ORIGINAL PAPER



Representativeness and Motivations of the Contemporary Donorate: Results from Merged Survey and Administrative Records

Seth J. Hill¹ · Gregory A. Huber²

Published online: 5 May 2016 © Springer Science+Business Media New York 2016

Abstract Only a small portion of Americans make campaign donations, yet because ambitious politicians need these resources, this group may be particularly important for shaping political outcomes. We investigate the characteristics and motivations of the *donorate* using a novel dataset that combines administrative records of two types of political participation, contributing and voting, with a rich set of survey variables. These merged observations allow us to examine differences in demographics, validated voting, and ideology across subgroups of the population and to evaluate the motivations of those who donate. We find that in both parties donors are consistently and notably divergent from non-donors to a larger degree than voters are divergent from non-voters. Of great interest, in both parties donors are more ideologically extreme than other partisans, including primary voters. With respect to why individuals contribute, we show that donors appear responsive to their perception of the stakes in the election. We also present evidence that inferences about donor ideology derived from the candidates donors give to may not closely reflect the within-party policy ideology of those donors. Overall, our results

Seth J. Hill sjhill@ucsd.edu

We thank Dan Biggers, Adam Bonica, Joshua Clinton, Shigeo Hirano, Gary Jacobson, Lynda Powell, Brian Schaffner, Chris Tausanovitch, Danielle Thompson, the editor, and anonymous reviewers for feedback. A replication archive is available at http://huber.research.yale.edu.

Electronic supplementary material The online version of this article (doi:10.1007/s11109-016-9343-y) contains supplementary material, which is available to authorized users.

¹ Department of Political Science, University of California, San Diego, 9500 Gilman Drive #0521, La Jolla, CA 92093-0521, USA

² Department of Political Science, Institution for Social and Policy Studies, Yale University, 77 Prospect Street, PO Box 208209, New Haven, CT 06520-8209, USA

suggest that donations are a way for citizens motivated by the perceived stakes of elections to increase their participation beyond solely turning out.

Keywords Campaign donations · Campaign Finance · Political participation

Introduction

Money is a central factor in American elections, from affecting who chooses to run for office (Fowler and McClure 1990) to influencing which candidates ultimately prevail (Jacobson 1978; Huber and Arceneaux 2007). Moreover, individual donors are an important source of campaign funds, and contributing to campaigns and political organizations is an important form of participation. Because money, unlike votes, is not distributed equally among those eligible to vote, it is essential to understand how well the views of those who contribute to campaigns are representative of the larger electorate, particularly given fears that those with greater resources to engage in political activity have greater influence on the political process (Schattschneider 1960; Bartels 2008; Gilens 2012).

Despite the centrality of donors in the American political system, we know relatively little about the contemporary representativeness of those who donate (the "donorate") compared to the larger American electorate. While some scholars have used self-reported contributions to compare the behavior and attitudes of donors to others (e.g., Grant and Rudolph 2002; Panagopoulos and Bergan 2006), this research approach may be misleading if individuals misreport their contribution or voting behavior. It is for this reason that others have surveyed donors identified using administrative records (e.g., Brown et al. 1980, 1995), but this important seminal work is now somewhat dated and may not reflect the contemporary political context. Finally, even recent work that directly surveys contributors identified from administrative records (e.g., Barber 2014a, b; Barber et al. 2016) uses different data collection methods for the non-donor population.¹ If variation in mode or timing of interview affect patterns of survey responses, than comparisons between donors and non-donors may conflate mode or timing effects with attitudinal differences.

In this article, we present analysis from a novel dataset that combines administrative records of two types of political participation, donating and voting, with a rich set of survey variables. We thus observe actual contribution behavior rather than the self-reported behavior that may prone to bias. We merged the 2012 Cooperative Congressional Election Survey (CCES), which includes validated measures of turnout and registration, with selected variables from the individuallevel records of campaign contributions reported in the Database on Ideology, Money in Politics, and Elections (DIME, Bonica 2013). The DIME dataset has several novel features, including a person-level record for individuals who donated to multiple campaigns, broad coverage of different ways in which individuals donate money (donations to local, state, and federal elections made to candidates, PACs, super PACs, leadership PACs, 527s, party committees, campaigns for state

¹ This work also relies on self-reported turnout.

ballot measures, and other recipient committees that engage in fundraising activities), and an estimated contributor ideology score (the *CFscore*, see Bonica 2013, 2014).

