
Do public sector unions erode business climates?

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This article addresses whether the growing prevalence of public sector unions exerts effects that spill over to the private sector. The hypothesis that higher prevalence erodes business climate is tested on an index of CEO ratings of the best and worst states in which to conduct business. Evidence indicates that business climates are inversely related to public sector union prevalence. An implication is that erosion of business climates should be a concern to union members as well since they rely on businesses, their employees and customers to pay for government.

Keywords: public unions; business climate; government size; bureaucracy

JEL Classification: H11; H73; J45

I. Introduction

Public sector union membership has risen 61% over the period 1973 to 2011 in the United States: from 23% to 37% of state and local government employees (Hirsch and MacPherson, 2012). While most research has focused on effects on their own members, this article addresses whether their growing prevalence spills over to the private sector. Growing power of government employees that fosters larger public sectors is hypothesized to alter environments within which businesses navigate.

This article first discusses the literature on how public sector unions may influence government policies. That their growing prevalence adversely influences business climates is then examined based on the hypothesis that businesses must navigate higher taxes and debt along with more complex and burdensome regulatory structures. Empirical support is then provided for the hypothesis that greater prevalence of unionism erodes business climates as defined by the Chief Executive Magazine's rankings of business climates and as graded by CEOs (Donlon, 2012).

Public sector unions and business climates

Government workers are generally known to experience wage premiums stemming from union membership. Gittleman and Pierce (2012) concluded that salary and benefits of government employees is as much as 21% higher than private sector employees doing similar work. Bitzan and Bahrami (2010) find positive premiums for 27 out of 41 occupations examined, with teachers receiving a 61% premium, secretaries and administrative assistants receiving a 5% premium and 14 occupations receiving no statistically significant premium. Marlow and Orzechowski (1996) found that public sector unionism is positively related to public spending and salaries of full-time employees. Marlow (2013) estimates that a 10% point increase in public union membership expanded government size from 2.25% to 4.25% and raised annual real wages by 3.5%.

Salary premiums underestimate possible benefits from unionization. Anzia and Moe (2012) argue that politicians have strong incentives to promise benefits that are paid for in the future with little or no impact on the current budgets. These authors find that states

with higher percentages of public sector workers in unions exhibit significantly higher pension liabilities as well as higher rates of pension underfunding. Congressional Budget Office (CBO) (2011) estimates unfunded liabilities somewhere between \$2 trillion and \$3 trillion and predicts that future taxpayers such as businesses, their customers and employees are likely targets for funding some portion of these future burdens.

Unions can also negotiate job protections such as forbidding nongovernment workers from doing various jobs, offering greater job security (Edwards, 2010) and expanding regulation. Regulatory expansion is consistent with Niskanen's (1971) hypothesis that, given constraints on profits, government workers pursue some combination of 'pay, power and prestige.' Regulatory expansion is also consistent with bureaucrats who believe that they are capable of guiding businesses either for the good of the businesses in particular or for the society in general. Meanwhile, businesses are left to navigate their operations within a more complex regulatory environment.

These studies suggest that unionized government workers are likely to push for a larger government as they succeed in securing higher compensation, greater job security and more generous pension and health benefits. Higher taxes today and tomorrow, more regulations and greater overall burdens for businesses represent inevitable by-products of government growth. Businesses, thus, may predict that they will be targeted for regulatory expansion and higher taxes in the future. Future costs of funding unfunded pension and health liabilities of state and local government workers are likely to be especially pressing issues for business owners as they assess the future prospects of state business climates.

In sum, states with higher percentages of unionized government employees are hypothesized to offer worse business climates for businesses than states with lower percentages. Business climates are hypothesized to be eroded with higher taxes, more regulations and smaller private sectors, in general, thus leading to worse opportunities for businesses.

Empirical investigation

Effects of unionism on business climate ($Rank_{it}$) are examined using the following panel regression models.

$$Rank_{it} = f(Density_{it}, College_{it}, Democrat_{it}, Population_{it}, Age_{it}, Regions_{it}, Public Employees_{it}, Public Union_{it}) \quad (1)$$

where i refers to the 50 states and t refers to years 2006–2011. 2006 is the first year the business climate index was assembled. Each regression is thus run on 300 observations.

