

# **Out-of-District Contributors and Representation in the US House\***

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## **Abstract**

Research suggests United States (US) House members are increasingly reliant on out-of-district individuals for fundraising. Yet we lack evidence on how such donations might affect representatives' policy decisions, and existing work suggests contributions from organized political action committees (PACs) do not influence roll call behavior. This paper examines whether House members' roll call voting is responsive to individual donors, and how any such responsiveness relates to out-of-district donations and district ideology. Three main findings emerge. First, members are responsive to the policy preferences of the national donor base of their party. Second, members' responsiveness to donors is positively associated with the ideological favorability of the district; in fact, this result holds even when the shift in ideological favorability is exogenously induced by redistricting. Third, the higher the percentage of out-of-district contributions a member has received, the greater is their responsiveness to the national donor base.

## **Introduction**

A variety of scholarship suggests the fundraising dynamics for United States (US) House members have changed dramatically in recent decades. Donations from individuals now eclipse ones from political action committees (e.g., Barber 2016). Moreover, for a typical representative, more than half of these contributions are from individuals residing outside of the district (e.g., Grenzke 1988; Gimpel, Lee, and Pearson-Merkowitz 2008). Indeed, neighborhoods that make up less than 15 percent of the population account for the vast majority of campaign contributions (e.g., Bramlett, Gimpel, and Lee 2011). Alongside these developments, a member's ability to fundraise for the party and fellow partisans has become a significant determinant of committee positions and advancement within the party leadership hierarchy (e.g., Heberlig, Hetherington, and Larson 2006; Cann 2008; Powell forthcoming). Thus, not surprisingly, the modal representative allocates a substantial amount of their time to fundraising (e.g., Grim and Siddiqui 2013).

The implications for representation from out-of-district contributors' increased importance has thus far received little scholarly attention. Arguably, the reason is that prior literature overwhelmingly suggests contributions from organized interests, which in the US are represented by political action committees (PACs), do not alter members' roll call behavior (e.g., Ansolabehere, de Figueiredo, and Snyder 2003). PAC donations affect committee participation (e.g., Hall and Wayman 1990), the writing of legislation (e.g., Powell 2013) and electoral outcomes (e.g., Poole, Romer, and Rosenthal 1987), but on legislative

voting there is no significant impact. Correspondingly, several studies conclude that PAC contributions are primarily directed at mobilizing allies to influence less public stages of the policymaking process (e.g., Denzau and Munger 1986; Hall and Wayman 1990; Powell 2013).

Yet there are grounds to expect the effects of individual donors and PACs to differ. Corporate PACs, in particular, tend to be bipartisan in their donation patterns in an effort to secure access (e.g., Hall and Wayman 1990; Fourinaies and Hall 2014) and favorable regulatory oversight (e.g., Baron 1989; Gordon and Hafer 2005). By comparison, individual donors are motivated by ideology and policy positions (e.g., Francia et al. 2003; Barber, Canes-Wrone, and Thrower 2017; Magleby, Goodliffe, and Olsen 2018). In fact, even for within-district donors, a candidate's policy positions have a large impact on whether a potential contributor gives to a particular candidate (e.g., Barber, Canes-Wrone, and Thrower 2017).

Less than a handful of papers have considered whether these differences might have policy implications. Baker (2016) finds that the greater the percentage of a representative's out-of-district contributions, the lower the alignment between district ideology and the member's NOMINATE score. Similarly, Fellowes and Wolf (2004) show that contributions from business professionals are associated with House members' support for particular types of business legislation. However, neither of these studies analyzes the policy preferences of the national donor base. In research on the Senate, Canes-Wrone and Gibson (2019a, 2019b) consider such preferences. Yet they do not

examine how out-of-district donations affect responsiveness to donors. Also, analysis of the Senate cannot leverage exogenous change in district boundaries to obtain a causal effect of district ideological favorability on responsiveness to donor opinion. Moreover, the high cost of Senate campaigns may create different fundraising incentives.

This paper investigates whether, despite the strong evidence that House members' legislative voting is not affected by contributions from organized interests, those from individual contributors are indeed influential. With data from the 109<sup>th</sup> to 114<sup>th</sup> Congresses (2006-2016), we analyze whether members are responsive to the preferences of the national donor class, and how out-of-district donations and district ideological favorability condition any such responsiveness. Furthermore, we leverage the change in district ideological favorability induced by redistricting to obtain a causal estimate of how district ideological favorability affects responsiveness to donor opinion.

The paper produces three main findings. First, we find House members' voting is significantly associated with the preferences of their national donor base. This result holds across a range of specifications, including ones that control for the member's party, district opinion, the primary electorate, and various other factors, as well as models with fixed effects for the individual member. Second, we show that responsiveness to national donor opinion is higher the more ideologically favorable is the district. In other words, members become more responsive to the preferences of donors the more favorable their

districts are for reelection. This result holds even when district favorability changes exogenously due to redistricting.

Third, we find that the higher the proportion of out-of-district donations a member has received in recent years, the more responsive the member is to the preferences of the national donor class. To account for the potential endogeneity between out-of-district donations and responsiveness to donors, we employ a two-stage least squares specification in addition to presenting the results for a one-equation model. The results indicate that out-of-district contributions reduce geographic representation, shifting members' incentives away from the home district towards the national pool of donors. Together, the findings indicate that representatives' fundraising incentives alter district representation in fundamental ways that have not previously been appreciated.

## **Theoretical perspective**

Several recent studies argue that fundraising has become a major determinant of legislative organization in the House. Party leadership positions, committee chairmanships, and even committee assignments are all dependent on a member's ability to solicit contributions that support the party, fellow partisans, as well as the member's own reelection campaign (e.g., Heberlig, Hetherington, and Larson 2006; Cann 2008; Currinder 2009; Powell

forthcoming).<sup>4</sup> Research refers to this new paradigm of legislative organization as the party exchange perspective (e.g., Cann 2008). Gone are the days of the “textbook” Congress where seniority dictated chairmanships (e.g., Deering and Smith 1997). Instead, committee and other leadership roles come with fundraising targets that vary according to the perceived influence of the position (e.g., Heberlig and Larson 2012; Bernhard and Sulkin 2018; Powell forthcoming). Parties expect members to spend hours every day in “call time” to potential donors (Grim and Siddiqui 2013).

