2018

Labor Market Freedom and Economic Prosperity: How Does Missouri Compare?

Dean Stansel

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By Dean Stansel

EXECUTIVE SUMMARY

Government restrictions on workers and employers tend to have a dampening effect on their ability to thrive. There have been numerous studies of the relationship between state labor market restrictions and labor market outcomes (as well as economic outcomes in general). As theory would imply, that literature generally has found a positive relationship between labor market freedom and various measures of positive economic outcomes. After a discussion of the concept of economic freedom and how it is measured in labor markets, this paper briefly reviews that literature. It also provides a detailed examination of how Missouri compares to its neighboring states and the U.S. average on a variety of measures of both labor market freedom and economic prosperity. Many other states are doing better than Missouri in both areas. A prescription for policy reforms that will move to correcting that disparity is provided.

1. INTRODUCTION

More than two centuries ago, the founding father of economics, Adam Smith, wrote his seminal treatise, *An Inquiry into the Nature and Causes of the Wealth of Nations*. In it he emphasized the importance of a "simple system of natural liberty," one in which government restrictions on the economy are kept to a minimum. About 30 years ago, Nobel Laureate economists Milton Friedman, Gary Becker, and Douglas North, among other economists and public policy experts, embarked on an effort to measure the extent to which nations lived up to that ideal model. Their efforts resulted in *Economic Freedom of the World: 1975-1995*,[1] now an annual report in its 21st edition produced by the Fraser Institute in cooperation with think tanks all over the globe. The report's authors describe "economic freedom" as follows:

"The cornerstones of economic freedom are personal choice, voluntary exchange, open markets, and clearly defined and enforced property rights. Individuals are economically free when they are permitted to choose for themselves and engage in voluntary transactions as long as they do not harm the person or property of others. When economic freedom is present, the choices of individuals will decide what and how goods and services are produced. Put another way, economically free individuals will be permitted to decide for themselves rather than having options imposed on them by the political process or the use of violence, theft, or fraud by others." (Gwartney et al., 2017, 1)[2]

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A few years after the publication of the first *Economic Freedom of the World* report, the Fraser Institute produced a state-level version that examined the U.S. states and Canadian provinces. That report, *Economic Freedom of North America* (EFNA), also is produced annually and is in its 13th edition.[3] Stansel (2013)[4] and Stansel (2018)[5] provide a local-level version for U.S. metropolitan statistical areas.

This paper examines the relationship between economic freedom and economic prosperity. The focus is on Missouri's labor market. Could it be that by increasing the ability of Missouri's labor force to more freely negotiate wage contracts and agree with employers on working conditions the state could realize improved overall economic conditions? Could changes in Missouri's labor market help improve its dismal economic record of slow growth and poor job creation?

The investigation proceeds as follows. Section 2 describes how we measure economic and labor market freedom in states. Section 3 details how Missouri compares to neighboring and Midwestern region states on a variety of measures of economic growth and labor market outcomes. Section 4 examines the previous literature on the relationship between economic (and labor market) freedom and economic prosperity. Section 5 provides a detailed discussion of how Missouri compares to neighboring and Midwestern region states on labor market freedom. Finally, Section 6 provides a prescription for policy reform.

2. HOW WE MEASURE ECONOMIC FREEDOM AND LABOR MARKET FREEDOM

The EFNA measures economic freedom using 10 variables in three policy areas, each designed to assess the level of government intervention into the workings of the private market. Area 1 measures government spending. It is comprised of three variables: General Consumption Expenditures by Government as a Percentage of Income, Transfers and Subsidies as a Percentage of Income, Insurance and Retirement Payments as a Percentage of Income. These three variables capture the sum total of government spending with the exception of capital outlays (for things like infrastructure, which can fluctuate substantially from year to year) and interest on debt (which usually is related to the funding of capital outlays). Area 2 focuses on government taxation and has four variables: Income and Payroll Tax Revenue as a Percentage of Income, Sales Tax Revenue as a Percentage of Income, Property Tax and Other Taxes as a Percentage of Income, and a variable that measures Top Marginal Income Tax Rate and the Income Threshold at Which It Applies.

Area 3 is Labor Market Freedom and is the one area that this paper will focus on the most. It consists of three variables. One is full-time minimum wage income as a percentage of per capita personal income. This is used to measure the extent to which the minimum wage is a binding constraint on the labor market. That is, for a given minimum wage (e.g., the federal level of $7.25) that price control will be more of a binding constraint in states where per capita income is lower. In higher-income states, that minimum wage will be less binding, because the market will already be paying a higher wage to a larger percentage of the workforce. Currently, 29 states and the District of Columbia have a minimum wage that is higher than the federal minimum wage. Increasingly, cities are raising their minimum wages even higher.

Also included is government employment as a percentage of total state employment.[6] This captures the extent to which public employers dominate labor markets, and thereby measures how much private employers have to compete with public employers for their employees. This is especially important because public sector employers do not face the same bottom-line constraints as private sector business owners. The other component is a measure of union density, calculated as the percentage of total state employees in a union. Rather than a binary variable for whether or not a state is a "right to work" state, this variable provides a more precise measure of the extent to which labor unions play a role in labor markets.

For each of the 10 variables across the three areas, a standardized score is calculated in which the observation that provides the most economic freedom (e.g., lowest tax burden) gets a score of 10 and the one that provides the least economic freedom (e.g., highest tax burden) gets a score of 0. Every other observation falls proportionately between 0 and 10. Within each area, the scores for each state are averaged to get a score

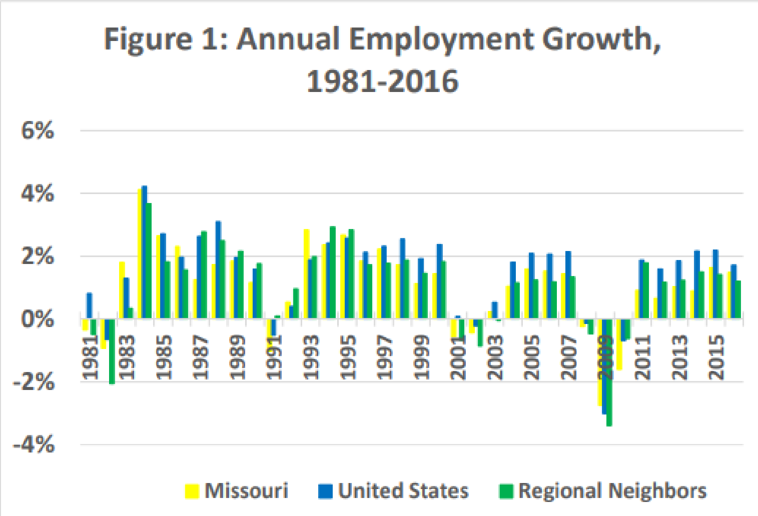


Table 1. Employment Growth in Missouri and Its Regional Neighbors

	Employment Growth, 1981-2016	US Rank	Regional rank (of 16)	Employment Growth, 2000-2016	US Rank	Regional rank (of 16)
Missouri	46.2%	36	10	7.0%	44	12
United States Average	68.5%			17.1%		
Midwest Average	44.3%			6.0%		
Neighboring State Average	47.7%			9.5%		

