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Right-to-Work and Economic Growth

A Comprehensive Analysis of the Economic Benefits to New Mexico of Enacting a Right-to-Work Law

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	Introduction

Executive Summary

This report measures the impacts of right-to-work laws on the economy, measured by employment and income growth. Looking backward, it examines what would have happened to state employment and income growth had New Mexico enacted right-to-work legislation passed by the legislature—but vetoed by the governor—in 1979 and 1981. Looking forward, the report forecasts future employment and income growth if New Mexico were to enact right-to-work legislation going into effect in 2013.

Looking backward, the analysis finds if the state had enacted right-to-work legislation in 1980:

- New Mexico's employment in 2011 would have been approximately 21 percent higher (169,400 more people working).
- New Mexico's 2011 personal income would have been 21 percent higher (\$15.7 billion); wage and salary income also would have been 21 percent higher (\$7.4 billion).

Looking forward, if New Mexico enacts right-to-work legislation effective 2013, the empirical results indicate that the state would see a permanent boost in employment and income growth.

- By 2020, New Mexico would have 42,300 more people working as a right-to-work state, with more that 2,000 in increased manufacturing employment.
- By 2020, the state's personal income would be nearly \$5 billion higher and wage and salary income would be \$2.2 billion higher.

New Mexico, along with much of the country, still struggles to recover from a recession that began more than four years ago. While the state has benefited from the recent energy boom, states like New Mexico have struggled to cope with the employment and public revenue consequences of the recession. In response, policy makers have tended to focus on fiscal policies such as tax cuts and "stimulus spending" rather than market structural solutions.

In addition to focusing on spending, subsidies and taxes, states should also embark on structural reforms that remove barriers to private sector initiative and job creation. Chief among the many structural barriers employers encounter in New Mexico is the lack of so-called "right-to-work" legislation. In this study, we examine the effects of the failure of New Mexico to adopt right-to-work legislation more than 30 years ago. We also estimate the benefits going forward of enacting such legislation next year.

Right-to-work laws prohibit agreements between labor unions and employers that make union membership, payment of union dues, or union fees a condition of employment, either before or after hiring. Right-to-work laws also prohibit "closed shop" agreements in which an employer agrees to hire union members only, and employees must remain members of the union at all times in order to remain employed. Provisions of the Taft-Hartley Act, enacted in 1947, affirm the right of states to enact right-to-work laws and were viewed as a counterbalance to the limitations imposed on private sector employers by the National Labor Relations Act.

Twenty-three states have taken advantage of the right-to-work provisions of the Taft-Hartley Act. As a group, they have enjoyed more rapid employment growth, better job preservation, and faster recoveries from recession.

This study employs a comprehensive macroeconomic database to measure the impact of right-to-work statutes. It also estimates the effect on New Mexico's economy that would likely follow if the state adopted a right-to-work policy this year. The findings indicate unambiguously that New Mexico would enjoy an employment and income windfall.

The table below summarizes the projected benefits to New Mexico of enacting right-to-work legislation:

Projected Employment and Income Impacts of Enacting Right-to-Work Legislation in New Mexico in 2013

Year	Employment	Manufacturing Employment	Personal Income (\$ mil.)	Wage & Salary Income (\$ mil.)
2013	4,750	220	\$445	\$210
2014	9,600	440	920	435
2015	14,650	680	1,445	680
2016	19,850	930	2,030	945
2017	25,250	1,180	2,665	1,225
2018	30,750	1,450	3,360	1,530
2019	36,450	1,730	4,115	1,855
2020	42,300	2,030	4,940	2,210

The body of this report presents additional background on right-to-work policy, and a comprehensive literature review of previous research on the impacts of right-to-work policies. The report then presents the methods, data and results supporting the macroeconomic impact study performed.

1 Introduction

New Mexico, along with much of the country, still struggles to recover from a recession that began more than four years ago. While the state has benefited from the recent energy boom, states like New Mexico have struggled to cope with the employment and public revenue consequences of the recession. In response, policy makers have tended to focus on fiscal policy such as tax cuts and "stimulus spending" rather than market structural solutions.

As the recovery debate continues, however, it is worth reviewing another feature of public policy that many economists believe influences the competitive prospects for states like New Mexico over the long term. That feature is a state's labor market policy and particularly the enacting of so-called "right-to-work" legislation.

In this study, we examine the likely effects on the New Mexico economy of the state's failure to adopt right-to-work policies more than 30 years ago. We define and examine the impacts of right-to-work policies using evidence from the 50 states and the District of Columbia over long periods of time. We find that it is likely that New Mexico's rejection of right-to-work policies has had adverse effects on patterns of employment and income growth.