For the vast majority of members, fundraising is a *national* affair rather than focused on their district. Scholarship suggests that the modal representative receives two-thirds of their individual contributions from out-of-district donors (Gimpel, Lee, and Pearson-Merkowitz 2008).<sup>5</sup> Of course, given that the potential total raised from within-district donors is lower than that achievable from the national pool of contributors, the dominance of the latter is unsurprising. During “call time”, a member can target both out- and in-district donors. Meanwhile parties and interest groups can ask their regular donors to give to out-of-district candidates in addition to in-district ones.

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<sup>4</sup> In addition, fundraising loyalty to the party is associated with a member’s ability to have their bills and resolutions brought to the floor (Currinder 2009; Pearson 2015).

<sup>5</sup> The data used for our analysis validates this estimate for recent years.

Of course, if donors give to a member regardless of their roll call record, for instance purely to support the party's candidates, then out-of-district contributions should not affect legislative voting incentives. However, research suggests donors are heavily influenced by candidate ideology, even for within-party candidates (e.g., Francia et al. 2003; Barber, Canes-Wrone, and Thrower 2017; Magleby, Goodliffe, and Olsen 2018; Baker 2019). Naturally, Democrats tend to give to Democratic candidates and Republicans to Republican ones, but even within-party donors select candidates with similar ideological positions. Indeed, Barber, Canes-Wrone, and Thrower (2017) find that ideology is a significant motivation for donors from the same state and party as a candidate, let alone ones outside the state.<sup>6</sup>

Given donors' ideological motivations and the larger pool of potential funds available from out-of-district donors, we expect that as a policy position becomes more popular with the national donor base of a member's party, the

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<sup>6</sup> Bafumi and Herron (2010) and Barber (2016) find a strong association between the ideal points of a legislator and their donors. These works do not calculate ideal points that reflect the national donor class, however. In the empirical analysis, we find that the results hold controlling for the estimated ideal point of a member's donors as well as after accounting for members' in-district donor opinion.



more likely the member will be to support that position. This prediction can be summarized as:

***National Donor Responsiveness Prediction.*** The greater is a position's popularity with the national donor base of a member's party, the more likely the member will be to support that position.

According to the hypothesis, Republican representatives should be responsive to the preferences of the national base of Republican donors, and Democratic representatives to the preferences of national Democratic donors.

Responsiveness should not necessarily be equal across legislators, however. Voting with donor opinion when it diverges from district opinion may have electoral consequences (e.g., Canes-Wrone, Brady, and Cogan 2002; Nyhan et al. 2012). For instance, highly salient out-of-step roll call decisions have been shown to decrease the likelihood that a constituent votes for a representative by five percentage points (Nyhan et al. 2012) and correspondingly, reduce total vote share by up to five percentage points (Brady, Fiorina, and Wilkins 2011). Of course, for a member in an ideologically safe district, a loss of five percentage points would not sway the election. For members in less ideologically favorable districts, however, such a swing could mean electoral defeat.

If representatives raised funds only for their own reelection, one might question whether ones from ideologically favorable districts would have incentives to focus on fundraising. However, as the party exchange perspective emphasizes, members fundraise in part to give to fellow partisans and move up

within the party hierarchy. This pressure to fundraise for the party combined with the electoral cost of voting out of step with one's district suggests that the members who will be most responsive to donor opinion are those in ideologically favorable districts. In sum:

***Ideological Favorability Prediction.*** As the ideological favorability of a representative's district increases, the representative will become more responsive to the preferences of their party's national donor base.

In a district that favors an incumbent's party by large margins, a member can vote with national donor opinion even if doing so is not popular in the district and reduces the member's vote share. However, a representative from a competitive district may not be able to win reelection with the same behavior. Therefore, she will be less responsive to donor opinion and more responsive to her constituents' preferences.

Notably, if fundraising is purely for reelection purposes, then the Ideological Favorability Prediction should not hold. Members from ideologically favorable districts have less reason to focus on fundraising in this circumstance. In research that formalizes this logic, contributions enable incumbents to buy advertising that sways the votes of uninformed voters (e.g., Baron 1994). According to that perspective, the effect of ideological favorability should be to decrease rather than increase responsiveness to donor opinion.

Finally, we consider the implications of representatives' reliance on out-of-district contributions. Given that individual donors are ideologically motivated (e.g., Francia et al. 2003; Barber, Canes-Wrone, and Thrower 2017;

Magleby, Goodliffe, and Olsen 2018), a member's dependence on out-of-district contributions should increase responsiveness to the national pool of party contributors. If a representative's views were unaligned with those of the donors, they could simply direct their contributions to a more ideologically aligned set of candidates. As the third prediction maintains:

***Out-of-District Donations Prediction.*** A congressional member's responsiveness to the preferences of the national donor base will be higher the greater is the member's reliance on out-of-district individual contributors.

In other words, for members who raise most of their funds from within the district, responsiveness to the preferences of the national donor base should be lower than for those who are highly dependent on out-of-district contributions. Analysis of the Out-of-District Donations Prediction accordingly sheds light on the extent to which geographic representation is skewed by members' dependence on campaign funds from outside their voting constituency.

## **Data and specifications**

Testing the theoretical predictions requires data on public opinion, fundraising, and House member characteristics. To estimate public opinion, we use the election year surveys of the Cooperative Congressional Election Study (CCES) from 2006 through 2016 (Ansolabehere, Schaffner, and Luks 2017). The CCES is a national stratified sample survey consisting of between 36,500 respondents in 2006 and 64,600 respondents in 2016. This large sample size allows for the measurement of opinion among low-incidence populations such as campaign

donors and House district constituencies. In each survey, respondents are asked their preferences on multiple congressional roll call votes, and we include all items that match a House vote. These roll calls cover a variety of domestic and foreign policy matters including abortion policies, trade, health care, taxes, NSA surveillance, troop withdrawal from Iraq, and other issues. Appendix Table A1 provides a complete list of the House roll calls.

For the data on fundraising and member characteristics, a variety of sources are employed. Campaign contributions for 2006-2010 are from Crespin and Edwards (2016) and for later years, we collected the information using files of the Center for Responsive Politics (2019). As detailed below, other congressional data are from sources including the *CQ Almanac*, Federal Election Commission, and Cook Political Report.