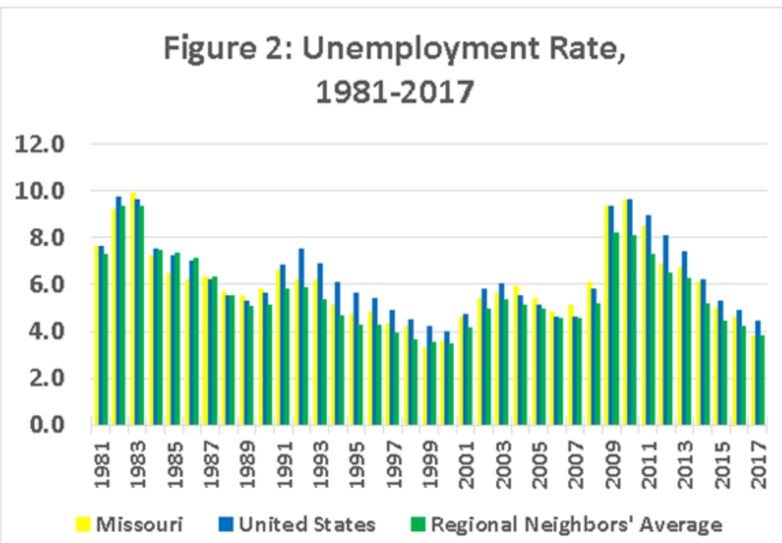


Table 2. Wages and Salaries Growth in Missouri and Its Regional Neighbors

	Wages and Salaries Growth, 1981-2017	US Rank	Regional rank (of 16)	Wages and Salaries Growth, 2000-2017	US Rank	Regional rank (of 16)
Missouri	404.9%	39	10	58.3%	43	12
United States Average	510.5%			73.0%		
Midwest Average	375.8%			54.4%		
Neighboring State Average	413.8%			64.3%		

for that area. The three area scores are then averaged to get the overall economic freedom score for a state.

3. HOW DOES MISSOURI COMPARE ON ECONOMIC PROSPERITY?

For many years, Missouri's economy has tended to lag behind its neighbors as well as the rest of the country. This section will examine various measures of the labor market and the economy over the period 1981 to the present. That period was chosen to correspond to the full time period for which the state economic freedom index (EFNA) is available.

As Figure 1 illustrates, Missouri's annual employment growth has been below the U.S. average for 30 of the last 36 years, including 20 of the last 21, and behind its regional neighbors' average for 17 of those years, including five of the last seven. Table 1 shows the growth of employment over two periods, 1981-2016 and 2000-2016. Missouri's growth of 46.2% and 7.0% trails behind the U.S. and neighboring state averages in both periods, growing faster than only six of its 15 regionally neighboring states over the longer term and only four over the shorter term.[7]

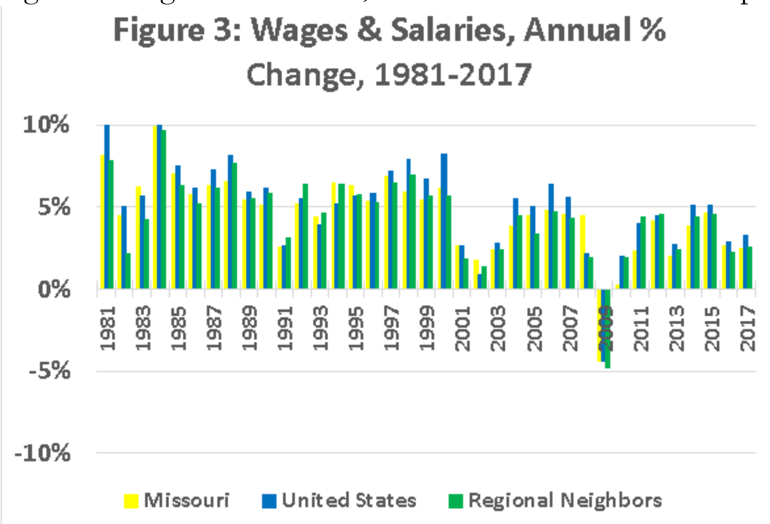
A relatively poor comparison also exists with the unemployment rate. As Figure 2 shows, in 31 of the last 37 years, Missouri's unemployment rate has exceeded its regional neighbors' average, including 17 of the last 18 years. The only exception was 2017 when the two rates were the same, 3.8 percent.

has also lagged behind in the annual growth of wages and salaries. Figure 3 shows that Missouri wages and salaries have grown slower than the U.S. average for 30 of the last 37 years, including the last eight years in a row and 13 of the last 15. Table 2 shows the growth of wages and salaries over two periods, 1981-2017 and 2000-2017. Missouri's growth of 404.9% and 58.3% trails behind the U.S. and neighboring state averages in both periods, growing faster than only six of its

15 regionally neighboring states over the longer term and only four over the shorter term. Table 2 here

As a result of that slow growth in wages and salaries, Missourians tend to have below average incomes. The U.S. average for per capita personal income in 2017 was $50,392, 15.4% above Missouri's $43,661. The average of Missouri's regional neighbors was $46,904, 7.4% higher. As Figure 4 illustrates, Missouri has been below the U.S. average for every one of the last 37 years, and behind its regional neighbors' average for 16 of those years, including the last 13 years in a row.

Table 3 shows the growth of per capita personal income over two periods, 1981-2017 and 2000-2017. Missouri's growth of 318.4% and 56.0% trails behind the U.S., Midwest, and neighboring state averages in both periods, growing faster than only one of its 15 regionally neighboring states over the longer term and none of them over the shorter term.



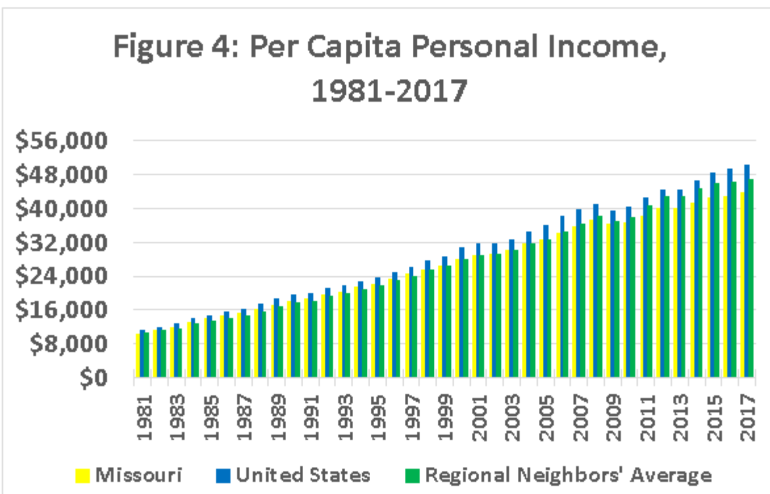


Table 3. Per Capita Personal Income Growth in Missouri and Its Regional Neighbors

