



State Legislative Institutions, Party Leaders, and Legislators' Weighted Preferences

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Version: December 15, 2014

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Abstract

Many scholars argue that institutions affect party leaders' power to influence rank-and-file members. The researchers assess one way this could happen, by changing the weight that members put on their leaders' positions. Leveraging variation in state-level institutions, they use original data on state legislators' preferences to test how term limits, legislative professionalism, and majority agenda control predict changes in the weights that legislators put on leaders' positions when forming their policy preferences. They find that legislators in term-limited states and in more professional legislatures put less weight on leaders' preferences. They also find that legislators put more weight on leaders' preferences in legislative chambers where the majority party controls access to the calendar. These results point to how party influence strongly depends on institutional arrangements.

How, if at all, do parties and their leaders influence the behavior of legislators? Some scholars posit the potential for strong party influence (e.g., Rohde 1991), while others are skeptical of party influence, suggesting that legislator's own preferences are most important (Krehbiel 1993). The ensuing debate is often framed around direct or indirect party influence (Smith 2007). Direct influence focuses on arm-twisting, pressuring and vote-buying (e.g., Groseclose 1996; Jenkins and Monroe 2012) and assumes that legislators' votes align with the leadership because of the carrots and sticks leaders use to cajole members. In contrast, indirect party influence focuses on how leaders structure the form and content of legislation (Cox and McCubbins 2005; Hartog and Monroe 2011).

Scholars have paid less attention to how institutions that affect leaders' resources may incentivize rank-and-file legislators to put more weight on leaders' positions when forming the preferences on which they will act. Institutions that affect the relative balance of resources between leaders and other members can shape how much weight legislators put on their leaders' positions in at least two ways. First, when rank-and-file members have more staff and more time to devote to their jobs, they are less reliant on leaders for information. As a result, they can rely less on leaders' preferences as a signal about what the optimal policy should be (Krehbiel 1992). Second, when leaders can allocate resources that members care about, like access to the agenda, members may preemptively incorporate leaders' preference into their own positions as a way to remain in favor with the leaders (Lebo, McGlynn, and Koger 2007; Lindstädt and Vander Wielen 2014). As a result, leaders may not have to actually twist arms; legislators may simply act in anticipation of leaders' power (Cameron 2000; Fox and Rothenberg 2011).

We use original survey data to measure legislators' personal and weighted preferences along with their perceptions of voters' and party leaders' preferences on their state's gas tax. We

use the term weighted preference to emphasize that the position they use to make decisions is a product of weights they put on various inputs such as their own and their party leaders' preferences. Because we measure these items on the same numeric scale, we are able to estimate the weights that legislators put on constituents' preference, their own preferences, and party leaders' preferences when forming their weighted preference on the issue.

These weighted preferences have power to predict legislators' actual roll call votes. In our dataset, about 60 of the surveyed legislators voted on a proposal in the previous session that would raise the gas tax in their state. Using these individuals, we test whether their weighted preferences, as reported in our survey, predict their vote on the bill. We find that the weighted preferences predict legislators' roll call votes, even when controlling for party. Our measure of legislators' weighted preferences captures meaningful information about an attitude that drives legislator behavior on actual roll call votes.

We use legislators' responses on the survey to test how term limits (Carey et al. 2006), legislative professionalism (Squire 2007), and majority agenda control (Jackman 2014) predict changes in the weights that legislators put on leaders' positions when forming their weighted preferences. Term limits, legislative professionalism, and majority agenda control each affect how important party leaders' resources are for rank-and-file members, which in turn should affect how much rank-and-file members cater to leaders' preferences. Term limits shorten the time horizon of the relationship between legislators and their leaders. Rank-and-file members know that they will not be working with leaders for long and so they have fewer incentives to cater to leaders' positions. Similarly, increases in legislative professionalism should cause members to be less responsive to leaders' desires because members are less reliant on leaders for resources. Further these legislators are in session longer and are more likely to work full time as

a legislator. As a result of this added investment, legislators in more professional legislatures will have more of their own information to use when evaluating policy proposals. Finally, when the majority party controls access to the calendar, legislators need party leaders' help if they want to pass their bills and so they should be more responsive to leaders' positions.

We are able to provide new insights about the effects of these institutions because we study them at the state level. The advantage of studying the effect of institutions in the American states is the variation in institutions across chambers. Fifteen states have term limits and there is also great variation in the level of state professionalism and majority control over the agenda. Focusing on state institutions also allows us to conduct a placebo test on federal Senators, indicating that our results are not driven by unobserved state differences.

We find that legislators in term-limited states and in more professional legislatures put less weight on leaders' preferences. We also find that legislators put more weight on leaders' preferences in legislative chambers where the majority party controls access to the calendar. These results are consistent with the possibility that institutions affect party leaders' power and shape the weights that rank-and-file members put on leaders' preferences. Institutions provide leaders with powerful tools that shape outcomes, even when we never see those tools used.

Party Leaders' Influence on Rank-and-File Members

Many factors influence how legislators vote. Legislators rely on information about constituents' preferences (Kousser, Lewis, and Masket 2007), but also look to party leaders and other legislators (Kingdon 1989), and their own experiences (Burden 2007). One important question is how institutions moderate the impact of these different sources on the weighted positions that legislators use when making decisions.

Work on legislatures, executives, courts, and other elite actors suggests that institutions affect outcomes by affecting the distribution of power and resources (Anzia and Jackman 2013; Schickler 2001; Wawro and Schickler 2007). Some institutions are theorized to have an indirect influence on outcomes by shaping how debate and negotiations are structured (Cox and McCubbins 2005; Hartog and Monroe 2011), while other institutions are theorized to have a direct influence by empowering some political powerbrokers to actively pressure other elites (Groseclose 1996; Jenkins and Monroe 2012).

Although this research emphasizes how institutional arrangements affect leaders' resources, scholars have given less attention to how legislators proactively incorporate leaders' policy views when forming the preferences on which they will act. When leaders have the power to reward or punish members, legislators may proactively align themselves with the position of the leadership. Similarly, when legislators have few resources that are independent of the party leadership, rank-and-file members may depend on leaders for information. As a result, legislators may rely on leaders' preferences as a signal about the appropriate policy and proactively incorporate leaders' views into their weighted policy preference.

The relative balance of resources between leaders and other members varies across legislatures. Certain institutional arrangements within these legislatures lead legislators to be more reliant on party leaders for information or future success. Others make legislators less reliant on leaders. We focus on how these institutions affect how much weight legislators put on the positions of party leaders when forming their weighted preference.

Deriving in part from legislators' own perspectives (Fenno 1978; Kingdon 1977), the baseline model of legislative voting behavior posits that voting is a function of party, ideology, and constituency (Fiorina 1974; Turner 1951; Shapiro et al. 1990). In this study, we extend this

classic model of voting to investigate the role of three sets of institutions on the relationship between leaders' preferences and legislators' weighted preferences.

First, we assess whether legislators in states with term limits are less responsive to party leaders. Fifteen states currently have term limits (which vary between six and twelve years). Given that term limits shorten legislators' time horizons, they reduce the power of the party leaders. Without the credible promise of future punishment or rewards, legislators in term-limited states have less incentive to cater to the leaders' positions. This leads to hypothesis 1:

Hypothesis 1: Legislators in term limited states put less weight on party leaders' preferences than legislators in non-term limited states.

Second, we consider whether legislators in more professionalized legislatures are less responsive to their party leaders. In more professionalized legislatures, legislators have more staff members, higher salaries, and more time on the job (Squire 2007). For example, in a relatively professional legislature like Wisconsin, legislators have a combined total of 640 staff, earned \$49,943 per year in 2013, and have no limit on the number of days in session. In 2013, they were in session for 310 days.¹ In contrast, in a more unprofessional legislature like New Hampshire, legislators share 197 staff, earn \$200 per two year term and are in session for 45 days a year (Ballotpedia 2014; National Conference of State Legislatures 2014b).² More staff allows legislators to gather information about legislation independently of the party. Similarly, more days in session allow legislators to acquire expertise at the system of lawmaking and about the content of policy itself. Higher pay means that legislators can devote their time to the

¹ The Squire index for Wisconsin in 2013 was 0.513. The benchmark of the Squire index is the United States Congress, which receives a score of 1.