The merged observations allow us to undertake a systematic analysis of how those who make contemporary political donations are different from the broader American electorate while holding constant mode of survey interview. In particular, because we have access to a rich battery of behavioral and attitudinal outcomes measured using the same survey instrument for both donors and non-donors, we can assess whether those who donate are ideologically representative of the potential electorate (registered voters), those who vote in general or primary elections, and even members of their party. Additionally, we can also examine whether these patterns hold when comparing donors to non-donors among those most likely to donate: those with the resources (wealth, education) and motivation (interest) to do so.

In addition to this descriptive analysis, we also address two related questions. The first is why people contribute. One explanation for why certain citizens contribute, apart from their own ideological views, is that they perceive more at stake in elections because they view the parties as offering distinct policy alternatives, one of which they greatly prefer. We assess whether those who perceive their less preferred party as being relatively more ideologically distant than their preferred party are more likely to contribute.

The second question we examine is whether the candidate (or set of candidates) an individual contributes to is an accurate indicator of the individual's ideology. Recent work (Bonica 2014, Hall 2015, Hall and Snyder N.d.) has used contributions by individuals and groups to place candidates and contributors on a common ideological scale. These procedures produce estimates for elected officials that correlate well with roll-call based measures of legislator ideology for those candidates who serve in a legislature (e.g., Carroll et al. 2009), but it is unclear whether these patterns also reveal the ideological views of individual (i.e., non-elite) contributors. While prior work has described sophisticated models of giving for PACs and other elite actors (e.g., Romer and Snyder 1994), how individuals decide which candidates to support is less well understood. Accordingly, we assess whether one such donation-derived measure of individual ideology, Bonica's CFscore, predicts individual-level differences in policy preferences as measured using a rich battery of survey questions.

These results add to our understanding of who makes campaign donations, why, and to what effect. We find that the demographic and ideological differences between donors and non-donors are consistently greater than the corresponding differences between voters and non-voters, a common measure of the implications for representation of unequal participation. Even when making comparisons within parties, we find donors are wealthier, more educated, more secular, older, less racially diverse, more likely to vote, and more ideologically extreme. Contributors are also about 20 % points more likely to participate in primary elections than non-contributors, and between 6 and 9 points more likely to participate in general elections. Finally, contributors are more extreme in both parties, even when compared to primary election voters. This is the first analysis in the contemporary period to show that contributors hold more extreme views than primary election

voters, and the first ever to our knowledge to do so using administrative records of both voting and contributing.

Regarding our two related questions, we show that the act of contributing is more likely the greater the relative ideological distance the individual perceives between her most and least preferred party, which we interpret as evidence that the stakes of the outcome motivate donation behavior. This pattern is consistent with a spatial model explanation for political participation in which the expected benefit to some form of activity is increasing in the relative loss associated with an individual's least preferred candidate winning office. Finally, we find that the relationship between individual-level policy preferences and donation-derived measures of ideology is relatively weak within both parties, suggesting that the CFscore measure calculated on the basis of donation patterns is limited in predicting individual-level non-elite ideology.

Who Donates and Why?

Political scientists have long-noted the "upper-class" bias of those who participate in politics (Schattschneider 1960), a pattern that may be exacerbated when the participatory act—donating money—itself requires monetary wealth. Thus, it is not surprising that survey data reveal that those who report contributing are not demographically representative of the larger electorate (e.g., Brady et al.1995). This research often relies on self-reports of individual-level donation behavior along with other forms of participation (e.g., voting). A concern with this mode of observation, however, is that individuals may systematically misreport their behaviors in ways confounded with characteristics of interest to the researcher (see, in the context of voting, Vavreck 2007).² For example, more ideologically extreme or politically interested people might report donating to express in the survey context their political engagement, despite not actually donating.

