Supplemental Information: Who Passes Restrictive Labor Policy

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Supplemental Information (Not for Publication)

DgMRP Estimation Procedure

Public Opinion Sources & Question Wording

A full list of the questions used to generate labor union support, as well as coding decisions are included as a separate spreadsheet (Codebook-laborMRP.xlsx). In total, there are 42 unique surveys and 63 questions all coded so that values of 1 indicate support and values of 0 indicate opposition.

First Stage of the Model

The first stage of the model has some uncertainty. By combining polls over time, and weighting by race and income cohort, we still had fairly small samples in several states. However, we have acceptable levels of convergence in the models over time. The mean convergence is 1.0. While the maximum value of an r hat is 1.02, falling below a 1.1 cutoff.

Below, is a histogram of r hats:

Estimating the Model

To create estimates for each state year, the model controls for state, year, percentage of a state’s population that is white, and the percentage of people in each income third. The Census level estimates are generated from the Current Population Survey. The model was estimated using 1500 iterations, 4 chains, 4 cores, and starting seed number of 42. Alternate iterations produced (i.e. without race and with 2500 iterations) substantively similar results that correlate at $r = 0.98$ or higher.

Formation of Union Support over Time

What are the sources of union opinion?

Public support of labor unions is likely a function of both mass ideology and union membership. The more liberal the public is, the higher support for unions will be. Support for organizing in the workplace and collectively advocating for higher wages and better benefits fits neatly within liberal ideology. Also, when one knows a member of a union, or is a member,
s/he can base support or opposition on whether that individual is perceived as deserving of support. Knowing more than one union member may make that group seem more important or more threatening depending on one's underlying ideological disposition. But, as union membership declines, individuals are less likely to know or have interacted with members of a union. While union members make up about 10% of the total workforce, the distribution of those workers is uneven across states.

In Table ?? we present three models of labor support. Models are two-way fixed effects models with average labor support as the dependent variable. Mass ideology is measured using scores of mass liberalism by ? with positive values indicating a more liberal electorate. Union membership is measured as the percentage of workers in the state that belong to a labor union using data from ?, and we also break this measure into public and private sector measures.
Observations from all fifty states from 1992-2014 are included in the model. We find that opinion of labor unions tracks positively and significantly with the overall liberalism of the mass public; more liberal populations are more likely to support unions. But, labor support is not a function of ideology alone. As total unionization and private sector unionization grows so too does support for unions on average (models 1-2). The relationship is slightly curvilinear. Interestingly, this relationship does not hold for public sector unionization. The percent of the workforce belonging to a public sector union has no discernible effect on overall support for labor unions.

Table 1: Labor Support, Mass Ideology, and Union Membership

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass Ideology</td>
<td>0.0146*</td>
<td>0.0187**</td>
<td>0.0223**</td>
</tr>
<tr>
<td></td>
<td>(0.0057)</td>
<td>(0.0054)</td>
<td>(0.0055)</td>
</tr>
<tr>
<td>Total Unionization</td>
<td>0.0090***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0023)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Unionization²</td>
<td>-0.0004***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Sect. Unionization</td>
<td>0.0101***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0025)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Sect. Unionization²</td>
<td>-0.0005***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Sect. Unionization</td>
<td></td>
<td>0.0009</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.0010)</td>
<td></td>
</tr>
<tr>
<td>Public Sect. Unionization²</td>
<td></td>
<td>-0.0000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.0000)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.4106***</td>
<td>0.3831***</td>
<td>0.4045***</td>
</tr>
<tr>
<td></td>
<td>(0.0290)</td>
<td>(0.0224)</td>
<td>(0.0251)</td>
</tr>
<tr>
<td>State Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Year Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>N</td>
<td>1148</td>
<td>1150</td>
<td>1150</td>
</tr>
<tr>
<td>adj. $R^2$</td>
<td>0.879</td>
<td>0.880</td>
<td>0.876</td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*p < 0.05, **p < 0.01, ***p < 0.001

We also reestimated these models of public and private sector unionization for labor support for each income group. There are distinct levels of support by class, and each moves slightly positively depending on the amount of private sector workforce that is unionized with a slight reversion back at very high levels of unionization. But, these slopes are much flatter and less curvilinear for public sector workforce and, like the model of average opinion, the relationship is not statistically significant.

People seem to like unions because they are in one or know someone in one, or support them

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1A curvilinear relationship was also tested for mass ideology and no relationship was found.
from an ideological standpoint. This accounts for much of the variation across states and over
time. Without a referent to construct union support from, respondents may acting with the
idea of a union member based on their ideology. Individual level processing of whether or not
someone approves of unionization may not stem from a strong understanding of what unions
do or who belongs to a union. Instead, we interpret union support as a gut level feeling toward
organized labor that is an amalgam of exposure to unions and overall ideology. But, more
work is needed to elaborate on why and under which conditions unions are seen as a desirable
institution, which groups (parties, media, interest groups) are capable of shifting perceptions.

Why would public opinion change?

Polling around labor union support occurs fairly regularly, generally twice per year (once
in January and once in June or July). However, we believe that respondents are influenced
by news coverage of work stoppage, strikes, or potential legislation. Polling also tends to ask
questions more regularly when labor is in the news. For example, when Wisconsin’s collective
bargaining bill was before its state legislature, we see an increase of polling asking about union
support. This support is meant to capture public opinion at a given political moment, one in
which sentiment toward organized labor (either positive or negative) was quite strong. While
we do suspect that people hold affective feelings toward organized labor, it seems unlikely,
especially given that union members are relatively rare in some states, that people act solely
based on union support. Instead, this type of feeling can be activated by a surveyer or by
ongoing news.

Changing union support, then, is a reaction to ongoing state level events. Ideally, we would
have the same numbers of survey questions throughout the period. However, we have no reason
to suspect that increased news coverage should push respondents only in a positive direction.
Indeed, existing work emphasizes that additional news coverage of protests is likely to lead to
lower levels of public support.

Why would groups converge in support over time?

It is possible that groups converging in levels of support for organized labor is an imperfect
reaction to party preferences. As more states take positions either in favor or against organized
labor, citizens may be learning whether or not their party is in support of organized labor.
However, we are not satisfied with a partisan explanation of public opinion convergence. Parties took positions toward organized labor long ago, and it seems unreasonable to expect that public opinion has only recently shifted. Instead, we believe that the recent news coverage around organized labor has activated some nascent union sentiment. This feeling is more common in lower and middle class respondents, particularly in areas that have a historic union presence. While many people may not have thought they needed to support unions, increased attention emphasizes a need to interact and engage.