$Rank_{it}$ measures how CEOs asked by Chief Executive Magazine considered three criteria – taxes & regulation, workforce quality and living environment – based on the belief that CEOs make the ultimate decisions regarding location and whether to expand or contract businesses. The 2011 data were based on a survey of 556 CEOs who were asked to pick the four best states and the four worst states for doing business. Points were assigned to each state each time it was cited as one among the top four states. Assignments were 10 points for #1 rating, 8.33 points for #2 rating, 6.66 points for #3 rating and 5 points for #4 rating. Each time a state was ranked one of the four worst states, points were deducted. Assignments were –10 points for #50 rating, –8.33 points for #49 rating, –6.66 points for #48 rating and –5 points for #47 rating. Then a tally of all positive points minus negative points was conducted to construct total points for each state. States were then listed in order of points earned for ranking purposes.

The following variables control for other characteristics of states that may influence business climates.¹ $Density_{it}$ is population divided by square miles of a state. $College_{it}$ measures percentages of citizens aged 24 and above with at least a college degree.² $Democrat_{it}$ takes the value of one if there is a Democratic or Independent governor and zero otherwise. Age_{it} measures the median age of the population. $Regions_{it}$ are dichotomous variables that identify whether or not states are located within the Mountain, Southern or Midwestern regions as defined by the US Census.³ Eastern states are left out, thus leaving estimated coefficients on regional dummies to reflect differences from the constant in the equation.

$Public Employees_{it}$ is defined as percentages of all workers employed by the state and local governments.⁴ Higher values are hypothesized to be positively related to $Rank_{it}$ following the view that larger governments will burden businesses with higher taxes,

¹ Unless otherwise stated, data obtained from the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BFRSS) survey available at <http://apps.nccd.cdc.gov/brfss/>

² Data are obtained from the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BFRSS) survey available at <http://apps.nccd.cdc.gov/brfss/>.

³ Regressions were run with and without regional dummy variables to determine whether they were connected to public sector unions or numbers of government employees. Results did not vary and so are left in the regressions.

⁴ Data obtained from US Census at <http://www.census.gov/govs/>

more regulations and greater overall complexity than smaller governments. $Public\ Union_{it}$ is defined as the percentage of all government workers that are members of unions, as defined in Hirsch and MacPherson (2012), and is hypothesized to be positively related to $Rank_{it}$ given the view that when they exercise more power over businesses, they worsen business climates.

Combining $Public\ Employees_{it}$ and $Public\ Union_{it}$ in one regression poses possible complications in interpretation if they are collinear to each other. But, it remains important to account for the possibility that the influence of public unions grows with the overall number of public employees. For example, given identical percentages of public sector unionism, a state with many public employees can be expected to be more powerful than a state with relatively few public employees. This potential problem is dealt with by running three different variations of regressions using the two government employee variables. Each variable is run separately, and then they are run together, as a simple test for sensitivity.⁵

Table 1 displays summary statistics of all variables used in the statistical analysis.

Table 2 displays OLS estimates of the effects of public sector unions on business climate ranks. Column (1) displays a regression without either public sector employee variable as a benchmark case. Rank is

positively and significantly influenced by urban density and Democratic governors; thus indicating that higher values make for worse business climates. Rank is negatively and significantly influenced by percentages of college-educated adults; thus indicating that higher education levels are looked favourably upon by business executives. All regional dummies exert negative and statistically significant influences on rank; thus indicating the excluded region (East) is considered to be the worst by business executives.

Column (2) includes the size of government, as measured by the number of public employees. With the exception of population that is now significant and positive, effects of control variables remain the same as before. Public employees per capita exert positive and statistically significant effects on rank; thus indicating that business executives view larger governments as detrimental to business climates.

Column (3) includes the percentage of unionization of government employees to the regression exhibited in column (1). Effects of control variables remain the same as in column (2). Public employee unionism is estimated to exert a positive and statistically significant effect on rank; thus again indicating that business executives view unionism as detrimental to business climates.