2 Background of Right-to-Work Policies

Right-to-work policies liberalize labor market conditions by loosening some of the most restrictive features of labor union legislation enacted during the Great Depression. Specifically, in 1935, at the depths of the Great Depression job losses, Congress passed the National Labor Relations Act (also known as the Wagner Act). This act permitted closed union shops. It also sharply circumscribed the powers of employers in the private sector to influence workers regarding their formation of labor unions, engagement in collective bargaining, and taking part in strikes and other forms of coordinated activity to achieve labor's demands.

The widespread impact of coal miner strikes up to the post World War II period led some to conclude that the Wagner Act had conferred too much power on organized labor. The Taft-Hartley Act, enacted in 1947 over President Truman's veto, modified the impact of the Wagner Act by affirming the right of states to prohibit certain union shop restrictions enabled by the Wagner Act. Specifically, states (but not counties or localities) can pass laws that prohibit collective bargaining and agreements between labor unions and employers that make membership, payment of union dues, or fees a condition of employment, either before or after hiring. These statutes are referred to as "right-to-work" laws.

Proponents of right-to-work legislation argue that individuals should have the choice of whether or not to join a union and that the choice of whether to join a union should not be a condition of employment. Opponents of right-to-work legislation argue that union collective bargaining benefits all employees; without compulsory union membership, employees have incentives to "free ride" on the benefits of collective bargaining without contributing to the costs associated with such bargaining. This free rider argument is fallacious in that Federal law does not obligate unions to represent non-members. The National Labor Relations Act allows unions to sign

"members' only" contracts that apply only to dues-paying members and the Supreme Court upheld the ability of unions to negotiate only on behalf of members.¹

The adoption of right-to-work statutes has been far from universal. Twice—in 1979 and 1981—the New Mexico legislature passed right-to-work legislation that subsequently was vetoed by Governor Bruce King. As

Table 1 indicates, adoption of right-to-work legislation is primarily a characteristic of the states in the southeast, the Great Plains, and the Intermountain West.

Although much of the debate over right-to-work legislation focuses on the rights of individuals versus the rights of a union, another debate involves whether right-to-work laws help stimulate economic growth, slow economic growth, or have no impact. Much of the literature demonstrates that right-to-work laws are associated with greater employment growth. An association between right-to-work status and employment growth is obvious from even casual analysis (Figure 1 and Figure 2). At the same time, the literature provides mixed results regarding the relationship between right-to-work laws and income growth.

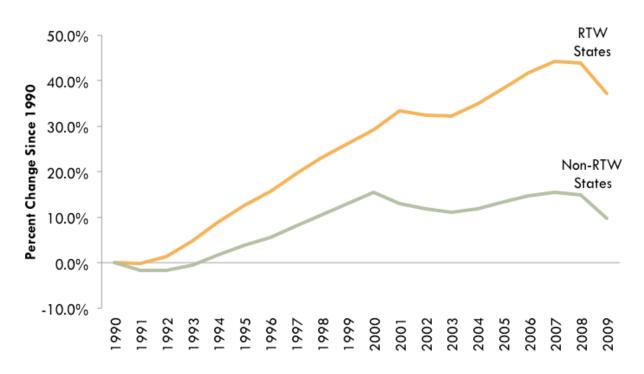
Table 1: State Right-to-Work Status, With Year Right-to-Work Legislation Was Enacted

Right-to-Work	Non-Right-to-Work
Alabama (1953)	Alaska
Arizona (1946)	California
Arkansas (1944)	Colorado
Florida (1954)	Connecticut
Georgia (1947)	Delaware
Idaho (1985)	District of Columbia
Indiana* (2012)	Hawaii
Iowa (1947)	Illinois
Kansas (1958)	Kentucky
Louisiana (1976)	Maine
Mississippi (1954)	Maryland
Nebraska (1946)	Massachusetts
Nevada (1951)	Michigan
North Carolina (1947)	Minnesota
North Dakota (1947)	Missouri
Oklahoma (2001)	Montana
South Carolina (1954)	New Hampshire
South Dakota (1946)	New Jersey
Tennessee (1947)	New Mexico
Texas (1947)	New York
Utah (1955)	Ohio
Virginia (1947)	Oregon
Wyoming (1963)	Pennsylvania
	Rhode Island
	Vermont

¹ Consolidated Edison Co. v. National Labor Relations Bd., 305 U.S. 197 (1938).

