Giving to the Extreme? Experimental Evidence on Donor Response to Candidate and District Characteristics

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Abstract

How does candidate ideology affect donors' contribution decisions in U.S. House elections? Studies of donor motivations have struggled with the confounding of candidate, donor, and district characteristics in observational data and the difficulty of assessing trade-offs in surveys. We investigate how these factors affect contribution decisions using experimental vignettes administered to 7,000 verified midterm donors. While ideological congruence influences donors' likelihood of contributing to a candidate, district competitiveness and opponent extremity are equally important. Moreover, the response to ideology is asymmetric and heterogeneous: donors penalize more moderate candidates five times more heavily than more extreme candidates, with the most extreme donors exhibiting the greatest preference for candidates even more extreme than themselves. Republicans also exhibit a greater relative preference for extremism than Democrats, although partisan differences are smaller than differences by donor extremism. Our findings suggest that strategic considerations matter and donors incentivize candidate extremism even more than previously thought.

Keywords: American politics; political donors; congressional elections; ideological extremism; survey experiment

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The influence of political contributions and donors in elections is increasingly relevant for understanding politics in the United States. All eligible citizens have a single vote, but the means and desire to financially contribute to campaigns may magnify the voices of some above others. Concerns about the potential consequences of this asymmetry have led scholars to investigate how donors influence which candidates choose to run (Schlozman, Verba, and Brady 2012; Thomsen 2014), candidates' policy positions (Barber 2016*b*; Canes-Wrone and Gibson 2019; Kujala 2020), and the legislation that is ultimately passed (Barber 2016*c*; Bartels 2008). Central to understanding these distortionary effects is the question of not just whether, but *how*, candidate ideology shapes donors' willingness to provide financial support, as well the relative impact of candidate ideology vis-à-vis other (instrumental) considerations.

While the general importance of ideology in donation decisions has received a great deal of scholarly attention (Barber 2016*b*; Barber, Canes-Wrone, and Thrower 2017; Bonica 2014; Kujala 2020; La Raja and Schaffner 2015), current approaches are limited in their ability to identify how and the relative extent to which donors respond to candidate ideology. Studies using observed donation patterns to infer determinants of donors' decisions (e.g., Ensley 2009; Gimpel, Lee, and Pearson-Merkowitz 2008) struggle to disentangle the effects of election, candidate, and opponent characteristics, especially given strategic entry and increasing use of donor lists to target giving in particular races (Hansen 2016; Koger, Masket, and Noel 2009). For example, Jaime Harrison, the Democratic candidate for Senate in South Carolina in 2020, raising a record-breaking \$130 million in his race¹ may indicate that Democratic donors strongly supported his policy positions — however, it may have also been due to his personal character, the competitive nature of the election, or the presence of his prominent Republican incumbent opponent, Lindsey Graham. The confounding of features poses a prohibitive hurdle to systematically estimating donors' responses to candidate ideology from campaign receipts.

¹https://www.opensecrets.org/races/summary?cycle=2020&id=SCS2

Given the identification challenges that arise from observational data, others use survey methods to directly question donors about factors affecting their giving decisions (Barber 2016*a*; Francia et al. 2003). While broadly informative, the difficulty of interpreting self-reported motivations and assessing tradeoffs limits how much we can learn from direct survey reports of motivations. Donors consistently rank ideological agreement as important to their decisions, yet it is unclear whether this means that they solely contribute to like-minded candidates (e.g. Bonica 2014), are less likely to support candidates as they grow ideologically distant (e.g. Barber, Canes-Wrone, and Thrower 2017), prefer more extreme candidates to more moderate candidates (Patty and Penn 2019), or vice versa (Hall 2015). Likewise, existing survey analysis cannot assess the *relative* importance of the multiple factors, such as ideological agreement and influencing election outcomes, that donors report as important to their decisions. For example, we do not know whether donors would prefer to give to an electorally secure, like-minded candidate or to a candidate running in a toss-up district with whom they disagree on some issues.

To investigate how candidate ideology affects donor decisions, we administer a multifactorial vignette experiment to over 7,000 verified donors from the 2018 midterm elections. We identify the relative effects of several factors that have been hypothesized to affect donation behavior using an experimental approach that circumvents not only the potential endogeneity issues with observational studies, but also the limitations of selfreported donation motivations. Our research design combines the external validity of interviewing verified midterm donors with the internal validity provided by a randomized experiment, allowing us to estimate donors' willingness to give based on descriptions of candidates and their electoral conditions that are difficult to recreate in surveys and isolate in observational studies.

Several important findings emerge. First, candidate ideology clearly matters to donors, but strategic electoral considerations — namely, the partisan lean of the district in which the candidate is running and her opponent's ideology — are equally consequential. Contrary to the behavioral assumptions of prominent donation-based measurement models (Bonica 2014; Hall and Snyder 2015), donors do not solely consider candidates' spatial proximity to themselves.² Indeed, the impact of running in a competitive district against an extreme opponent rivals the impact of ideological agreement on likelihood of giving.

Second, donors' willingness to give decreases *asymmetrically* as candidates' views are farther from their own. Donors are most likely to contribute to candidates who share their positions, all else equal, but they significantly prefer candidates more extreme than themselves to candidates who are more moderate (Thomsen 2017). Candidates described as somewhat more extreme than the donor were 5 percentage points less likely to receive a contribution than candidates who share the donor's views, yet candidates described as somewhat more moderate than the donor were almost 20 percentage points less likely.

Third, this asymmetric response to candidate ideology is greatest among the most extreme donors. Although these donors are themselves more extreme than the average donor — who is already more extreme than the average voter (Bafumi and Herron 2010; Barber 2016c) — extreme donors have the largest relative preference for candidates more extreme than themselves. In fact, extreme donors are as willing to contribute to candidates who are more extreme than themselves as to candidates who share their views.

Fourth, we uncover some partisan differences consistent with accounts of asymmetric polarization (Theriault 2006; Grossmann and Hopkins 2016). Republican donors have a greater preference than Democratic donors for extreme candidates over moderates, but these cross-party differences are smaller than within-party effects of donor extremism and the common large penalty to candidate moderation. While extreme Democrats are less likely than non-extreme Republicans to support candidates described as somewhat more moderate than themselves, extreme Republican donors are the least likely to give to such candidates.

Donors' reported intent to support more extreme candidates over more moderate can-

²While Bonica (2013) allows for the systematic incorporation of non-spatial considerations, scaling models that include only individual donors do not.

didates — especially among extreme donors — suggests that contribution-induced incentives for extremism are even greater than currently thought. While existing work argues that candidates financially benefit from adopting donors' (extreme) positions (e.g. Kujala 2020), our results indicate that donors are also much more willing to contribute to candidates with positions more extreme than theirs than to candidates with more moderate positions. However, the large impact of contextual, strategic factors on donors' decisions may attenuate these ideological effects: donors are equally likely to support an extreme candidate in a less competitive district as a moderate candidate in a toss-up district. Overall, the patterns we uncover are consistent with forward-looking donors contributing to help move their legislative party's caucus in a more extreme direction (Cameron and Kastellec 2016; Kedar 2005; Krehbiel 2007).

