**POLICY FEEDBACK AS POLITICAL WEAPON APPENDIX**

*Descriptive Statistics for Cross-State Public Union Analysis*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **Max *N*** | **Mean** | **Std. Dev.** | **Min.** | **Max.** |
| Public Union Density | 1,050 | 33.1 | 17.7 | 2.7 | 73.0 |
| NEA Revenue/Worker | 512 | 9.1 | 5.8 | 1.0 | 33.6 |
| ALEC Model Bill Passed | 1,150 | 0.06 | 0.2 | 0 | 1 |
| Private Union Density | 1,150 | 7.4 | 3.9 | 0.8 | 19.4 |
| Democratic Veto Points | 1,031 | 1.4 | 1.1 | 0 | 3 |
| Unemployment Rate | 1,050 | 5.5 | 1.9 | 2.3 | 13.8 |

*Descriptive Statistics for Cross-State Government Employee Analysis*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **Max *N*** | **Mean** | **Std. Dev.** | **Min.** | **Max.** |
| Political Participation Index | 10,041 | 0.7 | 1.0 | 0 | 5 |
| ALEC Model Bill Passed | 11,157 | 0.1 | 0.3 | 0 | 1 |
| Non-Party Political Mobilization | 9,177 | 0.1 | 0.3 | 0 | 1 |
| Government Employee | 11,189 | 0.2 | 0.4 | 0 | 1 |
| Age | 11,001 | 43.0 | 13.2 | 18 | 99 |
| Male | 11,168 | 0.5 | 0.5 | 0 | 1 |
| White | 10,662 | 0.7 | 0.5 | 0 | 1 |
| Black | 10,662 | 0.1 | 0.3 | 0 | 1 |
| Hispanic | 11,185 | 0.1 | 0.3 | 0 | 1 |
| Education | 11,153 | 2.1 | 0.8 | 1 | 3 |
| Family Income (Deciles) | 10,204 | 5.8 | 2.7 | 1 | 10 |
| Interest in Political Campaigns | 10,655 | 2.3 | 0.7 | 1 | 3 |
| Strong Partisan | 11,147 | 0.3 | 0.5 | 0 | 1 |

The following list details all of the ALEC model bills that I identified as relating to public sector labor unions. Full model bill text is available from the Center for Media and Democracy at www.alecexposed.org/.

Civil Rights Act

Employee Secret Ballot Protection Act

Labor Peace Agreement Preemption Act

Open Contracting Act

Paycheck Protection Act

Prohibition of Negative Check-off Act

Prohibition on Compensation Deductions Act

Prohibition on Paid Union Activity (Release Time) by Public Employees Act

Public Employee Freedom Act

Public Employee Paycheck Protection Act

Public School Employee Union Release Time Act

Right to Work Act

School Collective Bargaining Agreement Sunshine Act

Union Financial Responsibility Act

Voluntary Contributions (Paycheck Protection) Act

The table below lists the legislation I identify along with the corresponding ALEC model bill proposals in the eight states I study:

|  |  |  |
| --- | --- | --- |
| **State** | **ALEC Model Bill** | **Legislative Session** |
| Arizona | Public Employee Paycheck Protection Act | 2011-2012 |
| Colorado | School Collective Bargaining Agreement Sunshine Act | 2001-2002 |
| Georgia | Labor Peace Agreement Preemption Act | 2013-2014 |
| Idaho | Public Employee Paycheck Protection Act | 2003-2004 |
| North Dakota | Open Contracting Act | 2013-2014 |
| Tennessee | Open Contracting Act | 2011-2012 |
| Utah | Voluntary Contributions | 2001-2002 |
| Wisconsin | Public Employee Freedom Act | 2011-2012 |

Below, I append the full question text from the NES items I used as outcomes in the analysis of conservative network-backed legislation on public employee political participation:

*Political participation (0-5 additive index of each item)*:

* *Persuade others about voting*: We would like to find out about some of the things people do to help a party or a candidate win an election. During the campaign, did you talk to any people and try to show them why they should vote for or against one of the parties or candidates?
* *Political meetings or events*: Did you go to any political meetings, rallies, speeches, dinners, or things like that in support of a particular candidate?
* *Button/ sign/stickers*: Did you wear a campaign button, put a campaign sticker on your car, or place a sign in your window or in front of your house?
* *Work for candidates*: Did you do any (other) work for one of the parties or candidates?
* *Contribute to campaign*: During an election year people are often asked to make a contribution to support campaigns. Did you give money to an individual candidate running for public office?