Washington West Virginia Wisconsin

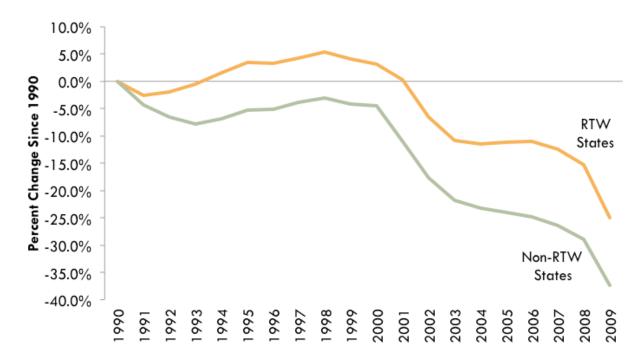
Figure 1: Comparative Employment Growth Rates: Right-to-Work vs. Non Right-to-Work States



^{*}Indiana enacted right-to-work legislation in 1957, repealed it in 1965, and enacted it again in 2012.

Figure 2: Comparative Manufacturing Employment Growth Rates: Right-to-Work vs.

Non Right-to-Work States



3 The Economic Effects of Right-to-Work Laws: A Review of the Research

Moore and Newman (1985) review numerous studies that have evaluated the impact of right-to-work laws on union membership, wages, and industry location. Because their article comprehensively reviews the older literature, our literature review will focus on more recent research.

Tannenwald (1997) notes that the impact of right-to-work laws has been more widely studied than any other labor market law or regulation. He suggests this is because the existence of right-to-work laws is a simple "either/or" variable: Either a state either has or does not have such a law. He identifies eleven studies that estimate the impact of right-to-work laws on either plant location, the rate of business formation, employment, or some other manifestation of economic development. Eight of the eleven studies find that right-to-work laws are associated with a positive, statistically significant impact on economic activity.

Research by Holmes (1998, 2000) has been held up as some of the most important empirical studies of the impact of right-to-work legislation on economic performance. For example, Holmes (1998) has more than 90 citations by other peer-reviewed articles. He argues that if state

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² Carlton (1979); Coughlin, et al. (1991); Friedman, et al. (1992); Garofalo and Malhotra (1992); Newman (1983, 1984); Plaut and Pluta (1983); Schmenner, et al. (1987); Soffer and Korenich (1961); Wheat (1986); and a working paper that was published as Holmes (1998).

policies are an important determinant of the location of manufacturing, one should find an abrupt change in manufacturing activity when one crosses a border at which policy changes from right-to-work to non-right-to-work because state characteristics unrelated to policy are the same on both sides of the border. Holmes (1998) uses data on manufacturing employment levels for counties occupying the borders of right-to-work states and non-right-to-work states. His regression results find that manufacturing employment in a county as a percentage of total employment in the county increases, on average, by approximately one-third when one crosses the border from a non-right-to-work state to a right-to-work state. Holmes (2000) cautions that the impact may not be entirely due to right-to-work legislation:

Thus, my results do not say that it is right-to-work laws that matter, but rather that the "pro-business package" offered by right-to-work states seems to matter.

Abraham and Voos (2000) examine the impact of enacting right-to-work legislation on the stock market returns of firms whose primary operating location was in a state that recently enacted right-to-work legislation. Their regression results indicate a 2 percent to 4 percent increase in shareholder wealth associated with enacting right-to-work legislation.

At the time Idaho enacted its right-to-work legislation, it was surrounded by three right-to-work states and three non-right-to-work states. Dinlersoz and Hernández-Murillo (2002) and Wilbanks and Reed (2001) investigate the manufacturing sector's performance before and after the right-to-work legislation went into effect. They find that after Idaho became a right-to-work state, the state experienced a significant and persistent annual growth in manufacturing employment and in the number of establishments. In contrast, the state saw almost no growth in each of these variables in the years leading up to the adoption of right-to-work legislation. In addition, the difference between "before right-to-work" and "after right-to-work" growth rates in Idaho was significantly larger compared with other states in the region. Moreover, they find that the fraction of total manufacturing employment in large manufacturing establishments increased significantly in Idaho after the law was passed. Dinlersoz and Hernández-Murillo (2002) conclude that Idaho became more attractive for large plants after the passage of right-to-work legislation.

Regressions performed by Reed (2003) find that after accounting for the influence of economic conditions that were present when states adopted right-to-work legislation, those states have significantly higher wages than would otherwise be expected.