The basic specification tests for a systematic relationship between the roll call decision of House member  $j$  on vote  $i$  and the national donor opinion of each party on that vote, controlling for a member's district opinion and other potential influences:

$$[1] \quad \Pr(\textit{Liberal vote}_{ij} = 1) = f(\textit{National donor opinion}_{ij}, \textit{District opinion}_{ij}, \textit{Additional controls}_{ij}),$$

The dependent variable, *Liberal Vote*, is coded 1 when the member votes with the majority Democratic position and 0 when the member votes with the

majority of Republicans. All legislative voting data are from *CQ Almanac*.<sup>7</sup> Because retiring members have different incentives than those running for reelection, the analysis excludes members who voluntarily retire from the House. Also, the data do not include cases in which a sitting member does not vote on an issue. Full descriptive statistics on all variables are presented on page 13 of the supplemental appendix.

The public opinion variables are measured with the CCES data. Most centrally to the theoretical predictions, *National Donor Opinion* is the proportion of respondents supporting the Democratic position among those who donated to political campaigns in the past year and identified with the member's party.<sup>8</sup> Donor opinion for each member-vote is not restricted to contributors within the legislator's district given that a majority of contributions come from out-of-district donors (e.g., Grenzke 1988; Gimpel, Lee, and Pearson-Merkowitz 2008). For CCES surveys conducted in 2008 and later the data enable measuring the policy opinions of individuals who contributed to U.S. House campaigns. As shown subsequently, the results are robust to measuring national donor opinion with contributors to House races only. We have also considered

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<sup>7</sup> We have also analyzed specifications in which the dependent variable is the likelihood a representative votes yea and the results are substantively similar, as shown on page 1 the supplemental appendix.

<sup>8</sup> Partisan "leaners," respondents who report generally leaning toward one party or the other, are included in partisan groups.

whether the self-reported nature of donating behavior affects the results, using the Hill and Huber (2017) validated CCES donor data for 2012. These results support those presented and suggest that self-reported donor opinion is nearly identical to that of validated donors (see page 2 of the supplemental appendix).<sup>9</sup>

A key control is public opinion in the member's general electorate.

*District Opinion* reflects this factor, equaling the percentage of respondents within each member's district who preferred a liberal vote on the roll call. For this and all other district-level opinion measures we follow Bafumi and Herron (2010) and restrict the analysis to those districts where the underlying sample size of the opinion measure is at least 40 respondents.<sup>10</sup> Conceivably, partisan geographic sorting (e.g., Cho, Gimpel and Hui 2013) could result in districts that are correlated with the national donor bases of the parties. However, the average difference between national donor opinion and district opinion is 24 percentage points and the correlation between these factors is only  $\rho=0.51$ , indicating a reasonable degree of independence. This independence is less surprising when one considers that 5% of zip codes account for over two-thirds of itemized receipts, according to Bramlett, Gimpel and Lee (2011).

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<sup>9</sup> Specifically, the correlation is  $\rho=0.97$ .

<sup>10</sup> We have also analyzed the data using a cutoff of 100 respondents and received substantively similar results, as shown on page 2 of the supplemental appendix.

The divergence of national donor opinion from district opinion varies across members with a given roll call vote, such that there is high divergence for some members but not others, and across roll calls for a given member. To illustrate, for the 2011 Korea Free Trade Agreement John Carney (D-DE at large) faced 55% support for the liberal position among Democratic donors and 56% support for it in his district. Meanwhile, Virginia Foxx (R-NC5) faced just 35% support among Republican donors for the liberal position but 65% support in her district for the position. On the other hand, Rep. Foxx faced almost no divergence of national donor and district opinion for the 2016 Highway and Transportation Funding vote (78% support among donors and 83% among district voters). Overall, the average difference between donor and district opinion for each member ranges from 7 to 51 percentage points.

More broadly, for 31% of the roll call observations within the data, House members were cross-pressured in that national donor opinion and district opinion were on opposite sides of the 50% threshold. In other words, donor opinion supported the Democratic position and district opinion the Republican one or vice-versa. Moreover, as shown in Table 1, in these cross-pressured circumstances, representatives voted with national donor opinion more than 80% of the time. In other words, the data indicate that when the pressures of appealing to the general electorate versus the national donor pool diverge, members resoundingly choose the latter.

**Table 1. House member votes when cross-pressured**

	N	% Votes Agree with Donor Opinion
Donor opinion versus district opinion	3115	81%
Donor opinion versus district opinion & district partisan opinion	600	66%

Table 1 also demonstrates that representatives are likely to side with donor opinion when it diverges from *both* district opinion and the preferences of partisans in the district. *District Partisan Opinion* equals the percentage of respondents in the member's district who identify with the member's party and prefer a liberal vote.<sup>11</sup> When the representative's national donor class favored voting in the opposite direction than that preferred by the member's general electorate (district opinion) and partisan subconstituency (district partisan opinion), the member voted with national donor opinion two-thirds of the time. Thus, at least with respect to basic descriptive statistics, donor opinion has a larger pull than a representative's general or primary election constituencies.

Moving beyond descriptive statistics, the main analysis includes several additional controls. Perhaps most critically, *Democrat* accounts for the member's party affiliation, equaling 1 for Democratic members and 0 for Republicans.<sup>12</sup> The variable captures the differential likelihood that a Democrat

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<sup>11</sup> As noted earlier, following the Bafumi and Herron (2010) cutpoint, all variables require at least 40 respondents per district.

<sup>12</sup> Independent or third party members are coded according to the party with which they caucused.



versus Republican will vote in a liberal direction. If we instead substitute a member's DW-NOMINATE score (Lewis et al. 2019), all key results hold, as shown on page 3 of the supplemental appendix; the two measures of member ideology are correlated at  $\rho > 0.9$ .