	Per Capita Personal Income Growth, 1981-2017	US Rank	Regional rank (of 16)	Per Capita Personal Income Growth, 2000-2017	US Rank	Regional rank (of 16)
Missouri	318.4%	41	15	56.0%	47	16
United States Average	347.5%			64.7%		
Midwest Average	348.7%			67.5%		
Neighboring State Average	339.8%			68.3%		

The growth of state gross domestic product (GDP) shows how much the productive output of the state changes over time. As Figure 5 shows, annual GDP growth has been below the U.S. average for 26 of the last 37 years, including seven of the last eight, and behind its regional neighbors' average for 22 of those years, including six of the last eight. Table 4 shows the growth of employment over two periods, 1981-2017 and 2000-2017. Missouri's growth of 481.6% over the longer period trails behind the U.S. and neighboring state averages, growing faster than only six of its 15 regionally neighboring states. Over the shorter, more recent period, Missouri's growth of 61.5% trails behind the U.S., Midwest, and neighboring state averages, ranking dead last among its 15 regionally neighboring states and 49th in the nation as a whole.

Finally, another way to assess the health of a state economy is to examine how fast the population is growing. From 1981 to 2017, the state's population has grown 24.0%, from about 4.9 million to about 6.1 million. The U.S. population has grown nearly twice as fast, at 41.9%. As illustrated in Figure 6, Missouri's annual growth has lagged behind the overall U.S. growth every one of the last 37 years. Its regional neighbors have also grown faster five of the last seven years.

As Table 5 shows, Missouri's population growth lags the U.S. and neighboring state averages for the more recent time period as well (2000-2017). Overall, based on the data described in this section for six different measures of the labor market and the economy as a whole, the evidence clearly shows that Missouri's economy is underperforming.

4. RELATIONSHIP BETWEEN ECONOMIC AND LABOR MARKET FREEDOM AND ECONOMIC PROSPERITY

Over 200 articles cite the EFNA[8]. The vast majority of the literature that uses it in statistical tests finds that economic freedom is associated with positive economic outcomes such as faster economic growth, faster employment growth, lower unemployment, and higher levels of new business formation. Researchers frequently have found that labor market freedom has a relatively stronger association with these outcomes than the other two areas (government spending and taxation). This section will review some of that previous literature related specifically to labor market outcomes.

Garrett and Rhine (2011) found that economic freedom was positively associated with employment growth.[9] Of the three areas of the index, they found that the labor market freedom component was more strongly associated with employment growth than the other two areas. Cebula and Alexander (2015) found that the female labor force participation rate was positively associated with labor market freedom.[10] They did not include the overall economic freedom index. Wong and Stansel (2016) find similar results at the metro area level.[11]

Heller and Stephenson (2014) found that greater levels of state economic freedom were associated with lower unemployment and with higher labor force participation and employment-population ratios.[12] When examining the three areas of the index separately, the labor market freedom area was found to be negatively associated with unemployment, but it was not always statistically significant and the other two areas tended to have a larger coefficient. The relationship with the other two dependent variables tended to be insignificant. Heller and Stephenson (2015) found similar

Figure 5: Gross Domestic Product, Annual % Change, 1981-2017

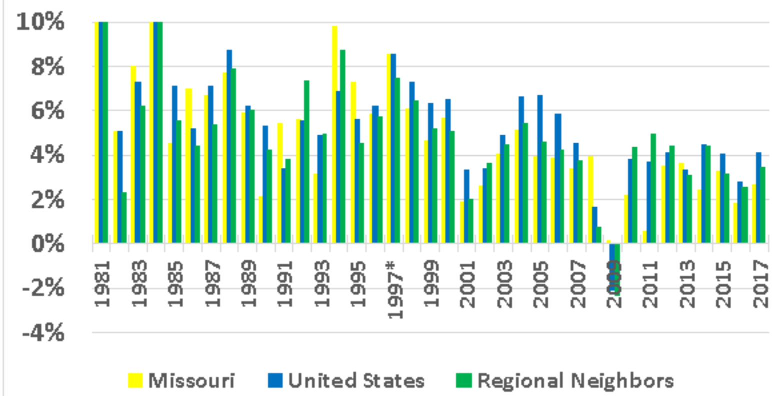


Table 4. GDP Growth in Missouri and Its Regional Neighbors

	GDP Growth, 1981-2017	US Rank	Regional rank (of 16)	GDP Growth, 2000-2017	US Rank	Regional rank (of 16)
Missouri	481.6%	38	10	61.5%	49	16
United States Average	609.8%			88.5%		
Midwest Average	470.5%			70.9%		
Neighboring State Average	487.5%			81.4%		

Figure 6: Annual Population Growth, 1981-2017

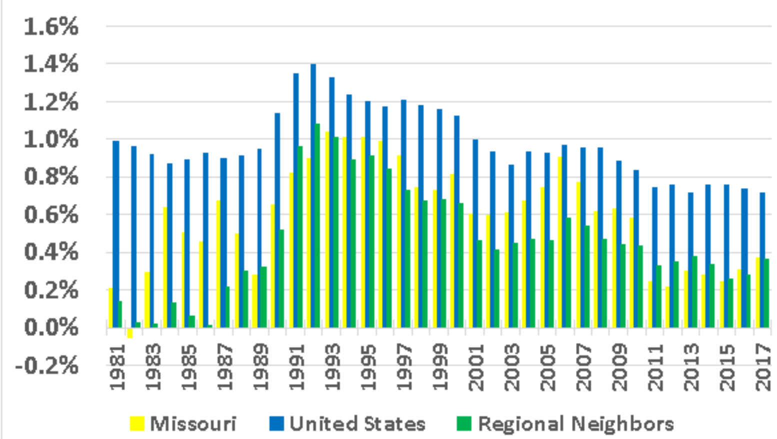


Table 5. Population Growth in Missouri and Its Regional Neighbors

	Population Growth, 1981-2017	US Rank	Regional rank (of 16)	Population Growth, 2000-2017	US Rank	Regional rank (of 16)
Missouri	24.0%	28	6	9.0%	32	10
United States Average	41.9%			15.4%		
Midwest Average	15.0%			5.4%		
Neighboring State Average	21.5%			9.1%		

results: a negative relationship between overall results: a negative relationship between overall economic freedom and state unemployment rates and a positive relationship between economic freedom and labor force participation rates and employment-population ratios.[13] Like their previous work, the labor market area was found to have a statistically significant relationship (the expected negative one) with unemployment but the other two areas had larger coefficients and labor market freedom was not associated with either of the other two outcomes. The authors conclude that their "finding that the size of government and the structure of taxation are more important than labor market policies *per se* is particularly suggestive that policies affecting new enterprises created by entrepreneurs plays a crucial role in explaining cross-state labor market conditions."

