

Labor Union Strength and the Equality of Political Representation*

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Abstract

Amid growing evidence of “unequal democracy” in the United States, labor unions can play a potentially important role by ensuring that low income citizens’ opinions receive more equal consideration when elected officials make policy decisions. To investigate this possibility, I evaluate the relationship between labor union strength and representational equality across the states and find evidence that states with higher levels of union membership weigh citizens’ opinions more equally in the policymaking process. In contrast, there is no relationship between the volume of labor union contributions to political campaigns in a state and the equality of political representation. These findings suggest that labor unions promote greater political equality primarily by mobilizing their working class members to political action and, more broadly, underscore the important role organized labor continues to play in shaping the distribution of political power across American society.

Keywords: political inequality, political representation, labor unions, public opinion, U.S. states

There is growing empirical evidence that the United States is an “unequal democracy” whereby affluent citizens are more likely to have their preferences reflected in government policy decisions compared to disadvantaged citizens (Jacobs and Skocpol 2005; Bartels 2008; Flavin 2012, Gilens 2012; Rigby and Wright 2013; Gilens and Page 2014). This representational inequality has arisen for a variety of possible reasons – compared to citizens with low incomes, wealthier citizens are more likely to vote in elections (Verba, Schlozman, and Brady 1995), contribute to political campaigns (Schlozman, Verba, and Brady 2012), have their opinions represented by organized interests and professional lobbyists (Schlozman and Tierney 1986), and serve as elected officials in government (Carnes 2013). In response, scholars and concerned citizens alike have begun to turn their attention to searching for possible remedies for political inequality.

For most of the twentieth century, the attempts by labor unions to organize their workers for political action were viewed as an important counterweight to the political power amassed by business interests and the affluent (Goldfield 1987; Smith 2000; Rosenfeld 2014). It is no surprise, then, that among the growing number of studies that document the recent rise in both political and economic inequality in the United States, nearly all point to the steady decline of labor union membership and influence as a major cause (Bartels 2008; Kelly 2009; Hacker and Pierson 2010; Gilens 2012; Schlozman, Verba, and Brady 2012; Volscho and Kelly 2012; Gilens and Page 2014).¹ However, this conclusion is premised on the assumption that stronger labor unions actually help to promote greater political equality. Despite a deluge of conventional

¹ According to the U.S. Bureau of Labor Statistics, in 2014 only 11.1% of all wage and salary workers were members of a labor union. By contrast, in 1983 the union membership rate was 20.1%.

wisdom that this assumption is true, to date there has not been an empirical investigation of the precise relationship between labor union strength and the equality of political representation.

To advance our understanding about the impact of organized labor in American politics, this paper uses the variation across the American states to examine the relationship between labor union strength and the equality of political representation between rich and poor citizens. Using public opinion measures from the National Annenberg Election Surveys and data on state policy outcomes, I uncover evidence that states with higher levels of union membership weigh citizens' opinions more equally in the policymaking process. In contrast, there is no relationship between the volume of labor union contributions to political campaigns in a state and the equality of political representation. These findings suggest that labor unions promote greater political equality primarily by mobilizing their working class members to political action as opposed to influencing elected officials directly through contributions to political campaigns.

Background and Theoretical Expectations

Political scientists and political observers more generally have long warned that political representation in the United States is tainted by an upper class bias such that wealthier citizens have more influence over government policy decisions than the poor (e.g., Schattschneider 1960; Dahl 1961). But, as the American Political Science Association Taskforce on Inequality and American Democracy (Jacobs and Skocpol 2005, 124) lamented: “Unfortunately, political scientists have done surprisingly little to investigate the extent of actual inequalities of government responsiveness to public opinion – that is, whether distinct segments of the country exert more influence than others.” A series of recent studies have sought to correct this problem and more fully understand unequal political influence in the United States. Most notably, Bartels

(2008) demonstrates that the opinions of affluent constituents strongly predict the voting behavior of their Senators while the opinions of those with low incomes display little or no relationship.² In addition, Gilens (2012) collects data from thousands of individual public opinion poll questions and finds that subsequent federal government policy decisions disproportionately reflect the views of the affluent, and this is especially true when the preferences of the rich and poor diverge. Investigations into unequal political representation at the state level (Flavin 2012; Rigby and Wright 2013) have tended to come to similar conclusions. In short, there is a growing body of empirical evidence that shows the stated opinions of citizens with low incomes tend to receive little attention in government policy decisions compared to their more affluent counterparts.

Labor unions, as an organizing instrument for working class citizens, have the potential to act as a counterweight to the political power amassed by business interests and the affluent (Goldfield 1987; Smith 2000; Rosenfeld 2014). This potential arises, I argue, through two primary theoretical mechanisms. First, labor unions can help to offset the pronounced socioeconomic bias in voter turnout and political activity more generally (Leighley and Nagler 1992; Rosenstone and Hanson 1993; Verba, Schlozman, and Brady 1995) if they are successful in mobilizing workers with lower socioeconomic status to political action (Leighley and Nagler 2007). As one illustrative example of labor union mobilization efforts, the AFL-CIO (through its Committee on Political Education) routinely devotes considerable resources to voter information, registration, and turnout drives (Sorauf 1988). Moreover, in many states, mandatory collective bargaining laws provide public sector unions with subsidized benefits that can help lower the

² Ellis (2012) finds a similar income bias in political representation for members of the U.S. House of Representatives.

costs of mobilizing their union members to political action.³ It is not surprising, then, that previous research emphatically suggests that unions are successful at mobilizing their members to higher levels of political activity and engagement (Asher 2001; Radcliff 2001; Francia 2006; Leighley and Nagler 2007; Flavin and Radcliff 2011; Ahlquist and Levi 2013). When combined with evidence that voters' opinions tend to be better represented by the policy decisions of elected officials than non-voters' opinions (Griffin and Newman 2005) and that the views of low income citizens tend to be better reflected in government policies when they turn out to vote at higher rates (Hill and Leighley 1992; Fellowes and Rowe 2004; Fowler 2013), it is likely that jurisdictions with higher levels of union membership (and, by extension, higher levels of union political mobilization) will display more egalitarian patterns of political representation.

Second, labor union organizations routinely insert themselves into political campaigns by contributing money directly to candidates running for office (Ansolabehere, de Figueiredo, and Snyder 2003) who support union friendly policies (such as a higher minimum wage, more generous government health care and retirement support, and a more progressive taxation system) that low income and working class citizens, in general, tend also to support (Gilens 2009; Franko, Tolbert, and Witko 2013). Although political scientists have uncovered little evidence that campaign contributions have a direct effect on the roll call votes of legislators, there is ample evidence suggesting contributions can exert sway behind the scenes by influencing who legislators agree to meet with, what issues they focus on, and how they allocate their scarce time while in office (Langbein 1986; Hall and Wayman 1990; Schram 1995;

³ As one example, public school teachers unions are almost always contractually entitled to receive a comprehensive list of all district employees at the outset of each school year with detailed contact information that can be utilized for political mobilization purposes (Flavin and Hartney 2015).

