# Partisan Preferences and Policy Outputs:

# Does Winning Actually Matter?\*

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#### Abstract

Partisans fight fiercely to get their own party's politicians into office so that they can push policy in their preferred direction. This assumption — that partisan's policy preferences matter more when their party is in power — underlies much of our understanding of politics, yet is not well-tested. Furthermore, there are reasons to believe it is simply not true. The wheels of the federal government move slowly. It is difficult to make drastic policy change, and doing so usually requires compromise with the other party. Using data across 11 issue areas from 1973 to 2016, I test whether partisans' opinions matter more when their party is in power. I show that control of government can matter, but it oftentimes does not. For highly salient, big spending issues, policy responds more to partisans of the same party as the president, but the same is not true about Congress.

## 1 Introduction

In the runup to every modern election in the United States, people all over the country experience a similar theme: "If you want your voice to count, vote!" This sentiment, drawn on by organizations from college voter registration drives to well-funded and professionalized

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operations like MoveOn, suggests that voting is one way that people can get their political preferences translated into policy outputs.

Of course, researchers have investigated whether this is in fact the case. Do people's preferences actually get translated into policy outputs? Before looking at the evidence, there is good reason to suspect they do not. After all, most people do not pay much attention to politics outside the campaign, so politicians' work can go unnoticed. It does seem to be the case that public opinion does in fact influence policy outputs, at least with certain limitations (Wlezien 1995; Franklin and Wlezien 1997; Erikson, MacKuen, and Stimson 2002; Burstein 2003). In fact, and consistent with the arguments of Get Out the Vote Campaigns described above, voting itself seems to ensure that people's preferences are better represented (Griffin and Newman 2005).

However, getting everyone's voice to affect policy is not what many organizers on the ground are striving for. Registration drives and Get Out the Vote campaigns oftentimes have an explicit partisan element. Their hope is to elect their own party's politicians into office so that their policy preferences can get translated into policy outputs. In other words, partisans want to win elections to get their preferred policy outputs. This basic assumption — that partisans' opinions affect policy more when their party is in power — underlies many theories of politics. People whose party wins the election are excited at least in part because they believe that their opinion matters; they believe that policy will move in their preferred direction. Losers are deflated because they feel as though they've lost the ability to affect policy outputs.

However, whether partisans' opinions matter more to policy outputs when their party is in charge remains untested by researchers. Although we know that public opinion can affect policy outputs, we do not know whether partisans' opinions affect policy outputs more when their party is in charge. There are of course strong reasons to believe it does, perhaps the strongest of which is that it is a common assumption underlying discussion of American politics in the news, in academic journals and conferences, and around the dinner table in

American homes. However, there are also reasons to suspect that this may not in fact be the case. Public policy is, with rare exceptions, slow moving. It is therefore difficult to see how partisans' preferences could outweigh those of the other party given the frequent shifts in party control. Additionally, until quite recently bipartisanship was commonplace, and so we might expect that the preferences of partisans of both parties are reflected in policy outputs. Even in the current era of heightened elite polarization, majority parties are oftentimes forced to make compromises with the minority party because of various veto points in the system, such as the filibuster in the Senate.

In this paper, I examine the widely-held yet little-tested theory that partisans' opinions affect policy outputs more when their party is in power. Using data from 11 issue areas from 1973 to 2016, I show that for certain issues, it does seem to be the case that there is partisan policymaking. In what might be considered to be the most important issue areas — big-ticket areas with substantial disagreement across partisan lines — policy is more responsive to partisans' opinions if they are the same party as the president. In less important issue areas, I do not find partisan policymaking. I also do not find consistent evidence for partisan policymaking in Congress, though it is difficult to say for certain either way.