Recent scholarship suggests that public policy disproportionately reflects the preferences of high-income Americans (e.g., Gilens 2012; but also see Branham, Soroka, and Wlezien 2017). To account for this potential influence, we include *Affluent Opinion*, which equals the percentage of respondents preferring the Democratic position among those in the top 10 percent of the income distribution who did not contribute to a campaign in the past year. Also included as standard controls are year indicators. Among other things, the year dummies capture shifts in the legislative agenda that could make liberal votes more or less likely for all members.<sup>13</sup>

Several additional variables measure factors that, at least conceptually, may be related to the preferences of the national donor base. First, we consider the potential role of in-district donor opinion. Where a sufficient sample size exists, we use the CCES data on in-party donors that reside within

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<sup>13</sup> We have also examined whether majority control is significantly associated with member responsiveness to donor opinion, and the results suggest it is not. Additionally, we have analyzed the data separately for Republicans and Democrats and do not find a party-specific effect of donor responsiveness. The supplemental appendix, page 3, presents all of these results.

the district to measure this factor. Separately, we use the Bonica (2016) CF scores of donors who reside within a member's district and gave to that member.<sup>14</sup> These donor CF scores are a summary value of each donor's ideological position, inferred from the individual's donations to candidates. The mean CF score of the member's in-district donors therefore provides an estimate of in-district donor ideology.<sup>15</sup>

Other factors conceptually related to the national donor base include national activists and the national party, and we consider whether the findings on donor opinion may simply reflect the influence of these factors. As described on pages 8-9 of the supplemental appendix, the results hold regardless of controlling for national activist opinion. Also in the supplemental appendix, on pages 6-7, we model the possibility that members could be responding to national party preferences that are themselves affected by donor

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<sup>14</sup> The CF scores of individual donors from a member's district are available from the Bonica (2016) release, which goes through 2014.

<sup>15</sup> We have also analyzed the data controlling for the member's CF Score, which reflects the estimated ideology of all donors to the member. The results regarding national donor opinion are substantively similar (see pages 8-9 of the supplemental appendix). The effect of the member's CF Score is also found to have a significant effect; however, because it is highly collinear with member party affiliation, the impact of the latter control no longer holds.

opinion. These results continue to suggest that members are directly responsive to national donor opinion.

In addition, the analysis considers the influence of more informed constituents. Previous research suggests that donors are more educated than non-donors (e.g., Francia et al. 2003) and therefore any impact could be due to higher levels of policy information rather than contributions. Hill and Huber (2019) likewise suggests that information alters respondents' opinions on roll call items, particularly when this information regards the issue positions taken by parties.<sup>16</sup> To account for the possibility that the results are a function of donors being more informed, the analysis includes *District Informed Opinion*, which is based on in-district respondents who could identify the majority party of both the House and the Senate and did not donate to a political candidate that year. We use questions about national politics given that individual districts vary in their likelihood of being represented by a given party. Like other measures, the control equals the percentage of such respondents who favor the liberal position on the roll call.

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<sup>16</sup> As an additional effort to assess whether donor opinion may be a function of signals from members of Congress, we conducted an instrumental variables analysis in which donor opinion is assumed to be endogenous. The supplemental appendix on pages 4-5 provides full details, which suggest that the null of exogeneity of donor opinion cannot be rejected. Moreover, all key results continue to hold.

Finally, the Ideological Favorability and Out-of-District Donation hypotheses require variables that reflect these potential influences. *Electoral Favorability* is measured two ways. First, as is standard (e.g., Peskowitz 2018), we employ the Cook PVI scores, which are calculated as the deviation of a member's district from the national two-party presidential vote of the candidate associated with the member's party across the last two elections. Second, in order to capture current national tides that may favor one party over the other (e.g., Jacobson 2015), the variable is measured as the percentage of the district's two-party vote for the presidential candidate of the member's party in the most recent election. *%Out-of-District Donations* then equals the proportion of total itemized individual contributions the member received from donors outside of that member's district in the prior election. Through 2010 these data are from Crespin and Edwards (2016). We collected the data for later years from files of the Center for Responsive Politics (2019). As shown in the descriptive statistics table on page 13 of the supplemental appendix, the mean of the observations is 64%, suggesting that out-of-district donations comprise almost two-thirds of a member's receipts from individuals.

When analyzing the Ideological Favorability and Out-of-District Donations hypotheses, we interact these variables with National Donor Opinion in addition to including all main effects. If members are more responsive to their national donor base as a district becomes more ideologically favorable, then the coefficient on the interaction between ideological favorability and donor opinion should be positive. The Ideological Favorability Prediction is first

tested with all observations, following which the data is limited to cases in which a member served immediately pre- and post-redistricting. For these observations, by holding the member's average voting patterns constant with fixed effects, we can assess whether relatively exogenous shifts in the ideological favorability of a district are associated with a change in the member's roll call liberalism. In both the general sample and redistricting analyses, district ideological favorability is also interacted with district opinion given that the former may not only affect responsiveness to donors but also to the general electorate.<sup>17</sup>

To test the Out-of-District Donations Prediction, we examine both one-equation and two-stage least squares (2SLS) instrumental variables models. Although the out-of-district contributions predate the member's votes, in that they are from the election prior to the legislative session, statistical endogeneity remains possible (for instance, if future out-of-district donations were highly correlated with prior ones). In the instrumental variables analysis, there are two first-stage equations, one for the main effect of out-of-district donations and a second for the interaction term, as described by Equations [2] and [3]:

$$[2] \quad \%Out-of-District\ Donations_{ij} = f(Chair_{ij}, Chair_{ij} \times National\ donor\ opinion_{ij}, National\ donor\ opinion_{ij}, Controls_{ij})$$

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<sup>17</sup> We receive similar substantive findings, however, if the interaction with district opinion is excluded.

$$[3] \quad \%Out-of-District\ Donations_{ij} \times National\ donor\ opinion_{ij} = f(Chair_{ij}, Chair_{ij} \times National\ donor\ opinion_{ij}, National\ donor\ opinion_{ij}, Controls_{ij})$$

Each equation includes instruments for whether the member was a committee chair in the session leading up to the prior election as well as this indicator interacted with national donor opinion. This strategy of interacting the instrument with the exogenous variable that is interacted in the second stage is a standard approach to instrumental variables analysis in specifications with interaction terms (e.g., Wooldridge 2002). In terms of the specific instruments, prior scholarship suggests that committee chairs receive more contributions from individuals (e.g., Thomsen and Swers 2017), yet there is no expectation that a chair is more or less likely to vote in a liberal direction than other members of their party. On page 12 of the supplemental appendix, we provide further justification for this assumption by showing that there not a significant relationship between being a chair and voting in a liberal direction, either for the data as a whole or for members of a particular party. Moreover, as demonstrated in the following section, the substantive findings are robust to the instrumental variables model or a simpler one-equation specification.