In light of this concern, an early and important line of research by Powell and colleagues adopts the strategy of surveying a known set of donors identified from administrative records and comparing their attitudes and characteristics to those of the general population (Brown et al. 1980, 1995, Francia et al. 2003). In all of these comparisons, however, the mode of survey interview is different for contributors and non-contributors. For example, Brown et al. (1980) show contributors to the 1972 presidential campaigns (the first year of mandatory FEC reporting) are wealthier, report more forms of participation, and are more likely to view themselves ideologically and have policy views than the general population. Those contributors are not, however, more ideologically extreme in their issue positions. In contrast, Brown et al. (1995) report similar demographic differences for contributors in 1988, but also find that donors are more ideologically extreme than both the general population and those who report voting in the general or primary elections. Francia et al. (2003) analyze the reasons that donors to congressional campaigns in

² See the Supplementary Information (SI) for a discussion of the accuracy of reported donation behavior in our merged data.

1996 gave for contributing, but do not compare donors to non-donors or analyze more recent election cycles.

More recently, Barber (2014a, b) surveys donors to 22 incumbent senators who sought reelection in 2012. Individual donors tend to rate ideological reasons (the positions of candidates or their opponents) as important in explaining their behavior, and ideological motivations are more frequent for more ideologically extreme donors. This is consistent with Johnson's (2010) account in which more extreme legislators seek contributions from (more extreme) ideologically motivated individual contributors instead of more moderate sources of funds like PACs. However, neither Johnson's account nor Barber's work explain why moderate citizens do not contribute or test the motivations that might lead ideologues to contribute (see below).

Other research uses contribution behavior reported by the individual in the survey context. For example, Tobin and Rudolph (2002) show that reported donors during the 2000 presidential campaign are wealthier, older, more engaged, and more partisan than those who do not report giving, but do not appear to be more extreme in their policy attitudes. By contrast, Panagopoulos and Bergen (2006) find similar demographic differences, but also find that contributors are more extreme on some policy issues (see also Lipsitz and Panagopoulos 2011). Finally, in a recent analysis of reported donations behavior in the CCES survey, LaRaja and Schaffner (2015) show contributors are substantially more extreme than the general population.

A related literature focusing on party elites (e.g., Layman et al. 2010) finds that those elites are substantially more extreme than either the mass public or rank and file party members. We know much less, however, about the individuals who, whether they participate in those formal party activities or not, provide financial resources to candidates.³ Thus, it remains an open question whether donors are more extreme than, for example, individuals who are engaged enough to participate in party primaries.

Overall, existing research does not combine survey data on individual ideological views and perceptions of the parties together with administrative records of both electoral participation and donations behavior. No studies that directly survey the broader pool of donors (e.g., donors to the 1988 presidential campaigns) use the same survey mode for non-donors. Finally, most prior studies of donors are now somewhat dated, and so may not reflect the contemporary political or institutional climates.

Beyond describing who donates, testing arguments about why some individuals with the means to contribute do so, while others of means do not, is also a recurrent theme in this literature. A common finding is that those who are more extreme are more likely to participate, which is consistent with multiple theoretical perspectives. For example, individuals may prefer to support ideologically likeminded candidates. Alternatively, individuals may be more strategic and choose to donate when the utility difference they will experience if one party wins office is substantially different from what happens if the other party does so. Claassen (2007) examines

³ This is important because while many party activists are likely donors, we do not know how many donors are activists.

multiple forms of self-reported participation, including contribution behavior, using American National Election Survey measures and finds support for the latter account. We build on this work to more fully explore how the perceived ideological stakes of an election affects donating as measured using administrative records below.

Finally, if one presumes that contributions to a candidate are a revealed preference of one's ideological affinity for the candidate over other possible recipients, contributions may also indicate an individual's own ideological orientations. This logic is the basis for the Campaign Finance ideology score (CFscore) reported in Bonica (2014) and similar estimates of candidate locations used by Hall (2015) and Hall and Snyder (N.d.). To calculate the CFscore, for example, contributions by individuals and groups are used to place candidates and contributors on a common ideological scale. These procedures produce estimates for elected officials that correlate well with roll-call based measures of legislator ideology for those candidates who serve in a legislature. What is uncertain, however, is how well such measures capture individual-level differences in ideology among those who are not candidates for office.