Our results also have implications for how political scientists study political donors. A comparison of donors' self-reported motivations for giving and the experimental effects of various factors on giving decisions reveals differences that are difficult to reconcile. In particular, donors who report caring more about candidates' positions and donors who report caring more about candidates' chances of winning weigh hypothetical candidates' ideologies and electoral environments no differently in their contribution decisions. The failure of self-reported measures to predict differences in experimental responses highlights the challenges of using direct survey questions to characterize the trade-offs donors making when deciding who to support in complex multidimensional choice environments. The relationships we uncover between donor ideology, candidate ideology, and likelihood of giving also suggests complications for scaling approaches which interpret observed donations as an expression of donors' ideologies (e.g. Bonica 2014; Hall and Snyder 2015; Hall 2015). Insofar as donors respond asymmetrically and heterogeneously to deviations in candidate ideology from their own, using donations to "bridge" candidates and donors into a common space runs the risk of substantial bias.

We substantiate our characterization of donor motivations as follows. Section 1 ex-

plores prominent approaches to identifying the motivations of political donors, which grounds and guides our experimental design. Section 2 introduces the experimental multifactorial vignette design we use to identify the effect of different considerations on donors' likelihood of contributing to several hypothetical candidates. Section 3 presents donors' responses to variation in candidate ideology relative to factors such as district competitiveness and opponent extremity and examines whether ideologically extreme and nonextreme donors respond differently. We also use survey questions to test whether direct elicitation predicts the effects we identify in our experimental vignettes. Section 4 concludes by discussing the implications of our findings for both our understanding of donors' impact on contemporary politics and how we study donors and interpret patterns of observed contributions.

1 Why Donors Give

A large body of work argues and empirically demonstrates that candidate ideology is relevant to individual donors' contribution decisions (Barber 2016*a*, *b*; Barber, Canes-Wrone, and Thrower 2017; Bonica 2014; Brown, Powell, and Wilcox 1995; Ensley 2009; Francia et al. 2003; Gimpel, Lee, and Pearson-Merkowitz 2008; Kujala 2020; Magleby, Goodliffe, and Olsen 2018), but it is challenging to identify precisely *how* ideology affects donors' willingness to give to candidates.

The extant literature is divided on how donors use candidate ideology when deciding who to support. Some argue that individuals contribute such *de minimis* amounts relative to the possible marginal political gains from influencing elections that donors must support candidates who share their views for the consumption value associated with expressing their views via an additional mode of political participation (Ansolabehere, de Figueiredo, and Snyder 2003).³ If donors give primarily to express support for like-

³Ansolabehere, de Figueiredo, and Snyder (2003) name multiple factors that may affect donors' giving decisions, but scholars have since interpreted donation-as-consumption to mean ideology-driven.

minded candidates, the distribution of donations across candidates would reflect donors' ideologies rather than the importance of strategic considerations such as the competitiveness of the election.⁴ This behavioral model of ideologically expressive giving is the basis of donation-based measurement models of contributor and recipient ideology (e.g. CFscores [Bonica 2014] and those developed in Hall and Snyder [2015]).

Others claim that while donors are most likely to contribute to ideologically-aligned candidates, they also give to misaligned candidates with decreasing probability as the ideological distance between them grows (Barber 2016*b*; Barber, Canes-Wrone, and Thrower 2017; Kujala 2020). Donors are commonly assumed to be indifferent between candidates who diverge in either direction, but they may also care about the direction of the divergence. On the one hand, donors may allocate greater resources to candidates more moderate than themselves if moderates are expected to be more electorally successful than extremists (Hall 2015; but see Utych 2020). Conversely, the greater electoral vulnerability of extremists, all else equal, may lead donors to believe that they are in greater need of financial support than moderates. Donors who give with an eye toward the subsequent lawmaking environment may also prefer to support more extreme candidates who are less likely to compromise with the opposition party (Groseclose and McCarty 2001; Lee 2016) and most likely to move the legislative party median closer to donors' extreme preferences (Barber 2016*c*; Cameron and Kastellec 2016; Krehbiel 2007; Patty and Penn 2019).

Understanding the importance of candidate ideology relative to other considerations is important for contextualizing the potential effects of donations on the larger political system. Given donors' extreme preferences, those who give solely on the basis of ideological alignment may contribute to elite polarization (Barber 2016*b*; Kujala 2020; La Raja and Schaffner 2015). However, if donors prioritize strategic factors, such as whether a candidate is running in a competitive district due to the importance of majority control

⁴In the stark donation-as-consumption story, a donor exhausts her budget on candidates with whom she fully agrees before contributing to candidates with whom she disagrees. This interpretation has been challenged in the context of corporate giving by scholars arguing that strategic giving is calibrated to expected needs and political returns (Gordon, Hafer, and Landa 2007).

for passing legislation (Cox and McCubbins 1993), then the incentives for candidate extremism may be more muted. Indeed, prior work has found that donors report caring about affecting electoral outcomes (Barber 2016*a*), are more likely to contribute to Senate candidates in competitive races (Barber, Canes-Wrone, and Thrower 2017), and give to close races out-of-state (Gimpel, Lee, and Pearson-Merkowitz 2008). Issues of endogeneity have made it difficult to assess how important district competitiveness is to donors' decisions compared to the ideology of candidates,⁵ and it is also unclear whether donors prefer giving to candidates running in districts that lean toward or against their party.⁶

Donors may also respond to characteristics of a candidate's opponent (Barber 2016*a*; Magleby, Goodliffe, and Olsen 2018). Those facing an incumbent opponent, for example, may be less likely to receive contributions because incumbents are historically more difficult to defeat (Abramowitz, Alexander, and Gunning 2006; Thomsen 2022; but see Jacobson 2015). At the same time, donors may prefer giving to candidates challenging incumbents because defeating an incumbent of the opposing party shifts the overall chamber margin by two seats. An ideologically extreme opponent may also increase donors' will-ingness to contribute, similarly to how voters turn out in greater numbers for candidates running against extreme opponents (Hall and Thompson 2018). This would be consistent with a concern that the election of an extreme opponent will push the opposing party's policy even further away from the donor than the election of a more typical opponent (Hill and Huber 2017).

A final set of potential considerations for donors emerge from the large literature on "quality challengers." Donors may rely on characteristics related to prior legislative experience, fundraising, and interest group support to identify candidates who are more likely

⁵Because candidates can strategically enter particular races or strategically adapt their public ideology for the electoral setting, candidates' ideologies are likely systematically related to district lean (and opponent characteristics). Importantly, the relationship between candidate ideology and district lean likely varies by candidate quality — making it difficult to pinpoint, for instance, whether donors eschew extremists running in competitive districts because of their ideology or because they are low-quality.

⁶While greater instrumental returns to giving in toss-up districts is clear, donors have a greater chance to shape their party's legislative coalition in districts that lean toward the party whereas districts that lean toward the opposition present a chance to gain a seat.

to be electorally successful (Biersack, Herrnson, and Wilcox 1993; Box-Steffensmeier 1996; Jacobson 1989; Maestas and Rugeley 2008). If donors contribute strategically to help their party win or retain seats, they may prefer to support candidates who are thought to be viable based on district enthusiasm, endorsements, strong fundraising, or favorable previous electoral performance. Although such traits have been associated with winning in the past, so-called "newcomers" may also be increasingly seen as viable given contemporary patterns of candidate recruitment (Bawn et al. 2012; Porter and Steelman 2022).

One complication is that the importance of these considerations may vary across donors. Donors differ in many ways, but a question of particular interest for understanding their potential impact on political polarization is whether those who are the most extreme behave differently than those who are more moderate. Even if all donors prefer giving to extreme candidates over moderate candidates to help pull their party caucus closer to donors' comparatively extreme preferences, extreme donors have the most to gain (and lose) from changes in majority control because of their relative extremity (Barber 2016*c*). It is consequently unclear whether they support more extreme candidates to try to shift the ideological makeup of the party caucus, or more moderate candidates who are better aligned with rank-and-file voters, presumably making them more electable (and majority status more likely).