There is a substantial literature related to that relationship between economic freedom and entrepreneurial activity. The connection to the topic at hand is that when labor market restrictions create difficulties for employer-employee matches, those potential employees may be more likely to become entrepreneurs. In addition, restrictions on economic freedom in general may make it harder for those entrepreneurs to be successful. Hafer (2015) provides a recent discussion of that literature and finds that economic freedom is positively associated with two country-level measures of entrepreneurial activity.[14] At the state level, Sobel (2008) found state economic freedom to be positively associated with venture capital investments, patents, sole proprietorship growth rates, and firm establishment birthrates.[15] Hall and Sobel (2008) find a positive association with the Kauffman Index of Entrepreneurial Activity, and Wiseman and Young (2013) find one with net entrepreneurial activity (productive minus unproductive).[16]

Finally, a related literature exists on the minimum wage. It tends to find negative employment effects. That literature is too vast to review in detail here: Neumark et al. (2014) provides a good example. They find that higher effective minimum wages are associated with job losses for low-skilled workers, especially teenagers.[17] Similarly, the literature on the impact of unions is large. Krol and Svorny (2007) review some of that literature and provide findings that, like most other work, show a negative relationship between union membership and the growth of state employment. [18]

The previous literature indicates that economic freedom tends to be associated with good economic outcomes. Factors producing impediments to a more freely functioning labor market—e.g., minimum wages, unionization, and an excessively large public sector bureaucracy—tend to generate negative economic consequences for state economies as a whole. Figures 7-9 provide some evidence of that relationship. Annual changes in EFNA labor market freedom scores (from 2000 to2015) are positively correlated with subsequent annual changes in employment (Figure 7) and wages and salaries (Figure 8) in the following year (from 2001 to 2016).[19] Those annual changes in freedom also are negatively correlated with unemployment rates (Figure 9) the following year.

5. HOW DOES MISSOURI COMPARE ON LABOR MARKET FREEDOM?

Labor Market Freedom

Before turning to specifically considering labor market freedom, it is useful to see how Missouri ranks in overall freedom. To see where Missouri ranks in terms of economic freedom, consider the numbers presented in Table 6. There we show Missouri relative to neighboring and Midwestern region states.

The most recent annual EFNA report (based on 2015 data) ranks Missouri 13th out of all states, down from 7th in 1981 and 5th in 1993, but only 7th out of its 16-state region. While Missouri is above the regional average, and well above states like Kentucky, Minnesota, and Illinois, it is well below states like South Dakota, Tennessee and Oklahoma. As a basis of comparison, we also show the ranking of Missouri using a similar assessment of economic freedom, the Freedom in the 50 States (F50S) report produced by the Cato Institute. [20] This report, using data for 2014, ranks Missouri a bit lower overall at 14th out of all states, down from 9th in 2008, but a bit higher at 6th among regional neighbors.[21] (Table A6 in the appendix lists the scores and ranks for all 16 states.) While overall economic freedom levels are not so bad, labor market freedom is a bit lower.

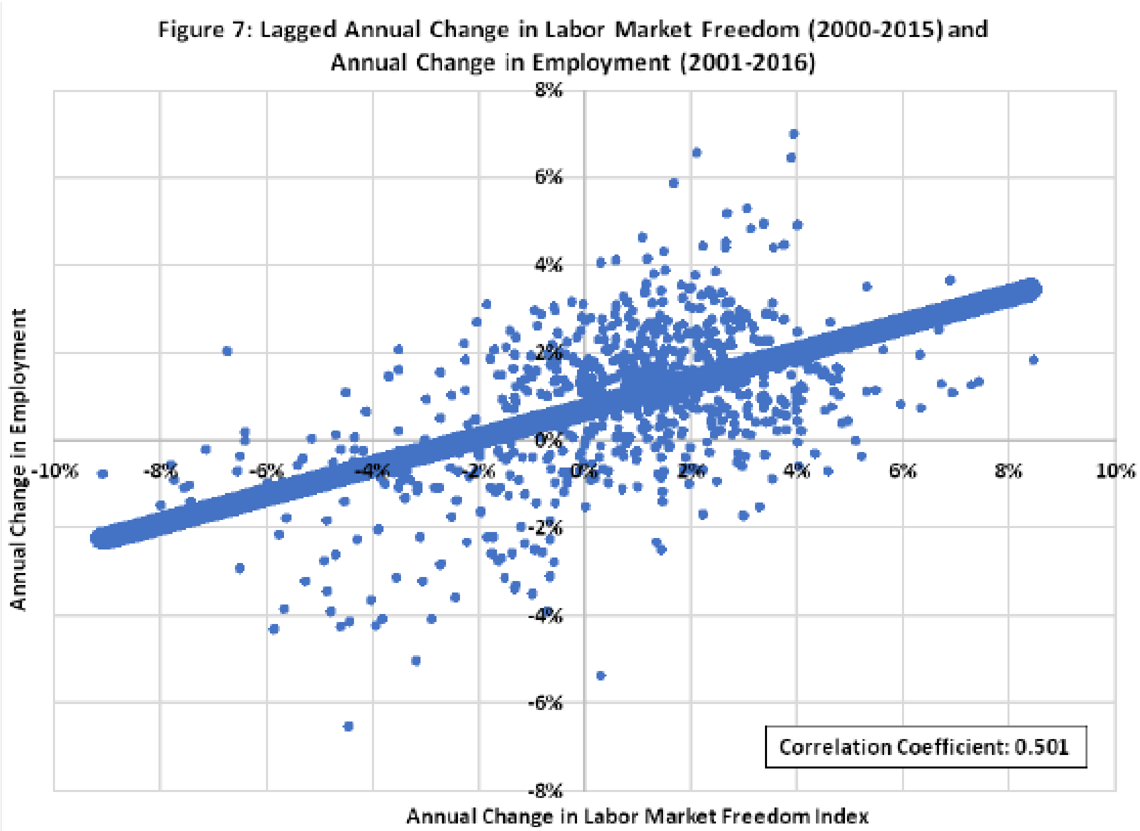


Figure 7: Lagged Annual Change in Labor Market Freedom (2000-2015) and Annual Change in Employment (2001-2016)
8%
6%
4%
2%
0%
-2%
-4%
-6%
-8%
-10%
-8%
-6%
-4%
-2%
0%
2%
4%
6%
8%
10%
Annual Change in Employment
Annual Change in Labor Market Freedom Index
Correlation Coefficient: 0.501

