



Legislative Holdouts

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Abstract

Holding out occurs when a legislator votes against a policy that is closer to her ideal point than the status quo. The researchers' original survey of state legislators shows that a large number, over a quarter, indicate that they would vote against a proposal even though it is closer to their ideal policy than the status quo. Following their pre-analysis plan, the researchers examine a number of possible factors that could explain why these legislators hold out. Their data indicate that Republicans, legislators in the majority, and those who fear that their constituents will punish compromise are most likely to hold out. The results show one way legislative gridlock can occur even when a supermajority of legislators could be made better off by policy change.

Legislative gridlock is a frequent and often bemoaned aspect of the American policymaking process (see e.g., Binder 2003; Burden 2011; Gutmann and Thompson 2014; Mayhew 1991), and spatial models with proximity voting provide a compelling explanation of why it is difficult to move policy away from the status quo: one or more pivotal actors with veto power prefer the status quo over the proposed alternative (Brady and Volden 2005; Krehbiel 1998; Tsebelis 2002). Gridlock may thus simply reflect the lack of common ground among the key actors involved in the process. However, gridlock may also occur because some legislators vote no, despite being faced with a policy proposal that is closer to their most preferred policy than the status quo. We refer to this type of behavior as “holding out.”¹ Our use of this term does not imply that a legislator must hold out for something. Rather, there are a number of reasons why an individual might not support a proposal. In our paper, holding out describes cases where legislators vote against a proposal (for whatever reason) even though the proposal is closer than the status quo to their ideal point.

Spatial models with proximity voting predict that holding out should never occur. Yet there are many reasons that a legislator might hold out on policy. Legislators might hold out for reasons related to strategic voting, or if they fear the consequences of voting for a compromise bill among their constituents or donors, or if they want deny the other party legislative credit, or even if they view partial policy solutions as unacceptable. We seek to understand whether legislators ever hold out. If so, what factors predict these legislative holdouts?

We currently know very little about legislative holdouts because it is difficult to measure when a legislator is voting against her preferred policy. Identifying a holdout requires the following information on the same single-dimensional scale: the legislator’s induced preference, the position of the current policy, the position of the new proposed policy, and how the legislator would vote. The need to identify individuals’ preferences and the location of the current policy on the same dimension is central to the application of spa-

¹Our use of this term builds on the Merriam-Webster Dictionary definition: to hold out is “to refuse to go along with others in a concerted action...”.

tial models in politics (Krehbiel and Rivers 1988; see also Adams et al. 2011; Jessee 2009, 2012; Joesten and Stone 2014; Stone and Simas 2010; Volden 1998). We provide new insights on legislative holdouts by acquiring all of these pieces of information through a survey of state legislators that examines their willingness to vote in support of a compromise proposal that moves the gas tax closer to their own preferred policy (albeit not all the way to the legislator’s ideal point).

We find that a surprisingly large number of legislators indicate that they would vote against a compromise proposal even though it is closer to their ideal policy than the status quo. Following a pre-analysis plan filed with the experiments in governance and politics (EGAP) network, we explore these deviations by examining a number of possible factors that explain legislators’ behavior and might explain why legislators hold out, including the role of credit claiming (Grimmer, Messing, and Westwood 2012), future legislative coalitions (Penn 2009; Volden 1998), morality (Clifford and Jerit 2013; Ryan 2014), and fear of voter punishment (Burden, Jones, and Kang 2014; Sanchez 2014). Our data show that Republicans, legislators in the majority, and those who fear that their constituents will punish compromise are most likely to hold out. The constellation of Republicans in the majority who fear voter retribution for compromise provides the perfect storm that would lead legislators to hold out on policy compromises, providing one explanation for the high levels of gridlock in the 112th and 113th Congresses at the federal level.

1 Expectations and Hypotheses

A legislator “holds out” under our definition when she votes against a policy that is closer to her ideal point than the status quo policy. The spatial model with proximity voting provides an unequivocal prediction of how frequently legislators should hold out: never. Given a one-dimensional policy space and actors with single-peaked preferences, a single-round, spatial model predicts that a legislator will vote for a proposal if it is closer to her ideal point than the alternative or status quo (Black 1948; Downs 1957).

Figure 1 shows a single-dimension policy space for two different legislators (A and B) to illustrate the region where the spatial model would predict that legislators would vote for a proposal. This is marked as the “potential holdout region” for each legislator. This region is defined by the status quo (SQ) on one side and $SQ - 2 * |SQ - Legislator's Position|$ on the other side. Thus, policy proposal P is in located in legislator A’s potential holdout region but not in legislator B’s potential holdout region. Proposal N is not in the *potential* holdout region for either legislator and proposal O is in the potential holdout region of both actors. Importantly, this is just the potential holdout region; legislators can vote for the proposals in these areas (and should vote for the proposals according to the proximity voting model because all proposals in this area are closer to the legislator’s ideal point than the status quo). By our definition, holding out occurs when legislators vote against a policy in their potential holdout region (for example, legislator A votes no on proposal O).

In our discussion and empirical tests, we focus on proposals located in the portion of the potential holdout region located between the legislator’s preferred policy and the status quo. For legislator A in Figure 1, proposal O is located in this narrower region of interest but proposal P, though it falls in the potential holdout region, is not. We focus on the area between the legislator’s ideal point and the status quo to eliminate concerns that legislators might vote against a policy because they engage in directional voting (Rabinowitz and Macdonald 1989). Proposals in this region unequivocally move policy toward the legislator and represent an option between the current policy and the legislator’s most preferred policy.

Although policymakers at times appear to hold out, cases reported in the press are often indeterminate because we do not have information about all of the inputs for these legislators’ decisions. For instance, in 2011, Republican lawmakers and presidential candidates made headlines when they said that they would reject a budget proposal that would provide \$1 in tax increases for every \$10 in spending cuts (Woodhill 2011). While it might be the case that these Republicans were holding out and voting against a pro-

posal (with its many spending cuts) that was closer to their preferences, it is possible that they were voting no because it was a two-dimensional issue and they simply weighted tax increases more than spending cuts.

Similarly, research suggests that legislators sometimes signal support for legislation via cosponsorship only to fail to support a discharge petition for the bill (Krehbiel 1995) or to vote against it on the floor (Bernhard and Sulkin 2013). It is difficult, however, to attribute this behavior to legislative holdouts because legislation can change between cosponsorship and committee reporting or floor voting. Some members may renege because they no longer prefer the bill on policy grounds. The complexity of multi-dimensional policy areas (Jochim and Jones 2013) combined with the difficulty of measuring actors' preferences and placing policies on a measurable scale (Krehbiel and Rivers 1988) generally makes it difficult to systematically analyze legislative holdouts.

Using a research design that avoids these pitfalls, we test several reasons that legislators might deviate from the standard prediction and hold out: to deny credit to the opposition party, because they expect to be in a better position to get their ideal policy in the future, because they are responsive to moral arguments made about the legislation, and because they are concerned that voters will punish them for voting for a compromise position.² Each of these is a potential explanation for why legislators might hold out when presented with a compromise policy proposal that falls between the current policy and their most preferred policy.

The discussion of the hypotheses below and the tests in the analyses that follow stem from our pre-analysis plan. Acknowledging that science is an iterative process and that scholars can intentionally or unintentionally select only those models that yield significant results, a growing body of scholars in the social sciences have been adopting

²Pressure from party leaders is also likely part of the story. We opt not to focus on party pressure for two reasons. First, there are many forms of party pressure (direct and indirect) that may not be well captured in a vignette (or any other simplified version of policymaking that is tractable in a survey). Second, even if there is pressure from party leaders that would simply push the question back one level. In other words, we would still want to know: why are party leaders against this proposal? Some of the same factors that we lay out here would need to be explored in relation to that question (e.g., denying the opposition credit or legislators' time horizons). We thus chose to focus directly on those reasons in this study.

pre-analysis plans as a way to specify the theoretical hypotheses, the empirical measures, and the relevant hypothesis tests before data is collected (see Humphreys, Sierra, and Windt 2013; Monogan 2013). To avoid post-hoc theorizing, we exactly implement our pre-analysis plan in the primary analysis and are transparent about where we go beyond the pre-analysis plan in either robustness checks or subsequent explorations of puzzling results. A full version of our pre-analysis plan was placed with the EGAP network and is also available in Appendix D. It spells out the following hypotheses.

1.1 Denying the opposition credit

Legislators might hold out on a policy to prevent the opposition party from getting credit for passing the policy. That is, legislators, who rely on their party to create a cohesive reputation that serves their reelection interests (Cox and McCubbins 1993, 2007), may avoid voting for legislation that would enable to the opposition party to take credit for a policy, even if it is closer to their ideal points (e.g., Brady and Frisby 2011). Even when a compromise version of legislation would make both sides better off, politicians may “reject compromise because the political advantages of maintaining disagreements outweigh the benefits of a modestly better policy achieved through compromise” (Gilmour 1995, p. 3). We test this expectation (and the proposed credit mechanism) with hypotheses H1-H4, which leverage the partisanship of the bill sponsors.

H1: Legislators will hold out more when the bill sponsors come from the opposing party.

H2 (a weak prediction): Legislators may be more likely to hold out when the bill has bipartisan sponsors than when they are all from the legislator’s party.³

H3: Legislators will indicate that their party will get the least credit if the

³We have intentionally used weak language to state this prediction. If the default is to vote for the proposal, as the spatial model predicts, then a bipartisan proposal might not move the legislators. However, compared to the situation when the sponsors are from the same party as the legislator, the opposition can claim more credit if the bill passes. For this reason, we might see that the bipartisan condition leads to more holdouts than the same-party condition.

sponsors are from the opposing party.

H4: Legislators will indicate that their party will get the most credit if the sponsors are all from the legislator's party.