Research on polarization at the mass and elite level that shows greater polarization among Republicans than Democrats (Hacker and Pierson 2015; Mann and Ornstein 2016; Theriault 2006) also suggests that the importance of these considerations may vary by partisanship. While it is impossible to know whether differences reflect variation in partisans' priorities — for instance, recent work argues that the parties differ in the relative importance of "issues" versus "identity" considerations (Grossmann and Hopkins 2016) — or their political context — donors in 2018 were giving to candidates following the 2016 election, where Republicans took control of both the presidency and Congress — arguments about asymmetric polarization make it important to determine whether Democratic and Republican donors respond similarly to candidate and electoral characteristics.

In addition to the fact that donors of different ideologies and parties may weigh considerations differently when deciding whether to support a candidate, it is also plausible that these motivating considerations interact with one another. Estimating the average effect of a factor while holding all else equal may obscure the conditional nature of the relationship between different considerations, especially among strategic donors. In particular, donors' willingness to give to candidates more extreme or moderate than themselves may depend on whether the candidate is running in a more or less safe district (Baron 1994) or against an extreme opponent (Woon 2018). Understanding whether the impact of certain factors depend on others is important for evaluating both the extent of donors' impact on the political environment and the types of research designs that can be supported in the presence of such selection effects.

2 Research Design and Experimental Vignettes

Research on individual donors' contribution decisions largely rely on either aggregatelevel donation patterns (e.g. Barber 2016*b*; McCarty, Poole, and Rosenthal 2006; Stone and Simas 2010) or self-reported motivations from surveys (e.g. Canes-Wrone and Gibson 2019; Rhodes, Schaffner, and La Raja 2018). Such studies provide important insights, but both approaches are limited in their ability to isolate relative effects of multiple factors on donors' decisions. We seek to both complement existing findings by providing more specific interpretations of their general patterns, as well as identify new patterns in donor behavior that are difficult or impossible to capture using extant approaches.

Consider, for example, the meaning of the above-average level of funding we observe in competitive districts. Does this reflect ideology-driven donors giving to like-minded candidates who happen to run in competitive races? Or are donors giving to help their party win close races, regardless of the candidates' positions? Alternatively, perhaps donors are choosing to support high-quality candidates, who are more likely to be recruited to run in pivotal races. It is even possible that donors know nothing about the candidate they are supporting given contemporary fundraising practices which encourage contributions to races about which an individual may know little. Making strong inferences about motivations using observed donation patterns is — to put it lightly — challenging due to inevitable problems of confounding, omitted variables, and endogeneity caused by the strategic behavior of candidates, donors, and parties.

Given the difficulties with observational data, some have chosen to directly question donors about their motivations for contributing (e.g. Barber 2016*a*; Barber, Canes-Wrone, and Thrower 2017; Francia et al. 2003). In a survey of 2012 Senate donors, for example, Barber (2016*a*) finds that ideologically extreme donors were more likely to report that a candidate's ideology, the opponent's ideology, and a chance to shape the election outcome were all important reasons for giving. While this work clearly demonstrates that donors consider multiple factors when giving (Magleby, Goodliffe, and Olsen 2018), the *relative* importance of each factor and how donors trade-off between competing considerations is unclear. Moreover, it can be difficult to interpret what it means for a consideration to matter in donation decisions. If donors report valuing a candidate's ideology, for example, it could mean that they (1) only contribute to like-minded candidates, (2) are willing to give to candidates with whom they disagree, but less so as candidates grow ideologically distant, or (3) have a general preference for supporting more extreme candidates over more moderate candidates, or vice versa.

To both examine the relative importance of candidate, opponent, and district characteristics in donors' willingness to contribute, and to avoid ambiguity associated with interpreting survey responses, we combine the advantages of interviewing verified donors with the causal identification provided by randomization of candidate and electoral characteristics in a multi-factorial experimental vignette. We randomly selected nearly 69,000 verified donors from the 2018 midterm elections using *Targetsmart's* national database of itemized donors, including all congressional donors who gave over \$200 as well as those who contributed to campaigns that voluntarily disclosed smaller donations.⁷ Each selected donor was sent a letter, and half were also sent a follow-up reminder postcard inviting them to participate in an online survey in return for a \$1 charitable contribution made on their behalf. Ultimately, 7,335 verified donors finished the survey (10.6%), which included vignettes gauging respondents' likelihood of contributing to a hypothetical sameparty candidate whose ideology, viability, electoral context, and opponent characteristics were experimentally manipulated.

Table 1 presents the weighted and unweighted demographics of our donor sample. As expected given prior studies of donor demographics, donors tend to be older, highly educated, very wealthy, and majority male (Hill and Huber 2017). To ensure that our respondents are representative of our sampling frame, we construct individual respondent weights to match the distribution of respondent demographics to the demographics of the sampling frame (which was itself a random sample of the population of midterm donors).⁸ Democratic donors are overrepresented in the sampling frame itself because more Democrats contributed during the 2018 midterm election than Republicans, and consistent with larger non-response patterns in polling (Clinton 2020), Democrats were more likely to respond to the survey than Republicans.⁹ To account for partisan differences, we also conduct separate analyses for Democrats and Republicans in Appendix D.

In addition to directly asking about motivations for giving (see Appendix A), our primary analysis examines donors' likelihood of contributing to hypothetical same-party candidates that are described with particular sets of randomized traits, opponents, and electoral environments. Our experimental vignette approach has three key advantages.

⁷Donors who contributed under \$200 according to the FEC constitute 18% of our sample. Given mixed evidence regarding the differences between small and itemized donors (Alvarez, Katz, and Kim 2020; Magleby, Goodliffe, and Olsen 2018), we compare vignette results among both groups in Appendix D and find negligible differences.

⁸Appendix G details our inverse propensity score and iterative raking weighting approaches, and our results are robust to the exclusion and different choices of weights (Miratrix et al. 2018).

⁹Because donor partisanship is only known in party registration states, it is impossible to construct respondent weights based on the partisanship of the sampling frame (see Appendix G).

	Unweighted Sample	Weighted Sample
Partisanship		
Democratic	75%	64.1%
Republican	25%	35.9%
Net Worth		
< \$250K	11.4%	11.4%
\$250-500K	11.4%	11.9%
\$500K-1M	10.4%	10.3%
\$1-2M	26.6%	26.1%
2 - 5M	26.1%	25.3%
> \$5M	14.1%	15.1%
Education		
< High School	0.1%	0.2%
High School	1.4%	1.6%
Some College	7.3%	8.3%
Associates	3%	3.1%
Bachelors	27.2%	28.5%
Postgraduate	61%	58.3%
Race		
White	93.8%	93.9%
Other	6.2%	6.1%
Gender		
Male	61%	60.4%
Female	39%	39.6%
Age		
< 35	3.7%	4.1%
35 - 48	9.8%	10.6%
49 - 58	15.4%	16.6%
59 - 68	27.5%	27.5%
69 - 78	32%	30.0%
79 - 99	11.1%	10.7%
Ν	7010	5608

Table 1: Donor Self-Reported Demographics

Table includes all respondents who finished the survey and self-identified with a party. Weighted sample is smaller due to missing survey weights based on voter file information. Appendix G reports the raw sample demographics in terms of voter file demographics.