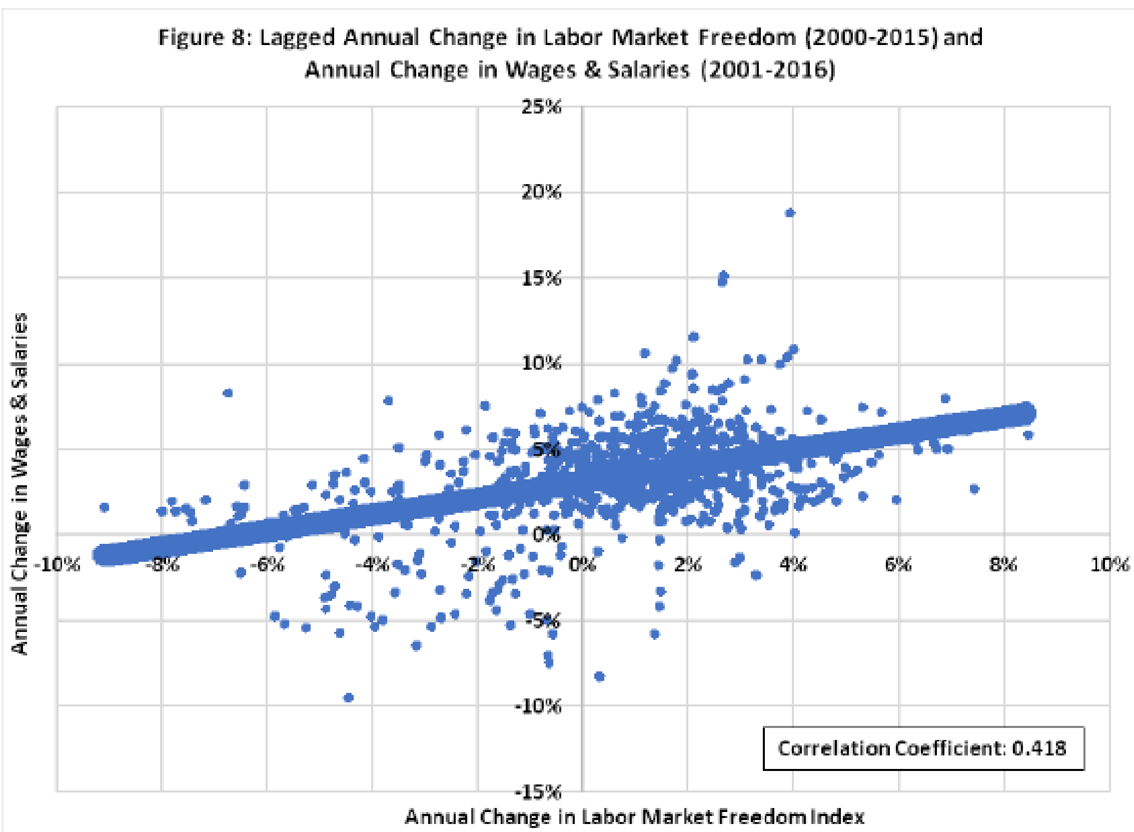


Figure 8: Lagged Annual Change in Labor Market Freedom (2000-2015) and Annual Change in Wages & Salaries (2001-2016)
25%
20%
15%
10%
5%
0%
-5%
-10%
-15%
-10%
-8%
-6%
-4%
-2%
0%
2%
4%
6%
8%
10%
Annual Change in Wages & Salaries
Annual Change in Labor Market Freedom Index
Correlation Coefficient: 0.418

Figure 9: Lagged Annual Change in Labor Market Freedom (2000-2015) and Unemployment Rate (2001-2016)

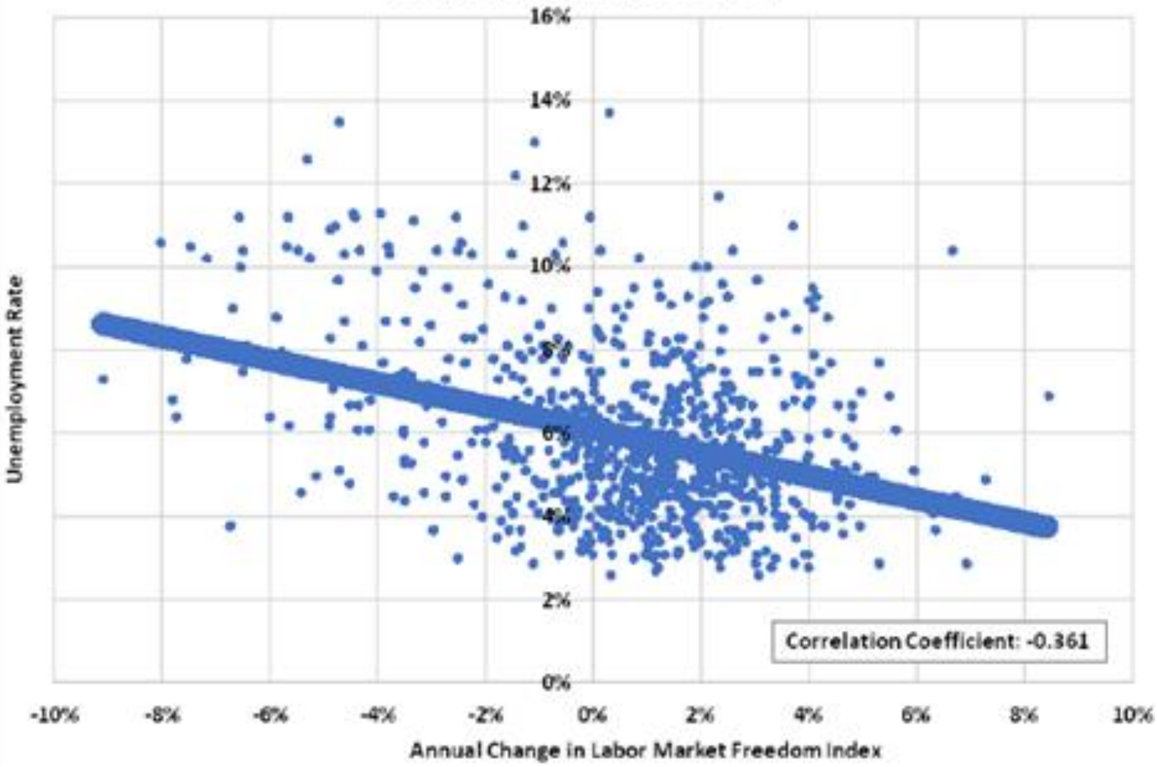


Table 6. Economic Freedom in Missouri and Its Regional Neighbors

	EFNA 2017 (2015 data)	US Rank	Regional rank (of 16)	F50S 2016, Economic Freedom (2014 data)	US Rank	Regional rank (of 16)
Missouri	7.32	13	7	0.11	14	6
United States	6.99			-0.04		
Midwest Average	7.09			0.04		
Neighboring State Average	7.07			0.06		

Table 7. Labor Market Freedom in Missouri and Its Regional Neighbors

	EFNA 2017 (2015 data)	US Rank	Regional rank (of 16)	F50S 2016 (2014 data)	US Rank	Regional rank (of 16)
Missouri	7.56	17	7	-0.017	27	12
United States	7.41			0.001		
Midwest Average	7.50			0.015		
Neighboring State Average	7.44			0.028		

The most recent EFNA's labor market freedom index, which employs the three different variables discussed in Section 2, ranks Missouri 17th, behind or tied with six of its 15 regional neighbors. However, the F50S, which utilizes eight different variables,[22] ranks Missouri only 27th, behind 11 of those 15 states. Table 7 provides the information specific to the labor market freedom measures. (Table A7 in the appendix lists all 16 states.) To gain a better perspective on the relative competitiveness of the Missouri labor market, we now look at each of the components to the labor market freedom index.