² The resulting Squire index for New Hampshire was 0.033.

activities of legislating, including gathering information about policy and about their constituents, rather than earning a living in another career. As a result, these legislators should be less reliant on party leaders for information about policy and may put less weight on leaders' policy preferences. These expectations lead to hypothesis 2:

Hypothesis 2: Legislators in more professionalized legislatures put less weight on party leaders' preferences than legislators in less professionalized legislatures.

Third, we evaluate whether more control of the agenda by the majority party leads legislators to place more weight on the stances of party leaders. State legislatures vary in terms of how much power the majority party has over committee and floor agendas (Anzia and Jackman 2013). While the majority leadership controls the floor calendar in many chambers, there are also a large number of chambers where bills are automatically placed on the calendar in a fixed order. In those legislatures where the majority party has control over the agenda, the roll call record reflects fewer instances where the majority party was internally divided, indicating that the party leadership was able to structure the agenda to avoid divisive issues that put their party on the losing side (Anzia and Jackman 2013). Majority agenda control can also affect the member-party relationship more broadly, making legislators more reliant on the party leadership to schedule votes on bills they sponsor. When the power to control the fate of bills rests with the party, legislators should seek to cultivate favor with party leadership by proactively adhering more to the leaderships' views on policy. These expectations lead to hypothesis 3:

Hypothesis 3: Legislators in legislatures with majority agenda control put more weight on party leaders' preferences than legislators in legislatures without majority agenda control.

Hypothesis 3 may apply only to members of the majority party because minority party leaders are not empowered to get their members' bills on the schedule. This is one reason that minority bills are much less likely to receive legislative attention (Volden and Wiseman 2014).

Because minority party leaders have few resources to help move bills forward, their rank-and-file members have fewer incentives to consider the preferences of their leadership. For example, in the open-ended question at the end of our survey, one state legislator in the minority noted, “If you are in the majority caucus, you will face a LOT of retribution from voting against leadership--loss of chairmanship, bills, campaign support. However, if you are in the minority caucus, your vote makes almost no difference (the majority only runs bills that will pass with their votes). Therefore, there is no retribution.”³ Another legislator in the minority of a different state wrote that, “With only [redacted] members of [redacted] being Democrats we are pretty free to do whatever and hardly be noticed. They just ignore us for the most part. Our bills are pretty much ignored. On the other hand those of the majority must toe the line or none of their bills will come to the floor, they are threatened with loss of good parking or smaller offices, removal from committees and just plain meanness.” The distinction between majority and minority members leads to hypotheses 3A and 3B:

Hypothesis 3A: Majority party legislators in legislatures with majority agenda control put more weight on party leaders’ preferences than legislators in legislatures without majority agenda control.

Hypothesis 3B: Minority party legislators in legislatures with majority agenda control do *not* put more weight on party leaders’ preferences than legislators in legislatures without majority agenda control.

Research Design

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

³ All quotes from legislators come from responses to an open-ended question at the end of the survey (survey details discussed below) that simply stated “Thanks for taking the survey. Let us know if you have any feedback.”

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 Online Appendix 1 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 legislators in the U.S. House (in our case 338 legislators). We received more responses overall, about 350,⁴ but we restrict the sample to the self-identified state legislators.⁵ Overall, the sample was fairly balanced relative to the national composition of state legislators on party, gender, majority/minority status, and term limited or not. For instance, 26 percent of our sample came from term-limited states (exactly the same as nationally),⁶ and 62% of our sample was in the majority party compared to 64% nationally. Although our sample skewed slightly Democratic, 47 percent of our sample were Republicans (compared to 52 percent

⁴ This represents a response rate of about five percent, a lower response rate than we expected. However, this is consistent with the pattern of decreasing response rates for elite-sample surveys (see 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 in previous years (both academic and non-academics). In our case, many legislators explicitly told us that they were turning us down because they received too many of these requests.

⁵ Our 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.

⁶ http://ballotpedia.org/State_legislatures_with_term_limits

nationally)⁷ and the difference is not statistically significant. The sample is slightly less professional than the average in the population of legislators (mean Squire Index of 0.16 compared to 0.20 nationally) and more of our sample served in legislatures where the majority sets the agenda (74% compared to 67% nationally). Figure O1 in the online appendix presents a map with information on the geographic locations of respondents and Table O4 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.

(Figure 1 about here)

To assess how institutions affect the weight legislators place on party leaders' preferences, we asked these state legislators about their state's gas tax. We first reminded the legislators about their state's current gas tax and then asked them about the preferences of (1) the voters in their district, (2) their legislative party leaders, and (3) themselves. Figure 1 gives the text of this question for state legislators in Arkansas. The same wording was used for legislators from other states, substituting state-specific information about the status quo gas tax. As Figure 1 shows, we then asked the following question designed to measure their weighted preference:

“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. The combination of these four measures allows us to analyze

⁷ http://ballotpedia.org/Partisan_composition_of_state_senate and http://ballotpedia.org/Partisan_composition_of_state_houses

the weight of party leaders' preferences on the legislator's overall preference and whether this weight changes across institutional arrangements.

We study *state* legislators' preferences because doing so gives us variation in term limits, professionalism, and majority agenda control. We focused the survey on the state gas tax in the legislators' respective states because it is a salient issue where the preferences of the legislators, their party leaders, and their constituents can be reported on a single-dimension, numeric scale: the state gas tax given in cents per gallon. The gas tax is also representative of the types of issues facing state legislators and the parties often take divergent stances on this issue.⁸ Moreover, many legislators have experience with it. The topic is salient enough that the National Conference of State Legislatures includes it as part of the searchable database that they provide for state legislators (National Conference of State Legislatures 2014a) and NPR recently reported that "gas tax increases are now on the table in states across the country, from New Jersey to Utah to South Carolina to South Dakota. Democratic governors in Delaware, Vermont and Kentucky, and other states are also looking to possibly raise gas taxes, as has been done in Pennsylvania, Maryland, New Hampshire and Wyoming in the last two years" (Schaper 2014).

Legislators' Weighted Preferences and Demonstrated Voting Behavior

⁸ On November 1, 2014, we did a search of bills regarding gas taxes in the states using the searchable database provided by the National Conference of State Legislatures (<http://www.ncsl.org/research/transportation/ncsl-transportation-funding-finance-legis-database.aspx>). We identified seven bills during 2013-2014 that proposed changes to the state gas tax. Three of the bills enjoyed the support of the majority of both parties (NV-AB413; UT-SB60; WY-HB69), but the other four bills all had the majorities of each party voting against each other (MA: H3535; MD-HB1515; NH-SB367; WA-HB1954).

Throughout the paper we assume that legislators' stated preferences are meaningful and that they predict in part how legislators would behave. However, these preferences are measured using responses to a survey. Perhaps the responses are simply cheap talk. To assess this, we look at how legislators voted on actual proposals to change the gas tax. Because the gas tax is easily mapped on a numeric scale, we can compare legislators' stated preferences with how they voted relative to the status quo and proposal under consideration. We specifically look at how legislators in New Hampshire and Wyoming voted on proposals to raise the gas tax to evaluate whether the legislators whose weighted survey preferences indicated higher gas taxes were the ones who were more likely to have voted to raise the gas tax.⁹

In 2014, legislators in New Hampshire voted on Senate Bill 367, which proposed raising the gas tax from 18 cents per gallon to 22.2 cents while also eliminating some tollbooths and making a few other changes. The gas tax increase would be used to pay for widening I-93, and the tax would return to 18 cents per gallon once the road improvements are paid off. The bill was introduced at the beginning of the 2014 session with cosponsors from both parties. In both the Senate and the House support for the measure was split (especially among Republicans); it passed by a 15-9 margin in the NH state senate and a 193-141 margin in the state house.¹⁰

In Wyoming, House Bill 69, which raised the gas tax from 14 to 24 cents per gallon, was introduced and passed in the 2013 session. The primary purpose of the bill was to increase the gas tax by 10 cents, but the measure also included instructions on how the extra revenue was to

⁹ We restrict the analysis to these states because they are only the only states that voted on bills to raise the gas tax where the vote was not unanimous or near-unanimous and where we had more than a handful of legislators in our survey sample.