Data

Our dataset is created by merging individual-level data from three sources. First, the survey firm YouGov interviewed a nationally-representative sample of 54,535 American citizens during the 2012 presidential election as part of the 2012 CCES (Ansolabehere 2012). The survey included numerous measures for the respondents, including demographics and political attitudes. Second, YouGov merged to the survey validated registration and turnout data from state election records. This merge allows us to observe the actual, rather than reported, turnout and registration behavior of the respondents. YouGov matched 45,221 individuals to registration records, and this set of registered (potential) voters serves as the basis for our analysis. Given this construction, all comparisons reported in this paper are among the set of registered survey respondents and all analysis uses the survey weights provided by YouGov.⁴

Third, we contracted with YouGov to match 2012 CCES respondents to a subset of the DIME contributor records using names and addresses. YouGov has an established technology for matching multiple datasets using these identifiers. They were able to match 4432 of the 45,221 records to a record in DIME, of which 3820 (about 85 % with survey weights) contributed during the 2012 election cycle.⁵ In order to preserve each survey respondent's privacy, we could select only a subset of the measures available in the full DIME data and each selected measure was randomly perturbed by a small amount. We use both the 2012 and the 2010 set of DIME contributors for the merge to capture individuals who only contribute in one

⁴ We compare among registrants because almost all donors are registered and because those who are not registered cannot vote.

⁵ We evaluate this matching process in the Supplementary Information.

or the other election. In particular, from the DIME data we have a measure of the number of contributions made in each year (binned into 8 categories), the total amount of contributions made in each year (binned into 10 categories), the cumulative Bonica CF score for each individual (ranging from approximately -7 to +6, with 99.8 % of scores between -2 and 2), and a dollar-weighted CF score calculated only on the basis of contributions made in each year (also ranging from -7 to +6). We describe our use of these measures below.

Note that to be recorded in federal contribution records an individual must have donated at least \$200 to a single campaign, but that many of the state contribution databases included in the DIME have records for contributions of smaller sizes. The donors to which we validate our survey records are thus a combination of federal donors > \$200 and state donors of smaller and larger amounts. Additionally, note that privacy restrictions prevent us from using these data to, for example, compare contributors to state elections with those who give only to presidential races or other such granular comparisons.

Demographic and Behavioral Differences Between Donors and Their Co-partisans

How representative of the population of registered voters is the population of donors—the donorate? Here we present a brief summary of these results; a complete analysis of the demographic and behavioral differences between donors and non-donors appears in the Supplementary Information (SI). To understand the substantive importance of these differences, we compare the size of the differences between donors and non-donors to the most-often considered measure of differential political participation: Those registrants who vote in general elections relative to those who do not vote.⁶ For each of these comparisons, we show that the difference between voters and non-donors is notably larger than the difference between voters and non-voters.

We compare donors to non-donors, where someone is coded as a "donor" if they matched to a record in the DIME data. Throughout this paper, partisans are coded to include both identifiers and those who "lean" toward a party.⁷ This analysis therefore excludes the modest number of pure independents and third-party adherents in our dataset. In each case, we compare donors to non-donors within party, which accounts for the demographic and behavioral differences between the parties along with differences in contribution rates.⁸

With respect to demographics, we show in the SI that within each party donors have higher incomes and more education and are older, less diverse, and (among Democrats) more secular than non-donors. In addition to establishing these difference using administrative records of voting and contributing, we show that the

⁶ Our comparison of voters to non-voters does not condition on donation behavior. As footnote 10 shows, almost all donors vote.

⁷ Analysis excluding leaners is available upon request.

⁸ For an account of differences between Democratic and Republican donors, see Francia et al. (2005).

differences between donors and non-donors are larger in most cases than the differences between voters and non-voters.⁹

We summarize these differences in Table 1, which shows that within each party donors are notably different from non-donors. Additionally, Table 1 presents parallel data for the differences between voters and non-voters. For example, Democratic donors are 19 % points more white than Democratic non-donors, while Democratic voters are 8 points more white than Democratic non-voters. Similar comparisons for religion and race are less stark among Republicans. In the final two rows, we present differences in validated political behaviors. Differences in validated political behaviors are less pronounced than on demographics, and in most cases show bigger differences between (general election) voters and non-voters than between donors and non-donors.¹⁰

Contributors Hold More Extreme Policy Views than Non-Contributors

The summary of the demographic and behavioral analysis presented in the previous section shows that contributors are demographically distinct from, and vote more than, non-contributor registrants. Do they also have different attitudes? In this section, we show that contributors are more ideologically polarized than non-donors, a pattern that holds even when accounting for a variety of potentially confounding characteristics. On average, Democratic contributors are more liberal than other Democrats and Republican contributors are more conservative than other Republicans.