Minimum Wage

Both indexes incorporate a measure for the state-level minimum wage. Minimum wages are what economists call a "price floor." To have any effect, they must be set above the market-determined wage. They have a negative effect on labor markets when they raise the wage of low-skilled labor higher than the market wage for such labor before the minimum was imposed. This higher wage induces employers to hire fewer hours of low-skilled labor than they would have otherwise. While imposing this higher-than-market minimum wage could benefit existing workers by raising their hourly wage, there are often other changes, such as fewer hours, fewer fringe benefits, etc., that tend to offset that increase. Furthermore, the quantity effect—how many jobs are lost due to the higher wage—is difficult to observe because it usually involves delayed hiring of new workers as opposed to firing of existing workers. Finally, the minimum wage is a rather blunt instrument to help increase the economic well-being of low-skilled workers. It provides the higher wage to all workers regardless of their economic circumstance. Many minimum wage workers are high school or college students seeking to earn some extra spending cash, not exactly the same as those in need of a wage subsidy to put food on the table.

Regardless, all minimum wages involve erecting an unnecessary and burdensome barrier between employees and employers in their efforts to voluntarily engage in mutually beneficial transactions. And, they tend to harm the lowest-skilled workers, the very people they are intended to help, by making it much more difficult to get onto the first rung of the ladder of economic success. Table 8 shows how Missouri's minimum wage compares with the national average and that of its nearby-states.

Missouri's 2018 minimum wage of $7.85 is 8.3% higher than the federal minimum wage of $7.25. However, there are 28 other states that also exceed that level, 27 of which also exceed Missouri's wage. (Details are provided in Appendix Table A8.) Having only the 28th highest minimum wage puts Missouri in the middle of the pack both nationally and amongst its regional neighbors. Eight of the 15 nearby states use the lower federal minimum wage; seven of them have higher minimum wages than Missouri.

Because income levels and cost of living vary across states, the minimum wage level alone does not provide a good way to assess the restriction it places on labor markets. For example, the federal minimum wage of $7.25 is much less burdensome in wealthy states, where market wages would often be above that amount without the law, than it is in poor states. That is, if the prevailing market wage is $7.50, a minimum wage of $7.25 is not binding. It does not affect the ability of most workers and employers to voluntarily contract, though it would adversely impact the lowest skilled workers, essentially rendering them unemployable.

In contrast, if the prevailing market wage in a lower-cost area is only $6.50, a minimum wage of $7.25 *is* binding. It would significantly curtail the ability of many workers and employers to engage in trade. One of the consequences of this is that workers can sometimes be replaced by machines, as is done with self-checkout in retail stores and self-ordering kiosks in fast-food restaurants. To adjust for that variance in the degree to which a minimum wage is binding, the EFNA measures full-time minimum wage income in each state as a percentage of their per capita personal income.

As is shown in Table 8, a full-time minimum wage income in Missouri would be 36.7% of per capita personal income in 2017, the 23rd highest in the nation. While this ranks Missouri worse nationally than on the unadjusted minimum wage, amongst its 15 regional neighbors it ranks the same on this measure (8th). That is down from a peak low of 31.4% in 2006 (30th highest nationally and 10th highest regionally), in part because Missouri's minimum wage has increased over 52 percent over the past decade. If that trend continues, Missouri will continue to put itself at a greater and greater competitive disadvantage with its neighbors.

Government employment

Table 9 shows how Missouri compares on the number of state and local government employees as a percentage of total employment in the state. This captures the extent to which the government competes with private sector employers for workers. Missouri's 10.3% is below the U.S. and regional averages, ranking only 29th highest and 10th highest, respectively. However, in the first year of the EFNA dataset, they fared much better, ranking 47th and 16th.

Table 9. Government Employment Share in Missouri and Its Regional Neighbors

	Government Employment as a Percentage of Total State Employment, 2015	US Rank	Regional rank (of 16)
Missouri	10.3%	29	10
United States Average	10.8%		
Midwest Average	10.7%		
Neighboring State Average	11.3%		

Right to Work

In states that have Right to Work (RTW) laws, employees have the freedom to decide whether or not to join a labor union. This is an important element of labor market freedom. An RTW law was passed in Missouri in 2017, but it has been held up by a successful petition drive to send it to the voters for approval.[23] So, even though technically Missouri has not yet enacted such a law, all of its eight immediate neighbors have. Of its 15 regional neighbors only three other states do not have a RTW law on their books (Illinois, Minnesota, and Ohio).[24]

Instead of a binary (i.e., "yes or no") variable for RTW laws, the EFNA uses a measure of union density to provide a more precise measure of how unions impact labor markets. The data is provided by Hirsch and McPherson (2003) and is updated annually on their website.[25] For Missouri the percentage of workers covered by a collective bargaining agreement is 9.8%.

Table 10. Union Density in Missouri and Its Regional Neighbors

	Percentage of Workers Covered by a Collective Bargaining Agreement, 2015	US Rank	Regional rank (of 16)
Missouri	9.8%	29	9
United States Average	11.5%		
Midwest Average	11.6%		
Neighboring State Average	8.0%		

Table 11. Occupational Licensing in Missouri and Its Regional Neighbors

	IJ Index US Rank*	Number of 102 Lower Income Occupations Licensed	Average Fees	Average Estimated Calendar Days Lost
Missouri	22	37	$179	348
United States Average		54.7	$267	375.6
Midwest Average		46.2	$189	252.2
Neighboring State Average		48.8	$179	292.4

Notes: *1=most burdensome, 50=least burdensome

As reported in Table 10, this is below the U.S. and Midwest averages, but substantially above the 8.0% average amongst Missouri's immediate neighbors. (See Appendix Table A10 for details.)

Occupational licensing

Licensing is another way that government policies can impose restrictions on workers' labor market freedom. One way they do so is by making it more difficult for workers to change careers when they lose their job. They also sometimes make it harder for ex-criminals to re-enter the work force, thus creating a major barrier to finding work and avoiding recidivism.[26] In fact, Hall, Harger, and Stansel's (2015) findings confirmed this: recidivism rates in states were negatively associated with economic freedom and even more strongly so with labor market freedom.[27] Requiring a government license is not the only way to protect public safety, nor is it necessarily the best way. For example, private certification, inspections, and consumer reviews (such as those on Angie's List and Yelp) can all help to prevent unqualified workers from harming consumers.