Makinson 2003; Witko 2006; Baumgartner et al. 2009; Powell 2012). As a result of these efforts, there is likely to be a more equal weighting of citizens' political opinions in government policy decisions in jurisdictions where union organizations are more actively involved in contributing to candidates for elected office who support labor-endorsed policy positions.⁴

Despite the potentially important role that labor unions can play in promoting more equal consideration of citizens' political opinions in government policy decisions, to date this question has received scarce empirical attention. Although related studies suggest that states with higher levels of union membership are more likely to implement liberal public policies (Radcliff and Saiz 1998), less likely to implement business friendly policies (Witko and Newmark 2005), and tend to have lower levels of poverty and income inequality (Kelly and Witko 2012; Brady,

⁴ Importantly, a third way labor unions can potentially promote greater political equality is by employing an "insider approach" of lobbying elected officials and urging them to implement public policies that are supported by organized labor (Masters and Delaney 2005; Facchini, Mayda, and Mishra 2011).

Unfortunately, there currently exists no comprehensive database of lobbying activity or expenditures by sector in every state that would allow for empirical testing of this potential mechanism. However, the National Institute on Money in State Politics is engaged in an ongoing effort to collect and catalogue data on lobbying expenditures and currently reports preliminary data for 16 states. When I construct a measure of labor union lobbying spending as a share of total lobbying spending in a state and run a regression for those 16 states using the model specification in Table 2, the coefficient for labor union lobbying is not statistically different from zero (complete results are reported in Table A-5 in the Appendix). Across the 16 states for which data are available, the labor union lobbying expenditures measure correlates at .56 with the labor union membership measure and at .16 with the labor union campaign contributions measure. Because data collection efforts in this area are ongoing, this is a fruitful avenue for future investigation.

Baker, and Finnigan 2013), our understanding of the specific effect of labor unions on the opinion-policy linkage between citizens and their government remains limited. Therefore, in what follows, I take advantage of the variation across the American states to empirically evaluate the relationship between labor union strength and the degree to which the political opinions of the wealthy and poor are equally reflected in the policy decisions made by elected officials.

Measuring the Equality of Political Representation in the American States

In this study, political representation is measured using a proximity technique that places public opinion and policy on the same linear scale and compares the distance between the two (Achen 1978; Ellis 2012; Flavin 2015). Using this method, as the ideological distance between a citizen's opinion and policy grows (i.e. policy is ideologically "further" from a citizen's preferences), that citizen is not well represented.⁵ In practical terms, this proximity technique allows a researcher to evaluate whether a conservative (liberal) citizen lives in a state that, compared to other states, implements conservative (liberal) policies and is "well" represented, implements liberal (conservative) policies and is "poorly" represented, or gradations in between.

Measuring ideological proximity requires two pieces of data: (1) a measure of citizens' opinions and (2) a measure of state policy. To measure public opinion, I combine data from the

⁵ The identical measurement technique has been used in several recent studies to evaluate the ideological distance between citizens and Member of Congress (Griffin and Flavin 2007; Griffin and Newman 2008; Ellis 2012), Senators (Gershtenson and Plane 2007), and presidential candidates (Burden 2004; Jessee 2009) in the United States as well as the ideological distance between citizens and political parties in Europe (Blais and Bodet 2006; Powell 2009; Golder and Stramski 2010; Giger, Rosset, and Bernauer 2012).

2000, 2004, and 2008 National Annenberg Election Surveys (NAES), three random digit dialing rolling cross sectional surveys conducted in the months leading up to that year's presidential election. The major advantage of pooling these three NAES surveys is their sheer sample size which allows a large enough sample without having to aggregate across a long time period or simulate state opinion (Carsey and Harden 2010). This large sample size is especially important because this paper later evaluates the relationship between income and ideological proximity within individual states.⁶

Citizens' general political ideology is measured using the following item from the NAES: "Generally speaking, would you describe your political views as very conservative, conservative, moderate, liberal, or very liberal?" The measure is coded such that it runs from -2 (very conservative) to +2 (very liberal). Data on citizens' self-reported political ideology have been commonly used to measure public opinion in previous studies of political representation (e.g., Erikson, Wright, and McIver 1993; Griffin and Flavin 2007; Bartels 2008; Flavin 2012, 2015) and there is reason to be confident that self-reported ideology is an accurate measure of citizens' aggregated policy-specific opinions.⁷

⁶ A total of 177,043 NAES respondents across the three survey waves answered the ideological self-placement and income items. All states except North Dakota (N=475) and Wyoming (N=414) have a sample size of over 500 respondents. Alaska and Hawaii were not surveyed.

⁷ For example, only 38% of respondents who place themselves in the "very conservative" category believe that "Government should reduce income differences between the rich and poor" while fully 77% of respondents who place themselves in the "very liberal" category support that policy proposal. Similarly, fully 81% of respondents who place themselves in the "very liberal" category oppose "Laws making it more difficult for a woman to get an abortion" while only 28% of respondents who place

To measure public policy, I require a general measure of the “liberalism” (Klingman and Lammers 1984) of state policy outputs that comports with the survey item that asks citizens their general political ideology. In their seminal book on state opinion and policy, Erikson, Wright, and McIver (1993) developed a composite index of state policy liberalism using eight policy areas for which liberals and conservatives typically disagree. Gray, Lowery, Fellowes, and McAtee (2004) updated this policy liberalism measure for 2000 using the following five policy items: (1) state regulation of firearms as measured by state gun laws; (2) scorecard of state abortion laws in 2000; (3) an index of welfare stringency that accounts for Temporary Assistance to Needy Families (TANF) rules of eligibility and work requirements for 1997-99; (4) a dummy measure of state right-to-work laws in 2001; and (5) a measure of tax progressivity calculated as a ratio of the average tax burden of the highest five percent of a state's earners to the average tax burden of the lowest forty percent of a state's earners.⁸ These five components are then standardized and summed in an additive index such that more liberal state policies are coded higher. I use this index as my first measure of the general ideological tone of state policy.

Second, a recent article by Sorens, Muedini, and Ruger (2008) provides a rich source of data on state policies in twenty different areas ranging from public assistance spending to gun control to health insurance regulations.⁹ In addition to specific statutes and spending data, the

themselves in the “very conservative” category oppose that policy proposal. For additional examples, see Table A-1 of the Appendix.