1.2 Legislators' time horizons

Legislators might hold out because they expect to be in a better position to get their preferred outcome in the future (Volden 1998). Compromising now may make it harder to get all of what they want in future legislative sessions because the compromise proposal might become a status quo point that is more difficult to move than the current status quo (Penn 2009; Brady and Volden 2005; Krehbiel 1998). Alternatively, a change now could make it harder to achieve future changes because of friction due to institutional design (Jones, Sulkin, and Larsen 2003) or transaction costs (North 1990). Finally, there may be behavioral reasons, such as not wanting to move a policy after just changing it, that cause legislators to consider what their position might be in future legislative sessions. We do not differentiate between these potential reasons. Instead, we test the basic expectation that legislators who expect that their side of the issue will be in a stronger position in the future will be more likely to hold out and vote no (see hypothesis H5).

H5: Legislators who expect that, as a whole, legislators serving in the future will be more likely to share their preferences will be more likely to hold out.

1.3 Framing the issue in moral terms

Because political moralizing connects issues to deeply held beliefs about right and wrong (Kahan and Braman 2006; Lakoff 2002), it changes the types of positions and policies people are willing to accept (Clifford and Jerit 2013; Feinberg and Willer 2013; Ryan 2014). Individuals in the public indicate that they are less likely to compromise on issues that they identify as moral in nature (Mooney and Schuldt 2008) and politicians

may do the same. Legislative proposals that move policy toward a politician's ideal point, but only part way, may be viewed as an unacceptable compromise. Although legislators are subject to more constraints than citizens, they may reject partial solutions to perceived problems, instead taking the stance that a moral issue is so privileged that it cannot be subject to an incomplete resolution. This leads to hypothesis H6.

H6: Legislators who receive arguments for policy change framed in moral terms will be more likely to hold out.

1.4 Voter punishment

Legislators might hold out because they believe that voters will punish them for appearing to compromise. While some types of constituents may want compromise from Congress (Harbridge and Malhotra 2011) or from members of the opposing party (Wolak 2013), others, particularly strong partisans, may not want legislative compromise from their own party (Harbridge, Malhotra, and Harrison 2014). In particular, if the reelection coalition on which the legislator depends (likely her copartisans; Fiorina 1974) would punish a compromising stance, a legislator might reject a policy that could be considered a compromise even if it moved policy in his preferred direction. Congressman Lee Terry (R-NE) hinted at this mechanism when discussing the effect of the Tea Party in the wake of Eric Cantor's 2014 primary election defeat: "The message to us is that negotiations or compromise can get you beat" (Sanchez 2014). This leads to hypothesis H7.

H7: Legislators who believe that their voters are very likely to punish legislators engaging in policy compromise will be more likely to hold out.

Proximity voting offers the clear expectation that legislators will not hold out. Exploring the frequency of holding out as well as whether any of these rationales explain patterns of who holds out provides a crucial first step toward understanding this aspect of legislative gridlock.

2 Research Design: Identifying Holdouts

To assess the rationales for why legislators hold out, we leverage a survey of state legislators that detailed a proposal to change to the state gas tax in the legislators' respective states. Most research on proximity voting among elites focuses on the United States Congress. However, the theoretical expectations from these spatial models (and the predictions from our hypotheses) hold across institutional domains (Tsebelis 2002). We study holding out among state legislators because doing so gives us variation in the status quo of the policy we explore (state gas tax levels), in the partisan control of the chamber, and in the likelihood that more members of their chamber will share their preferences in the future.

In June 2014, we emailed a link for a survey to all state legislators in the United States who had a publicly listed email address on the state's website to invite them to take a 5-minute survey on "how state legislators make policy decisions." The email came from the university account of one of the researchers at a top university in the United States (see Appendix D for the anonymized version of the invitation text used in the emails). In addition to the initial invitation, we sent two follow up invitations, each spaced a week apart.

Our invitations yielded a sample of state legislators that is about the size that is frequently used to study the behavior of the majority party in the U.S. House (in our case about 270 responses). We received more responses overall, about 350,⁴ but as we indicated in our pre-analysis plan, we restrict the sample to the self-identified state legislators who had an induced preference different than the current gas tax in their state.⁵ Overall

⁴This represents a response rate of about five percent. This is actually a lower response rate than we expected. However, this is consistent with the pattern of decreasing response rates for elite-sample surveys (see Butler and Powell 2014; Fisher and Herrick 2013; Maestas, Neeley, and Richardson 2003). While we do not know the reason for this decline, we suspect it is a manifestation of the tragedy of the commons. The advent of the Internet and the ability to easily contact state legislators means that many more people are now conducting national surveys than they have in previous years (both academic and non-academics). The increased request for time means that many legislators have instituted a policy of no response to anyone. In our case, many legislators explicitly told us that they were turning us down because they received too many of these requests.

⁵Our first question on the survey asked: "Before we start, are you a legislator or staff member?" We used only the self-identified legislators for our analysis. We also had a number of legislators who said

we had a sample that was fairly balanced relative to the national composition of state legislatures on gender, majority/minority status, term limited or not, and legislative professionalism. For instance, women represented 28 percent of our sample (compared to 24 percent nationally; National Conference of State Legislatures 2013) and 28 percent of our sample came from term limited states (compared to 26 percent nationally; Ballotpedia 2014c). Although our sample skewed slightly Democratic, 46 percent of our sample were Republicans (compared to 52 percent nationally; Ballotpedia 2014a, 2014b). Figure B1 in the appendix presents a map with information on the geographic locations of respondents and Table B1 in the appendix compares our sample to national numbers on each of the characteristics discussed above. Our sample's relatively high degree of representativeness across these characteristics increases our confidence in the generalizability of the findings.

2.1 State gas tax level

We focused the survey on the state gas tax in the legislators' respective states because it is a salient issue where the relevant inputs for our tests can be represented by a single-dimension, numeric scale: the state gas tax given in cents per gallon. Unlike more abstract concepts (such as the degree that a policy is pro-choice versus pro-life), legislators have a shared understanding of what a given change on this scale represents (i.e., everyone has a common understanding that the difference between 40 cents and 50 cents is a change of 10 cents). We were thus able to measure where legislators' induced preferences were in relation to the known status quo gas tax in their state and the policy proposal they were considering. Importantly, this meant that we could present legislators with proposals that they should strictly prefer based on their induced preferences and the status quo. Moreover, because there are many rationales for raising or lowering the gas tax, this issue also allowed us to vary the language that the proposer used (and, specifically, whether it was moral or amoral). In addition to offering a clean test of what drives holdouts, the

the current gas tax is equal to their induced preference on this issue. They were not shown the vignette because there is no compromise proposal to offer them.

gas tax is fairly representative of the types of issues facing state legislators.

2.2 Eliciting state legislators' induced preferences for their state gas tax

We began with survey questions to elicit legislators' induced preferences on their states' gas tax levels (see Appendix A for the full text of the survey). We built up to the question designed to capture induced preferences by first reminding legislators of their state's current gas tax level and then asking them about the preferences of three key sets of actors (Levitt 1996): (1) the voters in their district, (2) their legislative party leaders, and (3) themselves. We reminded the legislators about their state's current gas tax because legislators have information about the status quo when making decisions.

Legislators indicated their perceptions about the preferences of each group for state gas tax levels on a scale that ranged from 0 to 150 cents per gallon.⁶ We then asked the following question designed to measure their induced preferences:

“We realize that many factors go into making decisions as a state legislator. Accounting for all of the above considerations (and other factors too), what would you implement if, in your role as a state legislator, you could choose the state gas tax level in your state?”

We emphasized that they should think about their role as a state legislator to capture how they would act in their official capacity. We asked them about what policy they would “implement” in order to get their preferred policy as opposed to what they thought was politically viable.

Although it is supplemental to our pre-analysis plan, the preliminary questions also allow us to assess the weight legislators put onto different factors when forming their

⁶Currently, the highest state gas tax is 50 cents per gallon. We chose 150, which is higher than the optimal gas taxes given by economists (Lin and Prince 2009; Parry and Small 2005), as the upper end of the scale in order to leave room for those who wanted to increase the gas tax. Although we did not expect many legislators to choose a number higher than 150, we provided a separate box where they could enter a higher number if they did. Ultimately less than 1 percent of legislators chose a number higher than 150 for any of the groups we asked about.

induced preferences. We measured the weights that legislators put on these different factors by using an OLS regression to estimate the following model, with the constraint that $\gamma_V + \gamma_P + \gamma_O = 1$:

$$\begin{aligned} \text{Induced Preference}_i = & \alpha + \gamma_V \text{Voter Preference}_i + \gamma_P \text{Party Leaders Preference}_i \\ & + \gamma_O \text{Own Preference}_i + \varepsilon_i \end{aligned} \tag{1}$$

The coefficients γ_V , γ_P , and γ_O thus provide the relative weights that legislators put on each of these factors (Levitt 1996).⁷

Figure 2 shows the results in a triplot. Each side of the triangle ranges from 0 to 1, so that any point within the triangle represents a triplet of weightings on the components that drive legislators' induced policy preferences. The intersection of the dotted lines show the actual weighting legislators use; party leaders' preferences receive 14% of the weight, while voters' preferences receive 28% of the weight. The remaining 58% is attributable to the legislators' own preferences. These results are similar to the weights found by Levitt (1996)⁸ and increase our confidence that we are measuring legislators' induced preferences.

2.3 How would legislators vote on a proposal they should strictly prefer?

We used a vignette to identify which legislators hold out and vote against policies they should strictly prefer. On the page after the questions about policy preferences, legislators read the vignette shown in Figure 3, which asked them to suppose that two legislators in their state proposed a bill to change the gas tax. As we discuss more below, we varied the partisanship of the bills' sponsors to measure how that impacted legislators' decisions

⁷The R-squared on the unconstrained version of this regression is 0.76, indicating that the party, constituency, and ideology combined explain a great deal of the induced preferences.

⁸Levitt (1996) found that the weight on party leaders' preferences ranged from 2% to 13%, the weight on voters ranged from 23% to 28%, and the weight on ideology ranged from 52% to 69%.

and perceptions. We emphasized that there was no second dimension under consideration by telling them that the bill would only affect the state gas tax.