## **Methods and results**

We begin by testing the National Donor Responsiveness Prediction. To account for the potential correlation of votes for a particular member, we adopt a random effects logit model; specification testing rejects the null that the panel-level variance component is zero ( $p < 0.01$ , two-tailed). Table 2 shows the results

from this model, in addition to ones from alternative specifications including

**Table 2. House member responsiveness to national donor opinion**

	Random effects [1]	House donors [2]	No controls [3]	Basic logit [4]	Fixed effects [5]
National donor opinion (all donors)	4.056** (0.251)	--	6.673** (0.153)	2.968** (0.262)	4.579** (0.259)
National donor opinion (House donors only)	--	4.739** (0.286)	--	--	--
District opinion	2.217** (0.334)	1.387** (0.385)	--	3.122** (0.393)	1.183** (0.341)
Democrat	2.457** (0.157)	1.920** (0.173)	--	2.433** (0.130)	--
Affluent opinion	0.275 (0.353)	-0.409 (0.440)	--	-0.161 (0.401)	0.687 (0.355)
Constant	-3.362** (0.218)	-2.623** (0.235)	-3.374** (0.099)	-3.186** (0.179)	--
Year effects	included	included	--	included	included
<i>N</i>	9,921	7,663	9,921	9,921	8,000

*Note:* Dependent variable equals Pr(Liberal Vote = 1). Standard errors in parentheses below logit coefficients. Columns [1], [2], and [3] include random effects by member, Column [4] reports standard errors clustered by member, and Column [5] reports estimates from a member fixed effects model.

\* $p < 0.05$ , \*\* $p < 0.01$ , two-tailed

fixed effects and a logit with clustered standard errors.

Column [1] presents the main specification. Column [2] shows the analogous analysis with the exception that only House donors are used to estimate national donor opinion; because these data are not available for 2006, there are fewer observations. Column [3] drops the control variables, while Columns [4] and [5] do not assume random effects, in the latter case replacing them with fixed effects. The fixed effects account for personal qualities that may be

specific to an individual legislator, for instance legislative style (Bernhard and Sulkin 2018).<sup>18</sup>

Notably, across all specifications, the National Donor Responsiveness Prediction receives strong support. National donor opinion is significantly associated with House members' legislative voting ( $p < 0.05$ , two-tailed). The more a representative's donor base supports the liberal position, the more likely is the member to support that position. In the main specification of Column [1], the marginal effect at the means of the independent variables suggests that as a member's national donor base moves in a liberal direction on an issue by 10 percentage points, the likelihood the member casts a liberal vote increases by 8 percentage points. The estimated impact is similar in Column [2], when confining the measure of donor opinion to only those whom donated to House campaigns; in this case, the analogous marginal effect is 10 percentage points. Not surprisingly, the magnitude is larger when the controls are excluded in Column [3]. In Column [5], as in other conditional fixed effects logit models, one cannot interpret the magnitude absent additional

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<sup>18</sup> Interestingly, Bernhard and Sulkin (2018) argue that when a district is a poor fit for the member ideologically, members have greater incentives to adopt a style of "district advocacy." We return to this point when discussing the results on district favorability.



assumptions (e.g., Wooldridge 2002).<sup>19</sup> However, the significance of the effect suggests that even after controlling for member-specific voting tendencies, changes in national donor opinion are a significant factor in representatives' roll call decisions.<sup>20</sup> Moreover, these results extend to a linear probability model with member fixed effects (see pages 8-9 of the supplemental appendix).

Moving on to the controls, there are no major surprises. Across all of the models, district opinion is significantly associated with members' roll call behavior, as one would expect if legislators face pressure to represent their districts (e.g., Wlezien 1995; Erikson, Stimson, and MacKuen 2002). At the means of the independent variables, a 10 percentage point change in district opinion is associated with a 4.5 percentage point increase in the likelihood a representative supports that position. The impact is thus roughly half of that of national donor opinion.

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<sup>19</sup> The conditional fixed effects model drops observations of members who always voted for or against the Democratic position.

<sup>20</sup> Some research suggests that voters "follow the leader" (e.g., Lenz 2012) in stating policy views, and while donors are more educated than typical voters (e.g., Barber 2016; Francia et al. 2003), we still considered this possibility. As shown on pages 4-5 of the supplemental appendix, which details the analysis, the substantive results hold in an instrumental variables model. Specification testing also suggests national donor opinion is not endogenous to representatives' roll call decisions.

As anticipated, partisan affiliation has a significant relationship to members' voting. Additionally, as page 3 of the supplemental appendix shows, this result holds regardless of whether member ideology is measured with DW-NOMINATE scores or partisan affiliation. Somewhat surprisingly, Table 2 indicates that affluent opinion does not have a significant association with roll call behavior. A potential reason is that affluent opinion is measured with high-income respondents who were not campaign donors, and research that finds an effect of affluence argues campaign contributions may be the underlying mechanism (e.g., Gilens 2012). At the same time, when the parties are estimated separately, a significant effect emerges for Republicans, suggesting that the impact of affluent opinion differs between the parties. (The supplemental appendix, page 3, presents the by-party results, which are otherwise consistent with those in the main text.) Finally, the year indicators are consistently jointly significant ( $p < 0.01$ , two-tailed) in Table 2, indicating that the likelihood of liberal votes shifts across years as the legislative agenda changes.