Kalenkoski and Lacombe (2006) find that right-to-work legislation may positively affect manufacturing employment. However, Lafer and Allegretto (2011) suggest that Kalenkoski and Lacombe's (2006) study produce "some curious and unexplained findings," and suggest that Kalenkoski and Lacombe's (2006) approach or data may be unreliable. In particular, Kalenkoski and Lacombe (2006) find that right-to-work laws have a negative impact on the employment shares of the agriculture, forestry, mining, fishing and hunting industries, and some service industries. Lafer and Allegretto (2011) point out that agricultural employees and most professional and managerial employees have no right to organize under federal labor law, thus they argue that there is no clear reason why right-to-work statutes would directly impact employment shares in these sectors. This criticism, however, seems to belie a misunderstanding of basic arithmetic—as the employment in one sector of the economy increases relative to other sectors, by definition, the shares of other sectors must decrease.

Regressions performed by Krol and Svorny (2007) indicate that employment in right-to-work states recovers faster from recession than employment in non-right-to-work states.

Stevans (2009) argues that several factors that explain economic performance may also affect a state's decision to adopt right-to-work legislation. These factors include (1) the size of agricultural employment relative to non-agricultural employment, (2) the size of service sector employment relative to manufacturing sector employment, (3) population growth, especially in "Sun Belt" states, and (4) educational attainment. Where other studies treat right-to-work as an exogenous variable (meaning a state's right-to-work status is taken as given), Stevans (2009) argues it is an endogenous choice (meaning a state's right-to-work status is a choice that is determined by the same factors that affect things like employment and population growth). In contrast, Krol and Svorny (2007) note that right-to-work laws can be considered exogenous with respect to current economic conditions because in most cases the laws have been in place since the 1950s. Regressions in which Stevans (2009) treats right-to-work legislation as exogenous find that right-to-work states are associated with higher rates of employment and proprietors' income. When treated endogenously, Stevans (2009) finds that the employment impacts become statistically insignificant.

Regression results provided by Belman et al. (2009) indicate that right-to-work states have a higher share of their populations employed. Their regressions show that the employment-to-population ratio of states with right-to-work legislation is 2.8 percentage points higher than non-right-to-work states.

Besley et al. (2010) assume that right-to-work legislation is one of many "pro-business and growth promoting" policies that a state can adopt. They find that states with greater political competition—meaning states in which neither major political party has significant electoral advantage—are more likely to adopt right-to-work legislation as well as other growth promoting policies such as lower taxes.

Vedder et al. (2011) extends earlier work (Vedder, 2010) to examine the potential impacts of right-to-work legislation on Indiana's potential income growth. Their regression results suggest that, had Indiana adopted right-to-work legislation in 1977, annual per capita income growth would have been 0.3 percentage points higher than actual income growth. Indiana enacted right-to-work legislation in 2012.

In a briefing paper published by the Economic Policy Institute, Lafer and Allegretto (2011) argue that although much of the previous research finds a relationship between right-to-work legislation and economic development, the research may not establish a cause-and-effect relationship between right-to-work legislation and economic development. In addition, they criticize Holmes' (2000) focus on manufacturing employment as a share of total employment. They point out that, for example, in states where service employment is growing, all other things being held equal, the manufacturing share of overall employment will decrease without reflecting any failing in the local economy or government.

⁴ Proprietors' income is the payments to those who own non-corporate businesses, including sole proprietors and partners.

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³ See also Jacobs and Dixon (2006), who use economic, demographic, and political variable to evaluate the probability that a state adopts right-to-work legislation.

Idaho, Oklahoma, and Indiana are the three most recent states to enact right-to-work legislation. Idaho's legislation was enacted in 1985, Oklahoma's in 2001, and Indiana's in 2012. Eren and Ozbeklik (2011) use a recently developed econometric technique to examine the effectiveness of right-to-work laws on different measures of state-level economic development. Their results indicate that the passage of right-to-work legislation in Oklahoma is associated with a 24 percent increase in foreign direct investment and no significant impact on manufacturing employment. Even so, passage of right-to-work legislation in Idaho, is associated with a 14 percent increase in manufacturing as a share of the labor force.

4 Effects on Employment and Income Growth

This section of the report measures the likely effects of right-to-work laws on state economic growth. It is a comprehensive study that covers all 50 states and the District of Columbia and spans a period of time from before any state enacted right-to-work legislation through the year 2009. It examines the effects of these policies on employment and income growth.

The data and methodology employed for this study can be applied to any state considering a change in its right-to-work status. In this report, our focus is on the effect of right-to-work legislation on employment growth and income growth in New Mexico. Specifically, it examines what would have happened to state employment and income growth had New Mexico enacted right-to-work legislation in 1980. Looking forward, the report forecasts future employment and income growth if New Mexico enacts right-to-work legislation in 2013.