The vignette presented each legislator with a proposal that was at the midpoint between the status quo and her induced preference, a compromise proposal each legislator should strictly prefer. For instance, if a legislator from Arkansas had an induced preference of 40 cents per gallon, the proposal she would have seen would be 31 cents per gallon (halfway between her ideal point and the state status quo of 22 cents). The vignette then reminded them of the status quo and their preferred policy, presented an argument for the bill (which we discuss below) and asked, “Would you vote for this bill if it were introduced in your legislature?”

The standard spatial model with proximity voting predicts that all legislators should vote yes. Yet a full twenty-eight percent of the legislators in our survey indicated that they would hold out and vote no if confronted with the policy choice we presented (see Figure 4). This degree of holding out has significant consequences for the coalitions needed to pass legislation. Under majority rule, if twenty-eight percent of legislators who preferred a policy to the status quo were holdouts, proposals could only pass when they were closer to the ideal points of a supermajority of 69 percent of legislators (because only 72% of those expected to favor it would vote yes). Thus, holdouts can significantly contribute to gridlock by effectively raising the threshold for passage, hindering policy changes that make a majority better off.

3 Testing the Determinants of Holding Out

The analysis here follows our pre-analysis plan, in which we outlined seven hypotheses (see H1-H7 in the previous section) and the regression models to test those hypotheses. The following variables were constructed from the experimental components of the gas tax vignette and the questions that followed (see Appendix A for full question wording).⁹

⁹All questions except the primary dependent variable of whether a legislator would vote for the bill were presented on the page after the vignette.

3.1 Dependent variables

Holdout equals 1 if the legislator voted “no” on the policy in the vignette and equals to 0 if they voted “yes” (see Figure 3).

Credit is their response (measured on a scale of 0-100) to the following question: “If the compromise proposal passes, what portion of the credit do you think your party can claim?”

3.2 Independent variables

In the vignette we randomized the partisanship of the bill’s two sponsors (see Figure 3) so that legislators saw one of three conditions: two Democrats, two Republicans, or a Republican and a Democrat. We used this information to create dummy variables for *opposition sponsors* and *bipartisan sponsors* with the omitted category capturing same-party sponsors.

We also randomized whether one of the sponsors in the vignette made an argument using moral language (see Figure A3 in the appendix for complete treatment wording). The key difference is that the *moral argument* treatment (for either a decrease or increase in the gas tax) included several words that are associated with moral considerations in decision-making along a care/harm dimension (e.g., moral, preserve, protect, harm, and caring; Graham, Haidt, and Nosek 2009, Graham et al. 2011). We pretested the moral and amoral argument treatments on Amazon’s Mechanical Turk to ensure that the treatments differed in the extent of moral framing without affecting argument strength.¹⁰

¹⁰Specifically, we pre-tested these treatments using respondents from Amazon’s Mechanical Turk to ensure that we presented treatments that were 1) perceived as having differing degrees of moral language, 2) perceived as being similar strength arguments, and 3) the same across the increase and decrease gas tax choices. For our test, we gave each of the 1639 MTurk respondents one argument from among five proposed arguments in favor of a compromise position between their ideal position and the status quo. The five arguments were slightly different versions of the moral or amoral language. We then asked respondents whether “The legislator is trying to make an ethical appeal to listeners” and whether “The legislator makes a strong argument” on a five-point scale from “Strongly Disagree” to “Strongly Agree.” The sets of statements used here met all three of the criteria noted above. The two treatments were perceived as having differing degrees of moral language, where the coefficients in regressions of how ethical they thought the argument was on which treatment they received were significantly different at $p < 0.001$ and a two sample t-test with equal variances indicated they were significantly different. On

On the page following the vignette we asked respondents how much power legislators who share their view on this issue would have in the legislative chamber in the future. Respondents had five options for the amount of future power: *a lot more*, *a little more*, *the same amount of power*, *a little less*, and *a lot less* (see Appendix A for full text). We used this information to create indicator variables for how much power they thought those who shared their view they would have in the future (with the omitted condition being “the same amount of power”).

We also asked legislators: “In general, if you were to make compromises on policy, how much retribution would you face from voters in your district?” with the response options: None, Some, A lot. We used responses to create indicator variables for those who expected *high voter retribution* and *some voter retribution* (with the omitted category capturing those who thought they would face no voter retribution).

Finally, we created variables for whether the legislator was a *Republican*, a *woman*, *in the majority* in their legislative chamber, and for the *distance to SQ* (which equals |Legislator’s induced preference – Status quo gas tax level|).

3.3 Regression models and hypotheses

We used OLS regression to estimate the following two models. The first model captures the primary hypotheses about when legislators hold out. The second model captures the proposed mechanism linking the party of the policy proposer to the credit each party receives.¹¹

the other hand, they were perceived as similarly strong: the coefficients from the regressions were not distinguishable and a t-test showed no difference. This was the only pairing that met criteria 1) and 2) across both the increase and decrease arguments.

¹¹As we outline in our pre-analysis plan, we ran these models to test the following hypotheses (corresponding to H1-H7 introduced in Section 1):

- H1 (Credit claiming - strong prediction): $\beta_1 > 0$
- H2 (Credit claiming - weak prediction): $\beta_2 > 0$
- H3 (Credit claiming - mechanism): $\beta_{15} < 0$
- H4 (Credit claiming - mechanism): $\beta_{16} < 0$
- H5 (Effect of time horizon): $\beta_6 < \beta_5 < 0 < \beta_4 < \beta_3$
- H6 (Moral): $\beta_7 > 0$
- H7 (Voter punishment): $0 < \beta_9 < \beta_8$

Model 1

$$\begin{aligned} \text{Holdout}_i = & \beta_0 + \beta_1 \text{Opposition sponsors}_i + \beta_2 \text{Bipartisan sponsors}_i \\ & + \beta_3 \text{Future power=A lot more}_i + \beta_4 \text{Future power=A little more}_i \\ & + \beta_5 \text{Future power=A little less}_i + \beta_6 \text{Future power=A lot less}_i \\ & + \beta_7 \text{Moral argument}_i + \beta_8 \text{High voter retribution}_i \\ & + \beta_9 \text{Some voter retribution}_i + \beta_{10} \text{Republican}_i + \beta_{11} \text{Female}_i \\ & + \beta_{12} \text{Distance to SQ}_i + \beta_{13} \text{In majority}_i + u_i \end{aligned} \quad (2)$$

Model 2

$$\text{Credit}_i = \beta_{14} + \beta_{15} \text{Opposition sponsors}_i + \beta_{16} \text{Bipartisan sponsors}_i + \varepsilon_i \quad (3)$$

4 Results

Table 1 shows the results from an OLS regression corresponding to Model 1 given above. Because the dependent variable is binary, the coefficients can be interpreted in terms of the percentage point change in the likelihood that the legislator holds out and votes “no” on the proposal. For example, the -0.030 coefficient on woman indicates that female legislators are 3 percentage points less likely to hold out than male legislators (but this effect is not statistically significant). Three variables have coefficients that are statistically distinguishable from zero with $p < 0.05$ in a one-sided test.

Consistent with Hypothesis H7, legislators who believe that their voters are very likely to punish legislators engaging in policy compromise (i.e., high voter retribution) are twenty-two percentage points more likely to hold out. In some ways, this is not a shocking result: legislators who believe that their voters will punish behavior that looks like compromise are likely to avoid compromise even if they stand to benefit by bringing the gas tax toward their preferred level. However the size of the effect is noteworthy.

This is one of the three variables that attains statistical significance and is the second largest predicted effect in the model.

Although the coefficient on those who believe they would face some voter retribution for compromising does not reach significance, it has the expected positive sign. And the difference between the coefficient on those who believe they would face a lot of voter retribution and some retribution approaches significance (difference of 0.189, $p=0.071$, one-sided test). Taken together, this suggests that, more than making a simple decision about whether a proposal is closer to their ideal point, legislators must separately consider whether the policy moves far enough to placate voters who do not approve of compromise.

Republicans are likewise more likely to hold out and the effect is quite large. Holding constant the other factors in the model, Republicans are 23 percentage points more likely to hold out than Democrats.¹² This willingness of Republicans to oppose legislation that moves policy toward their ideal points suggests that there is something about the Republican Party that makes them less likely to compromise. It could be that Republicans, as a party, have staked out territory as the party of principles that cannot be compromised. It may also be that Democrats and Republicans weigh their constituent, party, and own preferences differently. We explore this issue more below.

Legislators in the majority in their respective chamber are also eighteen percentage points more likely to hold out than those in the minority. Given that the regression also contains variables testing the hypothesis that those who expect to have more power in the future are more likely to hold out, the legislators in the majority are not holding out because this majority status conveys something about who will hold power in the future.

¹²We might be concerned that the party results are driven by having a sample that over represents extreme Republicans and underrepresents extreme Democrats - that our party results are, instead, extremism results. However, a comparison of the CF scores from all winners of the 2012 state legislative elections and our sample (or between winners of the 2008 through 2012 elections and our sample) suggests that this alternative explanation is unlikely. These scores offer a measure of legislator ideology by using contribution patterns for each election cycle (Bonica 2014). The distribution of ideologies among all winners and among our sample shows that, if anything, our sample over represents extreme Democrats more than extreme Republicans. As a result, our sample provides a better balance between the number of extreme Democrats and extreme Republicans than occurs in the full universe of cases in Bonica (2013) for this time period, suggesting that our results would not be biased toward finding a Republican effect on holding out. The significant effect of being in the Republican Party should be all the more surprising given the distribution of members in our sample.

Instead, perhaps legislators in the majority have different experiences achieving their most preferred policies versus compromise proposals. Because majority party legislators have more success advancing their legislative initiatives (e.g., Volden and Wiseman 2014), they may have less experience having to compromise and so they may be less willing to do so. Or perhaps it is a selection story. The people who choose to run for a party that will be in the minority may be the very types who are willing to compromise (because otherwise they do not expect to get much done), while the majority party might entice potential candidates who expect to get their way while in office and who do not expect to have to compromise. Whatever explains this pattern, the result is that the politicians from the majority party may be less likely to support policy compromises. One implication of this finding is that, if the majority party controls the floor agenda of the chamber, the majority party may even block compromise proposals from seeing a floor vote altogether.