*Interest in electoral campaigns (1-3 scale)*:

* Some people don't pay much attention to political campaigns. How about you? Would you say that you have been [very much interested, somewhat interested or not much interested/ not much interested, somewhat interested or very much interested] in the political campaigns so far this year?

*Contacted by non-party group*:

* Other than someone from the two major parties, did anyone (else) call you up or come around and talk to you about supporting specific candidates in this last election?

*Difference-in-Differences Plot for Public Union Membership and NEA State Affiliate Revenue and ALEC Bill Passage*



Below, I present results excluding North Dakota and Tennessee from the analysis and looking only at the “treated” states. The results are similar to those in the paper. OLS models; standard errors clustered by state. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01.

|  |  |  |
| --- | --- | --- |
|  | *Public Union Density* | *NEA Revenue/Worker* |
| ALEC Model Bill Passed | -6.10\* | -1.19\*\*\* |
|  | (2.84) | (0.25) |
| Sample | Treated - ND & TN | Treated - ND & TN |
| State Effects | Y | Y |
|  |  |  |
| R-Squared | 0.88 | 0.93 |
| *N* | 126 | 61 |

Below, I present results of the eight “treated” states that leave out each state-year observation in turn to test the robustness of my findings to outliers, as well as including biennium fixed effects. OLS models. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *Public Union Density* | | *NEA Revenue/Worker* | |
| ALEC Model Bill Passed | -5.27\*\*\* | -2.01\*\* | -1.08\*\*\* | -0.90\*\* |
|  | (0.94) | (0.92) | (0.41) | (0.44) |
| Sample | Treated | Treated | Treated | Treated |
| State Effects | Y | Y | Y | Y |
| Biennium Effects | N | Y | N | Y |
| Jackknifed Errors | Y | Y | Y | Y |
| R-Squared | 0.87 | 0.89 | 0.94 | 0.95 |
| *N* | 168 | 168 | 80 | 80 |

Below, I present results of the eight “treated” states that control for public union density or NEA revenue/worker four years before the passage of ALEC legislation. OLS models. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01.

|  |  |  |
| --- | --- | --- |
|  | *Public Union Density* | *NEA Revenue/Worker* |
| ALEC Model Bill Passed | -4.29\* | -1.22\*\*\* |
|  | (1.88) | (0.25) |
| Sample | Treated | Treated |
| State Effects | Y | Y |
| R-Squared | 0.82 | 0.93 |
| *N* | 105 | 36 |

Below, I present results that difference the outcomes and include a lagged dependent variable. OLS models. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01.

|  |  |  |
| --- | --- | --- |
|  | *Differenced*  *Public Union Density* | *Differenced*  *NEA Revenue/Worker* |
| ALEC Model Bill Passed | -2.58\*\* | -1.19\*\*\* |
|  | (1.13) | (0.42) |
| Sample | All | All |
| State Effects | Y | Y |
| Year Effects | Y | Y |
| Lagged DV | Y | Y |
| R-Squared | 0.27 | 0.38 |
| *N* | 1,000 | 460 |

Below, I present results of the eight “treated” states that include state-specific time trends. OLS models. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01. The results for public union density are no longer significant at conventional levels (due to a larger standard error), but I continue to find a similar effect for NEA affiliate revenue.

|  |  |  |
| --- | --- | --- |
|  | *Public Union Density* | *NEA Revenue/Worker* |
| ALEC Model Bill Passed | -2.25 | -1.04\*\*\* |
|  | (1.60) | (0.24) |
| Sample | Treated | Treated |
| State Effects | Y | Y |
| State-Specific Time Trends | Y | Y |
|  |  |  |
| R-Squared | 0.94 | 0.94 |
| *N* | 168 | 80 |