# 2 Theory

Does public opinion affect policy, and if so how? It is unsurprising that much ink has been dedicated to studying this, given its centrality to modern theories of representative democracy. Although we generally do not expect a perfect relationship between opinion and policy, we do expect that policy generally responds to public preferences. Empirical research shows that this seems to happen, at least under certain conditions (Erikson, MacKuen, and Stimson 2002, for example). In other words, as demand for a policy goes up, supply of that policy tends to go up as well. There are, of course, exceptions to this general rule. In some policy areas, public opinion is simply unanchored to the policy status quo, and so policy cannot

respond to it (Wlezien 2016b). At other times, pressure for change gradually builds up and results in large changes all at once, a model known as "punctuated equilibrium theory" (Baumgartner and Jones 1993). However, we usually think of the normal day-to-day effect of public opinion on public policy to be slow-moving. The thermostatic model is one way of capturing this relationship (Wlezien 1995; Soroka and Wlezien 2010; Pacheco 2013). In this model, policymakers adjust the supply of policy up or down in response to public demand for that policy. As more of the public demands a certain policy, they are likely to get more of it. On the other hand, if the public wants less of a certain policy, then policymakers deliver less of it. There are of course caveats to this, and the strength of the relationship varies across different contexts, but the general relationship often holds.

More recently, interest has turned toward gauging whether certain people's preferences matter more to policy outputs than others. A common concern is that the rich are able to influence policy more than average citizens, so it is perhaps unsurprising that this area has received most of the attention of the newly-emerging field (see Bartels 2005; Soroka and Wlezien 2008; Enns and Wlezien 2011; Gilens 2012; Flavin 2012; Gilens and Page 2014; Enns 2015; Branham, Soroka, and Wlezien 2017, for examples). While there is some evidence that the rich are slightly overrepresented, all of these analyses find that the preferences of income groups are correlated at astonishingly high rates — sometimes with a pearson's r approaching one (Soroka and Wlezien 2008). This limits the degree to which there can be inequalities in representation across income groups. Given that income is not historically the main dividing cleavage in American politics, this is perhaps unsurprising.

On the other hand, partisanship is nicely aligned on the defining left-right cleavage in American politics. Although nearly all Americans agree on many items (such as low crime rates being a good thing), on many issues there are substantial differences in opinion across partisan groups. This means that there is more room for gaps in policy representation between partisan groups than across income groups. For empirical studies, differences in opinion across groups is important for at least two reasons. First, without much difference, it

is difficult to distinguish to whom policy is responding. From a methodological standpoint, if two groups' opinions are perfectly correlated, conventional statistics cannot distinguish between the two. Second, small differences across groups limit the practical importance of differential responsiveness. If policy responds to group A's opinion more than group B, but group A and group B have nearly identical opinions, then the opinion of group B will still be well represented in policy outputs.

While partisans have different opinions, we also know that party control of government matters a great deal for what kinds of policies the government enacts. We know, for example, that Republican control of government is more likely to result in policy moving in a conservative direction, even though this costs them electorally (Wlezien 2016a). We also know that policymakers respond to their constituents (Butler and Nickerson 2011), and that they may respond to constituents more often if they are of the same race (Butler and Broockman 2011). Whether they respond more to their own partisans is as yet unanswered, but seems likely.

What is untested so far, though, is whether partisans opinions affect policy more when their party is in charge. There is, however, reason to suspect that they should. It seems likely that politicians want to keep their base happy. If that is the case, Democratic politicians should be more likely to pass legislation that their Democratic supports favor, and Republican politicians should be more likely to pass legislation that their supporters favor. Of course, on the other hand the political inattentiveness of the average person is well-documented, so politicians may suspect that once they get into office they can enact policies they want, then try to persuade their base at election time that these policies will actually be beneficial.

If policymakers do listen to one groups' opinions more than another, we need to modify the traditional conceptualization of policy. Instead of policy responding to public opinion writ large, policymaking should be a function of different groups' opinions. This is represented in Equation 1, where P represents policy output, D represents opinion of democrats, R represents opinions of Republicans, and G represents partisan control of the government.

$$P = f(R, D, G) \tag{1}$$

We already know that as demand for policy increases, supply of that policy also increases (Soroka and Wlezien 2010). Therefore, we just need to modify what we know in order to take into account subgroup opinion and partisan control of government. This suggests a model where the effect of partisans' opinions differs depending on the party in control of government:

$$\Delta P_{jt+1} = \beta_{j0} + \beta_{j1} O_t + \beta_{j2} I_t + \beta_{j3} O I_t \tag{2}$$