⁸ Gray et al. (2004) argue that using these policy items, as opposed to a measure of per capita expenditures for different policy areas, precludes the possibility that policy liberalism is simply a proxy for a state’s wealth. The five measures produce a Cronbach's alpha of .63.

⁹ The state policy data can be accessed online at: www.statepolicyindex.com.

authors provide a summary index of policy liberalism for each state that they derive by factor analyzing their entire range of policies. I use this composite score as a second measure of general policy liberalism.¹⁰ Together, the two policy liberalism measures represent the uni-dimensional liberal/conservative ideology of state policy decisions that correspond well to the measure of citizens' general political ideologies described above.

Measuring ideological proximity requires a method of placing citizens' opinions and state policy on a common scale for comparison. Drawing on previous studies that have also used a proximity technique to measure political representation (Achen 1978; Burden 2004; Blais and Bodet 2006; Gershtenson and Plane 2007; Griffin and Flavin 2007; Griffin and Newman 2008; Jessee 2009; Golder and Stramski 2010; Ellis 2012; Giger, Rosset, and Bernauer 2012; Flavin 2015), this paper approaches this task in three different ways. If all three measurement techniques point to the same conclusion, then we can be more confident in the robustness of the results.¹¹

First, all ideological opinions are standardized to a mean of zero and a standard deviation of one and the two recent measures of general state policy liberalism described above (Gray et al.

¹⁰ The Gray et al. (2004) and Sorens et al. (2008) policy liberalism measures correlate across the states at .79.

¹¹ One common critique of using the proximity method to evaluate political representation is that, regardless of the statistical technique used to match up the two, opinion and policy are not on the same scale. However, whatever the flaws of each of the three different measures of ideological proximity in matching up opinion and policy, they are likely *equally flawed* for all citizens regardless of their income. Therefore, the proximity measures are appropriate for evaluating how ideologically proximate opinion and policy are for a poor person *in comparison to* a rich person (also see Ellis 2012).

2004; Sorens et al. 2008) are then standardized as well. After standardizing both opinion and policy, they are now on a common (standardized) metric, similar to the strategy originally used by Wright (1978) and more recently by Ellis (2012). Proximity is measured as the absolute value of the difference between a respondent's ideology score and the policy liberalism score for his/her state using both of the measures of policy. This creates the first measure of ideological distance for each respondent in the NAES sample which is labeled the *Standardized* measure.

Second, the two measures of state policy are rescaled to the same scale (-2 to +2) as citizens' self-reported ideology. This technique is similar to that used in early studies of congressional representation (Miller 1964; Achen 1978) and one that is still advocated by representation scholars today (Burden 2004; Griffin and Newman 2008; Giger, Rosset, and Bernauer 2012). The absolute value of the distance between a respondent's ideology score and the policy liberalism score for his/her state is again computed and labeled the *Same Scale* measure.

Third, policy is rescaled to a tighter range (-1 to +1) than citizens' ideologies. This procedure is used because we can expect citizens' ideological opinions to have a wider range and take on more extreme values compared to actual state policy outputs. This transformation to a tighter scale is suggested and implemented by Powell (1982, 1989) in her studies of congressional representation. Again, the absolute value of the distance between a respondent's ideology score and the state policy liberalism score for his/her state is computed and labeled the *Restricted Scale* measure.

Together, there are three different measurement techniques and two different measurements of state policy liberalism, for a total of six different measures of ideological proximity between citizens' opinions and state policy. I am then interested in whether there are

systematic differences in proximity between opinion and policy across citizens; specifically, whether there is a link between a citizen's income and the ideological distance between opinion and policy. Because I am interested in unequal political representation within each state and state populations can vary widely in terms of their income distribution, it would be unwise to simply compare the incomes of citizens in one state to the incomes of citizens in another state. Simply put, we might expect someone making \$100,000 per year living in West Virginia to exert comparatively greater political influence than someone making \$100,000 per year living in Connecticut. To account for differences in the income distribution across states, I generate a measure of state relative income that compares a respondent's income with the average income for a resident in his or her state.¹²

With this measure of state relative income, I then assess whether there is a systematic relationship between citizens' incomes and the ideological distance between their opinion and state policy by regressing the measure of ideological distance on income for every respondent in the sample using the six different measures of ideological proximity described above.¹³ The

¹² The NAES codes respondents into one of nine categories based on their self-reported household income. To create a state relative measure of income for each respondent, I take the respondent's income category and subtract the average income category value for all respondents in the state. The resulting calculation is positive if a respondent's income is above the state average and negative if a respondent's income is below the state average.

¹³ The results of these regressions are reported in Table A-2 of the Appendix. Because respondents are clustered within states and experience the same state policy, I use standard errors clustered by state for all regressions. The choice of a single time period (2000-2008) for the analysis is primarily a function of data availability for public opinion. As discussed above, while the National Annenberg Election Surveys

results of these six regression estimations reveal strong evidence of unequal political representation. Specifically, all six coefficients for income are negative and bounded below zero which indicates that as a respondent's income increases, the distance between their ideology and state policy decreases and they are better represented. Put another way, the lower a respondent's income, the greater the distance between opinion and policy and the worse that respondent's general political ideology is represented in the general liberalism of his or her state's public policies.

Substantively, the larger opinion-policy distance for a respondent at the 10th percentile for income compared to a respondent at the 90th percentile is about the same as the difference between a respondent at the 10th percentile for (state relative) level of education compared to the

collect a large sample size in each wave, it is a national sample that is not designed to sample equal numbers of respondents in each state. As a result, many small population states have a sample size of less than 150 respondents in any single survey wave. Because the measure of the equality of political representation developed below requires running a separate regression for each state, a sample size of less than 150 survey respondents is problematic for the precision of the regression estimates. By comparison, when pooling the 2000, 2004, and 2008 NAES waves together for the analysis, all states except North Dakota (N=475) and Wyoming (N=414) have a sample size of over 500 respondents. Therefore, a pooling strategy is necessary to have enough respondents to run state-specific regressions and evaluate the relationship between income and opinion-policy proximity within each state. Nevertheless, as a robustness check and to make sure pooling the data is not masking differences across survey waves, I also run a separate analysis for each wave on the national sample and report the results in Table A-3 of the Appendix. As the regression coefficients indicate, the relationship between income and ideological distance is negative (i.e. state policy is more proximate to citizens' opinions as income increases) and of roughly the same magnitude for all three survey waves.