Below, I present alternative regression specifications for the analysis of conservative network-backed legislation on NEA affiliate revenue, using logged revenue instead of revenue per worker. OLS models; standard errors clustered by state. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *Logged NEA Affiliate Revenue* | | | | |
| ALEC Model Bill Passed | -0.29\*\*\* | -0.25\*\*\* | -0.24\*\*\* | -0.24\*\*\* | -0.24\*\*\* |
|  | (0.05) | (0.07) | (0.07) | (0.07) | (0.06) |
|  |  |  |  |  |  |
| Sample | All | All | All | All | Treated |
| State Effects | Y | Y | Y | Y | Y |
| Year Effects | Y | Y | Y | Y | N |
| Covariates | N | Y | Y | Y | N |
| Lagged DV | N | N | Y | N | N |
| Region Trends | N | N | N | Y | N |
|  |  |  |  |  |  |
| R-Squared | 0.24 | 0.27 | 0.2 | 0.29 | 0.98 |
| *N* | 513 | 505 | 454 | 505 | 80 |

Below, I present the full regression results of the effect of conservative network-backed legislation on public employee participation using OLS models. Standard errors clustered by state. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01. Survey weights applied.

|  |  |  |
| --- | --- | --- |
| *Participation Index (0-5 Acts)* | | |
|  | Model 1 | Model 2 |
| ALEC Model Bill Passed | 0.16\*\*\* | -0.04 |
|  | (0.05) | (0.09) |
| Government Worker | 0.12 | -0.01 |
|  | (0.12) | (0.13) |
| Model Bill X Government Worker | -0.48\*\*\* | -0.27\* |
|  | (0.12) | (0.15) |
| Union Member |  | 0.14 |
|  |  | (0.15) |
| Age |  | -0.02 |
|  |  | (0.02) |
| Age Squared |  | 0.00 |
|  |  | (0.00) |
| Male |  | -0.01 |
|  |  | (0.08) |
| White |  | 0.01 |
|  |  | (0.12) |
| Black |  | 0.22 |
|  |  | (0.18) |
| Hispanic |  | -0.29\*\*\* |
|  |  | (0.10) |
| Some College |  | 0.19\* |
|  |  | (0.11) |
| College or More |  | 0.34\*\*\* |
|  |  | (0.11) |
| Family Income (Deciles) |  | 0.01 |
|  |  | (0.02) |
| Interest in Political Campaigns |  | 0.51\*\*\* |
|  |  | (0.06) |
| Strong Partisan |  | 0.55\*\*\* |
|  |  | (0.13) |
|  |  |  |
| State Effects | Y | Y |
| Year Effects | Y | Y |
|  |  |  |
| R-Squared | 0.05 | 0.23 |
| *N* | 10,014 | 8,620 |

Below, I present the full regression results of the effect of conservative network-backed legislation on public employee participation using OLS models and excluding North Dakota and Tennessee. Standard errors clustered by state. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01. Survey weights applied.

|  |  |  |
| --- | --- | --- |
| *Participation Index (0-5 Acts)* | | |
|  | Model 1 | Model 2 |
| ALEC Model Bill Passed | 0.17\*\*\* | -0.08 |
|  | (0.05) | (0.08) |
| Government Worker | 0.09 | -0.02 |
|  | (0.11) | (0.14) |
| Model Bill X Government Worker | -0.45\*\*\* | -0.27\* |
|  | (0.11) | (0.15) |
| Union Member |  | 0.14 |
|  |  | (0.16) |
| Age |  | -0.01 |
|  |  | (0.02) |
| Age Squared |  | 0.00 |
|  |  | (0.00) |
| Male |  | 0.00 |
|  |  | (0.08) |
| White |  | -0.01 |
|  |  | (0.13) |
| Black |  | 0.24 |
|  |  | (0.18) |
| Hispanic |  | -0.29\*\*\* |
|  |  | (0.10) |
| Some College |  | 0.20\* |
|  |  | (0.11) |
| College or More |  | 0.37\*\*\* |
|  |  | (0.11) |
| Family Income (Deciles) |  | 0.01 |
|  |  | (0.02) |
| Interest in Political Campaigns | | 0.52\*\*\* |
|  |  | (0.06) |
| Strong Partisan |  | 0.49\*\*\* |
|  |  | (0.14) |
|  |  |  |
| Sample | Excludes SD and TN | Excludes SD and TN |
| State Effects | Y | Y |
| Year Effects | Y | Y |
|  |  |  |
| R-Squared | 0.05 | 0.24 |
| *N* | 9,706 | 8,380 |