Where  $\Delta P$  represents change in spending on issue j from time t to time  $t+1.^1$  O represents individuals relative preferences for more or less policy, and we allow the effect of that to vary with an interaction term I, representing whether they are an in-partisan or not. Hence, the effect of in-partisan's opinions on policy change is  $\beta_{j1} + \beta_{j3}$  and the effect of out-partisans' opinions on policy change is simply  $\beta_{j1}$ . In order to analyze this relationship, we need information about policy, and opinions among the various partisan subgroups.

### 3 Data

Spending data comes from the Office of Management and Budget (OMB) *Historical Tables* — "Table 3.2 — Outlays by Function and Subfunction." The *Historical Tables* contain information about spending by subfunction, allowing us to match spending to public policy areas across years. Table 1 shows the match between the various subfunctions and the policy area. Because we expect current relative preferences to impact future policy changes, I difference the spending data. Finally, I standardize the separate series to have mean zero

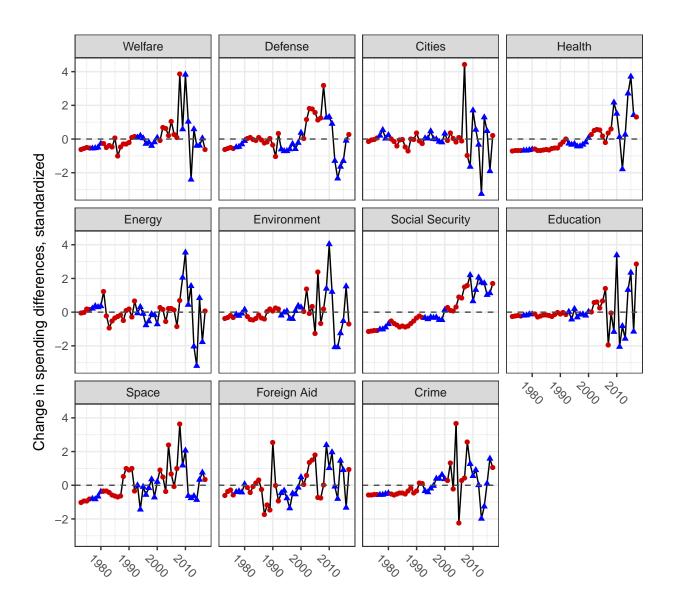
<sup>&</sup>lt;sup>1</sup>Since we expect preference to have a lagged effect on spending, we lead the dependent variable. In other words, preferences today impact future policy.

<sup>&</sup>lt;sup>2</sup>I also ran models including a term for transition years — years in which the presidency shifted from one party to the other — to control for any effects of one party always increasing spending. This was found to have little effect, and so is excluded here for parsimony.

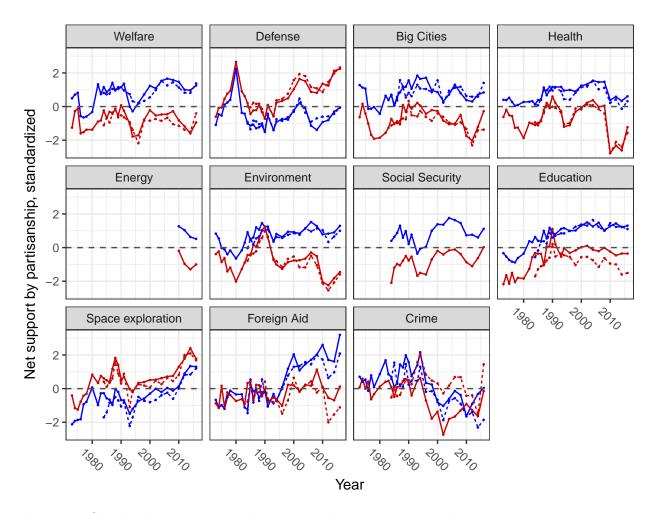
and standard deviation one to more easily allow comparisons across issue areas. Figure 1 shows the distribution of spending in the ten policy areas over time.