90th percentile (Gilens 2005) and larger than the difference between an African American respondent compared to a white respondent (Griffin and Newman 2008). These findings comport with the small but growing set of studies (Flavin 2012, Rigby and Wright 2013) that have found that citizens with low incomes are systematically underrepresented in the policymaking process in the American states.

The primary rationale for examining unequal political representation at the state level is to understand and explain variation in political equality across the states. To assess in which states political influence is strongly tied to income compared to those states that weight opinions more equally, I run a separate regression for each state and compare the coefficient for (state relative) income. Similar to the nationwide regression discussed above, a more steeply negative slope coefficient indicates a stronger relationship between income and ideological distance and, accordingly, less political equality. For example, consider the two hypothetical states presented in Figure 1. For each state, the line represents the slope of the relationship between income and ideological distance. As the figure illustrates, the relationship between income and distance is rather weak in State A, indicating that citizens' opinions are weighted roughly equally regardless of their income. In contrast, the slope of the relationship between income and ideological distance is quite steeply negative for State B, indicating that there is a strong degree of political inequality in state policymaking.

[Figure 1 about here]

A separate regression is run for each state using each of the six different measures of ideological proximity described above (three measurement techniques x two measures of state

policy liberalism).¹⁴ When the six regression coefficients (for state relative income) are compared across the states, they have a Cronbach's alpha of .96, indicating that all six measures appear to be measuring the same concept. To create a single summary score of political equality that is directly comparable across states, I conduct a principal components analysis on the six slope coefficients and generate a single factor score for each state.¹⁵ Because a more steeply negative slope coefficient indicates more unequal representation (i.e. a stronger relationship between income and ideological distance), a more positive factor score indicates greater political equality (i.e. a more equal weighting of citizens' opinions). I label this new measure the "Equality of Political Representation Index."

¹⁴ One potential concern with running a regression separately for each state with opinion-policy distance as the dependent variable is that every respondent has the same value for state policy, effectively making the policy term a constant. However, consider a state where income and ideological conservatism correlate perfectly (i.e. as income increases, so does ideological conservatism). If the state's policy position is more conservative than all citizens' ideology positions, the regression coefficient for income would be *negative* (indicating that as income increases, ideological distance between opinion and policy decreases). But, if the state's policy position is more liberal than all citizens' ideology positions, the coefficient for income would be *positive* (indicating that as income increases, ideological distance between opinion and policy also increases). Even though the distribution of citizens' opinions is identical under both scenarios, the regression coefficients are very different depending on where state policy is located in the ideological space (relative to citizens' opinions). Therefore, the coefficient for respondents' income for single state regressions does not simply indicate the relationship between income and ideology within a state but instead indicates (as intended) the sign and strength of the relationship between income and opinion-policy distance.

¹⁵ The eigenvalue for the lone retained factor is 5.15 and explains 86% of the total variance.

[Table 1 about here]

The factor scores generated using this procedure are reported in Table 1 where the states are ranked from the most to least equal in terms of political representation. It is important to note that the index is not simply an alternative measure of the general liberalism of state policy (with the expectation that lower income citizens support more liberal policies). The Equality of Political Representation Index correlates with the Gray et al. (2004) policy liberalism measure at .46 and with the Sorens et al. (2008) policy liberalism measure at only .36. Most importantly, however, is the fact that there is significant variation in political equality across the states. In the following section, I use this variation to evaluate whether states with stronger labor unions tend to display more egalitarian patterns of political representation.¹⁶

State Labor Union Strength and the Equality of Political Representation

¹⁶ Although inequality in political influence among different racial/ethnic groups is not the focus of this paper, it is nonetheless possible that the Equality of Political Representation Index may correlate with state racial/ethnic composition such that states with higher proportions of residents who are racial minorities are also the same states where citizens with low incomes are most unequally represented. To investigate this possibility, I ran a set of regression models using the same specification as reported in Table 2 and added in a measure of the percentage of state residents who identify as a race/ethnicity other than white (Caucasian). In all models, the coefficient for the percent of a state's residents who are non-white is not statistically different from zero, which indicates that more racially diverse states are no more or less likely to exhibit unequal political representation along income lines. Moreover, the coefficients for the other variables included in the regression models are substantive identical to the main findings reported in Table 2 below (complete results are reported in Table A-6 in the Appendix).

Above, I theorized that labor unions can promote greater political equality through two primary theoretical mechanisms: (1) mobilizing union members to political action and (2) contributing to candidates for elected office. To evaluate the individual effect of each mechanism, I measure the strength of labor unions in a state in two different ways. First, to measure the potency of labor mobilization in a state, I take the average percentage of nonagricultural wage and salary employees (including employees in the public sector) who are union members for 2000-2006 using data from the Current Population Survey (Hirsch, Macpherson, and Vroman 2001; Volscho and Kelly 2012).¹⁷ Second, to measure labor union involvement in political campaigns in a state, I take the amount of campaign contributions to candidates for state office (governor, state senate, and state house) for 2000-2006 that come from labor unions¹⁸ and divide by the total contributions from all sectors including agriculture, communications and electronics, construction, defense, energy and natural resources, finance, insurance, real estate, general business, health care, lawyers and lobbyists, and transportation.¹⁹ This calculation produces the percentage of all campaign contributions (that are catalogued by industry) that come from labor unions. Across the states, these two measures of labor union strength correlate at .65.

¹⁷ Union density data are available online at: <http://unionstats.gsu.edu/MonthlyLaborReviewArticle.htm>.

For 2000, private and public union membership rates (density) correlated across the states at .73.

¹⁸ Included in this measure are contributions from general trade unions (construction, mining, etc.), public sector unions (civil servants, teachers, etc.), and transportation unions (air, automotive, etc.).

¹⁹ State campaign contribution data by industry are collected by the National Institute on Money in State Politics and are available online at: <http://www.followthemoney.org/>.