We first consider the relationship of donor status to individual policy ideology. To measure policy ideology, we estimate a factor analysis on a set of policy preference items from the 2012 CCES.¹¹ The included items elicit preferences on a set of salient political issues: gun control, climate change, immigration, abortion, jobs versus the environment, gay marriage, affirmative action, and fiscal policy. This factor score is rescaled to range from -1 (most liberal) to 1 (most conservative). In Fig. 1 we plot the distribution of this measure of ideology. Panel A presents boxplots of ideology by party and contributor status. Contributors are more homogenous and less moderate than non-contributors for both parties. While Democratic contributors have a median ideology of -0.73 (5th and 95th percentiles

⁹ Voters, in this case, are those with a validated turnout record from the 2012 presidential contest.

¹⁰ 6.1 percent of donors in these data are not validated to have voted in either the 2012 general election or a 2012 primary election. See SI Table S1 for analysis of participation by donor status.

¹¹ We apply Stata's IPF factor command to CCES variables CC320, CC321, CC322_1-CC322-6, CC324, CC325, CC326, CC326, CC327, CC328, and CC329. We first break each categorical item into a set of dummy variables for all responses (including missing response) for a single-factor analysis. Factor coefficients are reported in SI Table S2. The first factor has an eigenvalue of 4.3. We exclude the roll call items, CC332A-J, out of concern that they reflect bills congress has already considered. Respondent "votes" on those bills may therefore proxy political sophistication, confounded with donor status, rather than actual differences in policy ideology. We have estimated these models excluding the immigration items out of concern that they are related to foreign policy positions and find highly similar results. Similarly, we have also estimated these measures excluding the binary response items (CC322_1-CC332_6 [immigration policy] and CC326 [gay marriage]). Results are again highly similar (Compare SI Table S3 to Table 2).

	Democrats with charac	difference in teristic	percentage	Republicant with charac		n percentage
	Donors vs non donors	Voters vs non voters	Ratio of differences	Donors vs non donors	Voters vs non voters	Ratio of differences
Family income > \$100 K	21.73	5.36	4.05	18.17	6.13	2.97
Education 4-year college+	31.60	13.05	2.42	25.84	9.95	2.60
Age 50+	30.71	14.97	2.05	24.03	13.86	1.73
Religion very important	-9.20	-0.96	9.57	1.37	7.24	0.19
Race not white	-18.99	-7.77	2.44	-0.61	-5.61	0.11
Voted 2012 congressional primary	32.41	31.10	1.04	30.87	42.81	0.72
Registered with major party in party registration state	8.92	27.42	0.33	11.40	32.61	0.35
Number of donors		3062			1154	
Number of non-donors		18,399			16,679	
Number of voters		17,254			15,324	
Number of non-voters		4207			2509	

Table 1 Demographic and behavioral differences by donation and turnout behavior

Weighted analysis. For each party, the first two columns present the percentage point difference between donors (voters) and non-donors (non-voters) who match the category of that row. Voters are those who voted in the November 2012 general election. The third column is the ratio of these two differences. The larger the ratio, the greater the relative difference for donors over voters

of -0.90 and -0.19), the corresponding number for non-contributors is -0.42 (-0.86 to 0.28). A similar pattern holds for Republicans, with a donor median of 0.59 (-0.07 to 0.92) compared to 0.39 (-0.36 to 0.88) for non-donors.

To add perspective to the ideological distinction between donors and non-donors relative to the ideological differences associated with other forms of participation, Panel B plots kernel densities of ideology by party for different levels of political participation. We plot the densities separately for respondents validated to have donated in 2012, validated 2012 congressional primary voters, validated 2012 general election voters, and all registrants. In the left frame presenting the distributions for Democrats, we see that ideology is increasingly homogenous and more liberal with increasing participation. The narrowest and most liberal distribution of preference is for validated donors and the least narrow distribution is for all registrants. A similar, though less stark, pattern holds for Republicans on the right. Thus we observe increasing extremism and homogeneity within each party as participation increases (from none to general election voting to primary voting to contributing).