The Institute for Justice (IJ) has produced a state-level index that measures the burdensomeness of licensing restrictions on 102 lower-income occupations, "jobs that can offer opportunities for upward mobility to those of modest means, such as cosmetologist, auctioneer, athletic trainer, landscape contractor and massage therapist."[28] It finds that on average these laws require passing one exam, paying over $260 in fees, and accruing almost one full year of education and experience. While some restrictions are an attempt to address health and safety concerns, others appear to be outright attempts to restrict competition from new entrants into the market. For example, Missouri requires hair braiders to have a cosmetology or barber license, despite the fact that they engage in neither cosmetology nor hair-cutting.[29] As Table 11 shows, the 2017 edition of the IJ study finds that Missouri has the 22nd most burdensome licensing laws, worse than 10 of its 15 regional neighbors (see Appendix Table A11). The first edition (from 2012) ranked Missouri 35th (i.e., *less* burdensome) so things are trending in the wrong direction.[30]

State tax laws

Finally, state tax laws can also impact labor markets. High personal income tax rates can negatively affect individuals' incentives to work and high taxes on employers -- such as corporate income taxes and unemployment insurance taxes -- can negatively affect their ability to expand and hire new workers. According to the Tax Foundation, Missouri's 2018 top personal income tax rate of 5.9% exceeds that of nine of its 15 regional neighbors.[31] Even Illinois has a lower rate (4.95%) and has one flat rate, which compares favorably to Missouri's 10-bracket progressive tax system. Of course, the income level at which that top bracket applies is important too. In Missouri, the top bracket applies to all taxable income above $9,072 in 2018, which makes the comparison even worse. At that income level, Missouri's tax rate exceeds every single one of its 15 regional neighbors.

Missouri's corporate income tax rate of 6.25% is higher than seven of its 15 regional neighbors,[32] in part because of a plethora of tax incentives that narrow the tax base.[33] However, as Hafer and Wall (2017) conclude, determining the burden of taxes on employers is much more complicated than just examining tax rates.[34] A more accurate approach is to examine "effective tax burdens," which take into account the tax base as well as the rates. They find that the effective tax burden on employers in Missouri is considerably higher than other rankings indicate. That disparity is problematic for Missouri's economy.

6. PRESCRIPTION FOR POLICY REFORM

Given that most states' economies are performing better than Missouri's, the state's policy makers can learn from what other states have done to make their economies more successful. Our focus in this paper is on policies that directly impact labor markets, but that is not meant to suggest that there are no other policy areas in which Missouri could improve.

Missouri's current minimum wage of $7.85 is above the federal level and higher than 22 other states, including eight of Missouri's 15 regional neighbors. When adjusted for state per capita personal income, Missouri's minimum wage is higher than 27 other states (and eight regional neighbors). A ballot initiative has been submitted for November 2018 that would raise it to $12.00 by 2023, increasing in increments, to $8.60 in 2019 and then by $0.85 per year until 2023.[35] While numerous other states are considering similar increases, that $12 would currently give Missouri the highest minimum wage in the country (ahead of Washington's $11.50 and California and Massachusetts' $11). Even the increase to $8.60 would give Missouri a higher minimum wage than 30 other states, including 11 of its 15 regional neighbors. To avoid further damage to low-skilled workers, Missouri should abolish its minimum wage or at least lower it to the federal level; 21 other states take that approach, including 8 of Missouri's regional neighbors. Not acting will continue to make Missouri's labor market less attractive to current and potential employers relative to many other states.

While the relative size of Missouri's public sector is below average, it is trending in the wrong direction. Furthermore, every state has the potential for reductions in unneeded bureaucracy. Missouri's labor markets would be freer (and more competitive) if it reduced the number of public sector workers relative to the total state workforce.

In states like Missouri that lack Right to Work (RTW) laws, workers lack the freedom to decide whether or not to join a labor union (if one exists at their place of employment). All eight of Missouri's bordering states have an RTW law, and all but three of its 15 regional neighbors do. Though a Right to Work law was passed in 2017 in Missouri, labor organizations successfully petitioned to have the measure sent to the voters for approval.[36] That vote will occur in the fall of 2018, the same time as the vote to raise the minimum wage. The passage of a Right to Work law and a rejection of the increase in the minimum wage would help make Missouri more competitive with its neighbors.

One of Missouri's neighbors, the state of Nebraska, was ranked by the Institute for Justice as having the least burdensome occupational licensing restrictions for 102 low-income occupations.[37] Nevertheless, Nebraska has made strides in recent years to reduce that burden even further by eliminating or loosening the restrictiveness of individual licenses. In April 2018, Nebraska passed a more comprehensive law that the *Wall Street Journal* Editorial Board called "a model for licensing reform."[38] Among other provisions, it will require legislators to examine one-fifth of the licenses every year in an effort to eliminate or make less restrictive those that are unnecessarily burdensome. Similar measures are being considered in Colorado, Louisiana, and Ohio.[39] Given that Missouri has the 22nd most burdensome occupational licensing system, implementing a reform similar to Nebraska's would be a great step forward in making the state's labor market more free.

Lowering taxes is another way that Missouri could improve its labor markets. Its personal income tax rates are particularly high compared to its neighbors. Missouri's corporate income tax rate is also problematically high, in part due to an unusually narrow tax base. Those high income taxes put the state at a competitive disadvantage, especially since some of Missouri's regional neighbors have been reducing those taxes in recent years.[40] Missouri should follow suit. With both income taxes, the ideal strategy would be to eliminate loopholes, thereby broadening the tax base, which would enable the tax rates to be substantially reduced. The personal income tax also ought to be changed from a 10-rate progressive system to a one-rate flat tax, like three of its regional neighbors (Illinois, Indiana, and Michigan) and like Missouri's corporate income tax.

Implementing these reforms would make Missouri's labor markets more free. Given that previous researchers have found the economic prosperity of states to be positively associated with the extent to which their labor markets are free of excessive government restrictions, these reforms should also lead to an improved economy. Since Missouri's economy has been lagging behind in recent years, that would be a welcome change for the Show Me State.

NOTES

[1] James Gwartney, Robert Lawson, and Walter Block. *Economic Freedom of the World, 1975–1995*. Vancouver: Fraser Institute, 1996.

[2] James Gwartney, Robert Lawson, and Joshua Hall. *Economic Freedom of the World: 2017 Annual Report*. Vancouver: Fraser Institute, 2017.

[3] Dean Stansel, Jose Torra, and Fred McMahon. *Economic Freedom of North America 2017*. Vancouver: Fraser Institute, 2017.

[4] Dean Stansel and Meg Patrick Tuszynski. "Sub-national Economic Freedom: A Review and Analysis of the Literature." *Journal of Regional Analysis and Policy*. Forthcoming.

[5] Dean Stansel. "U.S. Metropolitan Area Economic Freedom Index." Unpublished working paper, 2018.

[6] Total employment data comes from the broader measure from the Bureau of Economic Analysis, not the narrower "non-farm employment" measure from the Bureau of Labor Statistics.