In the analysis presented below, the Equality of Political Representation Index is regressed on a state's labor union membership and labor union campaign contributions to evaluate if states with stronger labor unions have more egalitarian patterns of political representation.²⁰ Along with the two measures of labor union strength, I also include in the model a measure of the partisan composition of state government, the composition of a state's interest group community, and a state's median income and level of income inequality. The partisan composition of state government is measured as the average percentage of Democrats in the state legislature for 2000-2006 and is included to account for the potential alternative explanation that states with a greater percentage of Democratic legislators are both more likely to implement union-friendly policies (that help strengthen labor unions) and more likely to equally represent the political opinions of citizens with low incomes in state policy decisions. The composition of a state's interest group environment is measured as the percentage of organized groups in 1997 that represent for-profit interests (measure devised by Gray and Lowery 1996; updated by Gray et al. 2004) and is included because previous research indicates that a greater proportion of for-profit interest groups attenuates the link between public opinion and state government policy decisions (Gray et al. 2004). Finally, a state's median income and level of

²⁰ Because the income-ideological proximity slope coefficients are estimated rather than observed for the states and have different levels of uncertainty (Achen 2005; Lewis and Linzer 2005), I also run Feasible Generalized Least Squares (FGLS) regressions in the second stage using the six individual sets of state regression coefficients from the first stage (instead of the combined Equality of Political Representation Index) as the dependent variables and weight observations by the inverse of a coefficient's standard error. These six estimations yield substantially similar results to those reported in Table 2 (see Table A-7 in the Appendix). The results are also similar when Huber-White robust standard errors are employed.

income inequality (using the Gini coefficient) for 2000 from the U.S. Census Bureau are included because previous research on unequal political influence at the state level suggests that political representation is the least egalitarian in poorer states and in states with higher levels of income inequality (Rigby and Wright 2011, 2013).²¹

The analysis proceeds by including each of the two union strength variables in a regression model separately before including both in the same model and allowing them to compete for statistical influence. Column 1 of Table 2 reports the estimates with labor union membership as the measure of union strength and reveals that the coefficient for membership is positive and statistically different from zero. This finding indicates that states with a greater percentage of workers who are labor union members tend to weigh citizens' opinions more equally in the policymaking process. By contrast, Column 2 reports the estimates with labor union campaign contributions as the measure of union strength and reveals the coefficient for contributions is not statistically different from zero, indicating that there is no relationship between the proportion of campaign contributions that come from labor unions in a state and the equality of political representation. Finally, Column 3 reports estimates with both measures of union strength included in the model and, again, the coefficient for labor union membership is statistically different from zero while the coefficient for labor union campaign contributions is not. In addition, the other covariates in the model reveal that (as previous studies have found) states with higher levels of income inequality tend to be less politically equal. Somewhat surprisingly, the coefficient for the percentage of Democrats in the state legislature is not

²¹ Nebraska has a nonpartisan state legislature and Alaska and Hawaii were not surveyed in the NAES, so N=47 for the regression estimations. Descriptive statistics for all variables included in the analysis are reported in Table A-4 of the Appendix.

statistically different from zero, indicating that there is little evidence that the partisan composition of state government is associated with the equality of political representation in a state.²²

[Table 2 about here]

From a substantive standpoint, the magnitude of the relationship between labor union membership and the equality of political representation is quite large. Column 4 of Table 2 reports the standardized coefficients (the predicted change in terms of standard deviations of the Equality of Political Representation Index when the independent variable in question is increased one standard deviation) from the regression estimated in Column 3. As illustrated in the table, labor union membership has the largest substantive relationship with the equality of political representation of any predictor in the model. Specifically, a one standard deviation increase in the percentage of a state's workers who are union members corresponds to more than half (.53) a standard deviation increase in the Equality of Political Representation Index. In summary, the data indicate that labor union membership is an important predictor of representational equality in the American states.

[Table 3 about here]

One potential concern about the findings reported in Table 2 is that the ability for labor unions to mobilize their members to political action or influence policymaking through contributions to political campaigns are not optimally operationalized. To investigate this concern, I estimate a set of additional regression models with different measures of both union

²² This finding is consistent with Bartels (2008) and Rigby and Wright (2013) who demonstrate that both Republican and Democratic candidates/elected officials are unresponsive to the political opinions of citizens with low incomes.

membership/mobilization and union campaign contribution activity. To measure how successful labor unions are at mobilizing their members to political action, I use validated voter turnout data from the 2008 Cooperative Congressional Election Study to calculate the share of the electorate in each state that is from a union member household. To measure how active labor unions are in contributing to political candidates as compared to other organized interests, I calculate the ratio of labor union contributions to business contributions in each state for 2000-2006.²³ Using these two alternative measures of labor union strength and the same empirical strategy and model specification as above, the results of the additional estimations are reported in Table 3. Looking across the columns, the coefficients are consistent with those reported in Table 2. Namely, labor union mobilization is a significant predictor of greater representational equality in a state while labor union campaign contributions are not. Again, the analysis points to the conclusion that labor unions' ability to promote more egalitarian patterns of political representation lies in their effectiveness at organizing and then mobilizing union members to political action as opposed to contributing directly to state political campaigns.²⁴

²³ Across the states, union membership and union household share of the electorate correlate at .87 and union campaign contributions as a percent of the total and the union/business contributions ratio correlate at .85. Data on campaign contributions from business are from the National Institute on Money in State Politics and include general business advocacy associations (e.g., chambers of commerce) and individuals and groups engaged in business services, manufacturing, gambling and casinos, food and beverage hospitality, lodging and tourism, liquor and tobacco companies and sales, and retail sales.

²⁴ Another potential concern with the findings presented in Table 2 is that equality of political representation is driving labor union membership (i.e. more egalitarian political representation in a state leads to higher levels of union membership). To investigate this concern, I estimated a model with state

Conclusion

Political equality is a cornerstone of democracy. As Sidney Verba (2003, 663) declares, “One of the bedrock principles in a democracy is the equal consideration of the preferences and interests of all citizens.” However, recent studies at both the national (Bartels 2008; Gilens 2012) and state levels (Flavin 2012; Rigby and Wright 2013) report that, across a wide array of issue areas, affluent citizens are more likely to have their preferences reflected in government policy decisions compared to disadvantaged citizens. In response to these revelations, scholars and concerned citizens alike have begun to turn their attention to searching for possible remedies for political inequality. As one example, Flavin (2015) finds that patterns of political representation are more egalitarian in states with stricter lobbying regulations and suggests tighter restrictions on the registration and conduct of professional lobbyists as one viable avenue to promoting more equal consideration of citizens’ political opinions. As another example, Carnes (2013) shows that citizens from working class and low income backgrounds are strikingly underrepresented in state legislatures across the nation and, in response, recommends specific programs aimed at

union membership as the dependent variable as a function of the Equality of Political Representation Index and three variables measured in 2000 that are common in the literature on the determinants of state union density: a dummy variable for whether a state has a mandatory collective bargaining law for state public employees (as originally specified by Valletta and Freeman 1988) and the percentage of private sector employees in a state that are in the construction sector and the percentage in the manufacturing sector (Hirsch, Macpherson, and Vroman 2001). The results of this estimation are reported in Table A-8 of the Appendix and reveal that the coefficient for the Equality of Political Representation Index is not statistically different from zero.

recruiting more blue collar workers to run for elected office and advocate for the opinions of disadvantaged citizens within government.