4.1 Data Employed

The data used in this section of the study consists of employment, income, tax, and regional economic and demographic characteristics of the states. The sources of the data are as follows:

- Employment information is from the US Bureau of Labor Statistics. Nonfarm employment information is available from 1939 to the present. Manufacturing employment information is available from 1990 to the present.
- Personal income, wage and salary income, and proprietors' income information is from the US Bureau of Economic Analysis and is available from 1929 to the present.
- Population, education, state tax revenue, and land area information is from the US Census Bureau. Annual population information is available from 1900 to the present. Education information (percent of population over age 25 with a high school diploma or higher and percent of population over age 25 with a bachelor's degree or higher) and is available every 10 years from 1940 to 2000 and annually from 2006 through 2009. State tax revenue information is available every other year from 1942 to 1952 and annually from 1952 through 2010.
- Tax rate information is from the National Bureau of Economic Research and the Tax Foundation and is available from 1976 through 2010.
- Corporate bond information is from the Board of Governors of the US Federal Reserve System and is available from 1919 to the present.

4.2 Methodology: Modeling Employment and Growth

The study employs regression analysis, a widely used econometric technique. It measures the relationship between employment growth and income growth for a given state at a given point in time, and the explanatory variables—including right-to-work status—in each of the various states. The study examines the relationship between right-to-work laws on growth in employment, manufacturing employment, total personal income, wage and salary income, and proprietors' income.

The study uses a panel of the 50 states and the District of Columbia pooled for the years 1940 through 2009. Cornell and Trumbull (1994) and Levitt (2001) describe the benefits and other considerations related to panel data. In particular, a panel allows for variation across states and for variation over time within each state. As a result, it is possible to measure coefficients that more accurately demonstrate causation.

Ordinary least squares (OLS) regressions are performed for five different specifications. The dependent variable is the year-over-year percent change in employment or income for each state. The first specification regresses the dependent variable against the right-to-work indicator (i.e., dummy variable), population, the sum of employment in other states, and the sum of personal income in other states. Corporate bond rates are included as a variable to control for variations in the national business environment that are unlikely to be associated with whether a state enacts right-to-work legislation. In addition, land area is included to control for variations in population density. While this specification omits several variables that research has suggested may be important factors, this specification has the advantage of covering a long period time (70 years) that includes the years in which right-to-work states enacted right-to-work legislation.

Each succeeding specification adds one or more independent variables such as state tax revenues, marginal tax rates, and educational attainment. Because of the limited availability of some independent variables, as each variable is added, the time period covered by the regressions shrinks. Thus, the specification with the most explanatory variables also has the fewest time series observations (7 years).

A number of researchers have suggested that a state's choice to enact right-to-work legislation may be an endogenous choice. That is, some of the factors that contribute to employment and income growth may also contribute to the states' choice to enact right-to-work legislation. If this is the case, then ordinary least squares estimates may not be statistically consistent. To account for this possibility, we employed five instrumental variable (IV) regressions using two-stage least squares (2SLS).

4.3 Results: The Impacts of Right-to-Work Policy on Economic Growth

The regressions provide the expected signs on the impacts of right-to-work laws on growth: right-to-work states experience higher employment and income growth. While various

⁵ Variables such as population, employment, and personal income are measured as year-over-year percent changes.

⁶ In statistics, a consistent estimator is one that converges in probability to the true value of the parameter being estimated.

specifications provide different coefficient estimates, the regressions are robust across the various specifications. Table 2 summarizes the range of estimated statistically significant coefficients across the specifications used, and the dependent variable studied for an impact of right-to-work. The coefficients in Table 2 can be interpreted as the increment to the various dependent variables' annual growth rates that is associated with adoption of right-to-work legislation.

Table 2: Range of Significant Estimates of Right-to-Work Coefficient

	OLS		IV	
Dependent Variable	Low	High	Low	High
Employment growth	+0.0045	+0.0069	+0.0118	+0.0257
Manufacturing employment growth	+0.0044	+0.0075	+0.0377	+0.0751
Personal income growth	+0.0042	+0.0060	+0.0079	+0.0149
Wage and salary income growth	+0.0059	+0.0083	n/a	n/a

Coefficients are significant at the 90 percent (or greater) level of confidence; n/a indicates no significant coefficients were estimated

Across all ten specifications, right-to-work legislation has a positive impact on employment growth. The coefficients are statistically significant in all of the OLS regressions and in three of the five IV regressions. Right-to-work legislation has a positive impact on manufacturing employment growth in all 10 of the specifications used. The coefficients are statistically significant in three of the five OLS regressions and in three of the five IV regressions.