¹⁰ More information about the bill can be found at: <http://openstates.org/nh/bills/2014/SB367/>.

be spent. Again, the measure internally split the legislative parties (especially the Republicans). In the Senate the bill passed by a margin of 18-12 and in the House by a margin of 35-24.¹¹

Although our measure of legislators' weighted preference on the state gas tax should predict how they vote on these measures, it should not necessarily predict their votes perfectly. The primary purpose of the bills was to raise the gas tax to increase revenues, but both bills also included other provisions. These other proposed changes to the law may have influenced how legislators voted. Also, we surveyed legislators after these bills had passed. It is possible that their weighted preferences were different at the time that the bill was under consideration. In particular, once the bill passed, the new higher status quo may have led some legislators to change their preferences in light of the change, or in response to changes in the economic condition of the state. Given these caveats, evidence that legislators' stated preference on this issue predicts their roll call votes would indicate that these preferences are not simply cheap talk but reflect something meaningful to the legislators.

Figure 2 shows the relationship between legislators' weighted preference and how they voted on the bills to increase their state's gas tax. The top half of the graph presents the results for the vote in New Hampshire and the bottom half the results for the vote in Wyoming. The x-axis gives legislators' weighted preference on the gas-tax in cents/gallon. The figure also marks the position of the status quo and the proposal that the legislators voted on. The vertical line marks the midpoint between the status quo and the new proposal. Because this line marks the cutpoint for the vote, we would expect that legislators with preferences to the right of this line should be more likely to vote "Yes", while legislators with preferences to the left of this line

¹¹ More information about the bill can be found at <http://openstates.org/wy/bills/2013/HB69/>

should be more likely to vote “No.”¹² Figure 2 maps legislators by placing them along the x-axis based on their stated weighted preference. Legislators who voted to pass the gas tax increase are marked with a “Y” while those who voted against the tax increase are marked with an “N”.

(Figure 2 about here)

Figure 2 shows that legislator’s weighted preferences roughly predict how they voted on the proposal. In both New Hampshire and Wyoming almost all of the yes votes were from legislators who preferred a gas tax level that was to the right of the cutpoint for the vote. Further, about half of the no votes were from legislators with weighted preferences to the left of the vote’s cutpoint. Recall that we asked these legislators for their preferences after the proposal had already become the new status quo. People who, prior to the adoption of the higher tax rate, would have preferred a lower rate may nonetheless have updated their weighted preference in light of the higher rate. In fact, many of the legislators, especially in New Hampshire, stated that their weighted preference was exactly the new status quo (22 cents per gallon).

We also estimate a regression model predicting legislators’ positions on these roll calls in order to test whether legislators’ weighted preferences continue to predict legislators’ votes even when controlling for their partisanship. The dependent variable in our models is a dummy variable that takes a value of 1 when the legislator voted to increase the gas tax and 0 when they voted against the gas tax increase. We regress legislators’ roll call on their *stated preference for the proposal over the status quo*. We operationalize legislators’ *stated preference for the proposal over the status quo* by taking the absolute difference between the status quo and their weighted preference minus the absolute difference of the proposal and their weighted preference

¹² Indeed, if legislators voted only on the basis of our measure of their weighted preference (and only on the gas tax aspect of the legislation), then we should see this pattern perfectly.

(i.e., $|\text{SQ} - \text{Preference}| - |\text{Proposal} - \text{Preference}|$). This measure takes a positive (negative) value when the proposal (status quo) is closer to the legislators' weighted preference. Thus, a positive coefficient is consistent with the claim that legislators' weighted preferences are predictors of their roll call votes.

(Table 1 about here)

The models are presented in Table 1, with column 1 presenting the results of the bivariate relationship, and column 2 presenting the results controlling for partisanship. Legislators' stated preferences predict their roll call votes and the effect remains strong and statistically significant when controlling for the legislators' partisanship (see column 2). Overall, the evidence suggests that legislators' survey responses are meaningful, which gives us more confidence that our analysis can provide insights into how party and legislative institutions affect the preferences that legislators act on when serving in office.

Evaluating State Legislative Institutions and Party Influence

Given that legislators' stated preferences line up well with their behavior, we turn to assessing the degree to which party leaders' positions play into these weighted preferences. Figure 3 shows the relationship between leaders' preferences, legislators' own preferences, voters' preferences, and legislators' weighted preferences. All of the measures are positively correlated with each other, but some appear to be more strongly correlated than others. For example, the scatterplot showing legislators' own preference and their weighted preference is tighter than the other relationships. This suggests that legislators' own views are a large component of their weighted preferences, consistent with comments from state legislators that their core beliefs, followed by voter preferences, influence their positions (Hanaway 2014).

(Figure 3 about here)

We use a constrained regression to test how much weight legislators put on their own preference, constituent preference, and leadership preference when forming their weighted preference (Leavitt 1996). For the constrained regression, we estimate the weights that legislators put on these different factors by using an OLS regression to estimate the following model, with the constraint that $\gamma_V + \gamma_P + \gamma_O = 1$:

$$\begin{aligned} \text{Weighted Preference}_i &= \alpha + \gamma_V \text{Voters' Preference}_i + \gamma_P \text{Party Leaders' Preference}_i \\ &+ \gamma_O \text{Own Preference}_i + \epsilon_i \end{aligned} \quad (1)$$

The coefficients γ_V, γ_P , and γ_O thus provide the relative weights that legislators put on each of these factors. We also estimate and report the results using an unconstrained regression.¹³

(Figure 4 about here)

Figure 4 shows the results of the constrained regression 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' weighted policy preferences. The intersection of the dotted lines shows the estimated weighting legislators use. On average, party leader's preferences have a weight of 14%, while voters' preferences receive 28% of the weight. The remaining 58% comes from legislators' own preferences. These results are similar to the weights found by Levitt (1996)¹⁴ and further increase our confidence that we are measuring legislators' weighted preferences. Moreover, the relative influence of party leaders, voters, and own preferences does

¹³ The constrained regression allows for intuitive interpretation of the results. We also relax the constraint and report results from the unconstrained regression in Online Appendix 3.

¹⁴ Levitt (1996) found that the weight on party leaders' preferences ranged from 2% to 13%, the weight on voters from 23% to 28%, and the weight on ideology from 52% to 69%.

not change substantially in an unconstrained regression; the coefficients are 0.12, 0.24, and 0.57, each with $p < 0.05$. In the unconstrained regression, the R-squared is 0.76, indicating that party, constituency, and legislators' own preferences combined predict much of the variation in legislators' preferences over the best policy to implement. While these results point to legislators putting relatively little weight on party leaders' preferences, they reflect the average weighting of our sample under many different institutional configurations of state legislatures.

In order to assess whether legislators systematically vary the weight they attach to leaders' preferences across institutional arrangements that alter member-party relationships, we re-estimate Equation 1, but allow the weights to vary under different institutional configurations.

Weighted Preference_i =

$$\begin{aligned} & \alpha + \gamma_V \text{Voters' Preference}_i + \gamma_P \text{Party Leaders' Preference}_i + \gamma_O \text{Own Preference}_i + \\ & \beta \text{Party Institutions}_i + \delta_V \text{Voters' Preference}_i * \text{Party Institutions}_i + \\ & \delta_P \text{Party Leaders' Preference}_i * \text{Party Institutions}_i + \delta_O \text{Own Preference}_i * \\ & \text{Party Institutions}_i + \epsilon_i \end{aligned} \quad (2)$$

where *Party Institutions* is a vector of institutions that includes term limits, the Squire index of legislative professionalism, and majority party control of the agenda. Both term limits and majority control over the agenda are binary variables while legislative professionalism is a continuous measure. We estimate Equation 2 separately for each institution and also estimate the combined constrained regression. The resulting estimates are presented in Table 2.¹⁵

(Table 2 about here)

(Figure 5 about here)

¹⁵ To ensure that the weights still add up to 1 for all legislators, the estimation also constrains

$\delta_V + \delta_P + \delta_O = 0$ for each institution.