Column (4) combines both measures of government employees. Effects of control variables remain the

Table 1. Summary statistics

	Mean	SD	Minimum	Maximum
Rank	25.53	14.50	1	50
Density	197.05	258.63	1.19	1199.50
College	26.99	4.71	16.5	38.2
Democrat	0.52	0.50	0	1
Population	6 209 685	6 734 651	512 841	37 691 912
Age	38.47	2.39	28.8	44.3
Mountain State	0.14	0.35	0	1
Southern State	0.31	0.46	0	1
Midwestern State	0.24	0.43	0	1
Public Employees	0.07	0.1	0.05	0.18
Public Union	33.83	18.29	6.2	72.4

Notes: Rank = best (= 1) to worst (= 50) business climate.

Density = population to square mile ratio.

College = of percentage of citizens aged 24 and above with at least a college degree.

Democrat = 1 if governor is democrat or independent, = 0 otherwise.

Population = state population.

Age = median age of state population.

Mountain State = 1 if a Mountain State, = 0 otherwise.

Southern State = 1 if a Southern State, = 0 otherwise.

Midwestern State = 1 if a Midwestern State, = 0 otherwise.

Public Employees = government employees (FTE) divided by population aged 16 and above.

Public Union = percentage of government employees that are union members.

⁵ Another set of regressions were run using an interactive term that multiplied them together, but results are not displayed here since coefficients were not statistically different from zero.

Table 2. Effects of public sector unions on business climate rank estimated coefficients (*p*-values)

	(1)	(2)	(3)	(4)
Density	0.0119 (<0.001)	0.0128 (<0.001)	0.0078 (0.020)	0.0084 (0.011)
College	-1.1195 (<0.001)	-1.0926 (<0.001)	-1.0478 (<0.001)	-1.0002 (<0.001)
Democrat	4.0400 (0.004)	4.0741 (0.003)	3.5577 (0.008)	3.5283 (0.008)
Population	1.64E-07 (0.112)	2.40E-07 (0.024)	5.66E-08 (0.058)	1.44E-07 (0.169)
Age	0.3760 (0.280)	0.6043 (0.090)	0.0933 (0.876)	0.3582 (0.300)
Mountain State	-19.4595 (<0.001)	-18.3339 (<0.001)	-13.8258 (<0.001)	-11.4199 (<0.001)
Southern State	-24.6601 (<0.001)	-24.7941 (<0.001)	-15.7050 (<0.001)	-14.4840 (<0.001)
Midwestern State	-10.8332 (<0.001)	-10.1569 (<0.001)	-6.9487 (0.002)	-5.4249 (0.014)
Public Employees		1.4295 (0.012)		1.9352 (<0.001)
Public Union			0.2695 (<0.001)	0.3117 (<0.001)
Constant	48.89461 (0.002)	28.6203 (0.100)	45.996 (0.002)	18.0968 (0.284)
Observations	300	300	300	300
<i>F</i> -Statistic (<i>p</i> -Value)	17.63 (<0.001)	17.15 (<0.001)	18.60 (<0.001)	18.86 (<0.001)
<i>R</i> ² (adjusted)	0.42	0.43	0.45	0.47
Mean dependent variable	25.53	25.53	25.53	25.53

Note: All regressions include year dummies.

same as in column (1). Both measures of government employee power exert significant positive influences on rank; thus indicating that business executives view higher levels of both variables as detrimental to business climates. Implications are that, holding one of these measures of public employee strength constant, higher values of the other variable lead to worsening of business climates.

II. Conclusion

The results indicate support for the hypothesis that higher prevalence of public sector unionization erodes business climates. Simple calculations indicate the magnitude of effects. An increase of 10% points of union membership is estimated to exert a rise in the business climate index of 2.695–3.117 given estimated coefficients of 0.2695 and 0.3117 in columns (3) and (4), respectively. Evaluated at the mean level of 25.53, this amounts to increases of 10.56 and 12.2%, respectively. An implication is that erosion of business climates should be a concern to union members as well

since they rely on businesses, their employees and customers to pay for government.

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