The evidence for the time horizon hypothesis (H5) is more mixed. On one hand, the coefficients generally go in the expected direction. The legislators who expect that the coalition that shares their view will grow in power are about ten percentage points more likely to hold out (than those who think their power will be the same in the future), while those who expect to have a lot less power are about twenty percentage points less likely to hold out. In other words, the people who expect to be on the side of the issue that is growing in power are willing to hold out and wait for better days, while those who think they are in a shrinking coalition are more likely to take the compromise while they have the chance. On the other hand, the coefficients fail to achieve statistical significance. However, the nearly 30 percentage point difference between those legislators who think that their group will have a lot more power in the future and those who think that their group will have a lot less power in the future, approaches significance ($p=0.076$, one-sided test). On balance, we think it is premature to make a conclusion about this hypothesis. Still the results give enough encouragement to justify further exploration into how time horizons affect legislators' willingness to hold out.

The evidence points against the other two rationales for why legislators might hold

out. In this study, legislators do not hold out because a moral argument makes them averse to compromise and they do not hold out because of fears that they will not get credit for supporting compromises proposed by the opposition. The coefficients testing these hypotheses are not only statistically insignificant, but they actually go in the wrong direction. Despite the Mechanical Turk pre-test of the sponsor's arguments to confirm that they offered different degrees of moral language, those who received the amoral framing were just as likely to hold out as those who received the moral framing. There are number of possible reasons for this null effect. Most of the research on the effects of moral framing focuses on the mass public. Perhaps the political elite and the mass public are affected differently by moral framing. Elites have different incentives than members of the mass public and may recognize the need to accept partial solutions even on issues that hinge on moral consideration. However, it could also be the case that among the political elite, Democrats and Republicans respond differently to moral considerations. Because Republicans rely on a greater number of moral foundations (Graham, Haidt, and Nosek 2009), moral considerations may be more readily available to Republicans than to Democrats. As a result, the moral frame may be stronger among Republicans (Chong and Druckman 2007), and the resulting treatments in our study may differentially affect Democrats and Republicans (a possibility we consider in the next section of the paper).

Similarly, legislators do not appear to be concerned about opposition credit; those who received a vignette with opposition sponsors or bipartisan sponsors are no more likely to hold out than those who received a vignette with sponsorship by their own party. Again the negative coefficients on the two sponsorship variables actually go in the opposite direction as what is predicted in hypotheses H1 and H2.

When we designed the study, we theorized that the partisanship of the sponsors should matter because the legislators would expect to get less credit if the other party sponsored the bill. The lack of a relationship between sponsorship and holding out calls into question whether the mechanism proposed, that legislators are loath to give credit to the opposition party, is correct. It is possible that this assumption is wrong: legislators may not think

that partisanship of the sponsors affects how much credit they can claim. Because we asked legislators to indicate how much credit they thought they would get if the bill in the vignette passed, we can test whether legislators believed that the partisanship of the bill sponsors would affect how much credit their party was able to claim.

The results in Table 2 show that legislators think that their party will receive significantly less credit if the passing proposal comes from members of the opposing party as opposed to their own. That is, our expectation that the party of the bill sponsors would affect the credit that each side receives was correct. This result is robust to the inclusion of additional control variables (see Appendix Table C2). Yet despite the party of the sponsors affecting the credit each party receives, fitting with the mechanism we proposed, this decrease in credit does not lead to an increased likelihood of holding out. This yields an interesting puzzle worthy of future research.

These patterns, in combination with the other findings, suggest that legislators care about their electoral interests, but only as it applies to their personal interest and not as it applies to their party's overall fortune. Fear of voter punishment, which measures how much legislators are concerned with their own personal interest, is one of the strongest predictors of holding out. At the same time, legislators are not concerned about the credit that goes to the party as a whole. This pattern is consistent with broad theoretical traditions in political science that suggest that legislators (like other individuals) are primarily focused on investing in their own interests, even when it comes at a cost to the public good of the party as a whole. This dynamic is often identified as the mechanism that explains why rank-and-file legislators empower legislative leaders to sanction their members in order to accomplish collective goals (e.g., Cox and McCubbins 1993).

Finally, the remaining control variables are not associated with holding out. Women are just as likely as men to hold out and those whose ideal points are close to the status quo are just as likely to hold out. Further exploration shows that the null effect of the distance to the status quo is robust to several alternate specifications (see Appendix Table C1). The distance to the status quo does not have either a linear or non-linear effect on

holding out. Likewise, a fully saturated model including an interaction term between an indicator variable for small distances (less than 5 cents) from the status quo and each independent variable of interest yields insignificant interactions. Only when the distance to the status quo is measured as a percentage change does a positive and significant effect emerge, suggesting that legislators who want to make a bigger change (and the resulting proposal is also a larger percentage change) are more likely to hold out. Finally, the significant effects of perceived voter retribution, Republican, and majority member are robust to the inclusion of additional controls for divided government, members' vote share in the last election (capturing electoral security), whether legislators wanted to increase (versus decrease) the state gas tax, and the size of the majority party (see Appendix Table C2 for more details).

5 Partisan Puzzles to Explore

All of the tests above were laid out in our pre-analysis plan and revealed the surprising frequency of holding out, while pointing to several variables as explanations. However, the results also raise several new questions. This section goes beyond our pre-analysis plan to provide some initial exploration into these puzzles. Because these results go beyond the pre-analysis plan, they should be viewed more tentatively and any findings should be independently investigated further.

First, could the null results on framing issues as moral be driven by differences in the ways that Democrats and Republicans view moral issues? Table 3 presents a test of this possibility by including an interaction term between legislator's partisanship and the moral treatment indicator. The coefficient on this interaction term is small and not statistically significant, suggesting that the null results on the moral framing of issues was not driven by partisan differences in availability of moral considerations. Neither party was moved by the appeals using moral language.

Second, why are Republicans more likely to hold out even after controlling for their

expectations of how much constituents punish politicians who compromise? While many popular accounts suggest that Republicans are more likely to hold out, these accounts typically blame that behavior on legislators' fears that they will face retaliation from the Tea Party wing of their party in the electorate (e.g., Skocpol and Williamson 2012).¹³ However, we find that Republicans are more likely to hold out and vote no on the policy compromise even after controlling for their expectations about how much voters will punish politicians who compromise. Thus, partisan differences cannot be driven merely by the threat of primary challengers to Republicans from the right. One possible explanation for the robust relationship between Republican members and holding out is that Republicans may be more likely to hold out because Republicans and Democrats arrive at their induced preferences by putting different weights on different factors. We explore this possibility by re-estimating Equation 1, but allowing the weights to vary by party.

Figure 5 displays the results of the regression and shows that Republicans put much more weight on their own opinion than do Democrats. Democrats put 54 percent of their weight on their own opinion, while Republicans put 70 percent of their weight on their own opinion. This 16 percentage point difference is quite large and is statistically significant ($p=0.022$, one-sided test).

This raises the possibility is that Republicans are more likely to hold out because they are more personally invested in their induced preferences, which may make it harder for them to compromise. Without testing alternative explanations we cannot claim that this is the sole reason for the observed relationship. However, the fact that Republicans hold out more often than Democrats, combined with this pattern of weights in the induced preferences, points to a promising way to understand the differences between the parties.

¹³These types of comments are common. For instance, a Huffington Post opinion piece blames the 2013 sequestration cuts on GOP members who fear the wrath of Tea Partiers in primary elections (Bard 2013). Similarly, a Bloomberg Business Week article notes that after the loss of Eric Cantor in 2014 to a Tea Party challenger, Republicans “now seem determined to do even less than before for fear of incurring the wrath of the far right” (Green 2014).

6 Discussion

Policy gridlock is a legislative outcome that concerns scholars and political observers alike. While some instances of gridlock reflect divergent views among the central players in the policymaking process and a resulting lack of common ground, other instances may reflect legislators failing to support proposals that they prefer to the status quo. This paper focused on this second possibility, leveraging a research design to test whether legislators hold out and what factors may explain these patterns.

Our results show that legislators hold out at surprisingly high rates. Despite being faced with a policy proposal that is closer to their own induced preference than the status quo, over a quarter of legislators indicated that they would hold out, voting no on the proposed bill. This finding stands in stark contrast to the expectation from a spatial framework with proximity voting. We tested a number of possible explanations for why legislators would hold out, finding evidence that legislators who thought their constituents would punish compromise were significantly more likely to hold out than those who did not fear voter retribution. We also found that Republican legislators and those in the majority party were more likely to hold out.

The combination of these findings suggests that the current political constellation in the U.S. Congress may be the perfect storm for legislative holdouts, which may in turn contribute to policy gridlock. Republicans in both chambers may be more likely to hold out, and Republicans in the majority in the House may be even more likely to hold out. Added to the party culture of the Republican Party that may be driving these holdouts, Republicans' constituents might be more likely than Democrats' to punish for compromise. Pew Research Center's Values Survey (2012) reports that while roughly 80% of all Americans agree with the statement: "I like political leaders who are willing to make compromises in order to get the job done," there are partisan differences. 90% of Democrats but only 68% of Republicans agree with the statement. Although the partisan gap on this question has been growing for the last fifteen years, it accelerated during the

Obama administration. Moreover, members of the public who identify with the Tea Party movement are even more likely than other Republicans to oppose bipartisanship (Skocpol and Williamson 2012).¹⁴ As a result, all of the factors that we found to be significant predictors of holding out on policy are at work in the 112th and 113th Congresses. Not only do Democrats and Republicans want to move policy in opposite directions on many policies, but even where they could agree on policy, members may hold out rather than vote for policies they prefer.

In addition to identifying additional reasons for legislative gridlock, the findings of this paper elucidate the relationship between individual legislators and their party. The findings point to legislators' own electoral interests trumping party credit as an explanation for holding out, and the patterns of induced preferences point to legislators' own preferences, and those of their constituents, having greater weight than party leaders' preferences. While not exhaustive of the legislator-party relationships that affect legislative politics, these patterns point to some of the dynamics at play, even in a political era that is more heavily partisan than earlier decades.