Drawing from the analysis of each institution separately, Figure 5 shows how each of the institutions changes the weight legislators place on party leaders' preferences.¹⁶ Consistent with hypothesis 1, legislators in states with term limits place less weight on party leader's preferences. Although this coefficient does not quite reach conventional statistical significance ($p=0.054$), the pattern is suggestive that term limits alter the relationship between leaders and their members. When institutional designs shorten the time horizons of legislators and leaders, leaders' promises of future rewards or punishments are limited and legislators have fewer incentives to curry favor with the leadership.

As predicted in hypothesis 2, legislators in states with more professionalized legislatures place less weight on the preferences of party leaders.¹⁷ For example, a shift in legislative professionalism of 0.10 points, which is equal to the difference between Connecticut and Maine (Squire 2007), would be associated with a decrease of about 10 percentage points in the weight placed on party leaders. These patterns are consistent with the argument that professionalism alters legislators' reliance on their leaders for information, decreasing the weight they give to leaders as professionalism increases.

¹⁶ The results are substantially the same when all three institutions are considered together, although the effect of term limits and leadership control over the agenda decrease in significance.

¹⁷ An alternative explanation for this pattern might be that legislators in less professionalized legislatures place such high weight on their own preferences and those of their leaders because they do not know the preferences of their constituents. If this was the case, we would expect that the weight legislators put on voters' preferences would be significantly lower in less professionalized legislature, a pattern that is rejected by the data where the weight placed on voters does not vary with the Squire index (see Tables 2 and 02).

(Table 3 about here)

Finally, having majority control of the agenda increases the weight legislators place on party leaders' preferences by 0.18. Thus, on average, legislators in states with institutions that facilitate party control of resources place more weight on party leaders' positions.¹⁸ Consistent with hypotheses 3A and 3B, this effect is driven more by legislators in the majority party than those in the minority party. Table 3 shows the relationship between control of the agenda broken down by whether the legislator is in the majority or minority party of her chamber. Leadership control over the agenda increases the weight that majority party legislators put on party leaders' preferences by 0.20 ($p < 0.1$), while it only increases the weight that minority party legislators place on party leaders by an insignificant 0.08 ($p = 0.399$). As one legislator put it in the comments section in the open-ended comment box at the end of our survey, "I serve in the minority. In our state there is much more freedom for minority legislators to vote their 'conscience' with no impact on my relationship with my legislative leader. Often, that is not the case in the majority (especially if it is a thin majority)."

The effect of each institutional arrangement is also robust to using an unconstrained regression to model each relationship (regression results available in Online Appendix 3). In that specification, term limits have a significant negative effect on the weight legislators' place on

¹⁸ These results are substantively the same even when own preferences (which correlate most highly with weighted preferences) are omitted from the analysis. Legislators still place less weight on leaders when they are in a more professionalized legislature and place more weight on leaders when the leader sets agenda. They place less weight on leaders when they are term limited, but this difference does not reach statistical significance. See Online Appendix 2 for more information.

leaders preferences ($p < 0.05$), professionalism has a negative, though not quite significant effect ($p = 0.059$), and majority agenda control has a positive and significant effect ($p < 0.05$). Moreover, when all three institutions are considered simultaneously, each has a statistically significant effect on the weight that legislators place on party leaders' preferences.

Taken together, these results provide evidence that party leaders influence the weighted preferences of legislators. Moreover, they show that the institutional configurations that affect the balance of resources in the member-party relationship also affect the degree to which legislators are attentive to party leaders' preferences. Where the party leadership has more control over resources and information, legislators are reliant on leaders for legislative success and place more weight on the preferences of party leaders. This pattern is consistent with the argument that legislators anticipate leadership control and respond by weighting leaders' preferences more.

A Placebo Test: The Effect of State Legislative Institutions on U.S. Senators

One alternative explanation is that politicians from the states and chambers with these institutions are simply different. That is, we might be concerned that unobserved differences between states that have nothing to do with member-party relationships are driving these results. We conduct a placebo test to address this. Unless the results are being driven by unobserved attributes of the state, *state* legislative institutions ought not to affect the degree to which *federal* Senators are responsive to the interests of their party leaders in the U.S. Congress. Elected officials in the federal government come from each of the 50 states, but the institutional arrangements differ between the state and federal legislatures. If institutional arrangements drive the member-party relationships and, ultimately, the weights that legislators put on leaders' preferences, state-level institutions should not affect the behavior of federal-level legislators.

(Figure 6 about here)

Following Levitt (1996), we use ADA scores between 1997 and 2012 to identify the weights U.S. Senators put on constituents, leaders, and their own preference. Like Levitt, we measure district preferences by the average ADA score among House members in each state, individual preferences by a fixed effect for each Senator's ADA score, and leader preferences by the average score of same-party Senators.¹⁹ As in our primary analysis, we focus on the interaction terms between each state institution and Senator's weighted preferences, leaving further details of this analysis and the full regression results in Online Appendix 2. Results suggest that party leaders have a weight of 0.13 among U.S. Senators, but, as Figure 6 shows, this weight does not change significantly based on the institutional configuration of the Senator's home state legislature. The interaction terms yield point estimates in the wrong direction that are not statistically significant. The weight on party leader's preferences is not significantly different if the state legislature has term limits, majority control of the agenda, or is more professionalized. These results give confidence that the observed differences in the analysis of state legislators are driven by the institutions, not by unobserved attributes of the states that the legislators are from.

Discussion

The debate over party influence has centered on the power of leaders and just how much power they have to control the actions of their members. While some scholars see substantial evidence of party influence (Cox and McCubbins 2005), others see much less evidence (e.g., Krehbiel 1993). Although some scholars have considered the conditional nature of party influence (e.g., Rohde 1991), our scholarship often omits the question of *when* leaders are

¹⁹ Like Levitt (1996), we drop Senators in states with three or fewer House districts. Although Levitt uses a longer time-series, we focus on the post-1997 period since the move toward state-level term limits, which is an important predictor for our models, occurred in the 1990s.

powerful in favor of asking *whether* they are powerful. We suggest that the former question is critical as there is no one-size-fits-all answer to the question of party influence. Leaders' influence hinges on the institutional arrangements of the legislature.

Institutional arrangements that centralize information with party leaders or provide leaders with other resources that members value increase leaders' power within the chamber. In contrast, institutional arrangements that allow legislators to acquire their own information and expertise, or disperse resources broadly limit leaders' power over their membership. Among the institutions that alter these conditions are term limits, legislative professionalism, and majority control over the agenda.

When institutional arrangements make legislators more reliant on party leaders, they increase the attention legislators give to leader's preferences, consistent with the view that legislators anticipate party preferences (and potential influence) and alter their policy preferences accordingly. The resources that parties wield change their degree of influence in expected ways. Institutions that increase leaders' control and resources relative to rank-and-file members (majority control of the agenda) increase the weight that legislators place on party leaders. Institutions that decrease their control and resources (term limits and professionalized legislatures) decrease the weight. While the classic picture of party leaders twisting arms on a particular vote may occasionally be accurate, this research shows that the influence can occur much earlier in the legislator's decision process. If legislators anticipate party pressure and incorporate leader preferences into their own view of an issue, we need not to see the twisting of arms, because party leaders' views are incorporated into the position that legislators use to guide their decision.

While this anticipatory view is missing in many studies of party influence, it is central to how scholars study the influence of president's veto power (Cameron 2000). Vetoes are uncommon, not because presidents lack power, but because legislators anticipate vetoes and alter the legislation accordingly. Fox and Rothenberg (2011) make a similar argument with respect to campaign contributions. The same logic can hold for the relationship between party leaders and their rank-and-file members. When leaders have the power to reward or punish members, legislators may proactively align themselves with the position of the leadership. To investigate this possibility we ought to pay more attention to opinion formation among elites, and not simply their voting patterns.