One concern is that donations are more likely for those who are wealthier and better educated. These same characteristics may be associated with more extreme policy views. Additionally, those who are better educated are also likely to have the most access to political information and the greatest ability to accurately express

	(1) Ideological sca	(2) ale from policy it	(3) ems (-1 = Lib,	(4) 1 = Cons)
	Republicans	Republicans	Democrats	Democrats
Is a contributor (matched to CCES case, $1 = yes$)	0.125 [0.015]***	0.079 [0.016]***	-0.265 [0.008]***	-0.181 [0.008]***
Validated 2012 general vote (1 = yes, 0 = no)	0.130 [0.014]***	0.095 [0.013]***	-0.081 [0.010]***	-0.058 [0.010]***
Validated 2012 cong. primary vote $(1 = yes, 0 = no)$	0.137 [0.009]***	0.095 [0.009]***	-0.033 [0.009]***	-0.019 [0.008]**
Constant	0.184 [0.012]***	-0.016 [0.049]	-0.311 [0.009]***	-0.214 [0.033]***
Observations	17718	17718	21284	21284
Demographic indicators? [detailed in note below]	No	Yes	No	Yes
Mean of DV	0.410	0.410	-0.450	-0.450
SD of DV	0.380	0.380	0.350	0.350
Left censored obs.	1	1	58	58
Right censored obs.	101	101	0	0

Table 2 Predicting policy ideology using contributor status, multiple regression

Tobit coefficients with robust standard errors in brackets

* Significant at 10 %; ** significant at 5 %; *** significant at 1 %. Weighted analysis

Dependent variable is policy ideology scale, which ranges from -1 (Liberal) to 1 (Conservative). Indicators for contribution status and participation are not mutually exclusive. Indicators for each category of income, education, gender, household union membership, race, age in decades, and importance of religion suppressed

their preferences on a set of survey questions about public policy. This greater ability to engage the survey instrument might reduce measurement error and thereby introduce artificial extremity among those who are most likely to donate.

To assess whether donor and validated turnout status are related to ideology when controlling for education, income, and other important factors, we estimate twolimit Tobit regression models predicting the policy ideology measure in each party using separate indicators for categories of income, union membership, education, religion, race, and age.¹² These estimates appear in Table 2. The Tobit models account for the fact that the ideology scale is censored at -1 and 1 (parallel results using OLS are very similar and are available upon request). In columns (1) and (3), we model ideology solely as a function of variables for turnout and contributor status, while in columns (2) and (4) we include both these indicators and the control

¹² We also investigated preferences over tax policy, because one might imagine that wealthy Democratic contributors might oppose higher taxes and therefore prevent more populist Democratic tax policies. However, we found that Democratic contributors of more than \$1,000 did not differ in their preferences over tax policy from non-contributors, and that contributors of less than \$1,000 preferred tax cuts for the middle class, but not the wealthy, by about 10 percentage points more than non-contributors. For Republicans, support for tax cuts is high across the board, and increasing in size of contributions. Analysis available from the authors on request.

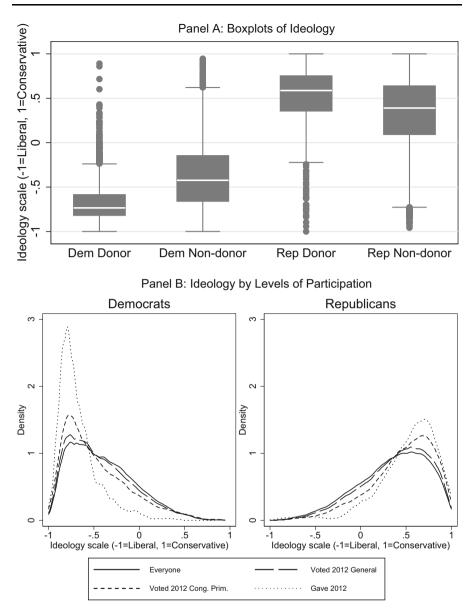


Fig. 1 Ideology of contributors and non-contributors, by party

variables. (The indicators for contributor status and turnout are not mutually exclusive. For example, a contributor who also voted in both types of elections would be coded 1 for all three measures. 70 % of Republican contributors voted in the 2012 primary and 94 % did so in the general election. For Democrats the corresponding figures are 56 and 93 %.) These regression results replicate the graphical pattern. Even after accounting for other differences across respondents within each party, ideology is increasingly extreme (more conservative for