First, the independent randomization of candidate and election characteristics in each vignette allows us to isolate their effects without dealing with the issues of omitted variable bias, collinearity, and endogeneity that are present in analyses of observed donations. Second, because we present each donor with several randomized multifaceted vignettes, we can directly characterize the relative importance of every factor for different donors. This also allows us to estimate effects of one consideration conditional on randomized changes in another. In so doing, we are careful to minimize potential concerns about design-induced demand effects by providing donors with an entirely new randomized combination of characteristics each time they evaluate a hypothetical candidate. Third, to avoid the difficulties associated with trying to locate candidates and donors on a comparable and commonly-understood ideological scale, we explicitly define candidates' ideology relative to the donor's own ideology.

Of course, no research design is perfect and relying on an experimental vignette introduces a few limitations. First, we must measure self-reported intent to give rather than actual giving. Even if this leads respondents overestimate their actual likelihood of giving, however, this seems unlikely to bias the relative effects of each consideration, but rather the intercept. Second, because we present respondents with multiple vignettes composed of randomized descriptions, the vignettes are necessarily generic and abstract. On the one hand, this is desirable because it avoids problems associated with omitted variables arising from information respondents have about real candidates, as well as bias that might originate if respondents felt external pressure to report supporting specific candidates. On the other hand, hypothetical candidates lack other features that may also affect donations, such as public reputation, professional ties, or campaign style — considerations that are more likely salient when donating to in-state candidates. Together with the vignette description of hypothetical candidates as running in a state other than the respondent's, the design generalizes better to out-of-state giving than to in-state giving.¹⁰

All randomized vignette features are described in Table 2. We introduced the vignettes as follows, with text in $\langle \langle \rangle \rangle$ indicating randomly assigned features and text in [[]] in-

¹⁰In the Appendix, we separately analyze results for donors who only contributed to in-state races and those who only contributed out-of state, with similar effects across groups.

dicating features based on prior survey responses:

We will next present you with 5 different [[OWN PARTY]] candidates who are likely to be running for DIFFERENT House races in the next election cycle. Suppose you were approached by each candidate. How likely would you be to donate to their campaign during the <<RACE TYPE>> election?

Although respondents are instructed to imagine being solicited by the candidate, the candidates are presented using neutral descriptions rather than in the language candidates would typically use in their own appeals, making the design more akin to donors choosing to give of their own initiative rather than reacting to fundraising solicitations.¹¹ While donors who did not identify with either of the major two political parties were randomly assigned [[OWN PARTY]] as either "Democratic" or "Republican", we focus on the 94% of donors who identified as one or the other. For each donor, all five vignettes were randomly assigned <<RACE TYPE>> of either "Primary" or "General" in order to ease cognitive load and minimize confusion. Asking about both general and primary elections allows us to determine whether donors' calculations differ when deciding to contribute to candidates in intra-party versus inter-party contests.

Each vignette had the following structure:

Candidate #1 [NAME WITHELD] is a <<RACE TYPE>> election candidate in [ANOTHER STATE]. The district <<DISTRICT LEAN>>. Your party's candidate <<VIABILITY>>. They hold policy positions that are <<OWN PARTY IDEOLOGY>>. They will likely face <<OUT PARTY IDEOLOGY>> <<OUT PARTY>>. What are the chances you would contribute to this candidate?

The outcome of interest is the donor's reported likelihood of contributing to the hypothetical candidate on a five-point labelled scale: I would almost certainly NOT contribute (0-10%), Not very likely (10-35%), Close to even (35-65%), Very likely (65-90%), and I

¹¹While our experimental framework could be extended to investigate how donation decisions vary with campaign fundraising strategies, we first provide evidence about donors' responses to objective descriptions of candidate, district, and opponents. As such, our results may serve as a benchmark for future studies measuring the impact of campaign messaging strategies on donors' proclivity to give.

Factor	Possible Assigned Features
< <own ideology="" party="">></own>	<i>For Democratic candidates</i> : much more liberal than yours somewhat more liberal than yours about the same as yours somewhat more conservative than yours
	<i>For Republican candidates</i> : much more conservative than yours somewhat more conservative than yours about the same as yours somewhat more liberal than yours
< <district lean="">></district>	leans toward your party
	is a toss-up district leans toward the other party
< <out ideology="" party="">></out>	a typical
	an extreme
< <out incumbency="" party="">></out>	new nominee
	incumbent
< <viability>></viability>	For Democratic candidates:
	is a political newcomer believes there is a great deal of district enthusiasm for the party has raised \$250,000 from both small and large donors has secured key endorsements from local party and labor groups previously lost in a closely contested House primary
	<i>For Republican candidates:</i> is a political newcomer believes there is a great deal of district enthusiasm for the party has raised \$250,000 from both small and large donors has secured key endorsements from local party and industry groups previously lost in a closely contested House primary

Table 2: Randomized Vignette Features

Each respondent was randomly assigned either five primary or five general election vignettes. All features were randomly assigned with equal probability in each vignette.

would almost certainly contribute (90-100%). For ease of interpretation, we present results with a binary outcome of whether the donor was very likely or almost certain to contribute (1) or not (0), with parallel specifications using the linear scale reported in Appendix E.

To investigate the effect of candidate ideology on giving, we randomly assign the hypothetical same-party candidate to either share the donor's views on policy, hold views that are somewhat more extreme, hold views that are much more extreme, or hold views that are somewhat more moderate than the donor's.¹² Recognizing that Democratic and Republican respondents react differently to candidates described as more liberal or conservative than themselves, we also vary the description of the candidate's ideology depending on the donor's partisanship as outlined in Table 2: for Republican donors, for example, we describe the candidate's policy positions as either "about the same as yours", "somewhat more conservative than yours", "much more conservative than yours", or "somewhat more liberal than yours", with the last option corresponding to being more moderate than the donor. In addition to explicitly describing the candidate's ideology in reference to the donor's, using the terms "liberal" and "conservative" rather than "extreme" and "moderate" helps minimize confusion for donors who consider themselves moderate or ideologically misaligned with their party.¹³

Figure 1 presents the basic relationship between candidate ideology and donors' willingness to give. Consistent with prior findings, the largest percentage of donors (39%) report wanting to contribute when the candidate is described as holding policy views that are "about the same" as their own. More novel, however, is the fact that the willingness to give decreases only slightly (to 36%) for candidates with somewhat more extreme views than the donor's and slightly more (to 30%) for much more extreme candidates, while the largest decline is present for candidates described as somewhat more moderate than the donor (only 21%). Far fewer donors report being willing to support a candidate more moderate than themselves relative to a candidate who is more extreme, providing prelim-

¹²We did not include an option corresponding to the candidate being "much more liberal" than a Republican donor or "much more conservative" to a Democratic donor to focus our limited statistical power on variation in extremism in light of recent increases in candidate extremism (e.g. Utych 2020). Moreover, we focus on a unidimensional, liberal-conservative dimension as issue sorting among candidates suggests that issue-based giving would be unlikely to induce bias in our estimates. For example, donors who prioritize the issue of abortion would undeniably associate pro-choice with "liberal" and pro-life with "conservative", making our descriptions informative and relevant even for donors only thinking about a specific issue.

¹³For instance, describing a candidate as holding positions "more moderate than yours" may be interpreted by a Democratic donor who is ideologically conservative as either more liberal or more conservative than themselves. While real-world candidates may not willingly identify as ideologically misaligned with their party, media and observers frequently use such language. We are more interested in how donors respond to independent descriptions of candidates than to candidates' strategic campaign appeals.