One advantage of surveying elites is that we can often connect their responses to real world outcomes. Here, we showed that weighted preferences predict how legislators voted on actual roll call votes. Other creative studies have compared legislators' predictions of constituent opinion to actual referenda results to measure how well legislators know their districts (e.g., Erikson, Luttbeg, and Holloway 1975).

Similarly, placebo tests using federal legislators further strengthened our confidence in the estimates of the effects of institutions. Other studies can benefit by taking a similar approach. While states offer institutional variation, there is often a question of whether the results are driven by the institutions under study or are simply the byproduct of unobserved differences across states. Placebo tests using federal legislators provide a great resource for scholars using state data to strengthen the credibility of the causal effects being studied. Because state level institutions should not affect the behavior of federal legislators, we should not expect those state level institutions to predict the behavior of federal legislators and, in our analysis, they do not.

Finally, it is worth noting that we have not studied all of the ways in which institutions can affect leaders' influence. Rather we have shone a light on one understudied way in which institutions strengthen party leaders' influence: by shaping the weight that legislators put on leaders' positions. We can put the importance of institutions into perspective by noting the relative power they have compared to the baseline influence that leaders have on legislators' position. Overall, legislators place relatively little weight on party leaders' preferences relative to their own preference – around 14 percent compared to 58 percent on their own preferences. These state legislators also place more weight on voters (28 percent) than they do on their party leaders. Given that legislators, on average, only put about 14 percent of the weight on leaders' positions, institutions that affect that weight by 15-20 percentage points represent an important tool for leaders trying to influence outcomes. Institutions are strong determinants of party leaders' power. Our work suggests that the studies that have not accounted for the role that institutions play in shaping the preferences on which legislators act have likely underestimated the importance of these institutions.

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Table 1: Predicting Legislators Roll-Call Votes Using their Weighted Preferences

DV = Vote to Increase Gas Tax	(1)	(2)
Stated Preference for Proposal over Status Quo (SQ – Preference - Proposal-Preference)	0.047* (0.011)	0.033* (0.010)
Republican		-0.476* (0.104)
Constant	0.450* (0.064)	0.725* (0.081)
Observations	58	58
R-squared	0.249	0.455

Note: Data comes the vote on Wyoming House Bill 69 (in 2013) and New Hampshire Senate Bill 367 (in 2014). The dependent variable is a dummy variable that takes a value of 1 when the legislator voted to increase the gas tax and 0 when they voted against the gas tax increase. Both models are estimated using OLS regressions. Standard errors in parentheses. * $p < 0.05$

Table 2: Weights in Legislators' Preferences (Constrained Regression)

DV=Weighted Preferences	(1) Basic	(2) Term Limits	(3) Professionalism	(4) Calendar	(5) Full
Voters' Preferences	0.28* (0.04)	0.29* (0.04)	0.23* (0.08)	0.12 (0.08)	-0.00 (0.11)
Leaders' Preferences	0.14* (0.03)	0.16* (0.04)	0.35* (0.07)	0.02 (0.06)	0.23** (0.10)
Own Preferences	0.58* (0.03)	0.54* (0.04)	0.42* (0.07)	0.86* (0.06)	0.77* (0.09)
Term Limits		-1.54 (1.47)			-0.68 (1.56)
Own*Term Limits		0.20* (0.08)			0.18 (0.10)
Leader's*Term Limits		-0.20 (0.10)			-0.20 (0.12)
Voter's*Term Limits		-0.01 (0.10)			0.01 (0.13)
Squire Index			0.55 (5.83)		1.97 (6.40)
Own*Squire			0.80* (0.32)		-0.03 (0.40)
Leader*Squire			-1.05* (0.33)		-0.89* (0.37)
Voter*Squire			0.24 (0.39)		0.92 (0.51)
Majority Sets Calendar				2.79 (1.43)	2.70 (1.46)
Own*Calendar				-0.42* (0.07)	-0.35* (0.08)
Leader*Calendar				0.18* (0.07)	0.15 (0.08)
Voters*Calendar				0.24* (0.09)	0.20 (0.10)
Constant	1.82* (0.64)	1.97* (0.74)	1.63 (1.15)	-0.14 (1.23)	-0.58 (1.60)
Observations	342	342	342	313	313

Note: Standard errors in parentheses. * p<0.05

Table 3: Does Agenda-setting power matter more for Legislators in the Majority?

DV=Weighted Preferences	(1) Minority	(2) Minority	(3) Majority	(4) Majority
Voters' Preference	0.19* (0.05)	0.10 (0.09)	0.34* (0.05)	0.13 (0.11)
Leader's Preference	0.07 (0.04)	0.05 (0.08)	0.20* (0.05)	0.03 (0.09)
Own Preference	0.75* (0.04)	0.85* (0.05)	0.46* (0.05)	0.84* (0.11)
Majority Sets Calendar		-0.47 (1.65)		4.79* (2.09)
Own*Calendar		-0.29* (0.07)		-0.46* (0.12)
Leader*Calendar		0.08 (0.09)		0.20 (0.11)
Voter*Calendar		0.21 (0.11)		0.26* (0.13)
Constant	1.15 (0.75)	1.70 (1.40)	2.26** (0.91)	-1.28 (1.81)
Observations	133	117	209	196

Note: Standard errors in parentheses. * p<0.05

Figure 1: Questions eliciting preferences for the gas tax as seen by legislators in Arkansas²⁰

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.]

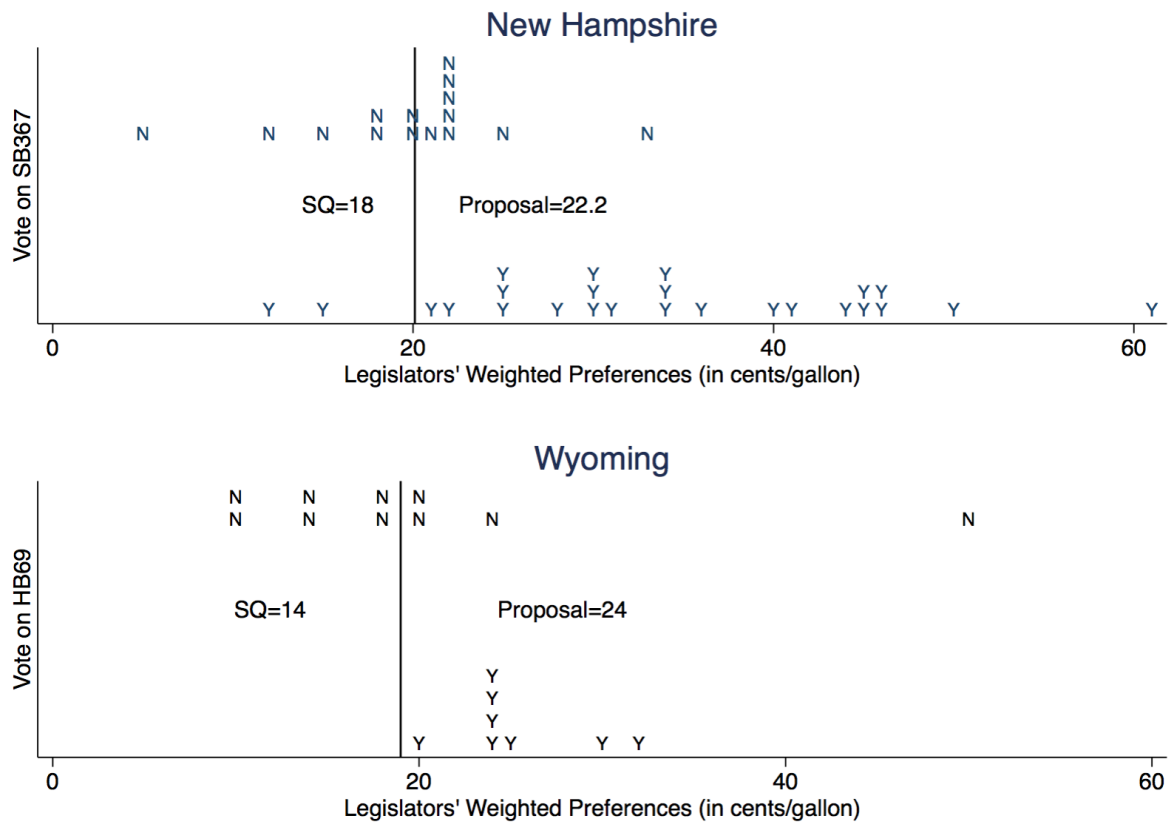
	0	15	30	45	60	75	90	105	120	135	150
Your chosen level as a state legislator											

>>

Note: This is a screen shot taken from our survey given to state legislators. The number giving the current gas tax in the respondent's state in the first paragraph was updated to reflect the status quo in the legislator's state.