Data about public opinion comes from the General Social Survey (GSS). The GSS collects a sample of over 1,000 adults each time it runs, and it ran almost yearly from 1973 to 1994, then biannually afterwards. The question on relative preferences reads, "We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount." The GSS asks about many different policy areas, and also includes two different question wordings for most of the areas. Figure 2 shows the standardized net support (the proportion of people preferring more spending minus the proportion of people preferring less) by partisanship over time. Issues are ordered by average disagreement between partisans of the two parties (combining question wordings) in this figure and throughout the rest of the paper. So partisans opinions are most similar on crime, foreign aid, and space exploration, and least similar on welfare, defense, big cities, and health. Note also that issue areas that tend to have large disagreements across partisan lines are also issue areas that tend to be highly salient and large budget items.

As noted by many others, aggregate opinion of partisan groups show remarkable parallelism over time (Page and Shapiro 1992). However, there are times when one party seems to move more than the other. One example that stands out is the drop in net support for spending on health between 2008 and 2010, after the passage of the "Patient Protection and Affordable Care Act," also known as "Obamacare." Note that the drop is much more pronounced for Republicans than Democrats, which suggests that partisans respond more strongly to policy from the other party.



**Figure 1:** Changes in spending. The vertical axis is standardized changes in spending. The point for each year is a blue triangle, indicating a Democratic president, or a red circle, indicating a Republican president.



**Figure 2:** Standardized net support by partisanship across issues and years. Democrat net support is represented by the blue line, Republican net support by the red line. Alternative question wordings in dashed lines. Questiones are ordered in descending level of average disagreement; partisans disagree most on average on welfare and least on crime.

## 4 Analysis

Recall that we are interested in estimating the effect of Republican and Democratic net support on policy outputs under Republican and Democratic presidents. In order to do this, we will estimate Equation 2. This suggests a model where policy change is based on individuals' opinions, but that in partisans opinions can have a different effect than out partisans. This possibility can be captured by using the following model:

$$\Delta P_{jt+1} \sim N(y_{jt}, \sigma)$$

$$y_{jt} = \beta_{j0} + \beta_{j1}O_{it} + \beta_{j2}I_{it} + \beta_{j3}OI_{it}$$

$$\beta_{jn} \sim N(\mu_n, \sigma_n) \forall n \in (0, 1, 2, 3)$$

$$\mu_n \sim N(0, 10)$$

$$\sigma \propto 1$$

where  $\Delta P$  represents policy change in policy area j at time t, O represents individual i's opinion, and I is an indicator for whether they are an in partisan or out partisan. In other words, future policy change for policy j depends on current opinion, and in partisans' opinions may have a stronger (or weaker) effect than out partisans. The hyperpriors on the means and standard deviations are quite diffuse; the means get a normal distribution with mean zero, standard deviation 10, and the standard deviations get an improper prior. Since we have differently-sized effects nested in issue areas, and varying numbers of observations across issue areas, we use partial pooling. In contrast to either total separation, where we estimate the effects for each issue separately, or complete pooling, where we don't allow effects to vary across issues, this approach allows us to estimate the global effects, and then allow issue-specific effects. These issue-specific effects are allowed to vary by issue. One advantage of particular importance here is that issues with fewer observations (and therefore

 $<sup>^{3}</sup>$ When actually implemented, this is given a lower bound of zero since it must be positive.

less information) are "pulled" toward the global effect. Not all issue areas have been asked about since the inception of these relative preference questions in 1973. As we can see in Figure 2, many issues started to be asked about in 1973 but some, such as social security, were added later. The question about energy was added much later; it has only been included in the GSS four times, so we have relatively little information in that issue area. This means that the effect will be pulled toward the global mean more strongly than effects in issue areas like welfare where we have a lot more information.