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¹⁴For instance, a 2011 Pew Research Center poll found that in the case of the 2011 budget debates, two-thirds of Tea Party identified Republicans favored a shutdown over compromise, while the majority of more moderate Republicans and Independents preferred meeting Democrats part way (Pew Research Center Publications 2011).

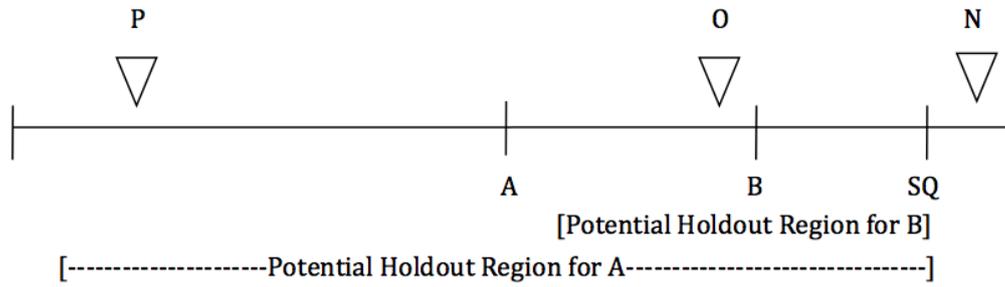
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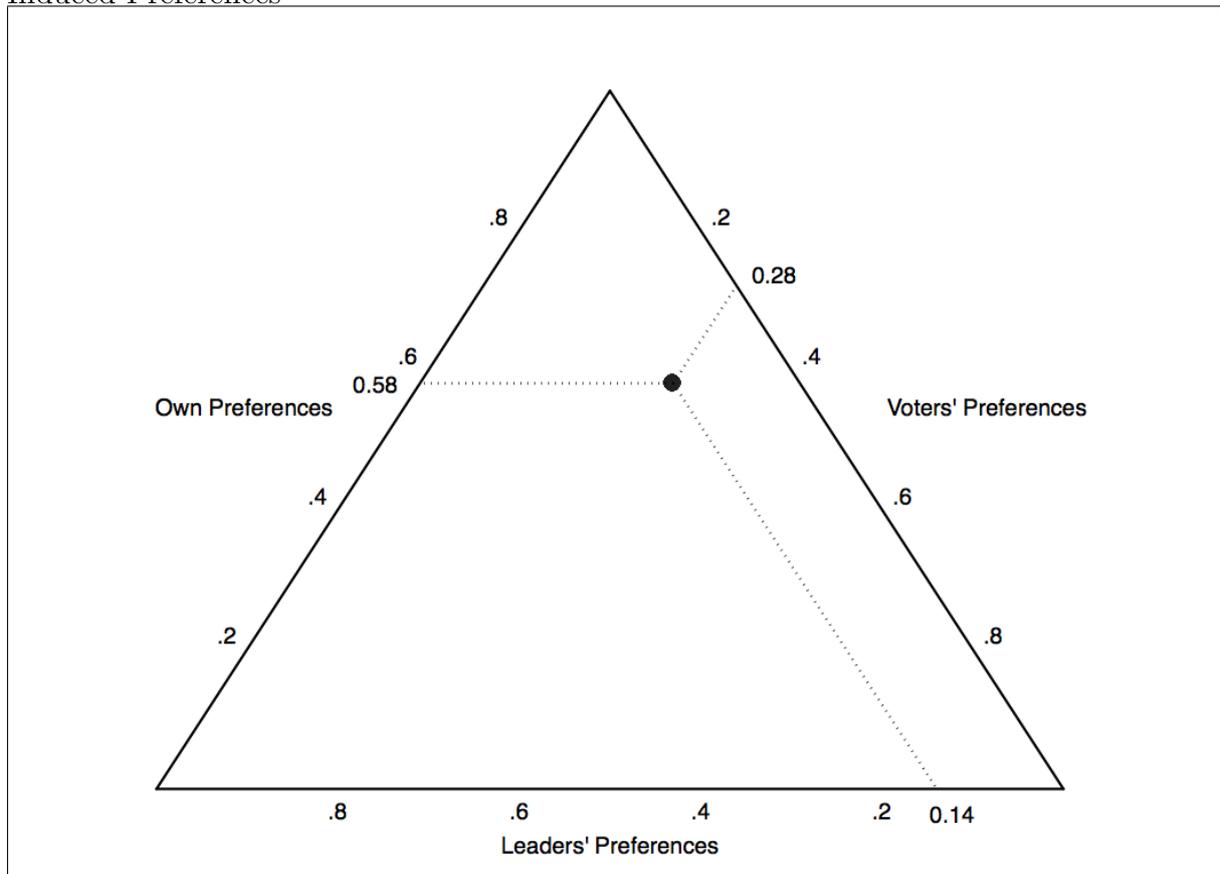
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Figure 1: Potential Holdout Regions



Note: The line represents a uni-dimensional policy space. Points A and B represent the preferences of Legislator A and Legislator B. The triangles N, O, and P, represent different policy proposals and SQ the status quo of the policy. Finally, the potential holdout region for the two legislators is marked below the figure in brackets.

Figure 2: Weights of Voter, Party Leader, and Individual Preferences in Legislator's Induced Preferences



Note: The point estimate from the constrained regression suggests that legislators use the following weights when deciding their induced preferences: 0.58 for their own preference, 0.28 for voters' preferences, and 0.14 for party leaders' preferences. Each side of the triangle represents weight given to the respective components of induced preferences. Each corner of the triangle represents full weight on one of the components. Specific values for weights are given by following the dotted lines parallel to the sides of the triangle to where they intersect with each side.

Figure 3: Treatment Vignette

Suppose that [two Democratic legislators / two Republican legislators / a Republican legislator and a Democratic legislator] in your state proposed a bill that would only affect the state gas tax, and would set the new state gas tax to [X] cents per gallon, a [Y] cent [increase/decrease].

Recall that the current gas tax in [STATE] is about [SQ GAS TAX] cents per gallon and you stated a preference for [THEIR INDUCED PREFERENCE] cents per gallon.

In proposing the bill, one of the sponsoring legislators argued:

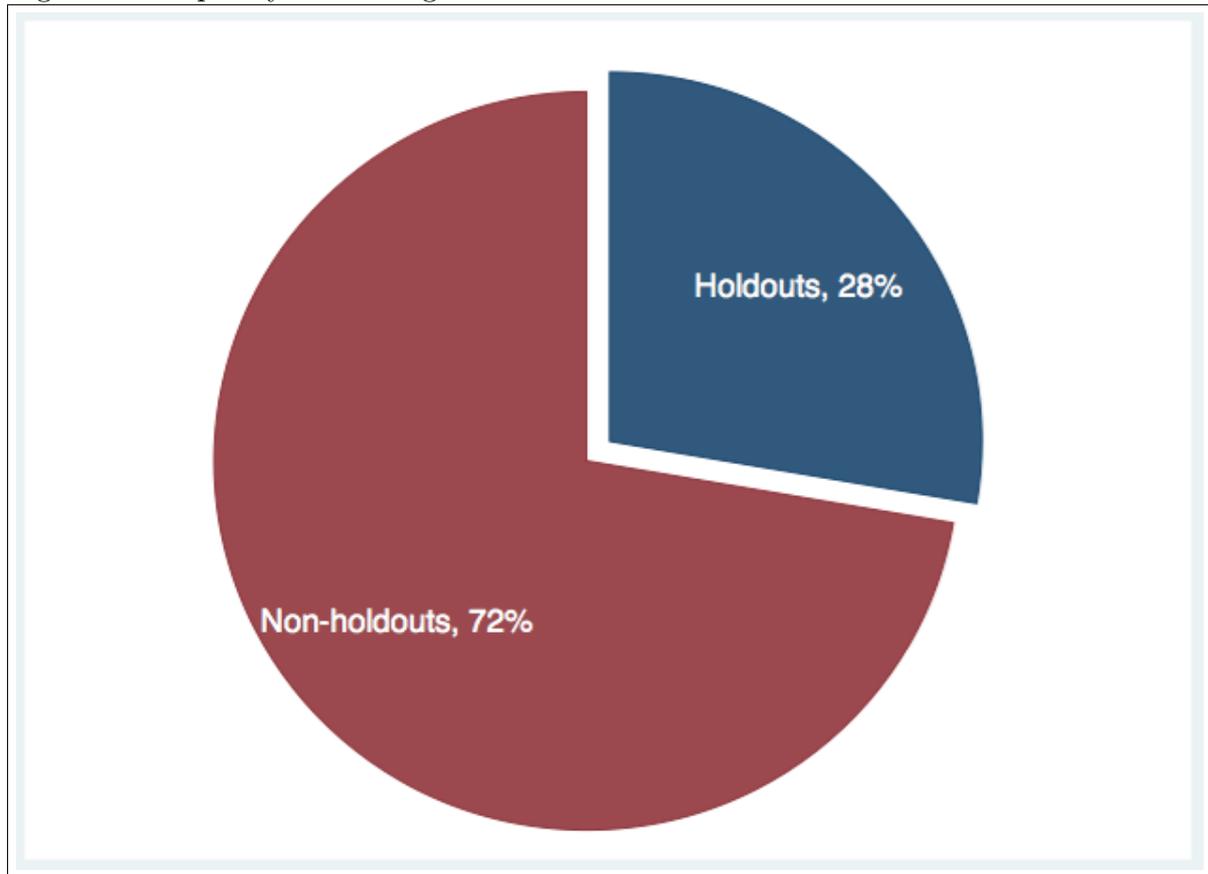
[MORAL ARGUMENT TEXTS]

Would you vote for this bill if it were introduced in your legislature?