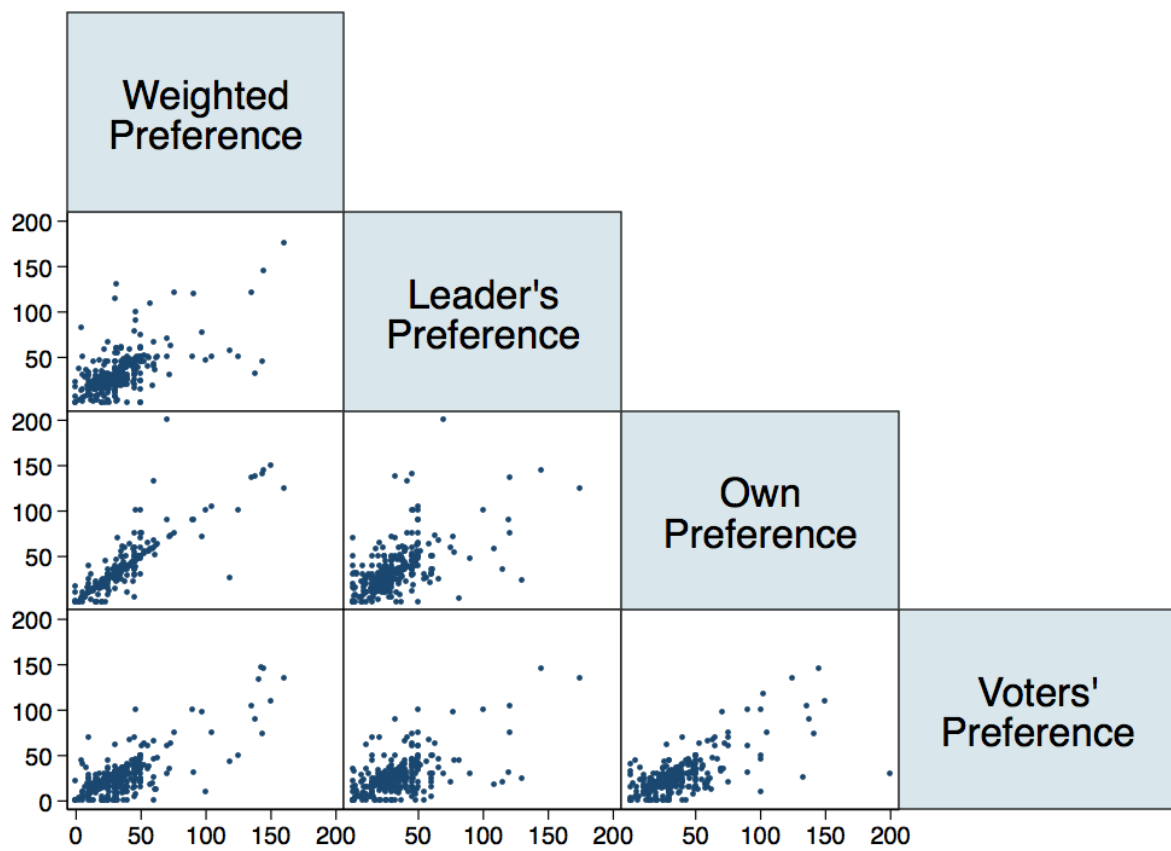
²⁰ The state name and status quo gas tax seen by each legislator matched their respective state.

Figure 2: Legislators' Stated Preference and their Roll-Call Votes in NH and WY



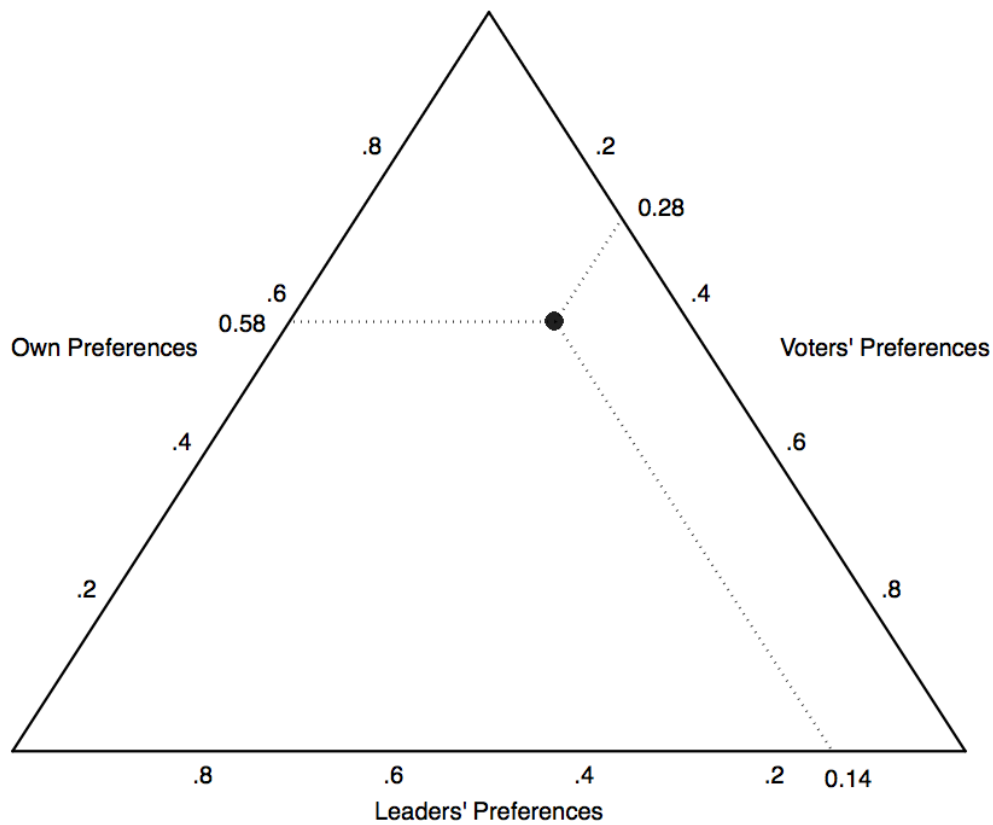
Note: The vertical line marks the midpoint between the status quo and the new proposal. Legislators who voted to pass the gas tax increase are marked with a “Y” and those who voted against the tax increase are marked with an “N”.