I use stan, called from R via rstan (Stan Development Team 2018), to estimate the model in a Bayesian framework. I run four chains of 4,000 draws each, discarding the first 2,000 in each chain for burnin. The sampler appears well-behaved, and additional diagnostic information is reported in Appendix C. Figure 3 shows estimated means and 95% HPDs for the effect of in-partisan opinion and out-partisan opinion on policy change.<sup>4</sup>

Somewhat remarkably, there is strong evidence of policy representation in nearly every issue area. This corroborates findings by Soroka and Wlezien (2010) and extends their finding to more policy areas. The posterior mean for the effect of in-partisan opinion on policy change is positive in nearly every policy area: welfare, defense, health, energy, the environment, social security, space, and foreign aid. For all of those the 95% HPD does not overlap zero. Energy is estimated with quite a bit of uncertainty, likely because we have very limited data since it has only been included in the last four GSS surveys.

So in partisans' opinions have an effect on policy across a wide range of issue areas. Conversely, the effect of out partisans' opinions on policy is less consistent. Figure 3 shows it to be positive only in welfare, cities, energy, education, space, and foreign aid. The estimated effect is negative in defense, health, the environment, social security (though it is estimated to be very close to zero), and crime.

Let us return to the question at hand, whether in-partisan opinion affects policy more

<sup>&</sup>lt;sup>4</sup>I focus on interpreting the quantities of interest: the estimate of the effect of out partisan opinion on policy  $(\beta_1)$ , and the estimate of the effect of in partisan opinion on policy  $(\beta_1 + \beta_3)$ . Estimates for all quantities are reported in Appendix B.

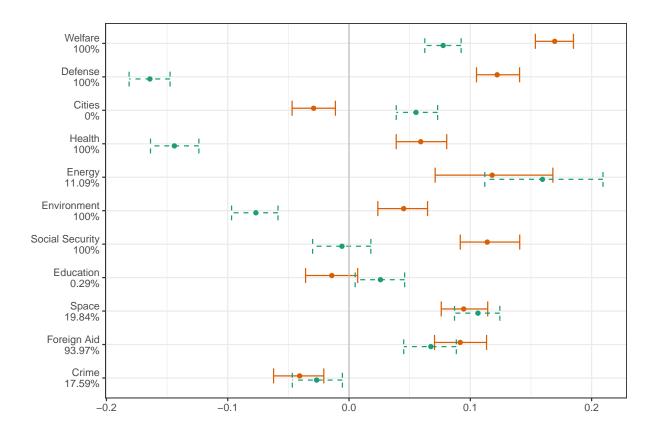


Figure 3: Effect of partisans' opinions on spending policy change. The estimated effect of inpartisan opinion on policy change is represented by the solid orange lines, the estimated effect of out-partisans by the dashed green lines. Dots are posterior means and the error bars represent 95 percent HPDs. Issues are arranged in descending order of average partisan disagreement. The percentage under the issue indicates the estimated posterior probability that in partisans opinion has a larger effect than out partisan opinion.

than out-partisan opinion. As Figure 3 shows, the effect of in-partisan opinion on policy change is estimated to be larger out-partisan opinion across a wide range of issues. The posterior means and HPDs suggest this, since they are larger across most issues. We can also check how often  $\beta_1 + \beta_3$  is larger than  $\beta_1$  in the posterior, which is a more accurate check since these coefficients can be correlated. This is reported under the issue names in Figure 3. So, for example, the posterior probability that the effect of in partisan opinion is larger than out partisan opinion in Foreign Aid is about 94% even though the HPDs overlap quite a bit. In six of the 11 issues analyzed, in partisan opinion has a greater effect than out partisan opinion on policy. Issues where the most money is being spent and partisan disagreement

highest (welfare, defense, health, social security) — exhibit some of the largest differences. In fact, in many of these areas, only the effect of in-partisans' opinions on policy is estimated to be positive. This indicates that policy is not at all responsive to out-partisan opinion in these issue areas.

Smaller less salient issues like foreign aid, exhibit smaller differences across party. In four issue areas — energy, education, space, and crime — the effect of in-partisan opinion on policy change is estimated to be smaller than that of out-partisan, but in none of those areas is the difference significant.