In Table 3, we further test the National Donor Responsiveness Prediction by considering the effects of subconstituencies including partisan voters, in-district donors, and informed voters. Column [1] shows the results for in-district partisans. The collinearity between district partisan opinion and national donor opinion for the full sample is quite high ( $\rho > 0.9$ ) and so we adopt the approach of Gilens (2012). In particular, we analyze the data only for observations where the divergence between national donor opinion and

partisan district opinion is greater than 0.15 percentage points, which reduces the collinearity to  $\rho < 0.7$ .<sup>21</sup> Notably, even with the inclusion of district partisan

**Table 3. District subconstituencies**

	District partisans [1]	In-district donors, CCES [2]	In-district donors, CF scores [3]	District Informed opinion [4]
National donor opinion	2.792** (0.925)	12.246* (5.874)	3.843** (0.274)	5.231** (0.458)
District opinion	4.904** (1.487)	1.715 (5.422)	2.065** (0.336)	4.522** (1.071)
District partisan opinion	1.256 (1.299)	--	--	--
In-district donor opinion	--	-4.285 (4.793)	1.696** (0.142)	--
District informed opinion	--	--	--	-0.618 (0.839)
Democrat	3.912** (0.482)	2.373 (1.900)	-0.043 (0.265)	1.946** (0.271)
Affluent opinion	0.478 (1.141)	-0.918 (3.935)	0.449 (0.356)	-0.063 (0.663)
Constant	-5.208** (0.785)	-6.985 (2.506)	-2.561** (0.210)	-5.053** (0.426)
Year effects	included	--	Included	included
<i>N</i>	1,479	129	8,373	3,996

*Note:* Logit models with member random effects where the dependent variable equals Pr(Liberal vote = 1). Standard errors in parentheses. \* $p < 0.05$ , \*\* $p < 0.01$ , two-tailed.

<sup>21</sup> If instead we analyze the full sample, including observations for which the divergence between national donor opinion and affluent opinion is less than 0.15 percentage points, the National Donor Responsiveness Prediction continues to receive a similar level of support, as shown on pages 8-9 of the supplemental appendix.

opinion, the National Donor Responsiveness Prediction receives corroboration. The estimate on district partisan opinion is in the expected direction, but not significant at any conventional level. At the same time, general district opinion and the member's partisan affiliation continue to have significant effects.

The National Donor Responsiveness Prediction receives further support when accounting for in-district donor opinion, as shown in Columns [2] and [3]. In Column [2], in-district donor opinion is measured with the CCES data, with the limitation that there are not many observations with a sufficient number of in-district contributors. In Column [3], as described earlier, we use the CF Scores of the in-district contributors from the Bonica (2016) DIME database to estimate a district-specific donor ideology score. Despite the differences in across samples, in each case the results suggest that national donor opinion is significantly associated with a member's voting. The CF-score estimates indicate that in-district donor opinion also has an independent, significant effect, while the smaller CCES sample does not.

Column [4] indicates that the findings on national donor opinion are not simply a function of campaign donors being more informed than non-donors. The coefficient on informed opinion is not even in the predicted direction, albeit not significant at a conventional level. Moreover, the estimates on national donor opinion continue to substantiate the National Donor Responsiveness Prediction. Interestingly, the correlation between informed opinion and national

donor opinion is only moderate ( $\rho < 0.5$ ), suggesting that these two potential influences are reasonably independent.<sup>22</sup>

In sum, Tables 2 and 3 provide strong support for the argument that representatives are responsive to their national donor base. There is evidence of responsiveness after controlling for the preferences of a member's general electorate, partisan subconstituency, in-district donors, informed constituents, and the member's party, among other factors. Moreover, the results are robust to a variety of methodological assumptions. These findings indicate that even on what is arguably representatives' most transparent and public activity, donor influence is evident.

### ***Ideological favorability and redistricting***

The Ideological Favorability Prediction suggests that responsiveness to donor opinion should be higher the more ideologically favorable the district is to the member's reelection. Table 4 presents two types of evidence with respect to this hypothesis. Columns [1] and [3] show results for all observations, using the random effects model of the main specification. For the results in Columns [2]

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<sup>22</sup> We have also analyzed whether small versus large donors have differential effects. The CCES asks respondents how much they gave in total to political candidates in the past year. Using these self-reports we compare respondents who reported giving \$100 or less in a year to respondents who reported giving \$1000 or more. As described on pages 8-9 of the supplemental appendix, there is not a significant difference in the effects between the groups.

and [4], the major redistricting that followed the 2010 census is leveraged as an exogenous shift in district ideology, and the analysis is limited to members who served immediately before and after this redistricting. Notably, in both types of tests, the Ideological Favorability Prediction is corroborated. Moreover, the results hold regardless of whether ideological favorability is measured with the Cook PVI ratings or presidential vote from the most recent election.

Because conditional fixed effects logit models do not allow for the estimation of magnitudes absent additional assumptions (e.g., Wooldridge 2002), we focus on the magnitudes from the random effects models. (As shown

**Table 4. Electoral favorability**

	Cook PVI [1]	Redistricting, Cook PVI [2]	Presidential vote [3]	Redistricting, pres. vote [4]
National donor opinion × Cook PVI	0.254** (0.017)	0.408** (0.088)	--	--
National donor opinion × Presidential vote	--	--	26.292** (1.646)	30.347** (7.643)
District opinion × Cook PVI	-0.246** (0.022)	-0.322** (0.087)	--	--
District opinion × Presidential vote	--	--	-21.435** (2.225)	-25.488** (8.792)
National donor opinion	2.665** (0.251)	3.493** (0.819)	-10.631** (0.913)	-11.323** (4.123)
Cook PVI	0.010 (0.012)	0.187 (0.218)	--	--
Presidential vote	--	--	-0.472 (1.216)	-8.083 (5.909)
District opinion	2.831** (0.350)	2.108 (1.160)	13.290** (1.255)	15.242** (4.544)
Affluent opinion	0.587 (0.355)	-1.659 (1.277)	0.657 (0.355)	-1.802 (1.290)
Democrat	2.205** (0.143)	--	2.197** (0.144)	--

Constant	-3.219** (0.231)	--	-2.910** (0.715)	--
Year effects	included	included	included	included
<i>N</i>	9,921	1,030	9,921	1,030

Note: Dependent variable equals Pr(Liberal vote = 1). Columns [1] and [3] include random effects by member. Columns [2] and [4] include member fixed effects. Standard errors in parentheses below logit coefficients. \* $p < 0.05$ , \*\* $p < 0.01$ , two-tailed.

on page 11 of the supplemental appendix, the fixed effects results also hold in a linear probability model with member fixed effects.) In Column [1], at the means of the independent variables, a standard deviation increase in the Cook PVI (11 percentage points) increases the likelihood that a member votes with their national donor base by 6 percentage points. The magnitude is similar in Column [3], with the measure of two-party presidential vote, where a standard deviation increase (13 percentage points) is associated with a 7 percentage point increase.