Right-to-work legislation has a positive impact on personal income growth in each of the OLS regressions, with statistically significantly positive coefficients in four of the five OLS regressions. Three of the five IV regressions report a statistically significant positive relationship between right-to-work laws and personal income growth. Two of the regressions report negative coefficients that are not statistically significant.

Across each of the OLS specifications, right-to-work legislation has a statistically significant positive impact on wage and salary income growth. Four of the five IV regressions also report a positive relationship between right-to-work laws and wage and salary income growth; however, none of the estimated coefficients in the IV regressions are statistically significant.

None of the ten specifications find any statistically significant relationship between right-to-work laws and proprietors' income.⁷

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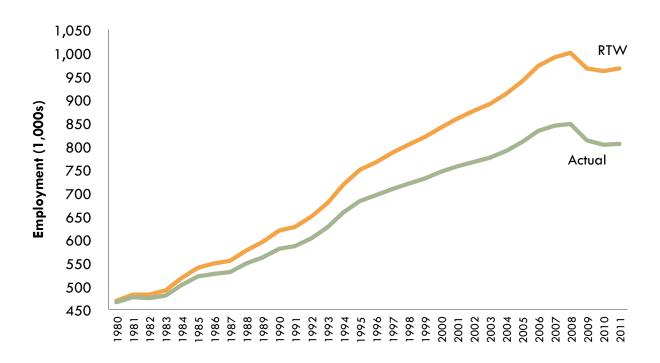
⁷ This may be because there is no relationship or because of the well-known difficulties with accurately measuring proprietors' income.

The estimated coefficients are interpreted as additions to the growth rate associated with right-to-work laws. For example, the "high" OLS estimated coefficient is +0.0069, thus in this specification, right-to-work states experience, on average, an annual employment growth rate that is 0.69 percentage points higher than states that do not have right-to-work laws. While such a difference may seem small, Barro (1996) points out that "increases in growth rates by a few tenths of a percentage point matter a lot in the long run and are surely worth the trouble."

This report examines what would have happened to state employment and income growth had New Mexico enacted right-to-work legislation in 1980. Looking forward, the report forecasts future employment and income growth if New Mexico enacts right-to-work legislation in 2013. For the forecasts, we use the OLS estimators from second OLS model. This model has the advantage of a large number of observations covering a relatively long time period (59 years, with the exception of manufacturing employment) and a favorable mean squared error relative to other specifications.

Barro's (1996) observation is illustrated in Figure 3, which contrasts New Mexico's actual employment against the forecasted employment if New Mexico had adopted right-to-work in 1980. The figure shows that New Mexico's employment in 2011 would have been approximately 21 percent higher (169,400 higher employment) if the state had enacted right-to-work legislation in 1980. Similarly, New Mexico's 2011 personal income and wage and salary income also would have been 21 percent higher had New Mexico enacted right-to-work legislation in 1980.

Figure 3: New Mexico Employment and Estimated Employment With Right-to-Work Law Enacted in 1980



Projected future impacts are based on forecasts produced by the University of New Mexico Bureau of Business and Economic Research (Reynis, 2012). If New Mexico enacts right-to-work legislation in 2013, the empirical results indicate that the state would see a permanent boost in employment and income growth. Table 3 shows that by 2020, the state would have 42,300 more people working. The state's personal income would be \$4.9 billion higher and wage and salary income would be \$2.2 billion higher. The increased employment and increased incomes would provide a much needed boost to the New Mexico economy, reduce burdens on state and local "safety net" budgets, and enlarge state and local tax revenues.

Table 3: Projected Employment and Income Impacts of Enacting Right-to-Work

Legislation in New Mexico in 2013

Year	Employment	Manufacturing Employment	Personal Income (\$ mil.)	Wage & Salary Income (\$ mil.)
2013	4,750	220	\$445	\$210
2014	9,600	440	920	435
2015	14,650	680	1,445	680
2016	19,850	930	2,030	945
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2018	30,750	1,450	3,360	1,530
2019	36,450	1,730	4,115	1,855
2020	42,300	2,030	4,940	2,210

Enacting right-to-work legislation has an added, and unquantifiable, signaling benefit. Glaeser (2011) concludes: "Indeed, one can quite plausibly argue that the South had far worse institutions for economic growth before the Civil Rights Era, but that today, fewer regulations and lower taxes makes the Sunbelt more pro-growth." Holmes (2000) points out that right-to-work to laws can be viewed as part of a "pro-business package" that encourages firms to locate and expand in pro-business states.