#### 4.1 Considering Congress

Of course, the presidency is just one of several important federal institutions. We started by considering the presidency for a variety of reasons, both substantive as well as methodological. The President's geographic constituency covers the entire United States, unlike members of Congress. Perhaps this makes presidents more likely to respond to opinion at the national level, unlike individuals in Congress who respond both to national opinion but especially also to local opinion. From a methodological viewpoint, the presidency is also easier to model since it is one position controlled either by the Republicans or Democrats. Congress on the other hand has two branches and 535 voting members. This adds quite a bit of complexity to the model.

However, there is of course reason to believe that partisan control of Congress may matter. Congress is the legislative body, after all. It directly sets the spending levels that are the subject of analysis. If party elites respond to the party base, then we should expect policy to respond more strongly to partisans' opinions as outlined above. We know that representatives are more likely to communicate with constituents of the same race (Broockman 2013), leading to worries about unequal representation based on race. It is also plausible that representatives are more likely to communicate with members of their own party.

On the other hand, there are also reasons to suspect that we will not observe the same

relationship when analyzing Congress as we did when looking at the presidency. In addition to the concerns above about responding to constituencies rather than the national electorate, Congress might not be as responsive to partisan opinion as the presidency. Although it is easy to forget with elite polarization currently at historically high levels, up until quite recently bipartisanship and compromise were the norm in the Senate and, to a lesser degree, the House. The Senate also has rules that give the minority party quite a bit of power, which weakens the majority party's ability to pass legislation very close to their party's ideal point.

Either way, it is interesting to know whether we observe the same relationship between partisan opinion, partisan control, and public policy in Congress as we do in the presidency. Because we might expect differences in the House and Senate, we re-run the model three times. In each situation, we define in partisanship slightly differently. We first run the model defining people as in partisans if their party controls both the House and the Senate. We then repeat this defining in partisans as controlling the House or the Senate.

Figure 4 presents the results of these estimations and can be interpreted as Figure 3. It is hard to make the case that partisans' opinions affect policy more when their party is in control for any of the three models. We could look at certain policy-branch combinations and find support; for example, the environment and social security spending are estimated to be more responsive to in-partisan opinion in the House. However, it is difficult to see consistency here. When looking at Figure 3, we saw in partisan opinion having a stronger effect on policymaking in many different issue areas. In all three congressional models, estimates bounce around quite a bit. In some policy areas we see stronger effects for in partisan opinion, but in other policy areas we see no difference or even weaker effects. There is also inconsistency across branches; when considering the House, in partisan opinion has a weaker effect than out partisan opinion in defense, for example, but in the Senate, the situation is exactly reversed.

It appears as though Congress is not as responsive to national partisan opinion as the presidency. Since Congress is not elected at-large, it seems reasonable that the relationship

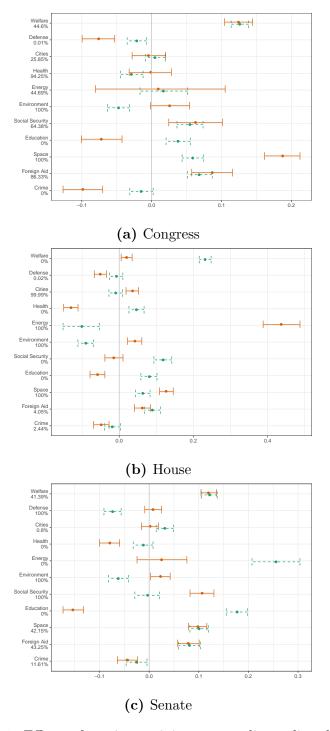


Figure 4: Effects of partisan opinion on spending policy change.

between partisan opinion and policy change is not as straightforward at the congressional level as it is at the presidential level.

#### 5 Discussion

These analyses reveal that partisans are right to care deeply about election outcomes. In the biggest issue areas with the most disagreement across partisan lines — in other words, where it matters most — policy responds more (and sometimes solely) to in-partisans than it does do out-partisans' opinions. As polarization at the elite level reaches historical levels, it seems even more important for partisans to win elections in order to get their preferences reflected in policy outputs. Although this paper did not consider whether the relationship changed over time, it seems likely that the effect of partisan opinion on policy outputs is stronger now than it was when the two parties were largely the same.