Interestingly, Table 4 also suggests that as district ideological favorability increases, representatives' responsiveness to district opinion declines. Across all four specifications, district ideological favorability reduces the association between a member's roll call decision and district opinion. This result is consistent with Bernhard and Sulkin's (2018) argument that district favorability reduces a legislator's likelihood of adopting a district advocacy style. The Column [1] estimates indicate that a standard deviation increase in the Cook PVI decreases the estimated effect of district opinion by 5 percentage points and those in Column [3] likewise indicate a 6 percentage point decline. Thus in each analysis, ideological favorability induces counteracting influences

on member responsiveness to in-district constituents versus the national base of donors.

Accordingly, Table 4 implies that representation is altered in fundamental ways by the sorting of voters into more ideologically homogenous districts (e.g., Cho, Gimpel, and Hui 2013). Earlier work has focused on the potential consequences of redistricting and partisan sorting for polarization (e.g., McCarty, Poole, and Rosenthal 2009). It is therefore worth highlighting that the repercussions unearthed here need not be limited to or even about polarization. Indeed, on multiple votes within the dataset, such as the Korea Free Trade Agreement, the Republican and Democratic donor bases both supported passage and were more supportive than non-donors. Table 4 indicates that when districts become more lopsided ideologically, representatives' incentives to cater to these donor bases will strengthen while incentives to represent constituents' preferences will abate.

More generally, Table 4 suggests that responsiveness to donor opinion varies by member according to the electoral context. Consistent with the arguments of the party exchange perspective, the representatives who are most responsive to national donors are not the ones facing the largest electoral threats but instead those in the more ideologically favorable districts.<sup>23</sup>

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<sup>23</sup> We have also analyzed whether wealth is associated with responsiveness to national donor opinion. If members raise funds purely for their own reelection, one would expect a negative association. However, consistent with arguments



Moreover, the fact that the finding holds even for members whose district ideology has shifted through redistricting indicates a causal effect. It is not simply the selection of a different type of member into the more ideologically favorable districts, but within-member voting behavior that changes when a district becomes more favorable.

### ***Out-of-district Donations***

The Out-of-District Donations Prediction implies a positive association between the percentage of out-of-district contributions and the representative's responsiveness to the national donor base. The more reliant a member is on donations from outside their district, the more responsive they will be to national donor opinion. As described earlier, we examine this hypothesis with not only the random effects logit used in earlier analyses but also a two-stage least squares instrumental variables model. Table 5 shows these results.<sup>24</sup>

Consistent with expectations, a greater proportion of contributions coming from outside the district is associated with stronger responsiveness to

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that representatives are fundraising for a broader set of goals, there is no association between wealth and responsiveness to donor opinion (see pages 10-11 of the supplemental appendix).

<sup>24</sup> The number of observations in Table 5 is slightly lower than that in the baseline model. Members elected or appointed off-cycle are excluded, and the pre-2012 data on out-of-district contributions do not include cases involving mid-cycle redistricting.

national donor opinion. The result holds across each of the specifications. Column [1] shows the estimates from the standard random effects logit. At the means of the independent variables, a standard deviation increase in the percentage of out-of-district donations increases the likelihood that a member votes with their national donor base by 5 percentage points. In Column [2], which presents the results of the instrumental variables specification, the Out-of-District Donations Prediction again receives support. Moreover, the Hausman specification test does not reject the null of exogeneity ( $p=0.18$ , two-

**Table 5. Out-of-district donations**

	Random effects		
	logit [1]	2SLS, 2 <sup>nd</sup> -stage [2]	Cook PVI [3]
National donor opinion × %Out-of-district donations	2.228** (0.717)	1.140* (0.576)	1.410* (0.701)
National donor opinion × Cook PVI	--	--	0.249** (0.017)
National donor opinion	2.615** (0.519)	-0.089 (0.363)	1.798** (0.503)
%Out-of-district donations	-0.590 (0.448)	-0.003 (0.380)	-0.387 (0.417)
District opinion × Cook PVI	--	--	-0.249** (0.023)
District opinion	2.416** (0.341)	0.212** (0.034)	3.043** (0.359)
Affluent opinion	0.203 (0.360)	-0.093* (0.036)	0.494 (0.362)
Democrat	2.381** (0.160)	0.230** (0.031)	2.163** (0.146)
Cook PVI	--	--	0.012 (0.012)
Constant	-3.029** (0.348)	0.134 (0.233)	-3.030** (0.343)

Year effects	included	included	included
Hausman endogeneity test	---	X <sup>2</sup> =13.83 (p=0.18)	---
<i>N</i>	9,608	9,608	9,608

*Note:* Dependent variable equals Pr(Liberal vote = 1) in Columns [1] and [3] and Liberal Vote in Column [2]. All columns include random effects by member. Standard errors in parentheses below coefficients. Appendix Table A2 describes 1<sup>st</sup>-stage estimates for the instrumental variables analysis of Column [2]. \**p*<0.05, \*\**p*<0.01, two-tailed.

tailed), which is perhaps not surprising given that contributions are from the election preceding the congressional session. The first-stage results, described in Appendix Table A, are also consistent with expectations.

Column [3] presents the results from a model that includes the interactions involving district ideological favorability. Out-of-district contributions continue to have a significant effect. That is, even holding constant district favorability, out-of-district donations are positively associated with a representative’s responsiveness to national donor opinion. Additionally, as before, district favorability increases members’ responsiveness to national donor opinion and reduces their responsiveness to district opinion.

In sum, Table 5 is consistent with a world in which representatives’ efforts to solicit out-of-district donations makes them responsive to the preferences of their national donor base. Prior literature suggests a variety of ways in which donations may affect legislative behavior outside the public eye, such as in committee meetings and other forms of participation (e.g., Hall and Wayman 1990; Powell 2013). Yet evidence for House roll call responsiveness

has been scant. These results, along with those of the Tables 2 through 4, indicate that even on the public activity of roll calls, donor influence is evident.