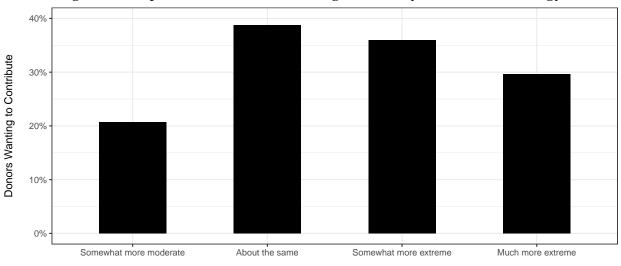


Figure 1: Proportion of Donors Wanting to Give, by Candidate Ideology

Relative Candidate Ideology

Horizontal axis is randomized candidate ideology, described relative to the donor's own positions. Vertical axis is percentage of donors who indicated being very likely or almost certain to contribute to the candidate.

inary evidence of donors penalizing moderation more than extremism.

As Table 2 details, we also randomize other features of the race. This allows us to evaluate the average impact of candidate ideology on donors' decisions relative to the impact of other considerations, as well as whether donors respond differently to candidates' ideologies depending on these other race features. The partisan "lean" of the district in which the candidate is running is said to lean toward the respondent's party, lean toward the opposition party, or be a pure toss-up.¹⁴ We also vary the extremity and incumbency status of the candidate's opponent. Finally, the same-party candidate is described as either a political newcomer, having received key endorsements, raising a good deal of money, having barely lost a prior election, or running in a district that is enthusiastic about the candidate.

To allow for non-linear treatment effects, we estimate the relationship using indicator variables for every value of the randomized traits. For expositional ease, we focus on an additively separable specification that models the likelihood of donor *i* contributing to the

¹⁴One concern with randomized vignettes is that certain combinations of vignette features may be implausible, such as extremists running in swing districts. Empirically, however, other work finds that extremists run with some frequency in swing districts: in 2018, about 1/3 of general election nominees in competitive districts were extreme, compared to about 40% in safe districts (CITE REDACTED).

candidate described in vignette *v* using:

$$\begin{aligned} Pr(Y_{iv} = 1) &= \alpha + \beta_1 CandidateIdeology_{iv} + \beta_2 DistrictLean_{iv} \\ &+ \beta_3 OpponentExtreme_{iv} + \beta_4 OpponentIncumbent_{iv} \\ &+ \beta_5 CandidateViability_{iv} + \gamma PrimaryRace_i + \delta_v + \epsilon_i \end{aligned}$$

where $Y_{iv} = 1$ denotes whether respondent *i* reported that they were either very likely or certain to contribute to the candidate as described in vignette *v*. In accordance with Table 2, *CandidateIdeology* represents separate indicators for whether the candidate is described as being somewhat more moderate, somewhat more extreme, much more extreme, or has about the same ideology (base condition) as respondent *i*, allowing for non-linear effects. For *DistrictLean*, the district either leans toward the respondent's party, leans toward the other party, or is a toss-up (base condition). *OpponentExtreme* indicates whether the opponent is extreme rather than typical (base condition) and *OpponentIncumbent* designates whether they are an incumbent rather than a new candidate (base condition). *CandidateViability* is a set of indicators for whether the candidate has either received key endorsements, raised money, believes that the district is enthusiastic about the candidate, barely lost last time, or is a newcomer (base condition). We include vignette order fixed effects (δ_v)¹⁵ and cluster standard errors at the respondent level.¹⁶

The specification also includes an indicator for whether respondent *i* was assigned primary or general election vignettes to allow for differences in the willingness to contribute by election type (γ). Although campaigns may believe that donors' motivations differ in the primary versus general elections (Hassell 2011), Appendix D reveals similar av-

¹⁵This accounts for baseline changes in likelihood of giving across vignette order. Separate models in Appendix D show effects do not vary substantially across vignette order.

¹⁶We use a linear probability model for ease of interpretation, but using a logit or probit (or even an ordered logit on the full scale) reveals substantively similar conclusions with the added interpretative costs.

erage estimated conditional effects for primary and general election vignettes.¹⁷ Donors were less likely to report a willingness to contribute to candidates running in primary elections overall, but the estimated incremental effects of the randomized considerations on donors' willingness to give did not vary across election type. Consequently, we pool analyses across primary and general election vignettes.

Although we focus on an additively separable specification, there is reason to think that effects of various factors are interdependent. Existing research suggests that donors' response to candidate ideology may have an interactive effect with district competitiveness (Baron 1994) or the presence of an extreme opponent (Woon 2018). To account for strategic interactions, we investigate differences in the effects of candidate ideology by district and opponent treatments in Appendix D. Regardless of whether the candidate was described as running in more or less competitive districts or facing an extreme opponent, donors reacted similarly to the same-party candidate's relative ideology.

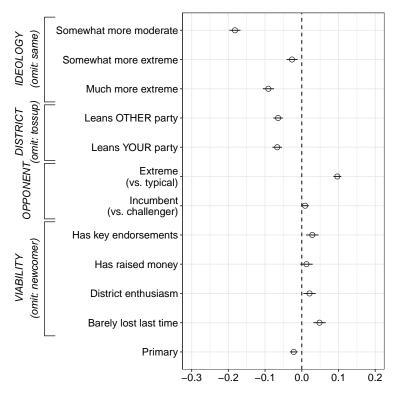
3 Results

Figure 2 plots the average effect of each consideration relative to the baseline category on donors' reported likelihood of contributing to a same-party candidate. To help compare the relative effects of candidate ideology, district competitiveness, and opponent extremism, Table 3 summarizes the predicted probabilities.

If donors are only willing to give to candidates who are ideologically aligned with themselves (baseline category), we should observe large negative coefficients for other values of candidate ideology in Figure 2. While donors are most willing to contribute to candidates who share their views, all else equal, they also express some willingness to contribute to candidates of every ideological description, including those who are *much*

¹⁷Whereas we might expect donors to penalize ideologically misaligned candidates more in a primary, we find that, if anything, the opposite is true. This may reflect donors' dual lack of enthusiasm about the prospect of electing a candidate more moderate than themselves and skepticism about the chances of successfully electing a candidate more extreme than themselves.

Figure 2: Average Effect of Vignette Manipulations on Likelihood of Contributing



Effect on Reported Likelihood of Contributing (0-1)

Whiskers are 95% confidence intervals. Outcome is 1 if "Very Likely" or "Almost Certain" to contribute, and 0 otherwise. Intercept is 0.34.

more extreme than themselves. Table 3 helps interpret the magnitude of these effects. The probability of expressing a willingness to give to a like-minded candidate with all other factors at their baseline is 0.34 on the [0, 1] scale, or a 34% probability. All else equal, the probability of giving to a somewhat more moderate candidate is only 16% — 18 percentage points lower. Donors are therefore 54% less likely to support a candidate who is somewhat more moderate than themselves relative to an ideologically-aligned candidate.

In contrast, donors' predicted probability of giving to a candidate described as somewhat more extreme than themselves is still 31% — just a 3 percentage point penalty (8% decrease). This suggests that, on average, donors penalize candidates more moderate than themselves *five times* more heavily than candidates more extreme than themselves. Finally, although donors are less willing to contribute to a *much* more extreme candidate (25%),

Baseline: same ideology, toss-up district, typical opponent		Prob. of Giving 34%	pp. change –	% change –
	Somewhat more moderate	16%	-18%	-54%
All else equal	Somewhat more extreme	31%	-3%	-8%
	Much more extreme	25%	-9%	-27%
All else equal	District leans toward a party	27%	-7%	-20%
All else equal	Extreme opponent	43%	+10%	+29%

Table 3: Predicted Likelihood of Giving

Baseline represents model intercept. Percentage point change is raw difference between baseline and the likelihood of giving to candidate with stated feature. Percentage change is percentage point change divided by baseline.

this difference relative to a like-minded candidate is only 9 percentage points — less than half of the penalty associated with a *somewhat* more moderate candidate.