Yes No

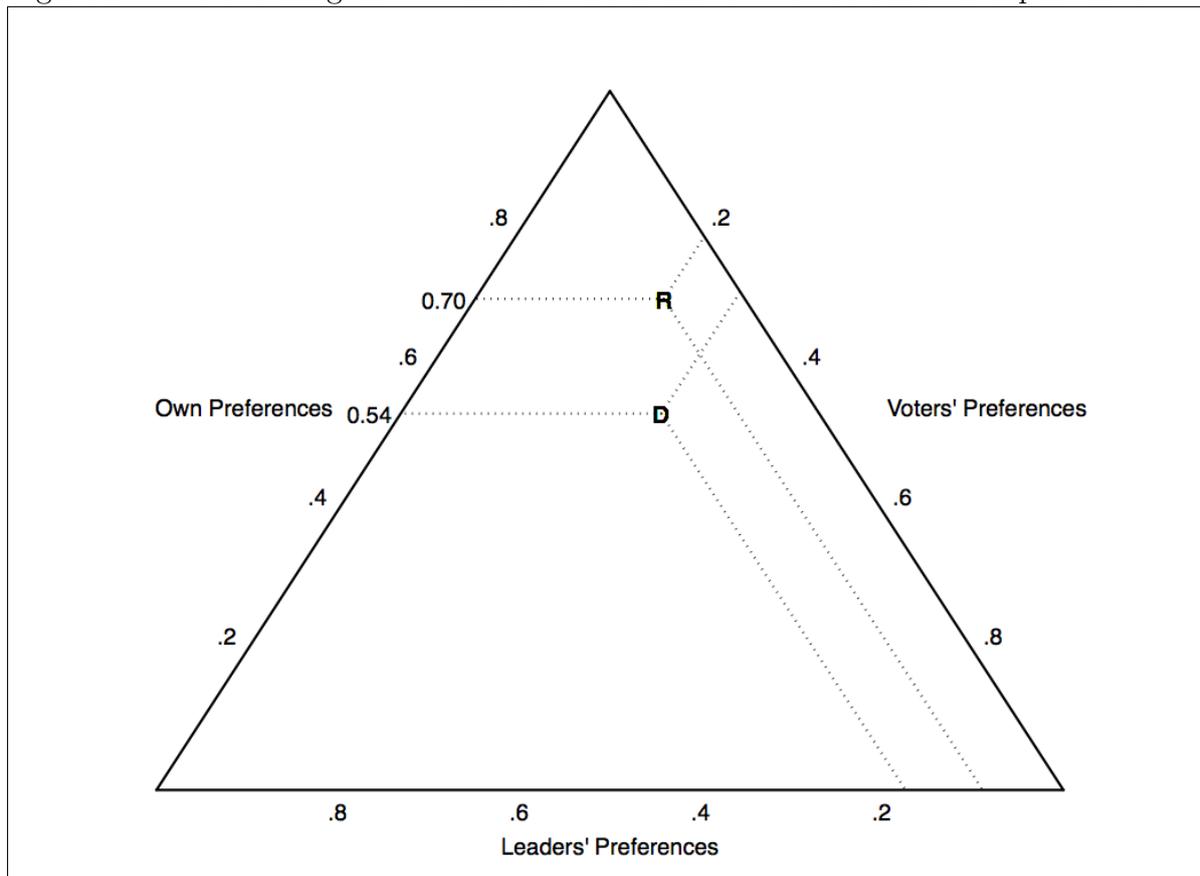
Note: The figure gives the text of the vignette shown to legislators. The text given in brackets varied across legislators. X is the midpoint between the status quo and the legislator's preferred policy. Y is the distance between the current gas tax and the proposed gas tax, and is calculated as $|(SQ\ GAS\ TAX - INDUCED\ PREFERENCES)/2|$.

Figure 4: Frequency of Holding Out



Note: This presents the percent of legislators who held out and voted “no” on the compromise proposal presented in the vignette (see Figure 3).

Figure 5: Different Weights in Induced Preferences for Democrats and Republicans



Note: R and D are used to indicate the point estimates from the constrained OLS regression for Republicans and Democrats respectively. The estimates for Republicans: 0.70 for their own preference, 0.21 for voters' preferences, and 0.09 for party leaders' preferences. The estimates for Democrats: 0.54 for their own preference, 0.29 for voters' preferences, and 0.17 for party leaders' preferences.

Table 1. Predicting Legislative Holdouts

| VARIABLES | DV=Holdout |
|------------------------------|-------------------|
| Opposition sponsors | -0.027 (0.063) |
| Bipartisan sponsors | -0.038 (0.062) |
| Future power = A lot more | 0.104 (0.098) |
| Future power = A little more | -0.060 (0.061) |
| Future power = A little less | -0.008 (0.081) |
| Future power = A lot less | -0.192 (0.186) |
| Moral treatment | -0.038 (0.051) |
| High voter retribution | 0.219* (0.129) |
| Some voter retribution | 0.038 (0.057) |
| Republican | 0.235* (0.056) |
| Woman | -0.030 (0.059) |
| Distance to SQ | 0.004 (0.003) |
| In majority | 0.181* (0.054) |
| Constant | 0.031 (0.093) |
| Observations | 271 |
| R-squared | 0.172 |

Standard errors in parentheses. *p<0.05 (one-sided).

Table 2. Effect of Sponsorship on Credit

| VARIABLES | DV=Credit |
|---------------------|---------------------|
| Opposition sponsors | -12.115* (4.533) |
| Bipartisan sponsors | -2.799 (4.478) |
| Constant | 60.742* (3.430) |
| Observations | 233 |
| R-squared | 0.035 |

Standard errors in parentheses. *p<0.05 (one-sided).

Table 3. Does the Effect of Moral Framing Vary by Party?

| VARIABLES | DV=Holdout |
|------------------------------|-------------------|
| Opposition sponsors | -0.028 (0.063) |
| Bipartisan sponsors | -0.039 (0.062) |
| Future power = A lot more | 0.101 (0.098) |
| Future power = A little more | -0.058 (0.061) |
| Future power = A little less | -0.009 (0.081) |
| Future power = A lot less | -0.194 (0.187) |
| Moral treatment | -0.021 (0.068) |
| Republican*Moral treatment | -0.037 (0.102) |
| High voter retribution | 0.221* (0.130) |
| Some voter retribution | 0.037 (0.057) |
| Republican | 0.253* (0.075) |
| Woman | -0.030 (0.059) |
| Distance to SQ | 0.004 (0.003) |
| In majority | 0.182* (0.054) |
| Constant | 0.025 (0.095) |
| Observations | 271 |
| R-squared | 0.172 |

Standard errors in parentheses. *p<0.05 (one-sided).

NOTE: MOST OF THIS MATIERAL WILL BE PLACED IN AN ON-LINE APPENDIX

Appendix A: Screen Shots of the Survey

Figure A1: Page 1 of survey questions seen by legislator in Arkansas

Sometimes state gas taxes are proposed as a way to encourage fuel conservation and reduce carbon emissions (in addition to being a source of funding). Currently the gas tax in Arkansas is about 22 cents per gallon.

We want to ask you about the following three groups' preferences over the optimal state gas tax level.

[Note: As you answer these question, be sure that the number you've selected appears on the right side of the slider. If a number does not appear on the right, you have not yet answered this question. If the answer is more than 150 cents/gallon, enter 150 here and we'll give you a chance to enter the larger number.]

| | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 |
|--|---|----|----|----|----|----|----|-----|-----|-----|-----|
| The preferred level for voters in your district | | | | | | | | | | | |
| The preferred level of your legislative party leaders | | | | | | | | | | | |
| Your preferred level | | | | | | | | | | | |

We realize that many factors go into making decisions as a state legislator. Accounting for all of the above considerations (and other factors too), what would you implement if, in your role as a state legislator, you could choose the state gas tax level in your state?

[Note: As you answer these question, be sure that the number you've selected appears on the right side of the slider. If a number does not appear on the right, you have not yet answered this question. If the answer is more than 150 cents/gallon, enter 150 here and we'll give you a chance to enter the larger number.]

| | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 |
|---|---|----|----|----|----|----|----|-----|-----|-----|-----|
| Your chosen level as a state legislator | | | | | | | | | | | |

Note: The state name and status quo gas tax seen by each legislator matched their respective state.

Figure A2. Example of page 2 of survey questions seen by legislator in Arkansas

Suppose that two Democratic legislators in your state proposed a bill that would only affect the state gas tax, and would set the new state gas tax to 31 cents per gallon, a 9 cent increase.

Recall that the current gas tax in Arkansas is about 22 cents per gallon and you stated a preference for 40 cents per gallon.

In proposing the bill, one of the sponsoring legislators argued:

Climate change is a problem with important implications. This proposal is not perfect, but it is a step towards improving the environment.

Would you vote for this bill if it were introduced in your legislature?

Yes

No

The party identification of the bill sponsors and whether the argument from the bill sponsor was moral or amoral varied randomly across legislators.

Figure A3. Text of Moral Arguments Used in the Vignette (see Figure A2)

Those who wanted to increase the gas tax in their state (relative to the status quo) saw one of the following two arguments:

Tax increase, moral treatment: “Climate change is a dangerous problem with important moral implications. We must act on our obligation to preserve the earth and protect future generations from harm. This proposal is not perfect, but it is a step towards caring for the environment.”

Tax increase, amoral treatment: “Climate change is a problem with important implications. This proposal is not perfect, but it is a step towards improving the environment.”

Those who wanted to decrease the gas tax received one of the following two treatments:

Tax decrease, moral treatment: “Slow economic growth is a dangerous problem with important moral implications. We must act on our obligation to preserve jobs and protect future generations from harm. This proposal is not perfect, but it is a step towards caring for the economy.”

Tax decrease, amoral treatment: “Slow economic growth is a problem with important implications. This proposal is not perfect, but it is a step towards improving the economy.”

Figure A4: Page 3 of survey questions

If the compromise proposal we described on the last page did pass, what portion of the credit do you think your party could claim?

0 10 20 30 40 50 60 70 80 90 100

Portion of the credit your party could claim

Elections change the composition of legislatures. Thinking about this issue and your chamber, which of the following best describes what you expect in the future:

Legislators who share my views on this issue will...