This paper uses the variation across the American states to examine the relationship between labor union strength and the equality of political representation between rich and poor citizens and uncovers evidence that states with higher levels of union membership (and where union households make up a greater share of the electorate) weigh citizens' opinions more equally in the policymaking process. In contrast, there is no statistical relationship between the volume of labor union contributions to political campaigns in a state and the equality of political representation. Taken together, these findings suggest that labor unions promote greater political equality primarily by mobilizing their working class members to political action as opposed to influencing elected officials directly through contributions to political campaigns.

As illustrated by recent high profile battles over “right-to-work” legislation in several states that have traditionally supported labor-friendly policies such as Indiana, Michigan, and Wisconsin, the ability to organize and join a labor union has increasingly become a politically contentious issue. Even in states without right-to-work laws, local governments (such as cities and counties in Illinois and Kentucky) are attempting to bypass state labor policies by creating right-to-work enclaves within their jurisdictions. The ultimate aim (and effect) of these efforts is to lower union membership rates and substantially reduce the influence of labor unions in both the workplace and the political arena. Given the empirical findings reported in this paper, this increasingly adversarial climate for organized labor will likely only exacerbate existing inequalities in political influence between the rich and the poor. Therefore, citizens who are concerned with rising levels of economic and political inequality should focus greater attention

on the important role that organized labor can still play in shaping the distribution of power in American politics.

More broadly, this paper suggests a fruitful avenue for future study of the relationship between organized labor and the equality of political representation. Recent research (Giger, Rosset, and Bernauer 2012) examines the correspondence between public opinion and party positions/government policies in 21 parliamentary democracies and reports evidence that, similar to the United States, affluent citizens are more likely to have their opinions represented compared to disadvantaged citizens. Power Resources Theory posits that one of the most effective ways for lower and working class citizens to exert greater political influence and secure public policies favorable to them is by organizing and affiliating with a labor union (Stephens 1979; Hicks 1999; Huber and Stephens 2001).²⁵ However, to date, there has been no empirical evaluation of whether countries with stronger and more politically active labor unions display more egalitarian opinion-policy linkages. Therefore, future research should take advantage of the sizable cross-national variation in union strength and activity to explicitly examine whether the important role that labor unions play in promoting political equality in the United States applies internationally as well.

²⁵ Indeed, one commonly cited reason that the United States has one of the highest levels of income inequality and one of the stingiest social welfare systems among the advanced industrialized democracies is the relative weakness of the American labor movement (Hacker and Pierson 2010; Volscho and Kelly 2012).

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Table 1: Ranking the States by the Equality of Political Representation

Montana	4.51 (most equal)	Virginia	0.22
Minnesota	3.23	Florida	0.22
Oregon	3.19	Massachusetts	0.19
South Dakota	2.60	Connecticut	0.08
Vermont	2.19	Texas	0.01
California	2.18	Nevada	-0.06
New Mexico	2.12	North Carolina	-0.18
Michigan	1.94	Kansas	-0.25
Washington	1.82	Maryland	-0.50
Wisconsin	1.64	Kentucky	-0.68
Ohio	1.54	New York	-1.07
Nebraska	1.29	Indiana	-1.27
Iowa	1.24	Louisiana	-1.46
Pennsylvania	1.23	Tennessee	-1.53
West Virginia	1.20	South Carolina	-1.79
Arizona	1.15	Delaware	-1.85
Missouri	1.14	North Dakota	-2.02
Idaho	1.10	New Hampshire	-2.36
Rhode Island	1.06	Arkansas	-2.47
New Jersey	1.03	Oklahoma	-2.52
Maine	0.57	Wyoming	-2.91
Colorado	0.55	Georgia	-3.56
Illinois	0.40	Alabama	-5.06
Utah	0.34	Mississippi	-8.44 (most unequal)

Cell entries are factor scores from combining six coefficients for state specific regressions. Larger positive values indicate greater political equality (i.e. a weaker relationship between income and ideological proximity).

Table 2: Labor Union Strength and the Equality of Political Representation

	(1)	(2)	(3)	(4)
Labor Union Membership	0.182** [0.070]	--	0.234*** [0.084]	0.53
Labor Union Campaign Contributions	--	0.032 [0.059]	-0.072 [0.066]	-0.19
% Democrats in State Legislature	-0.009 [0.026]	0.008 [0.027]	-0.010 [0.026]	-0.06
% Interest Groups For-Profit	-0.076 [0.063]	-0.098 [0.069]	-0.090 [0.064]	-0.19
State Median Income	-0.007 [0.057]	0.051 [0.057]	-0.004 [0.057]	-0.01
State Income Inequality	-31.177* [17.220]	-29.037 [18.557]	-32.957* [17.259]	-0.29
Constant	18.098** [8.783]	17.312* [9.594]	20.062** [8.948]	--
R ²	.30	.19	.32	--
N	47	47	47	--

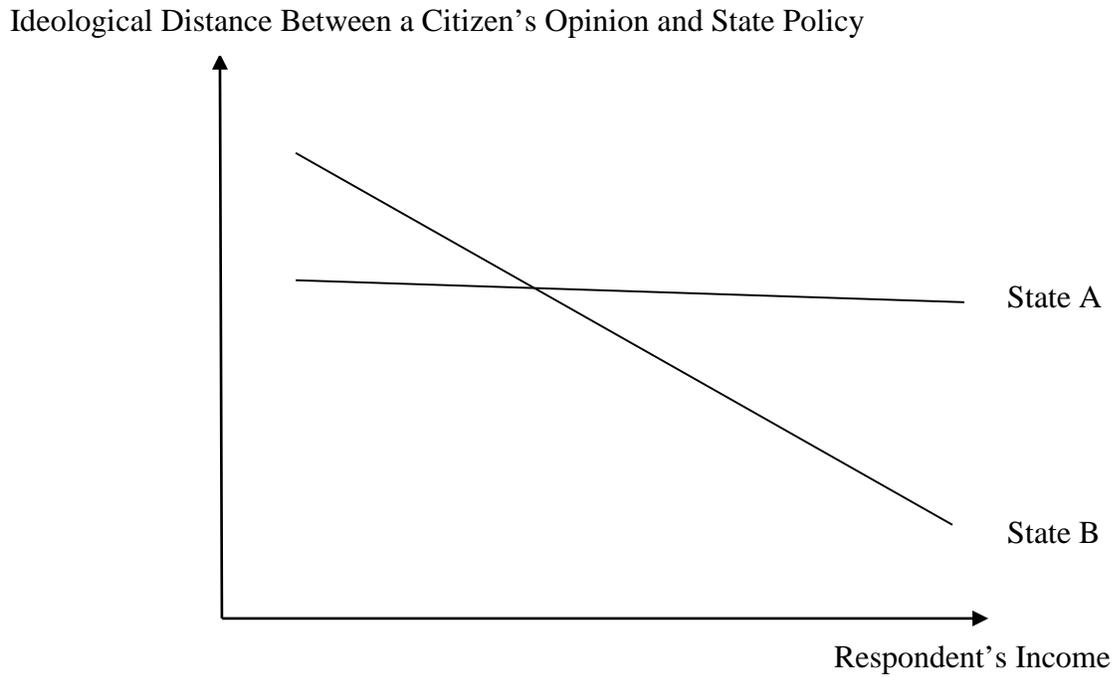
Dependent variable is the Equality of Political Representation Index (higher value indicates a more equal weighting of citizens' political opinions). Cell entries are ordinary least squares regression coefficients with standard errors reported beneath in brackets. * denotes $p < .10$, ** $p < .05$, *** $p < .01$ using a two-tailed test. Column 4 reports the standardized coefficients for the model in Column 3 (the predicted change in terms of standard deviations of the Equality of Political Representation Index when the independent variable in question is increased one standard deviation).