These results also reveal that considerations beyond candidate ideology strongly influence contribution decisions. If donors were solely motivated by ideological alignment, we would observe null effects of candidate viability, district competitiveness, and opponent characteristics. Instead, donors have a strong preference for giving to candidates running in toss-up districts relative to districts that lean toward one party. A candidate is 7 percentage points (or 20%) less likely to receive a contribution if they are in a district that leans in either direction than in a toss-up district. In fact, the estimated difference in giving between more and less competitive districts rivals the difference between ideologicallyaligned and much more extreme candidates, and is far larger than the difference between somewhat more extreme and ideologically-aligned candidates. This suggests that electoral context is as influential on donors' decisions as candidate ideology.

We also find a substantial effect of the opponent's ideology on the decision to contribute: donors are about 10 percentage points more likely to give to a same-party candidate running against an ideologically extreme opponent. The relative magnitudes associated with same-party and opposing candidate ideology imply that donors are as willing to support a same-party candidate who is much more extreme than themselves but running against an extreme opponent as they are to a candidate who shares their ideology but is facing a typical opponent. Additionally, Figure 2 shows that opponent incumbency and common proxies for candidate viability have modest effects on donors' decisions.

3.1 Variation by Self-Reported Motivation

Perhaps the average effects discussed above mask important variation among donors who are motivated to contribute for different reasons.¹⁸ To explore this possibility, we re-examine the effect of the vignette considerations while allowing effects to vary based on donors' self-reported motivations for giving. Specifically, we leverage donors' responses to a survey question asked prior to the experimental vignettes:

Which better characterizes your decision to contribute to a specific <<OWN PARTY>> House candidate?

- I care more about the candidate's positions
- I care more about the candidate's chances of winning the election

Consistent with prior work on the importance of ideology in contribution decisions, Figure 3 reveals that donors report caring more about the candidate's positions than the candidate's chances of winning by nearly a two-to-one margin (65% versus 35%). To evaluate whether different self-reported motivations predict different responses to factors implied by those motivations, we separately estimate effects of the vignette manipulations on likelihood of contributing among donors who report caring more about candidates' positions versus candidates' chances of winning.

Figure 4 plots regression results by self-reported motivation and reveals that they are nearly identical to the pooled results in Figure 2. Donors who report caring most about

¹⁸In Appendix D, we also investigate differences by donors' total contribution number, amount, and wealth, finding substantively similar results.

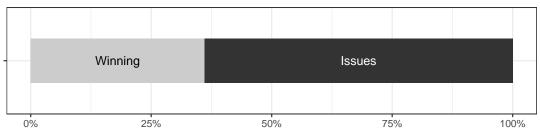


Figure 3: Self-Reported Motivation for Giving

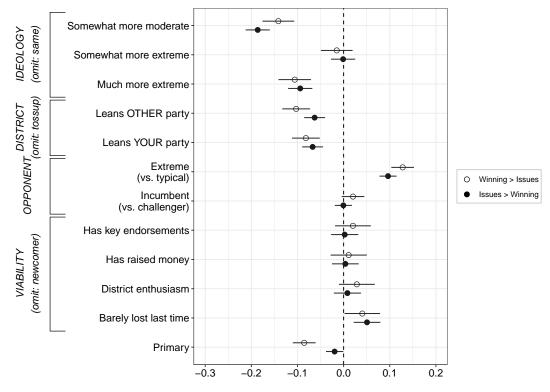
candidates' positions are not significantly less responsive to district characteristics than donors who purport to prioritize winning. Although we might expect donors who care more about candidates' positions to penalize incongruence more than donors who care more about winning, this is not borne out: if anything, issue-motivated donors only further penalize moderation, and the difference between issue-driven and winning-driven donors is statistically and substantively insignificant. While the 1/3 of donors who report caring most about winning are less willing to contribute in primaries than general elections overall compared to issue-based donors, the overall pattern of results we find suggests that donors react to candidate ideology and other factors similarly regardless of their self-reported motivations for giving.

These results show a lack of mapping between donors' self-reported priorities and responses to the factors relevant to such priorities. Donors who report caring about candidates' positions more than their chances of winning do not respond more strongly to candidates' ideologies nor district context in their decisions than donors who report caring about candidates' chances of winning more than positions. As explicated previously, the interpretation of directly-elicited motivations is frequently unclear. For instance, donors who prioritize funding ideologically aligned, more extreme, or more moderate candidates may all report issues as more important than winning. The inability of direct motivations to predict variation in relative effects of key ideological and strategic contribution consid-

Proportion of Respondents

Weighted proportions of responses to: Which better characterizes your decision to contribute to a specific <<OWN PARTY>> House candidate?

Figure 4: Average Effect of Vignette Manipulations on Likelihood of Contributing, by Self-Reported Donation Motivation



Effect on Reported Likelihood of Contributing (0-1)

Hollow circles report prioritizing winning over issues when contributing and filled circles prioritize issues over winning. Whiskers are 95% confidence intervals. Outcome is 1 if "Very Likely" or "Almost Certain" to contribute, and 0 otherwise. Intercept is 0.38 for Winning and 0.35 for Issues.

erations highlights the difficulty of capturing complex choice environments with straightforward survey items. Although experimental vignettes are likewise limited, they better capture the trade-offs associated with donation decisions, thus serving to complement and enhance interpretation of existing results on donors' self-reported motivations.

3.2 Variation by Donor Ideological Extremity

Because donors are, on average, more extreme than voters (Bafumi and Herron 2010) and incumbent senators (Barber 2016*c*), investigating whether those who are relatively more and less extreme make their contribution decisions differently is important for un-

derstanding the potential incentives that they create for candidates. In particular, identifying the extent to which the most extreme donors give on the basis of candidates' ideologies, as well as how these donors respond to candidates of different ideologies, can provide insight into how they could exacerbate elite polarization. If the most extreme donors have a preference for candidates who are even more extreme than themselves, this essentially implies a preference for *the* most extreme candidates in the entire political system.

Expectations about the giving behavior of more versus less extreme donors are unclear. On the one hand, especially extreme donors may be willing to support candidates more moderate than themselves if they are aware that their views are out of line with those of voters, and more moderate candidates may be required for the party to win elections (Hall 2015). On the other hand, extreme donors may prefer supporting candidates who are even more extreme than themselves in hopes of moving their party's platform and caucus composition closer to their own more extreme positions (Patty and Penn 2019).

We employ several measures of extreme ideology to assess whether more and less extreme donors respond differently to election features when making their decisions. First, we classify donors as extreme if they self-identified as either "Extremely Liberal" (for Democrats) or "Extremely Conservative" (for Republicans) on a standard 7-point ideology scale. Nearly 20% of donors in our sample identified as such.