- gain a lot of power in the chamber
- gain a little power in the chamber
- keep the same amount of power
- lose a little power
- lose a lot of power

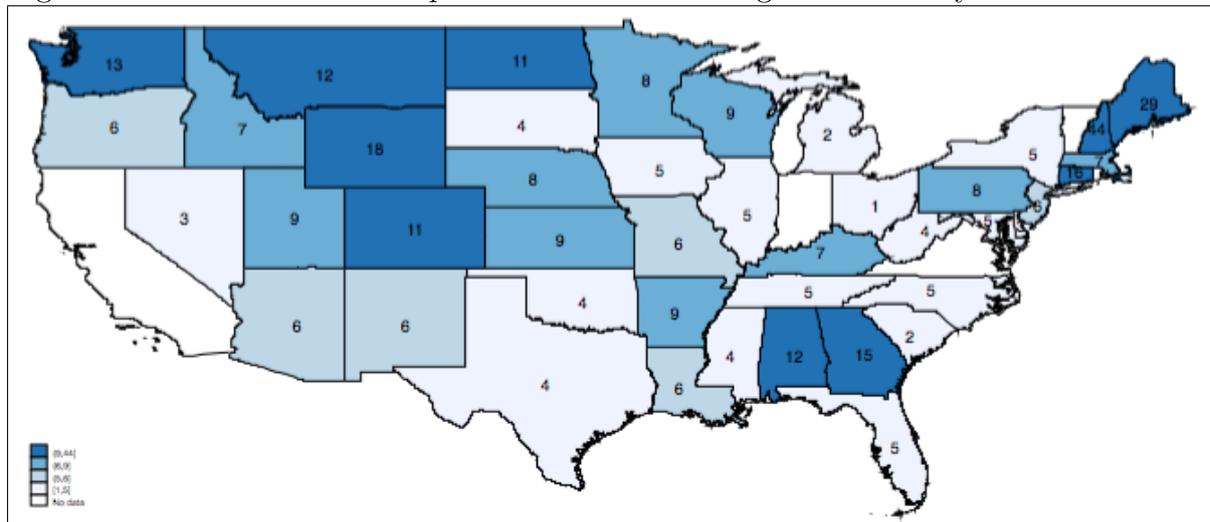
In general, if you were to make compromises on policy, how much retribution would you face from voters in your district?

- None
- Some
- A lot

>>

Appendix B: Distribution of Survey Responses

Figure B1: Distribution of Responses to 2014 State Legislative Survey



Note: This presents the distribution of responses for our survey. Darker shades of blue represent more responses from that state (with the number of responses by state shown at the center of each state).

Table B1: Comparison of Survey Sample to State Legislator Population

| Attribute | % in Sample | % in Population |
|--------------|----------------|--------------------|
| Female | 28 | 24 |
| Republican | 46 | 52* |
| Term limits | 28 | 26 |
| In majority | 62 | 64 |
| | Mean in Sample | Mean in Population |
| Squire index | 0.17 | 0.20 |

Note: * A chi-squared test indicates that the distribution in the sample is significantly different (at $p < 0.05$) than the distribution in the population. For all other attributes, we reject the null that the distributions are different (or that the mean in the sample is different from the mean in the population).

Appendix C: Robustness Tests

Table C1. Does distance to the status quo affect patterns of holding out?

| VARIABLES | Distance Control | Distance ² | Saturated Distance | Distance as % |
|------------------------------|---------------------|-----------------------|-----------------------|---------------------|
| Opposition sponsors | -0.027 (0.063) | -0.026 (0.063) | -0.086 (0.088) | -0.031 (0.062) |
| Bipartisan sponsors | -0.038 (0.062) | -0.038 (0.062) | -0.073 (0.090) | -0.037 (0.062) |
| Future power = A lot more | 0.104 (0.098) | 0.104 (0.098) | 0.145 (0.142) | 0.107 (0.098) |
| Future power = A little more | -0.060 (0.061) | -0.060 (0.061) | 0.017 (0.083) | -0.060 (0.061) |
| Future power = A little less | -0.008 (0.081) | -0.008 (0.081) | 0.040 (0.111) | -0.009 (0.081) |
| Future power = A lot less | -0.192 (0.186) | -0.192 (0.187) | -0.172 (0.193) | -0.225 (0.187) |
| Moral treatment | -0.038 (0.051) | -0.038 (0.051) | -0.023 (0.071) | -0.038 (0.051) |
| High voter retribution | 0.219* (0.129) | 0.218* (0.130) | 0.426** (0.186) | 0.227* (0.129) |
| Some voter retribution | 0.038 (0.057) | 0.038 (0.057) | 0.099 (0.078) | 0.041 (0.057) |
| Republican | 0.235*** (0.056) | 0.235*** (0.056) | 0.151* (0.082) | 0.232*** (0.056) |
| Woman | -0.030 (0.059) | -0.030 (0.060) | -0.041 (0.083) | -0.031 (0.059) |
| In majority | 0.181*** (0.054) | 0.181*** (0.054) | 0.113 (0.073) | 0.184*** (0.054) |
| Distance to SQ | 0.004 (0.003) | 0.004 (0.007) | | |
| Distance to SQ ² | | 0.000 (0.000) | | |
| Distance to SQ (Percent) | | | | 0.124* (0.067) |
| Small magnitude | | | -0.004 (0.182) | |
| Small mag*Opposition | | | 0.114 (0.130) | |
| Small mag*Bipartisan | | | 0.061 (0.126) | |

Continued on next page...

Table C1 - CONTINUED.

| VARIABLES | Distance Control | Distance ² | Saturated Distance | Distance as % |
|-------------------------------|---------------------|-----------------------|-----------------------|------------------|
| Small mag*A Lot More Power | | | -0.070 (0.200) | |
| Small mag*A Little More Power | | | -0.156 (0.124) | |
| Small mag*A Little Less Power | | | -0.090 (0.167) | |
| Small mag*Moral Argument | | | -0.026 (0.105) | |
| Small mag*High retribution | | | -0.352 (0.264) | |
| Small mag*Some retribution | | | -0.130 (0.119) | |
| Small mag*Republican | | | 0.126 (0.118) | |
| Small mag*Female | | | 0.013 (0.122) | |
| Small mag*In majority | | | 0.116 (0.113) | |
| Constant | 0.031 (0.093) | 0.032 (0.098) | 0.083 (0.125) | 0.026 (0.093) |
| Observations | 271 | 271 | 271 | 271 |
| R-squared | 0.172 | 0.172 | 0.206 | 0.175 |

Standard errors in parentheses. *p<0.05 (one-sided).

Table C2. Robustness Results for Divided Government, Vote Share, and Size of Majority

| VARIABLES | (1) DV=Holdout | (2) DV=Credit |
|------------------------------|-------------------|---------------------|
| Opposition sponsors | -0.036 (0.065) | -13.366* (4.663) |
| Bipartisan sponsors | -0.041 (0.064) | -3.298 (4.590) |
| Future power = A lot more | 0.124 (0.103) | |
| Future power = A little more | -0.043 (0.064) | |
| Future power = A little less | -0.010 (0.082) | |
| Future power = A lot less | -0.207 (0.190) | |
| Moral treatment | -0.038 (0.052) | |
| High voter retribution | 0.244* (0.131) | |
| Some voter retribution | 0.040 (0.058) | |
| Republican | 0.237* (0.061) | -5.566 (4.348) |
| Woman | -0.036 (0.061) | -3.651 (4.269) |
| Distance to SQ | 0.004 (0.003) | 0.205 (0.197) |
| In majority | 0.169* (0.056) | 5.403 (3.829) |
| Divided government | 0.000 (0.064) | 0.323 (4.412) |
| Vote share in last election | -0.137 (0.142) | -26.083* (9.927) |
| Size of majority | 0.168 (0.293) | 7.478 (21.378) |
| Leg. wanted gas tax increase | 0.060 (0.059) | -3.002 (4.340) |
| Constant | -0.011 (0.248) | 75.892* (16.924) |
| Observations | 266 | 225 |
| R-squared | 0.176 | 0.085 |

Standard errors in parentheses. *p<0.05 (one-sided).

Appendix D: Anonymized Version of the Pre-Analysis Plan

We will conduct a survey experiment on a sample of state legislators to investigate why legislators might not vote for a policy proposal that is closer to their preferred outcome than the current status quo. In other words, what predicts which legislators will be policy holdouts?

We will carry out this experiment by measuring legislators' preferred level for their state's gas tax and then seeing how they respond to proposals that would put the new proposal at the mid-point of their preferred outcome and the current status quo. We will test three broad explanations for what might lead some legislators to be holdouts. The independent variables in the analysis will be a combination of experimental manipulations in the survey vignette and observational data.

Data Collection

RAs have collected a list of U.S. state legislators' email addresses that were available on the respective state legislature websites. The final list includes about 7,000 state legislators. Only state legislators who are either members of the Republican or Democratic party will be used in the analysis. Also, only those who indicate on the first question that the legislator is filling out the survey will be included in the analysis.

We will email these legislators an invitation to participate in our survey (a copy of the invitation is the appendix A of this document). The first email will go out to legislators in June 2014. Those who do not take the survey at that time will be sent a follow up reminder a week later. A final invitation to take the survey will be sent to those who have not taken the survey two weeks after the initial email is sent out.

The text of the survey questions is given in Appendix B. The main vignette is on the fourth page of the survey where the legislators are presented with the scenario that two legislators in their state propose a bill to change the state gas tax level. The proposal is

designed to be the mid-point between the current gas tax and the respondent's preferred gas tax level (as measured earlier in the survey). The outcome is whether they would vote to support the bill if given the chance.

Hypotheses

A single-round, spatial model with sincere voting provides an exact prediction for how everyone should vote: they should vote yes because this is a policy proposal that would bring the policy closer to their ideal point.¹⁵ We want to test whether we can systematically explain any deviations from that pattern.