Table 3: Robustness Check Using Alternative Measures of Labor Union Strength

	(1)	(2)	(3)	(4)
Union Household Share of Electorate	0.090** [0.043]	--	0.120** [0.049]	0.44
Labor Union/Business Ratio of Campaign Contributions	--	-0.190 [1.311]	-1.835 [1.404]	-0.20
% Democrats in State Legislature	-0.003 [0.026]	0.010 [0.027]	-0.006 [0.026]	-0.03
% Interest Groups For-Profit	-0.062 [0.067]	-0.112 [0.069]	-0.071 [0.067]	-0.15
State Median Income	0.016 [0.056]	0.062 [0.055]	0.011 [0.056]	0.02
State Income Inequality	-32.896* [17.745]	-29.837 [18.641]	-35.983** [17.752]	-0.32
Constant	16.676* [9.051]	18.489* [9.700]	19.007** [9.149]	--
R ²	.26	.18	.29	--
N	47	47	47	--

Dependent variable is the Equality of Political Representation Index (higher value indicates a more equal weighting of citizens' political opinions). Cell entries are ordinary least squares regression coefficients with standard errors reported beneath in brackets. * denotes $p < .10$, ** $p < .05$, *** $p < .01$ using a two-tailed test. Column 4 reports the standardized coefficients for the model in Column 3 (the predicted change in terms of standard deviations of the Equality of Political Representation Index when the independent variable in question is increased one standard deviation).

Figure 1: Computing the Relationship For Income and Ideological Distance, by State



State A has more equal political representation than State B because the relationship (regression slope coefficient) between income and opinion-policy distance is weaker in State A compared to State B.

Online Appendix

Table A-1: Political Ideology and Specific Policy Opinions

	Self-Reported Political Ideology				
	Very Conservative	Conservative	Moderate	Liberal	Very Liberal
Government should reduce income differences between rich and poor (% yes)	38	45	58	70	77
Providing health care for people who do not already have it (% spend more)	49	57	73	83	88
Providing assistance to poor mothers with young children (% spend more)	34	39	48	59	67
Financial assistance to public schools (% spend more)	49	58	73	83	87
Laws making it more difficult for a woman to get an abortion (% oppose)	28	42	66	78	81
Constitutional amendment banning gay marriage (% oppose)	29	39	61	74	80
Restricting the kinds of guns that people can buy (% government should do more)	42	52	67	76	76

Data source: 2000 and 2004 National Annenberg Election Surveys.

Table A-2: Income and Ideological Distance Between Opinion and State Policy

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Proximity Measure:</i>	Standardized	Standardized	Same Scale	Same Scale	Restricted Scale	Restricted Scale
<i>Policy Data:</i>	GLFM	SMR	GLFM	SMR	GLFM	SMR
Respondent's Income (State Relative)	-0.010*** [0.002]	-0.011*** [0.003]	-0.012*** [0.002]	-0.014*** [0.003]	-0.008*** [0.002]	-0.010*** [0.002]
Constant	1.148*** [0.115]	1.164*** [0.117]	1.194*** [0.103]	1.213*** [0.074]	0.906*** [0.032]	0.905*** [0.025]
N	177,043	177,043	177,043	177,043	177,043	177,043

Dependent variable: Linear distance between a citizen's ideology and state policy (smaller distance indicates a citizen is better represented). Cell entries are ordinary least squares regression coefficients with standard errors clustered by state reported beneath in brackets. * denotes $p < .10$, ** $p < .05$, *** $p < .01$ using a two-tailed test. GLFM = Gray et al. (2004), SMR = Sorens et al. (2008).

Table A-3: Income and Ideological Distance Between Opinion and State Policy, by Survey Wave

2000	(1)	(2)	(3)	(4)	(5)	(6)
<i>Proximity Measure:</i>	Standardized	Standardized	Same Scale	Same Scale	Restricted Scale	Restricted Scale
<i>Policy Data:</i>	GLFM	SMR	GLFM	SMR	GLFM	SMR
Respondent's Income (State Relative)	-0.015*** [0.003]	-0.013*** [0.003]	-0.018*** [0.004]	-0.017*** [0.003]	-0.015*** [0.003]	-0.016*** [0.002]
Constant	1.141*** [0.131]	1.161*** [0.132]	1.189*** [0.117]	1.208*** [0.084]	0.859*** [0.038]	0.857*** [0.030]
N	57,482	57,482	57,482	57,482	57,482	57,482
2004	(1)	(2)	(3)	(4)	(5)	(6)
<i>Proximity Measure:</i>	Standardized	Standardized	Same Scale	Same Scale	Restricted Scale	Restricted Scale
<i>Policy Data:</i>	GLFM	SMR	GLFM	SMR	GLFM	SMR
Respondent's Income (State Relative)	-0.010*** [0.003]	-0.012*** [0.003]	-0.012*** [0.003]	-0.015*** [0.003]	-0.013*** [0.002]	-0.015*** [0.002]
Constant	1.116*** [0.112]	1.127*** [0.117]	1.162*** [0.102]	1.185*** [0.075]	0.878*** [0.033]	0.876*** [0.026]
N	70,946	70,946	70,946	70,946	70,946	70,946
2008	(1)	(2)	(3)	(4)	(5)	(6)
<i>Proximity Measure:</i>	Standardized	Standardized	Same Scale	Same Scale	Restricted Scale	Restricted Scale
<i>Policy Data:</i>	GLFM	SMR	GLFM	SMR	GLFM	SMR
Respondent's Income (State Relative)	-0.009** [0.004]	-0.011*** [0.003]	-0.009*** [0.003]	-0.013*** [0.003]	-0.011*** [0.002]	-0.012*** [0.002]
Constant	1.202*** [0.099]	1.219*** [0.100]	1.242*** [0.089]	1.258*** [0.064]	1.001*** [0.027]	1.002*** [0.021]
N	48,615	48,615	48,615	48,615	48,615	48,615

Dependent variable: Linear distance between a citizen's ideology and state policy (smaller distance indicates a citizen is better represented). Cell entries are ordinary least squares regression coefficients with standard errors clustered by state reported beneath in brackets. * denotes $p < .10$, ** $p < .05$, *** $p < .01$ using a two-tailed test. GLFM = Gray et al. (2004), SMR = Sorens et al. (2008).