It is also important to note that this comes with a caveat. We found a stronger link between partisans' opinions and policy outputs when their party was in power, but only for the presidency. Checking the same relation for the House of Representatives, the Senate, and Congress as a whole did not show consistent results. The presidential election draws much more attention than congressional elections, and this analysis suggests that that may be merited. At the national level, if partisans want policy to reflect their opinion, their best bet is to control the presidency.

What are other implications of these findings? When considered together with recent research showing that in partisans are less responsive to policy change, this may help explain why parties often run to the extremes. For example, Wlezien (2016a) finds that the longer a president's tenure, the less representative they become. This could be at least partially due to the combination of presidents catering to their partisan's opinions but partisans not updating those opinions. In other words, Republican presidents may push policy rightwards, but Republican voters don't respond as if they had. Republican presidents then perhaps

continue to respond to now-outdated Republican opinion and get punished for pushing policy too far in one direction. There is still more research needed in this area before we fully understand how policy, opinion, and partisanship interact with each other, especially over time.

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# A Policy functions

Table 1 presents which policy areas were matched with what subfunctions. This follows the coding scheme by Soroka and Wlezien (2010) where possible, and extends it to more issues.

Policy	Subfunction(s)
Cities	451, 452
Crime	751 - 754
Defense	51, 53, 54
Education	501-503, 505, 506
Energy	271, 272, 274, 276
Environment	301 - 306
Foreign aid	151, 152
Health	551, 552, 554
Social Security	651
Space	251, 252
Welfare	604, 605, 609

**Table 1:** Policy subfunctions

# B Regression coefficients

In the main text of the paper, we focused on presenting and interpreting the quantities of interest. In this section, we report all estimated parameters. Figure 5, Figure 6, Figure 7, and Figure 8 present the posterior means and 95 percent HPDs for the estimates from models where in partisanship was determined by matching with the president, the House, the Senate, and Congress respectively.