## **Conclusion**

This paper has produced three main findings. First, we have shown that House members' roll call decisions are responsive to the national donor base's preferences. This result holds controlling for a variety of factors, including district opinion, the member's party, partisan opinion, and in-district donor opinion. It also appears in simply the raw descriptive statistics, which suggest that when the national donor base prefers a different outcome than a representative's general and primary electorates, overwhelmingly the donor-favored position is chosen.

Second, this paper has found that the ideological favorability of a member's district increases their responsiveness to individual contributors. This result extends to analysis of the full dataset as well as of members who served immediately pre- and post-redistricting. In the latter, by holding the legislator's average voting record constant, we obtain a causal estimate of how an exogenous shift in ideology influences roll call behavior. The analysis of district favorability also shows that as it increases, representatives' responsiveness to district opinion declines.

Third and finally, the paper has established that out-of-district contributions are associated with members' responsiveness to the national donor base. The greater is a representative's reliance on out-of-district funding, the more they cater to the preferences of the national pool of their party's

contributors. These results are robust to a range of specifications, including ones that account for the potentially endogenous nature of out-of-district funding. Furthermore, in specifications that jointly consider the impact of out-of-district contributions and ideological favorability, each has an independent effect.

The robustness of the results notwithstanding, there are some boundaries of applicability worth noting. First, the roll calls under examination are on highly salient issues. Correspondingly, they are not procedural. On the one hand, perhaps it is surprising that donor opinion is influential on items that are in the open and readily traceable. On the other hand, if members want to prove their ideological affinity to potential donors, then procedural or less salient votes may be less helpful for this aim. Thus, conceivably the results could differ on other types of roll calls. Future analysis might examine this question.

Second, these results are from a period—2006 through 2016—with a specific fundraising system that incentivizes member-to-member and member-to-party contributions (e.g., Heberlig, Hetherington, and Larson 2006; Cann 2008; Currinder 2009; Powell forthcoming). We would not claim that member responsiveness to donor opinion would be similar, necessarily, under alternative campaign finance systems or party institutional arrangements. For instance, La Raja and Schaffner (2015) argue that political polarization would decline if parties could directly raise and distribute more funding. Our results,

while not about polarization per se, are consistent with their view that the sources of funding matter for congressional incentives and behavior.

Within these boundaries, the results have several implications for representation. Perhaps most obviously, they suggest it will skew towards a national donor class that is wealthier, older, has a higher proportion of males, and a higher proportion of non-minorities than the national voting population (e.g., Francia et al. 2003; Aldrich, Freeze, and Montgomery 2008; Aldrich et al. 2013). Yes, district opinion, which reflects the preferences of the general electorate, still matters. However, the estimated magnitude of the effect is no higher than that of national donor opinion and actually lower in many analyses. Moreover, as district ideological favorability increases, the impact of national donor opinion grows while that of district opinion declines.

Correspondingly, the findings on district favorability imply that partisan sorting and redistricting that reduces within-district partisan competition augments the impact of donors. It is not representatives facing the tightest electoral races who are most responsive to donor opinion, but instead those who can afford to buck district opinion. Earlier work suggests that redistricting may not influence partisan polarization (e.g., McCarty, Poole, and Rosenthal 2009), and the results here are agnostic about how donor opinion relates to polarization. However, they do indicate that redistricting has implications for member responsiveness to donor opinion as well as district opinion. The paper consequently implies that redistricting is consequential with respect to legislative policymaking outcomes.

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## Appendix

**Table A1. Roll Call Votes**

<u>Congress</u>	<u>Issue</u>	<u>Bill/Resolution</u>	<u>Vote #</u>
109 <sup>th</sup>	Minimum wage increase	HR 2	18
109 <sup>th</sup>	Stem cell research	HR 810	204
109 <sup>th</sup>	Partial birth abortion ban	HR 760	242
109 <sup>th</sup>	Iraq troop withdrawal	H Res 861	288
109 <sup>th</sup>	Central American Free Trade	HR 3045	443
109 <sup>th</sup>	Capital gains tax cut	HR 4297	621
110 <sup>th</sup>	Housing bailout	HR 3221	301
110 <sup>th</sup>	Stem cell research 2	S 5	443
110 <sup>th</sup>	Bank bailout	HR 1424	681
110 <sup>th</sup>	FISA amendments	S 1927	836
110 <sup>th</sup>	CHIP	HR 982	982
110 <sup>th</sup>	Peru trade agreement	HR 3688	1060

111 <sup>th</sup>	CHIP 2	HR 2	16
111 <sup>th</sup>	Stimulus	HR 1	46
111 <sup>th</sup>	Obamacare	HR 3590	165
111 <sup>th</sup>	Don't ask don't tell repeal	HR 2965	638
111 <sup>th</sup>	Dodd Frank	HR 4173	968
112 <sup>th</sup>	Ryan budget	H Con Res 34	277
112 <sup>th</sup>	Obamacare repeal	HR 6079	460
112 <sup>th</sup>	Korean Free Trade Agreement	HR 3080	783
113 <sup>th</sup>	Debt limit	S 540	61
113 <sup>th</sup>	Farm bill	HR 2642	31
114 <sup>th</sup>	Obamacare repeal 2	HR 596	58
114 <sup>th</sup>	Medicare access	HR 2	144
114 <sup>th</sup>	No Child repeal	S 1177	665
114 <sup>th</sup>	Highway funding	HR 22	673

**Table A2. 1<sup>st</sup>-stage estimates, Out-of-district donations 2SLS**

	National donor opinion × %Out-of-district [1]	%Out-of-district [2]
National donor opinion × Chair	0.094** (0.015)	0.002 (0.023)
Chair	0.004 (0.010)	0.096** (0.015)
National donor opinion	0.623** (0.007)	-0.005 (0.011)
District opinion	-0.004 (0.010)	0.014 (0.014)
Affluent opinion	0.012 (0.010)	-0.009 (0.015)
Democrat	0.088** (0.005)	0.143** (0.007)
Constant	-0.027** (0.006)	0.569** (0.009)
Year effects	included	included
<i>N</i>	9,608	9,608

Note: Standard errors in parentheses below coefficients. Table 5 presents 2<sup>nd</sup>-stage estimates. Dependent variable in Column [1] is the interaction National donor opinion × %Out-of-district donations, and dependent variable in Column [2] is %Out-of-district donations. \* $p > 0.05$ , \*\* $p > 0.01$ , two-tailed.