5 Summary

The new, comprehensive analysis presented here relies on what appear to be the largest datasets ever employed to study the impacts of right-to-work laws. The innovation in analysis of this

policy is important, because income and employment growth trends are influenced by many factors. Policy makers are often misled by staff and lobbyists who advance only anecdotal evidence, or who hide behind the difficulty of extracting the effects of one policy from the panoply of other policies and factors.

Taken as a whole, the findings in this paper are a repudiation of the widely held notion that extending right-to-work protections to workers is immaterial, a confusion of cause and effect, or unproven because of the amount of noise and influence of other factors. The work here indicates that, to the contrary, the effect of restrictions on right-to-work policy have an effect that is significant in scale and statistical importance to employment, income, and the attraction and retention of higher income households.

Looking backward, the analysis finds if the state had enacted right-to-work legislation in 1980:

- New Mexico's employment in 2011 would have been approximately 21 percent higher (169,400 more people working).
- New Mexico's 2011 personal income would have been 21 percent higher (\$15.7 billion); wage and salary income also would have been 21 percent higher (\$7.4 billion).

Looking forward, if New Mexico enacts right-to-work legislation going into effect in 2013, the empirical results indicate that the state would see a permanent boost in employment and income growth.

- By 2020, New Mexico would have 42,300 more people working as a right-to-work state, with more that 2,000 in increased manufacturing employment.
- By 2020, the state's personal income would be nearly \$5 billion higher and wage and salary income would be \$2.2 billion higher.

A right-to-work law can be viewed as part of a pro-business package that encourages firms to locate and expand in the state. In turn, the improved opportunities likely would have the effect of increasing migration into the state and slowing migration out of the state.

There are undoubtedly segments of the labor force that benefit from imposing restrictions on the right to work, and have used the disproportionate political influence conferred by those restrictions to preserve the policy. New Mexico and other non-right-to-work states should think hard about the policies it has toward labor and the workplace environment, especially as it struggles to restore its economy, employment opportunities, and public sector revenues.

About the Author

Eric Fruits, Ph.D., an adjunct scholar with the Rio Grande Foundation, is President of Economics International Corp., a consulting firm specializing in economics, finance, and statistics. He has taught at Indiana University, the University of Southern California, and the Claremont Colleges. He currently is an adjunct professor of economics at Portland State University. Dr. Fruits has been engaged by private and public sector clients, including state and local governments, to evaluate the economic and fiscal impacts of business activities and government policies. His economic analysis has been widely cited and has been published in *The Economist*, the *Wall Street Journal*, and *USA Today*. Dr. Fruits has been invited to provide

analysis to the Oregon legislature regarding the state's tax and spending policies. His testimony regarding the economics of Oregon public employee pension reforms was heard by a special session of the Oregon Supreme Court. His statistical analysis has been published in top-tier economics journals and his testimony regarding statistical analysis has been accepted by international criminal courts.

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Sources

- Abraham, S. E. and Voos, P. B. (2000). Right-to-work laws: New evidence from the stock market. *Southern Economic Journal*, 67(2):345–362.
- Barro, R. J. (1996). Determinants of economic growth: A cross country empirical study. Working Paper No. 5698, National Bureau of Economic Research.
- Belman, D., Block, R. N., and Roberts, K. (2009). The economic impact of state differences in labor standards in the United States, 1998–2000. Employment Policy Research Network. http://www.employmentpolicy.org/topic/15/blog/economic-impact-state-differences-labor-standards-united-states-1998-2000.
- Besley, T., Persson, T., and Sturm, D. M. (2010). Political competition, policy and growth: Theory and evidence from the US. *Review of Economic Studies*, 77(4):1329–1352.
- Carlton, D. W. (1979). Why do new firms locate where they do? An econometric model. In Wheaton, W. C., editor, *Interregional Movements and Regional Growth*, pages 13–50. The Urban Institute.
- Cornwell, C. and Trumbull, W. N. (1994). Estimating the economic model of crime with panel data. *Review of Economics and Statistics*, 76(2):360–366.
- Coughlin, C. C., Terza, J. V., and Arromdee, V. (1991). State characteristics and the location of foreign direct investment within the United States. *Review of Economics and Statistics*, 73(4):675–683.
- Dinlersoz, E. M. and Hernández-Murillo, R. (2002). Did "right-to-work" work for Idaho? Federal Reserve Bank of St. Louis *Review*, 84(3):29–42.
- Eberts, R. W. and Stone, J. A. (1992). *Wage and Employment Adjustment in Local Labor Markets*. W. E. Upjohn Institute for Employment Research.
- Eren, O. and Ozbeklik, I. S. (2011). Right-to-work laws and state-level economic outcomes: Evidence from the case studies of Idaho and Oklahoma using synthetic control method.