Figure 3: Relationship between weighted preference, leaders' preference, own preference and voters' preference



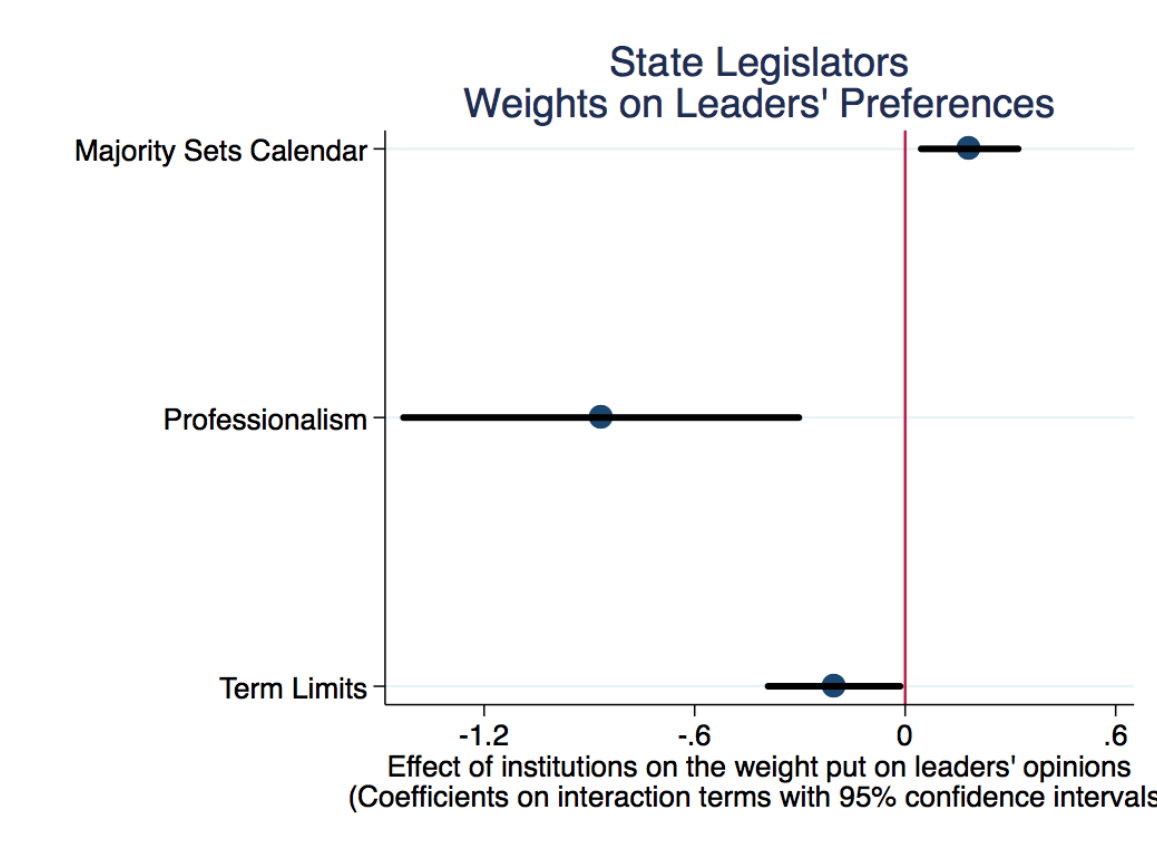
Note: This figure plots the bivariate relationship between legislators' responses to questions about the preferences of different actors over the state gas tax in their state (see Figure 1).

Figure 4: Weights of Voter, Party Leader, and Individual Preferences in Legislator's Preferences



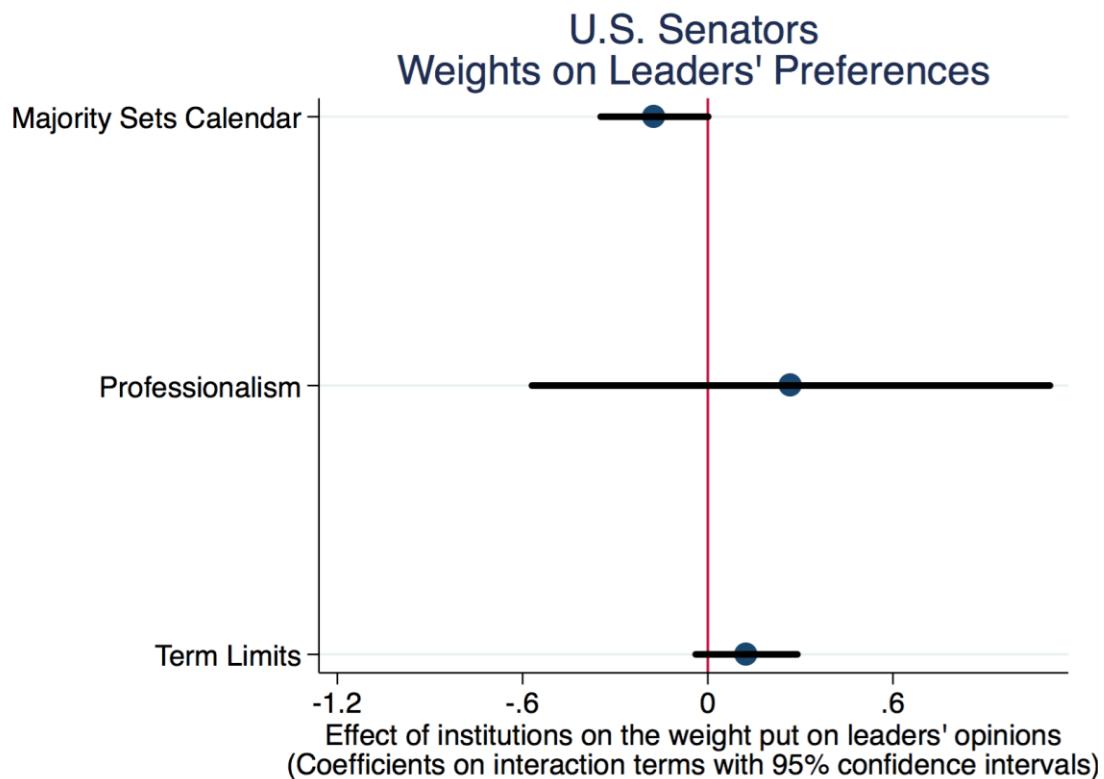
Note: The point estimate from the constrained regression suggests that legislators use the following weights when deciding their weighted preferences: 0.58 for their own preference, 0.28 for voters' preferences, and 0.14 for leaders' preferences. Each side of the triangle represents weight given to the respective components of legislators' weighted 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 5: The Effect of Select State Legislative Institutions on State Legislators' Weighted Preferences



Note: The results are based on the constrained regressions displayed in columns 2-4 of Table 2. The figure displays the point estimate on the interaction terms associated with each institution listed on the y-axis and the corresponding 95 percent confidence interval.

Figure 6: The Effect of Select State Legislative Institutions on U.S. Senators' Weighted Preferences



Note: These results present a placebo test that looks at the effect of state legislative institutions on the roll-call voting records of U.S. Senators. Data comes from the 1997-2012 period. Following Levitt (1996), we measure district preferences by the average ADA score among House members in each state, individual preferences by a fixed effect for each Senator's ADA score, and leader preferences by the average score of same-party Senators. For the analysis, we regress the Senator's ADA scores and the interaction between these measures and the institutions listed on the y-axis. The figure displays the point estimate and the corresponding 95 percent confidence interval for the interaction terms associated with each institution.

Online Appendix

Online Appendix 1: 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 try 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)

Online Appendix 2: Robustness Check Excluding Legislator's Own Preference

Table O1: Weights in Legislators' Weighted Preferences (Constrained Regression) – Excluding One's Own preferences

DV=Weighted Preferences	(1) Basic	(2) Term Limits	(3) Professionalism	(4) Calendar	(5) Full
Voters' Preferences	0.61* (0.05)	0.64* (0.06)	0.14 (0.11)	0.50* (0.10)	0.03 (0.15)
Leaders' Preferences	0.30* (0.05)	0.32* (0.05)	0.47* (0.10)	0.08 (0.10)	0.40* (0.13)
Term Limits		8.22 (3.70)			5.90 (4.09)
Leader's*Term Limits		-0.13 (0.14)			-0.07 (0.16)
Voter's*Term Limits		-0.12 (0.15)			-0.02 (0.18)
Squire Index			-32.87 (16.26)		-19.66 (17.49)
Leader*Squire			-0.78 (0.50)		-1.80* (0.57)
Voter*Squire			2.48* (0.48)		3.04* (0.55)
Majority Sets Calendar				-12.26* (3.72)	-10.33* (3.99)
Leader*Calendar				0.25* (0.11)	0.32* (0.12)
Voters*Calendar				0.15 (0.12)	0.01 (0.15)
Constant	7.60* (1.51)	5.86* (1.73)	12.93* (2.86)	17.59* (3.31)	17.82* (4.24)
Observations	342	342	342	313	313