Table A-4: Descriptive Statistics for Variables in Regression Models in Tables 2 and 3

Variable	N	Mean	Standard Deviation	Minimum	Maximum
Equality of Political Representation Index	47	-0.02	2.28	-8.44	4.51
Labor Union Membership	47	11.39	5.22	3.30	25.58
Union Household Share of Electorate	47	22.80	8.46	0	43.30
Labor Union Campaign Contributions	47	10.51	6.17	0.69	21.55
Labor/Business Ratio of Campaign Contributions	47	0.33	0.25	0.01	1.53
% Democrats in State Legislature	47	50.39	14.07	18.75	85.00
% Interest Groups For-Profit	47	72.82	4.92	61.70	81.60
State Median Income (\$1000s)	47	41.01	6.23	29.69	55.14
State Income Inequality (Gini Coefficient)	47	0.44	0.02	0.41	0.50

Note: N=47 because Alaska and Hawaii were not surveyed in the NAES and Nebraska has a non-partisan legislature.

Table A-5: Labor Union Lobbying and the Equality of Political Representation

	(1)	(2)
Labor Union Lobbying Expenditures	-0.020 [0.159]	-0.075 [0.168]
% Democrats in State Legislature	--	0.054 [0.053]
% Interest Groups For-Profit	--	-0.170* [0.090]
State Median Income	--	-0.008 [0.079]
State Income Inequality	--	-31.755 [19.941]
Constant	1.043 [0.653]	25.275** [9.742]
R ²	.01	.40
N	16	16

Dependent variable is the Equality of Political Representation Index (higher value indicates a more equal weighting of citizens' political opinions). Cell entries are ordinary least squares regression coefficients with standard errors reported beneath in brackets. * denotes $p < .10$, ** $p < .05$, *** $p < .01$ using a two-tailed test.

Table A-6: Robustness Check with % Racial Minority Variable Added to Model

	(1)	(2)	(3)
Labor Union Membership	0.176** [0.077]	--	0.225** [0.088]
Labor Union Campaign Contributions	--	0.009 [0.062]	-0.076 [0.067]
% Democrats in State Legislature	-0.009 [0.026]	0.004 [0.027]	-0.010 [0.026]
% Interest Groups For-Profit	-0.079 [0.066]	-0.119 [0.072]	-0.098 [0.068]
State Median Income	-0.001 [0.065]	0.079 [0.063]	0.008 [0.065]
State Income Inequality	-27.678 [24.202]	-11.586 [24.968]	-26.523 [24.145]
% Racial Minority (Non-White)	-0.007 [0.036]	-0.038 [0.037]	-0.014 [0.036]
Constant	16.784 [10.896]	11.111 [11.277]	17.722 [10.893]
R ²	.30	.21	.32
N	47	47	47

Dependent variable is the Equality of Political Representation Index (higher value indicates a more equal weighting of citizens' political opinions). Cell entries are ordinary least squares regression coefficients with standard errors reported beneath in brackets. * denotes $p < .10$, ** $p < .05$, *** $p < .01$ using a two-tailed test.

Table A-7: Running Feasible Generalized Least Squares Regression on the Six Separate Sets of State Income/Proximity Regression Coefficients

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Proximity Measure:</i>	Standardized	Standardized	Same Scale	Same Scale	Restricted Scale	Restricted Scale
<i>Policy Data:</i>	GLFM	SMR	GLFM	SMR	GLFM	SMR
Labor Union Membership	0.001* [0.001]	0.001*** [0.000]	0.001* [0.001]	0.001** [0.000]	0.001** [0.000]	0.001** [0.000]
Labor Union Campaign Contributions	-0.000 [0.000]	-0.000 [0.000]	-0.000 [0.001]	-0.000 [0.000]	-0.000 [0.000]	-0.000 [0.000]
% Democrats in State Legislature	-0.000 [0.000]	-0.000 [0.000]	-0.000 [0.000]	-0.000 [0.000]	-0.000 [0.000]	-0.000 [0.000]
% Interest Groups For-Profit	-0.001* [0.000]	-0.001** [0.000]	-0.001** [0.000]	-0.001 [0.000]	-0.000 [0.000]	-0.000 [0.000]
State Median Income	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]	0.001** [0.000]	-0.000 [0.000]	0.000 [0.000]
State Income Inequality	-0.170 [0.105]	-0.197** [0.096]	-0.145 [0.111]	-0.134 [0.095]	-0.156* [0.082]	-0.155** [0.078]
Constant	0.110** [0.056]	0.117** [0.052]	0.108* [0.059]	0.055 [0.053]	0.096** [0.044]	0.084** [0.043]
N	47	47	47	47	47	47

Dependent variable is the income/proximity slope coefficient for a state (higher value indicates a more equal weighting of citizens' political opinions). Cell entries are feasible generalized least squares regression coefficients with standard errors reported beneath in brackets. Observations are weighted by the inverse of the income/proximity coefficient's standard error in the first stage (state-level) regression. * denotes $p < .10$, ** $p < .05$, *** $p < .01$ using a two-tailed test. GLFM = Gray et al. (2004), SMR = Sorens et al. (2008).

Table A-8: Equality of Political Representation Does Not Predict State Union Membership

Equality of Political Representation Index	0.327 [0.333]
Public Sector Collective Bargaining Law	4.743*** [1.741]
% Private Sector Employees in Construction	-0.727 [0.630]
% Private Sector Employees in Manufacturing	-0.030 [0.127]
Constant	14.306** [6.449]
R ²	.42
N	48

Dependent variable is the average percentage of nonagricultural wage and salary employees (including employees in the public sector) in a state who are union members for 2000-2006. Cell entries are ordinary least squares regression coefficients with standard errors reported beneath in brackets. * denotes $p < .10$, ** $p < .05$, *** $p < .01$ using a two-tailed test.