[7] Throughout this report, the term "regional neighbors" will be used to describe these 15 states. The 11 states in the Midwest region, as defined by the U.S. Census Bureau are Indiana, Michigan, Minnesota, North Dakota, Ohio, South Dakota, Wisconsin, Illinois, Iowa, Kansas, and Nebraska, the latter four of which border Missouri. The other four of the 15 states are the following states in the South region that also border Missouri: Arkansas, Kentucky, Oklahoma, and Tennessee. Individual state data for this and remaining tables is available upon request.

[8] Stansel and Tuszynski. "Sub-national Economic Freedom," Op cit.

[9] Thomas A. Garrett and R.M. Rhine, "Economic Freedom and Employment Growth in US States," *Federal Reserve Bank of St. Louis Review*, 93, No. (2011), 1-18.

[10] Richard J. Cebula and Gigi Alexander, "An Exploratory Empirical Note on the Impact of Labor Market Freedom on the Female Labor Force Participation Rate in the US," *Applied Economics Letters*, 22 No. 8 (2015): 632-36.

[11] Crystal Wong and Dean Stansel, "An Exploratory Empirical Note on the Relationship between Local Labor Market Freedom and the Female Labor Force Participation Rate in US Metropolitan Areas," Empirical Economics Letters, 15, No. 11 (2016), 1095-1100.

[12] Lauren R. Heller and E. Frank Stephenson, "Economic Freedom and Labor Market Conditions: Evidence from the States," *Contemporary Economic Policy*, 32, No. 1 (2014): 56-67.

[13] Lauren R. Heller and E. Frank Stephenson, "Economic Freedom, Homeownership, and State Labor Market Conditions," *Journal of Entrepreneurship and Public Policy*, 4, No. 2 (2015): 142-151.

[14] R.W. Hafer, "On the Relationship between Economic Freedom and Entrepreneurship." In Cebula, Hall, Mixon and Payne, eds., *Economic Behavior, Economic Freedom and Entrepreneurship*, (Edward Elgar Publishing, 2015).

[15] Russell Sobel, "Testing Baumol: institutional quality and the productivity of entrepreneurship," *Journal of Business Venturing*, 23, No. 6 (2008), 641-655.

[16] Joshua C. Hall and Russell S. Sobel, "Institutions, entrepreneurship and regional differences in economic growth," *Southern Journal of Entrepreneurship*, 1, No. 1 (2008): 70-96.

Travis Wiseman and Andrew T. Young, "Economic freedom, entrepreneurship and income levels: some US state-level empirics," *American Journal of Entrepreneurship*, 1, (2013): 104-124.

[17] David Neumark, JM Ian Salas, and William Wascher, "More on Recent Evidence on the Effects of Minimum Wages in the United States," *IZA Journal of Labor Policy*, 3, no. 24 (2014): 1-26.

[18] Robert Krol and Shirley Svorny, "Unions and Employment Growth: Evidence from State Economic Recoveries," *Journal of Labor Research*, 28, No. 3 (2007): 525–35.

[19] A one-year lag is used because changes in policies take time to have an effect.

[20] William Ruger and Jason Sorens, *Freedom in the 50 States*, Washington, DC: Cato Institute, 2016.

[21] It should be noted that the F50S uses a different scoring system. Rather than a 0 to 10 index, they score the states relative to the 50-state average, so scores can be either negative (for less-free than average) or positive (for more-free than average).

[22] Those eight variables are measures of: 1) General right-to-work law; 2) Short-term disability insurance; 3) Workers' compensation coverage regulations; 4) Workers' compensation funding regulations; 5) Minimum wage; 6) Employer verification of legal status; 7) Employee anti-discrimination law; and 8) Paid family leave.

[23] http://www.stltoday.com/news/local/govt-and-politics/plan-to-move-missouri-s-right-to-work-vote-to/article_f6b3e253-6c91-5b9b-baf4-5e8a3eb7d61c.html Accessed on 4/29/18

[24] http://www.nrtw.org/right-to-work-states/ Accessed on 5/5/18.

http://www.ncsl.org/research/labor-and-employment/right-to-work-laws-and-bills.aspx

[25] Barry T. Hirsch and David A. Macpherson, "Union Membership and Coverage Database from the Current Population Survey: Note," *Industrial and Labor Relations*

Review, 56, No. 2, (January 2003): 349-54. Their website is http://unionstats.com/.

[26] According to the National Employment Law Project, as of April 2018, 31 states (including Missouri) and over 150 cities and counties have enacted "ban the box" measures, which prevent employers from including a question about criminal history on initial job applications. These are designed to make it easier for ex-convicts to secure employment and thereby avoid returning to a life of crime.

https://www.nelp.org/publication/ban-the-box-fair-chance-hiring-state-and-local-guide/

[27] Joshua Hall, Kaitlyn Harger, and Dean Stansel, "Economic Freedom and Recidivism: Evidence from US States," *International Advances in Economic Research*, 21 (2015): 155-65.

[28] Dick M. Carpenter II, Lisa Knepper, Kyle Sweetland and Jennifer McDonald. *License to Work: A National Study of Burdens from Occupational Licensing, 2nd edition.* Washington, DC: Institute for Justice, 2017.

[29] http://ij.org/press-release/st-louis-area-braiders-appeal-missouri-braiding-law-u-s-supreme-court/ Accessed on 4/28/18.

[30] Dick M. Carpenter II, Lisa Knepper, Angela Erickson, and John K. Ross. *License to Work: A National Study of Burdens from Occupational Licensing.* Washington, DC: Institute for Justice, 2012.

[31] https://taxfoundation.org/state-individual-income-tax-rates-brackets-2018/ Accessed on 5/5/18.

[32] https://taxfoundation.org/state-corporate-income-tax-rates-brackets-2018/ Accessed on 5/5/18.

[33] https://taxfoundation.org/three-tax-plans-missouri/ Accessed on 5/5/18.

[34] R.W. Hafer and Howard J. Wall. "Taxing Business in Missouri." *CEE Policy Series*, No. 27. St. Charles, MO: Center for Economics and the Environment, John W. Hammond Institute for Free Enterprise, Lindenwood University, 2017.

[35] http://www.newstribune.com/news/news/story/2018/may/03/signatures-acquired-steps-toward-minimum-wage-increase/724598/ Accessed on 5/4/18.

[36] http://www.stltoday.com/news/local/govt-and-politics/plan-to-move-missouri-s-right-to-work-vote-to/article_f6b3e253-6c91-5b9b-baf4-5e8a3eb7d61c.html Accessed on 4/29/18

[37] Carpenter et al., *License to Work, 2nd edition.*

[38] Editorial Board. "A Model for Licensing Reform," *Wall Street Journal*, April 4, 2018.

[39] http://ij.org/press-release/nebraska-governor-signs-landmark-reform-occupational-licensing/ Accessed on 4/30/18.

[40] https://taxfoundation.org/proposed-illinois-tax-hikes-regional-outlier/ Accessed on 5/5/18.