Note: Standard errors in parentheses. * p<0.05

Online Appendix 3: Unconstrained Regression of Main Results

Table O2: Weights in Legislators' Preferences (Unconstrained Regression)

	(1)	(2)	(3)	(4)	(5)
DV=Weighted Preferences	Basic	Term Limits	Professionalism	Calendar	Full
Voters' Preferences	0.24* (0.04)	0.28* (0.05)	0.09 (0.09)	0.00 (0.08)	-0.10 (0.12)
Leaders' Preferences	0.12* (0.03)	0.16* (0.04)	0.28* (0.08)	-0.07 (0.07)	0.18* (0.10)
Own Preferences	0.58* (0.03)	0.54* (0.04)	0.40* (0.07)	0.82* (0.06)	0.69* (0.09)
Term Limits		5.63* (2.71)			4.48 (3.21)
Own*Term Limits		0.21* (0.08)			0.16 (0.10)
Leader's*Term Limits		-0.34* (0.11)			-0.29* (0.12)
Voter's*Term Limits		-0.15 (0.11)			-0.05 (0.14)
Squire Index			-20.12 (12.01)		-3.79 (12.67)
Own*Squire			0.81* (0.32)		0.33 (0.40)
Leader*Squire			-0.74 (0.39)		-0.95* (0.42)
Voter*Squire			0.71 (0.44)		0.88 (0.55)
Majority Sets Calendar				-4.41 (2.71)	-3.19 (3.05)
Own*Calendar				-0.38* (0.07)	-0.34* (0.08)
Leader*Calendar				0.27* (0.08)	0.23* (0.08)
Voters*Calendar				0.35* (0.10)	0.29* (0.12)
Constant	3.62* (1.12)	2.60* (1.25)	7.38* (2.15)	7.37* (2.43)	6.39* (3.22)
Observations	342	342	342	313	313
R-squared	0.76	0.77	0.78	0.79	0.81

Note: Standard errors in parentheses. * p<0.05

Online Appendix 4: Full Results of Placebo Test

As a placebo test of the effect of state institutions, we analyzed the effect of state legislature institutional arrangements on the weighted preferences of U.S. Senators. Our approach to decomposing the weighted preferences of U.S. Senators follows from Levitt (1996). First, we measured Senators' weighted preferences by using their Americans for Democratic Action (ADA) scores between 1997 and 2012. Second, we estimated district preferences by the average ADA score among House members in each state and party leader preferences by the average score of same-party Senators. To estimate Senators' individual preference we estimate an initial model that includes individual fixed effects along with our measures of leaders' preference and voters' preference. Like Levitt (1996), we then use the predicted values from those fixed effects as a measure of legislators' personal preference. We then estimate a model that includes our measure of legislator's personal preference along with the measures for leaders' and voters' preferences.

Our estimation strategies follows directly from Levitt (1996), and so, like him, we drop Senators in states with three or fewer House districts. In the regression models that follow, we estimate the basic constrained regression that allows voters', leaders' and own preferences to predict weighted preferences. The subsequent columns interact leaders' preferences with each state-level institutional arrangements, first individually, and then all combined.

The results of our placebo test show that the effect of *state-level* institutions are insignificant in predicting the weighted preferences of *federal* Senators. This is further evidence that the main results we find in the paper represent the effect of institutions on legislators' behavior and not some form of omitted variable bias related to the state and public officials from states with those types of institutions.

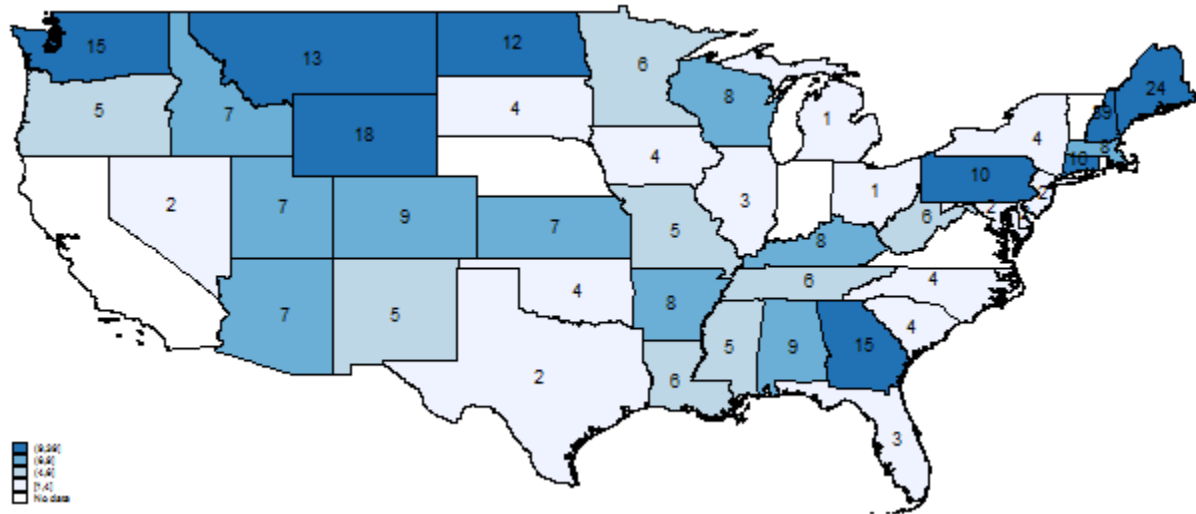
Table O3: U.S. Senators Placebo Test

DV=Weighted Preferences	(1) Basic	(2) Term Limits	(3) Professionalism	(4) Calendar	(5) Full
Voters' Preferences	0.08* (0.01)	0.09* (0.01)	0.10* (0.02)	0.08* (0.01)	0.11* (0.02)
Leaders' Preferences	0.13* (0.02)	0.10 (0.07)	0.07 (0.13)	0.28* (0.06)	0.21* (0.08)
Own Preferences	0.79* (0.02)	0.81* (0.06)	0.83* (0.11)	0.64* (0.06)	0.68* (0.08)
Term Limits		-4.99 (3.56)			-3.15 (3.22)
Own*Term Limits		-0.10 (0.07)			-0.05 (0.06)
Leader's*Term Limits		0.13 (0.08)			0.07 (0.07)
Voter's*Term Limits		-0.02 (0.02)			-0.02 (0.02)
Squire Index			-9.62 (17.53)		-7.89 (10.29)
Own*Squire			-0.17 (0.36)		-0.22 (0.23)
Leader*Squire			0.27 (0.43)		0.31 (0.25)
Voter*Squire			-0.09 (0.09)		-0.09 (0.08)
Majority Sets Calendar				8.47* (3.80)	13.13* (3.75)
Own*Calendar				0.17* (0.08)	0.21* (0.07)
Leader*Calendar				-0.17 (0.09)	-0.22* (0.08)
Voters*Calendar				0.00 (0.02)	-0.05 (0.03)
Constant	38.60* (1.12)	39.56* (2.72)	40.82* (5.50)	31.40* (2.71)	32.73* (3.84)
Observations	1,049	1,049	1,049	1,049	1,049

Note: Standard errors in parentheses. * p<0.05

Online Appendix 5: Distribution of Survey Responses

Figure O1: 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 O4: Comparison of Survey Sample to State Legislator Population

Attribute	% in Sample	% in Population
Female	26	24
Republican	47	52
Term Limits	26	26
In Majority	62	64
Majority Sets Agenda	74	67 [^]
<hr/>		
	Mean in Sample	Mean in Population
Squire Index	0.16	0.20 [^]

[^] A chi-squared test indicates that the proportion of legislators in our survey serving in a legislature where the majority sets the agenda is significantly greater (at $p < 0.05$) than in the population of legislators. A t-test indicates that the mean Squire score in the sample is significantly different (at $p < 0.05$) than the mean in the population. For all other attributes, a chi-squared test allows us to reject the null that the distributions are different.