Figure 5: President

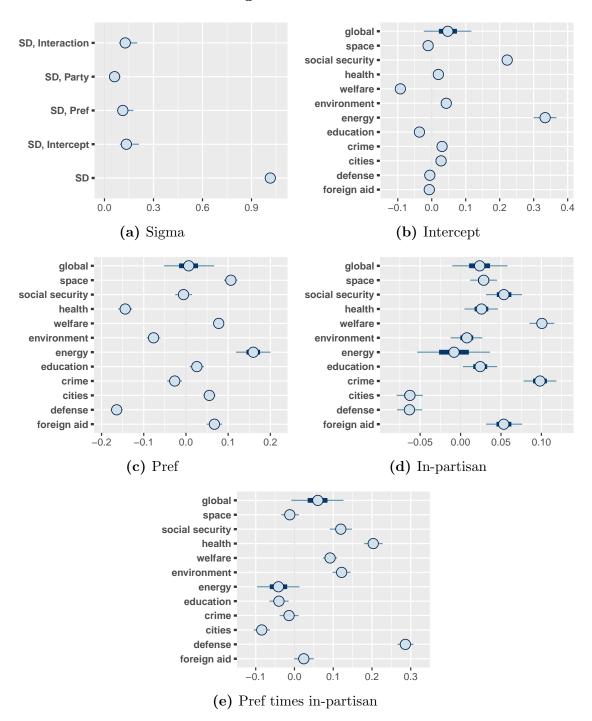


Figure 6: House

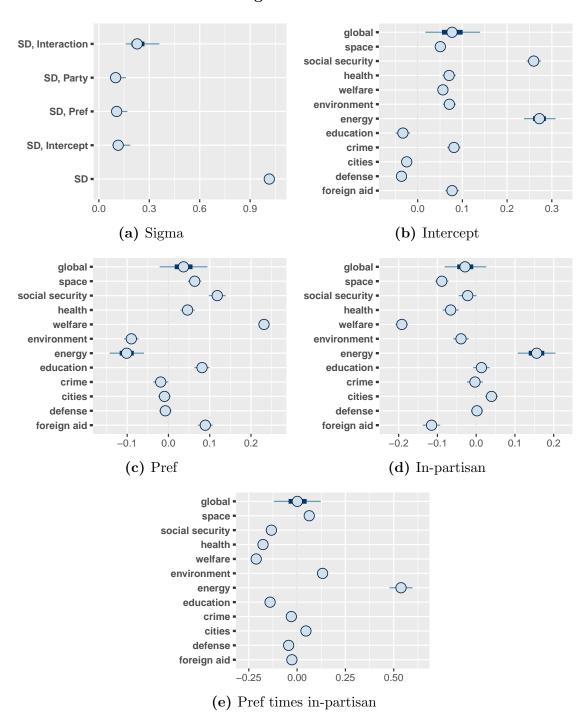


Figure 7: Senate

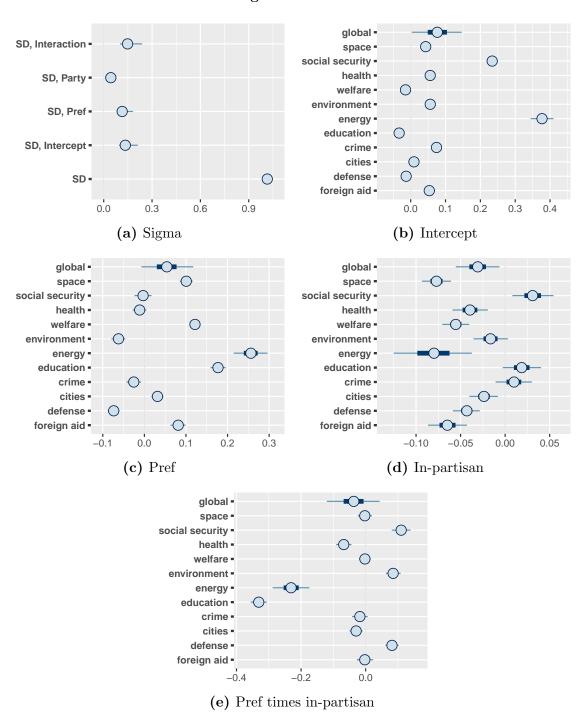
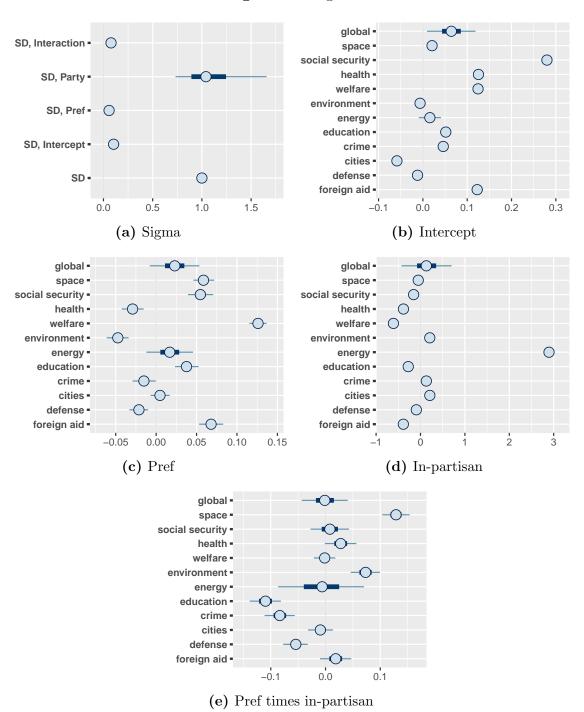


Figure 8: Congress



# C Sampler diagnostics

All R values from a Gelman and Rubin (1992) test are within 0.01 of 1, and all but a handful are within 0.001.

The effective sample size for the four samplers are good. The means are 6668.65, 7975.83, 6979.66, and 6827.32 for the samplers for the Presidency, Congress, House, and Senate respectively. The minimum effective sample size for any parameter is, 4950.84, 6981.88, 5341.6, and 5472.5.