- Working paper. http://econweb.umd.edu/~davis/eventpapers/OzbeklikRight.pdf, retrieved October 5, 2011.
- Friedman, J., Gerlowski, D. A., and Silberman, J. (1992). What attracts foreign multinational corporations? *Journal of Regional Science*, 32(4):403–418.
- Fruits, E. and Pozdena, R. J. (2009). *Tax Policy and the Oregon Economy: The Effects of Measures 66 and 67*. Cascade Policy Institute.
- Garofalo, G. A. and Malhotra, D. M. (1992). An integrated model of the economic effects of right-to-work laws. *Journal of Labor Research*, 13(3):293–305.
- Glaeser, E. L. (2011). Which places are growing? Seven notable trends from newly released Census data. Harvard Kennedy School Policy Briefs.
- Holmes, T. J. (1998). The effect of state policies on the location of manufacturing: Evidence from state borders. *Journal of Political Economy*, 106(4):667–705.
- Holmes, T. J. (2000). The location of industry: Do states' policies matter? *Regulation*, 23(1):47–50.
- Jacobs, D. and Dixon, M. (2006). The politics of labor-management relations: Detecting the conditions that affect changes in right-to-work laws. *Social Problems*, 53(1):118–137.
- Kalenkoski, C. M. and Lacombe, D. J. (2006). Right-to-work laws and manufacturing employment: The importance of spatial dependence. *Southern Economic Journal*, 73(2):402–418.
- Krol, R. and Svorny, S. (2007). Unions and employment growth: Evidence from state economic recoveries. *Journal of Labor Research*, 28(3):525–535.
- Lafer, G. and Allegretto, S. (2011). Does "right to work" create jobs: Answers from Oklahoma. Briefing Paper #300, Economic Policy Institute.
- Levitt, S. D. (2001). Alternative strategies for identifying the link between unemployment and crime. *Journal of Quantitative Criminology*, 17(4):377–390.
- Moore, W. J. (1998). The determinants and effects of right-to-work laws: A review of the recent literature. *Journal of Labor Research*, 19(3):445–469.
- Moore, W. J. and Newman, R. J. (1985). The effects of right-to-work laws: A review of the literature. *Industrial and Labor Relations Review*, 38(4):571–585.
- Newman, R. J. (1983). Industry migration and growth in the South. *Review of Economics and Statistics*, 65(1):76–86.
- Pantuosco, L., Parker, D., and Stone, G. (2001). The effect of unions on labor markets and economic growth: An analysis of state data. *Journal of Labor Research*, 22(1):195–205.
- Plaut, T. R. and Pluta, J. E. (1983). Business climate, taxes and expenditures, and state industrial growth in the United States. *Southern Economic Journal*, 50(1):99–119.

- Reed, W. R. (2003). How right-to-work laws affect wages. *Journal of Labor Research*, 24(4):713–730.
- Reynis, L. A. (2012). New Mexico economy: Recent developments and outlook. Annual Economic Outlook Conference. University of New Mexico Bureau of Business and Economic Research.
- Schmenner, R. W., Huber, J., and Cook, R. L. (1987). Geographic differences and the location of new manufacturing facilities. *Journal of Urban Economics*, 21(1):83–104.
- Soffer, B. and Korenich, M. (1961). "Right-to-work" laws as a location factor: The industrialization experience of agricultural states. *Journal of Regional Science*, 3(2):41–56.
- Stevans, L. K. (2009). The effect of endogenous right-to-work laws on business and economic conditions in the United States: A multivariate approach. *Review of Law & Economics*, 5(1):596–614.
- Tannenwald, R. (1997). State regulatory policy and economic development. *New England Economic Review*, pages 83–107.
- Vedder, R. (2010). Right to work laws: Liberty, prosperity, and quality of life. *Cato Journal*, 30(1):171–180.
- Vedder, R., Denhart, M., and Robe, J. (2011). Right-to-work and Indiana's economic future. Indiana Chamber of Commerce Foundation.
- Wheat, L. F. (1986). The determinants of 1963—77 regional manufacturing growth: Why the South and West grow. *Journal of Regional Science*, 26(4):635–659.
- Wilbanks, J. R. and Reed, W. R. (2001). The impact of right-to-work on state economic development: Evidence from Idaho. Working paper. http://www.econ.canterbury.ac.nz/personal_pages/bob_reed/Papers/ right-to-work _Paper.pdf