One null hypothesis is that there should be no deviations because legislators vote sincerely

We want to test four¹⁶ broad rationales that might lead a legislator to deviate from the standard prediction:

1. **Denying the opposition credit.** A legislator might holdout on a policy to prevent the opposition party from getting credit for passing the policy. We test for the possibility by varying the partisanship of the proposer in the vignette. Respondents will be exposed to one of three treatments: the two proposers are Democrats, the two proposers are Republicans, and one of the proposers is Republican and the other is a Democrat. After respondents indicate what actions they would take, we also ask them how much credit each party would get if the bill in the vignette passed (we ask this question to ensure that we are identifying the reason the manipulation of the party sponsorship affects legislators). We use these aspects of the design to

¹⁵This is an important theoretical perspective that many models of legislative behavior use as a foundational assumption. For example, many ideal point techniques use this as the key assumption.

¹⁶Pressure from party leaders is also likely part of the story. We opt not to focus on party pressure for two reasons. First, there are many forms of party pressure (direct and indirect) that may not be well captured in a vignette. Second, even if there is pressure from party leaders, that would simply push the question back one level. In other words, we would still want to know: why are party leaders against this proposal? Some of the same factors that we lay out here would need to be explored in relation to that question (e.g., denying the opposition credit or legislators' time horizons). We thus chose to focus directly on those reasons in this study.

test hypotheses H1-H4 below.

2. **Legislators' time horizons.** Legislators might hold out because they expect that in the future they will be in a position to get their preferred outcome. In other words, legislators might not just worry about the current period, but compromising now may make it harder to get what they want in future legislative session where they expect their side will be in a better position. There are different reasons we might see this dynamic. For example, a change now could move the policy into the gridlock region, making further movement impossible. On the other hand, it could be for behavioral reasons (e.g., legislators may not want to move a policy after just changing it). Our initial tests will not differentiate between these potential reasons; instead we will test the basic expectation: legislators who expect that their side of the issue will be in a stronger position in the future will be more likely to holdout and vote no. This leads to H5 below, which we test by asking legislators about their expectations about the future policy direction of their legislature.

3. **Priming moral considerations.** When politicians are primed with moral considerations, they may be less likely to accept compromise legislation. Moral stances do not lend themselves to persuasion and citizens indicate that they are less likely to compromise on issues that they identify as moral in nature. Legislators may reject partial solutions to perceived problems, instead taking the stance that a moral issue is so privileged that it cannot be subject to an incomplete resolution. This leads to hypothesis H6 below, which we test by varying the language used by the one of the bill's sponsors. Those who desire to increase the gas tax, will receive one of the following two treatments:

Moral Treatment: Climate change is a dangerous problem with important moral implications. We must act on our obligation to preserve the earth and protect future generations from harm. This proposal is not perfect, but it is a step towards caring for the environment.

Amoral Treatment: Climate change is a problem with important implications. This proposal is not perfect, but it is a step towards improving the environment.

Those who desire to decrease the gas tax, will receive one of the following two treatments:

Moral Treatment: Slow economic growth is a dangerous problem with important moral implications. We must act on our obligation to preserve jobs and protect future generations from harm. This proposal is not perfect, but it is a step towards caring for the economy.

Amoral Treatment: Slow economic growth is a problem with important implications. This proposal is not perfect, but it is a step towards improving the economy.

4. **Voter recalcitrance.** Legislators might hold out because they believe that voters will punish them for doing something that looks like compromise. We will ask legislators about how much voters in their district punish legislators who compromise to pass policies. We will use their responses to test hypothesis H7.

We use these broad claims to develop several hypotheses.

Hypotheses

H1: Legislators should be most likely to holdout when the bill sponsors both come from the other party.

H2 (a weak prediction): Legislators may be more likely to holdout when the bill has bipartisan sponsors than when both are from the same party. We have intentionally used weak language to state this prediction. If the default is to vote for the proposal, as the spatial model predicts, then a bipartisan proposal might not move the legislators. However, compared to the situation when the sponsors are from the same party as the legislator, the opposition can claim more credit if the bill passes. For this reason, we might see that the bipartisan condition leads to more holdouts than the same-party condition.

H3: Legislators should indicate that their party will get the least credit if the sponsors are both from the opposition party.

H4: Legislators should indicate that their party will get the most credit if the sponsors are both from their party.

H5: Legislators who expect that legislators serving in the future will be more likely to share their preferences will be more likely to holdout.

H6: Legislators who are primed with moral considerations should be more likely to holdout.

H7: Legislators who believe that their voters are more likely to punish legislators engaging in policy compromise will be more likely to holdout.

Analysis

Define the variables as follows:

Dependent Variables

Holdout = Legislator is a holdout (=1 if vote 'no', =0 if vote 'yes').

Credit = Response to the question: "If the compromise proposal passes, what portion of the credit do you think your party can claim?" (on 0-100 scale).

Main Independent Variables

Opposition.Sponsors = 1 if received sponsorship treatment where both the sponsors are from the other party; = 0 otherwise.

Bipartisan.Sponsors = 1 if received sponsorship treatment where one sponsor is Republican and one is a Democrat; = 0 otherwise.

Future.Power.alot.more = 1 if they expect their side to gain a lot more power in the legislature.

Future.Power.alittle.more = 1 if they expect their side to gain a little more power in the legislature..

Future.Power.alittle.less = 1 if they expect their side to lose a little power in the legislature.

Future.Power.alot.less = 1 if they expect their side to lose a lot of power in the

legislature.

Moral.Argument = 1 if the vignette presented the moral argument and 0 if they presented the amoral argument.

Voters.Alot.Retribution = 1 if they think voters are very likely to withdraw support for compromising on policy and 0 otherwise.

Voters.Some.Retribution = 1 if they think voters are somewhat likely to withdraw support for compromising on policy and 0 otherwise.

Control Variables

Republican = 1 if they are a Republican and 0 if they are a Democrat.

Woman = 1 if they are female and 0 if they are male.

Distance.to.SQ = |Legislator's Preferred Gas Tax Level–Status Quo Gas Tax Level|.

In.Majority = 1 if their party is in the majority in their chamber and 0 otherwise.

NOTE: Because we are conducting this experiment while many legislatures are in sessions, existing estimates of legislators' ideology (e.g., Shor and McCarty 2011; Bonica 2012) are not currently available for the full sample. If they become available before submission we will also control for the legislators' ideological extremity.

We will conduct simple difference-in-proportion tests with the experimentally manipulated variables (sponsorship and moral arguments).

We will also use the variables to run the following two models. In each case we will run the models for the full sample and also separately for whether the legislators wanted to increase or decrease the state's gas tax.

Model 1 - We will use a regression to estimate the following model:

$$\text{Holdout}_i = f(\alpha + \beta_1 \text{Opposition.Sponsors}_i + \beta_2 \text{Bipartisan.Sponsors}_i + \beta_3 \text{Future.Power.alot.more}_i + \beta_4 \text{Future.Power.alittle.more}_i + \beta_5 \text{Future.Power.alittle.less}_i + \beta_6 \text{Future.Power.alot.less}_i + \beta_7 \text{Moral.argument}_i + \beta_8 \text{Voters.Alot.Retribution}_i + \beta_9 \text{Voters.Some.Retribution}_i + \beta_{10} \text{Republican}_i + \beta_{11} \text{Female}_i + \beta_{12} \text{Distance.to.SQ}_i + \beta_{13} \text{In.Majority}_i + u_i)$$

We will then test the following predictions using one-sided tests against the null hypotheses of no effects.

$$H1 : \beta_1 > 0$$

$$H2 : \beta_2 > 0$$

$$H5 : \beta_6 < \beta_5 < 0 < \beta_4 < \beta_3$$

$$H6 : \beta_7 > 0$$

$$H7 : 0 < \beta_9 < \beta_8$$

Model 2 - We will use an OLS regression to estimate the following model:¹⁷

$$Credit_i = \gamma_0 + \gamma_1 Opposition.Sponsors_i + \gamma_2 Bipartisan.Sponsors_i + u_i$$

We will then test the following predictions using one-sided tests against the null hypotheses of no effects.

$$H3 : \gamma_1 < 0$$

$$H4 : \gamma_2 < 0$$

Models 3 and 4 - We will rerun models 1 and 2 but interact the independent variables that are not control variables with *Distance.to.SQ*. We will also draw loess lines to graph the relationship between the outcomes and *Distance.to.SQ* for different values of the independent variables. It may be that the legislators whose preferences are closest to the status quo may react differently to the treatments.

Other Pre-Analysis Plan Details

- The proposal received approval from the IRB (Study # 1404013767)
- We conducted a power analysis for the experimental treatments before the study.
- The intervention is implemented by us as researchers.
- None of the researchers are receiving remuneration for this project.
- No advance agreement is needed for this project.

¹⁷One could also use these data in a mediation analysis where who gets the credit is the mediator between the the partisanship manipulation and the outcome. We use this model, however, because we think the the question regarding credit for the bill passage is conceptually closer to being a manipulation check, ensuring that the partisanship manipulation changes their expectations about who would get credit for the action.

Pre-Analysis Plan Appendix: Text of Email Invitation

Dear \$e://Field/Title \$m://LastName:

My name is (Redacted) and I am a professor of political science at (Redacted). I am conducting research on how state legislators make policy decisions. As researchers we often try to make inferences about politics without hearing from the experts like yourself. The survey is designed to learn more about how legislators weigh different considerations when making decisions. This will greatly contribute to understanding how state legislative politics works and the relationship between legislators and their voters. Your experience as a legislator in \$e://Field/State would be very valuable.

To take the confidential, 5-minute survey, please click the link below. \$l://SurveyLink?d=Take the Survey

All of your responses (as well as your decision to participate in this study) will be confidential so that only the researchers and those responsible for research oversight will have access to the individual responses. Participation in this study is completely voluntary. You are free to decline to participate, to end participation at any time, or to refuse to answer any individual question.

If you have further questions, you may contact me at (Redacted).

If you would like to talk with someone else about any dimension of the research, you may contact the (Redacted). Additional information is available at (Redacted)

Clicking on the link to the survey represents your agreement to participate in this research study. Link to survey: \$l://SurveyLink?d=Take the Survey

Sincerely,

(Redacted)