To alleviate concerns that each donor may use the 7-point ideology scale differently, we also perform principal components analyses using 49 issue questions asked elsewhere in the survey to construct issue-based ideology scores. We create a summary measure using all issue questions, as well as dimension-specific measures using 11 questions related to domestic social issues, 13 questions related to domestic economic issues, and 13 questions dealing with globalism issues following Broockman and Malhotra (2020).¹⁹ For comparability, we classify the Democrats with the most liberal scores and the Republicans with

¹⁹Appendix F demonstrates strong relationships between all four measures, the weakest correlation being 0.71.

the most conservative to match the proportion of self-reported extremists in each party.²⁰

Although ideological scales may reflect both issue extremity and consistency (Broockman 2016), the fact that donors' views are more constrained than the average voter suggests that the variation we recover is related to extremity rather than consistency. In Appendix F, we detail this estimation and demonstrate the robustness of the results to using social, economic, or globalism issue-specific measures where consistency across questions is more easily satisfied, suggesting that the summary measure captures meaningful ideological variation. To demonstrate that measurement differences are not driving our results, Figure 5 plots the proportion of donors self-identifying as extreme across different values of the continuous issue-based extremism score. As expected, very few donors in the lower half of the issue extremism scale identify as extreme, and donors in the upper half become increasingly more likely to identify as extreme as their issue positions become more extreme. However, consistent with some individuals interpreting ideology in nonissue-based ways (Ellis and Stimson 2012; Hopkins and Noel 2022), not all donors with the most extreme issue positions identify as extreme.

Figure 6 plots the estimated effects of the aforementioned vignette features on likelihood of contributing separately for self-reported (left) and issue-based (right) extreme and non-extreme donors. Across both classifications, two differences between extreme and non-extreme donors are especially noteworthy. First, even though extreme donors are, by definition, among the most extreme individuals participating in politics, they are even less likely than non-extreme donors to support a candidate described as somewhat more moderate than themselves. Second, extreme donors are actually more likely than non-extreme donors to support candidates who are described as even more extreme than themselves. In fact, by both measures of extremism, extreme donors are at least as willing to support a candidate who is somewhat more extreme than themselves as they are to support a candidate who shares their views.

²⁰To ensure comparability between measures, we classified as issue-based extremists the same proportion of partisans who self-identified as extremists ($\sim 15\%$ of Republicans and $\sim 19\%$ of Democrats).

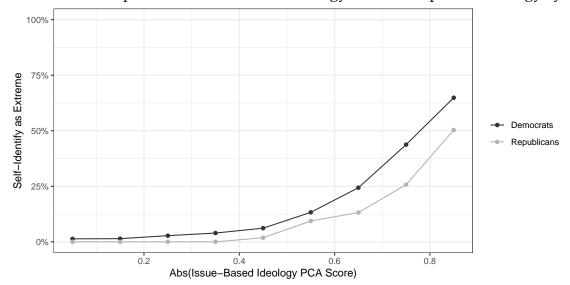
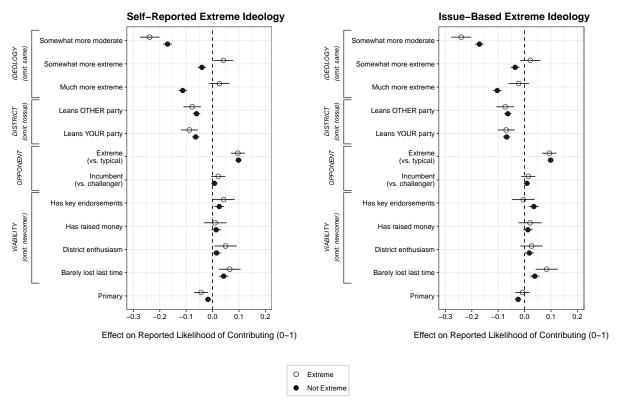


Figure 5: Relationship Between Issue-Based Ideology and Self-Reported Ideology by Party

Horizontal axis is absolute scaled issue-based PCA score. Vertical axis is proportion of donors in bin who identified as "Extremely Liberal" or "Extremely Conservative". Bin intervals span 0.1 on absolute PCA scale.

Despite already holding views that are more ideologically extreme than other donors, politicians, and voters in their party, these results suggest that extreme donors are also the least willing to penalize those more extreme than themselves while harshly penalizing those who are more moderate. To quantify the magnitude of extreme donors' relative preference for extremism over moderation, we can compare their reported behavior to that of non-extreme donors. Compared to the likelihood of contributing to a candidate who shares the donor's ideology, non-extreme donors are 17 percentage points less likely to support a somewhat more moderate candidate and 4 percentage points less likely to support a somewhat more extreme candidate. In contrast, extreme donors are 24 points less likely to support a somewhat more moderate candidate and at least 2 percentage points less likely to support a somewhat more extreme donors are 26 points less likely to give to a more moderate candidate relative to a more extreme candidate — double the 13 point relative penalty to more moderate candidates among less extreme donors.

Figure 6: Average Effect of Vignette Manipulations on Likelihood of Contributing, by Ideological Extremism



Left: Extreme identified as extremely liberal or conservative. Baseline is 0.39 for Extreme and 0.33 for Non-Extreme. *Right:* Extreme falls in equivalent quantiles of issuebased PCA scores. Baseline is 0.40 for Extreme and 0.33 for Non-Extreme. Whiskers are 95% confidence intervals. Outcome is 1 if "Very Likely" or "Almost Certain" to contribute, and 0 otherwise.

3.3 Variation by Donor Ideological Extremity & Partisanship

Beyond differences due to donor extremity, are there partisan differences in how donors give? Recent work has highlighted asymmetric partisan polarization at both the mass and elite level (Grossmann and Hopkins 2016; Theriault 2006; Thomsen 2014), which suggests that Republican and Democratic donors may respond to candidate characteristics differently. In fact, some have argued that contemporary Republican donors and other party elites have a lower tolerance for moderation (Hacker and Pierson 2015). To investigate variation by donor partisanship, we re-estimate the relationships in Figure 6 separately for extreme and non-extreme Democratic and Republican donors. Figure 7 reports the

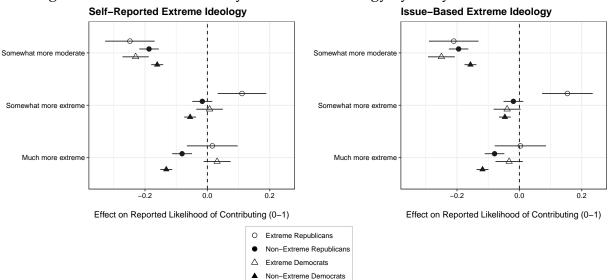


Figure 7: Effect of Same-Party Candidate Ideology by Party and Extremism Self-Reported Extreme Ideology Issue-Based Extreme Ideology

Models include all vignette manipulations. *Left:* Extreme identified as "Extremely Liberal" or "Extremely Conservative". *Right:* Extreme falls in equivalent quantiles of issue-based PCA scores. Whiskers are 95% confidence intervals. Outcome is 1 if "Very Likely" or "Almost Certain" to contribute, and 0 otherwise.

estimated effects of candidate ideology on donors' willingness to contribute by party and extremity. To formally test for partisan differences using a nested model, Table 4 reports partisan interactions from a pooled model.

The results of Figure 7 reveal that extreme and non-extreme donors do not differ substantially by party. In general, extreme Democratic donors and extreme Republican donors are less willing to support more moderate candidates and more willing to support candidates who are somewhat more extreme or much more extreme than themselves. The cross-party similarities between extreme and non-extreme donors suggests that donors in both parties likely play a part in incentivizing extremism, and within-party differences in ideological extremism appear more consequential than between-party differences for donor behavior.