Below, I present graphical results of the effect of conservative network-backed legislation on public employee participation using OLS models, accounting for the timing of ALEC model bill legislative passage. This model is based on a regression with binary indicators for 1-2 elections before ALEC bill passage, the year of passage, and one or more elections after bill passage. (The excluded category is 3 or more years before bill passage.) All of these indicators are interacted with the binary indicator for government worker, and the results are shown below. 90% confidence intervals shown in lines. The effect of conservative network-backed bills on government worker participation grows negative only after bill passage and stays relatively similar after bill passage for private sector workers. Survey weights applied.



Below, I present the full regression results of the effect of conservative network-backed legislation on public employee participation using OLS models with an interactive term between bill passage, government workers, and union membership. Standard errors clustered by state. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01. ALEC model bill passage lowered public employee participation for both union and non-union members alike. Survey weights applied.

|  |  |
| --- | --- |
|  | *Participation Index (0-5 Acts)* |
|  | Model 1 |
| ALEC Model Bill Passed | 0.20\*\*\* |
|  | (0.05) |
| Government Worker | 0.13 |
|  | (0.13) |
| Model Bill X Government Worker | -0.35\*\* |
|  | (0.13) |
| Union Member | 0.29 |
|  | (0.23) |
| Model Bill X Union Member | -0.92\*\*\* |
|  | (0.23) |
| Government Worker X Union Member | -0.24 |
|  | (0.27) |
| Model Bill X Government Worker X Union Member | 0.18 |
|  | (0.27) |
|  |  |
| State Effects | Y |
| Year Effects | Y |
|  |  |
| R-Squared | 0.05 |
| *N* | 10,014 |

Below, I present the full regression results of the effect of conservative network-backed legislation on the political interest expressed by public employees (interest in electoral campaigns, on a 1-3 scale) using OLS models. Standard errors clustered by state. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01. The models show that ALEC model bill passage does not appreciably change the interest expressed by public employees in electoral campaigns. Survey weights applied.

|  |  |
| --- | --- |
|  | *Interest in Campaigns (1-3)* |
|  | Model 1 |
| ALEC Model Bill Passed | 0.05 |
|  | (0.04) |
| Government Worker | 0.06 |
|  | (0.04) |
| Model Bill X Government Worker | 0.04 |
|  | (0.04) |
|  |  |
| State Effects | Y |
| Year Effects | Y |
|  |  |
| R-Squared | 0.05 |
| *N* | 10,254 |

Below, I present the full regression results of the effect of conservative network-backed legislation on public employees reporting mobilization by non-party groups, like unions, using OLS models. Standard errors clustered by state. \* *p*<0.10, \*\* *p*<0.05, \*\*\* *p*<0.01. The models show that ALEC model bill passage led to a lower probability of public employees reporting non-party contact around the election (12 percentage point reduction). Survey weights applied.

|  |  |
| --- | --- |
|  | *Non-Party Contact (0-1)* |
|  | Model 1 |
| ALEC Model Bill Passed | 0.00 |
|  | (0.05) |
| Government Worker | 0.05 |
|  | (0.04) |
| Model Bill X Government Worker | -0.13\*\*\* |
|  | (0.04) |
|  |  |
| State Effects | Y |
| Year Effects | Y |
|  |  |
| R-Squared | 0.03 |
| *N* | 9,152 |