state government, passage of such a law ultimately would make tax reduction more possible. Since, as Table 2 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, population will expand as well, with consequential positive effects on existing commercial enterprises.

Although not discussed extensively in this report, it should be emphasized that RTW laws should not be properly viewed as "anti-union." These laws are anti-union *monopoly*, meaning they are designed to force unions to compete for union membership, which should, on balance, make unions more effective in serving their members. It is interesting to note that in the modern era, union membership has declined in greater percentage terms in non-RTW states relative to their RTW counterparts, and some RTW states (e.g., Nevada) have actually bucked the national trend towards smaller union memberships.

All that said, however, Missouri's biggest problem is its sluggish economic performance. As this study indicated in the introduction, Missouri's role in the national economy has shrunk with the passage of time. Enactment of a RTW law likely would slow and very possibly even reverse this trend.

Endnotes

1 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. T*eaching with Documents: The Ratification of the Constitution.* National Archives of the United States

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

3 Ushistory.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.

6 For 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

8 Right-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, Wisconsin and Wyoming, and the U.S. territory Guam.

9 Vedder, Denhart and Robe, 2012.

10 Ibid.

11 George G. Suggs, Jr., *Union Busting in the Tri-State*, University of Oklahoma Press, 1986, 10.

12 Vedder, Denhart and Robe, 2012.

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

14 This 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). Similar text is found in subsequent studies of RTW in other states, such as Michigan and Wisconsin.

[15] For 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," J*ournal 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.

[16] Let 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).

[17] 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 completed his B.A. in economics in the Honors Tutorial College at Ohio University and is pursuing a PhD in economics at Ohio State University. Mr. Hartge has authored or co-authored several studies and has served as a research associate at the Center for College Affordability and Productivity. Along with 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.

JOSHUA DISTEL is a graduate of Ashland University. He has an M.A. in Politics from the Hillsdale College Van Andel Graduate School of Statesmanship. A scholar of Winston Churchill, he has written for the *Churchillian*. Mr. Distel is the Administrative Director of the Center for College Affordability and Productivity.

JUSTIN STREHLE is a senior studying economics and mathematical statistics at Ohio University. He is also a research associate at the Center for College Affordability and Productivity.