Although there are similarities between more and less extreme donors across parties, there is also some evidence that Republican donors are less willing than Democratic donors to support candidates more moderate than themselves. Consistent with arguments

	All (1)	Self-Reported Extreme (2)	Self-Reported Non-Extreme (3)	Issue-Based Extreme (4)	Issue-Based Non-Extreme (5)
Somewhat more moderate	-0.173^{***}	-0.230***	-0.161^{***}	-0.250^{***}	-0.157^{***}
	(0.010)	(0.023)	(0.010)	(0.023)	(0.010)
Somewhat more extreme	-0.045^{***}	0.007	-0.055^{***}	-0.039	-0.046^{***}
	(0.010)	(0.023)	(0.010)	(0.024)	(0.010)
Much more extreme	-0.105^{***}	0.031	-0.132^{***}	-0.033	-0.118^{***}
	(0.010)	(0.024)	(0.010)	(0.024)	(0.010)
Republican ×	-0.024	-0.018	-0.026	0.040	-0.038^{*}
Somewhat more moderate	(0.016)	(0.040)	(0.017)	(0.041)	(0.017)
Republican $ imes$	0.052^{**}	0.104**	0.039^{*}	0.193^{***}	0.027
Somewhat more extreme	(0.016)	(0.040)	(0.017)	(0.042)	(0.017)
Republican $ imes$	0.038^{*}	-0.015	0.051^{**}	0.036	0.039*
Much more extreme	(0.016)	(0.042)	(0.017)	(0.042)	(0.017)
N	28,090	4,823	23,192	4,754	23,336
\mathbb{R}^2	0.044	0.085	0.042	0.073	0.043

Table 4: Party-Interacted Effect of Candidate Ideology on Giving

* p < 0.05, ** p < 0.01, *** p < 0.001. Models include all vignette manipulations. Respondent-clustered standard errors in parentheses. Outcome is 1 if "Very Likely" or "Almost Certain" to contribute, and 0 otherwise.

suggesting that ideological moderates are less welcome in the Republican Party than the Democratic Party, the partisan interaction terms reported in Table 4 for the pooled specification (1) reveals that Republican donors are a few percentage points more more likely to report wanting to contribute to candidates who are more extreme than themselves than are Democratic donors, and they may be even less willing to support more moderate candidates as well.

To further probe the partisan asymmetry in relative preference for extremism, we separately estimate the interaction model by donor extremism. First, comparing the differences in main effects between specification (2) versus (3) and (4) versus (5) makes clear that extremity explains donors' response to candidate ideology better than partisanship. In general, partisan differences captured by the Republican interaction terms in each model are smaller than differences between the same coefficients in extreme versus non-extreme models. Second, there is some evidence that Republicans are willing to support more extreme candidates than Democrats even conditional on donor extremity. While not always distinguishable from zero, the interaction effects estimated in Table 4 reveal that Republicans are generally less likely to support moderates than Democrats and more likely to support somewhat or much more extreme candidates than similarly situated Democrats.

4 Conclusion and Implications

Understanding what affects donors' decisions to contribute to a candidate is a prerequisite for understanding the nature of donor influence in contemporary politics. A substantial body of work has established the general importance of candidate ideology to contribution decisions, but identifying its importance relative to other considerations is challenging. Because of the difficulty of disentangling characteristics of candidates, districts, and donors in observational studies and the ambiguity inherent in direct survey questions that fall short of capturing the complex choice environment, our current knowledge of *how* candidate ideology shapes donors' decisions is limited.

We contribute to this important effort by conducting the largest-ever survey of verified midterm donors, administering a multi-factorial vignette experiment to over 7,000 donors to estimate the impact of candidate, opponent, and district characteristics on likelihood of supporting a hypothetical candidate. Independently randomizing each of these factors in every vignette allows us to identify their relative effects, as well as whether those effects vary across donor traits and election contexts.

Our findings provide compelling evidence that donors respond strongly to a sameparty candidate's ideology, the competitiveness of the district in which they are running, and the extremity of their opponent. All else equal, donors are significantly more likely to contribute if a candidate is running in a toss-up district, facing an extreme candidate, or shares their views. Donors are about as willing to give to an ideologically divergent candidate running in a competitive district against an extreme opponent as they are to an ideologically-aligned candidate running against a typical opponent in a district that leans toward one party. The fact that multiple considerations affect donors' decisions means that we cannot easily interpret patterns of observed donations as simply a reflection of donors' policy positions.

Although donors most prefer supporting like-minded candidates, donors also strictly prefer supporting more extreme candidates over more moderate candidates. Moreover, this asymmetry is largest among the most extreme donors, despite the fact that are already more extreme than others in their party. Republican donors also appear less likely to support moderate candidates, but the effect of ideological positions in each party is more consequential than the partisan differences we detect. While Republicans may have a greater relative preference for extreme over moderate candidates compared to Democrats, the difference in relative preferences is greater between extreme and non-extreme donors across parties.

While we cannot directly test why donors vastly prefer contributing to candidates who are more extreme than themselves over candidates who are more moderate, the finding is consistent with strategic, forward-looking behavior. Akin to the results regarding voter preferences from Patty and Penn's (2019) formal model, donors may likewise have an "induced taste for extremism" (744) due to successfully elected candidates' ability to play only a small part in influencing final policies. Because most representatives can do little more than vote on agenda items, donors may give to candidates who are extreme, running in key districts, or facing extreme opponents in order to help "move the median" in their preferred (extreme) direction and prevent the out-party from doing the same (Cameron and Kastellec 2016; Keedar 2005; Krehbiel 2007).

Our analyses also have implications for the study of contributions and donor motivations. The asymmetric and heterogeneous relationships we find between donor ideology, candidate ideology, and likelihood of giving suggests complications for scaling approaches which interpret observed donations as an expression of donors' ideologies (e.g. (Bonica 2014; Hall and Snyder 2015; Hall 2015). In addition to responsiveness to strategic factors, donors' asymmetric preference for extreme candidates over moderate candidates implies that donors' locations are not simple functions of the locations of candidates whom they support. Moreover, extreme donors' greater preference for extreme candidates suggests that donors' utility functions vary with their ideologies. Because donors respond to equidistant candidates differently depending on their relative locations, and donors' responses also vary by the donors' own extremism, using observed contributions to place candidates and donors in a common space likely requires a more complicated behavioral — and, therefore, statistical — model than those currently used.

Likewise, the inability of self-reported donation motivations to predict the patterns we identify in our experimental vignettes is concerning. Although surveys are exceptionally valuable for characterizing donors' policy views, their usefulness for determining the motivations for and implications of donors' giving may be more limited due to complexity of donors' choice environment — a complexity that our vignettes seek to capture, albeit imperfectly. While we cannot directly translate the effects from our hypothetical, experimental setting into the implied effect on actual giving, the persistence and robustness of the overall patterns of effects that we find across the multiple within-donor vignettes are reassuring.

Looking forward, subsequent work can build on our approach in several ways. One is to examine whether the patterns uncovered here persist over time. Given the modest partisan differences we find, future studies can try to better understand whether partisan donors react differently depending on the larger political context they face. In 2018, for example, Republicans controlled both legislative chambers and the presidency, which may have affected both who donated and the relative weight partisans gave to different factors in choosing among candidates. Another possibility is to add elements to the choice environment we lay out in the experimental vignettes, including other candidate features, such as race or gender. Because our study presents respondents with neutral descriptions of candidates, questions also arise as to how campaign appeals may affect donors' willingness to give: can moderate candidates use messaging to increase their attractiveness to extreme donors? Building on the sentinel evidence we collect can help to further enhance our knowledge of the relative influence of these factors and more. Finally, our combination of purposive sampling of donors and a vignette approach is portable to other offices, level of government, and potentially countries to help interpret observational findings.

5 Supplementary Material

The supplementary material for this article can be found at *insert Cambridge link here*.

6 Data Availability Statement

Replication data for this paper can be found at https://doi.org/10.7910/DVN/Q1X3RZ.

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9 Competing Interests: None

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