Republicans, more liberal for Democrats) with rising levels of participation as measured using either voting or contribution behavior.¹³

Among Republicans, per column (2), contributors are 0.08 units more conservative than a non-contributing primary voter, who is 0.10 units more conservative than a general election voter who does not vote in a primary, who is 0.10 units more conservative than a Republican who does not vote, all else equal.¹⁴ By comparison, Republicans for whom religion is "extremely important" rather than "not too important" are about 0.08 units more conservative. Among Democrats, per column (4), general election voters are about 0.06 units more liberal than non-voters and primary voters are an addition 0.02 units more liberal. But validated contributors are substantially more liberal, by about 0.18 units. This effect is about the same as the 0.20 unit liberal shift associated with being a college graduate rather than never having finished high school.

The average Democrat and the average Republican differ by about 0.86 units on the ideology scale. Among contributors (assuming they did not also vote), this difference is 1.12 units, or about 30 % larger. Thus, differences in ideology across the parties are also substantially larger among contributors than among partisans who did not donate.

Recent scholarship raises the question of whether scaled survey data overstate the moderateness of the electorate because they assume that extremism requires consistent responses (i.e., all in one ideological direction) when in fact some extremists are not bound by ideological constraint (e.g., Ahler and Broockman N.d.). To assess the importance of this argument, we created a second measure of extremism that was calculated using the five policy items with non-binary responses and clear extreme response options.¹⁵ For each item, regardless of ideological direction, a response was coded as extreme if it was an end category (e.g., either the most conservative or most liberal response). We then summed the number of "extreme" responses to create a scale that ranges from 0 (no extreme responses) to 5 (all extreme responses). We estimate (using both ordered Logit and OLS regression, see SI Table S5) the number of extreme responses that each partisan respondent gave as a function of voting, contribution behavior, party, and the other covariates used in the Table 2 analysis. We find that while general election voters are no more likely than non-voters to give extreme answers, primary voters on average give an additional 0.07 more extreme responses (p < 0.01) and contributors give an additional 0.31 more extreme responses (p < 0.01). Thus, the earlier finding about the extremity of contributors holds even when we allow extremity to be ideologically inconsistent.

Overall, we find that contributors are more ideological than non-contributors. In the SI (Figure S11), we present similar results for a scale calculated using foreign

¹³ One concern is that random measurement error may be larger for less sophisticated respondents, making them appear more centrist, and sophistication may be correlated with other factors (e.g., income and education) that predict giving. For this reason, we have also replicated our analysis for respondents with at least a 4-year college degree and find similar results with smaller magnitudes. See SI Table S4.

¹⁴ Because most contributors also vote in general and primary elections, and because most primary voters also vote in general elections, we order the comparisons in this way.

¹⁵ These are items CC320, CC321, CC324, CC325, and CC327.

policy items (which measure the conditions under which the respondent believes the United States should intervene abroad). Unlike in the case of domestic policy preferences presented here, differences in foreign policy attitudes are more minor when comparing contributors to non-contributors in each party.¹⁶ Furthermore, comparing Democrats to Republicans, contributors are not more polarized than non-contributors.

Donations are Correlated with Perceptions of the Ideological Stakes of an Election

Those who give have different characteristics, behaviors, and attitudes from those who do not. Additionally, and perhaps more saliently, donors are more extreme than non-donors in their policy views. This leads naturally to seeking to understand *why* these individuals contribute while others with means do not. Here, we consider multiple explanations for this pattern. We show that those who perceive more at stake in the election as measured by the relative perceived proximity to the two parties are more likely to contribute. We show that the relationship to perceived proximity holds even when we control for the direct effect of personal policy ideology as well as proximity to one's preferred party.¹⁷

While prior research suggests that there are multiple reasons individuals may donate, Francia et al. (2003) describe one important category of donors as ideologues.¹⁸ In this typology, ideologues are individuals who donate in the hopes of getting better policy outcomes. But, as Claassen (2007) notes, merely being policy motivated does not explain how individuals think about the policy consequences of elections. Individuals may simply prefer to participate when they are more extreme (vis-à-vis the median voter), they may prefer supporting candidates who are ideologically close to them (regardless of the opposition candidate's position), or they may compare the likely policy consequences of their preferred candidate winning to the outcome that will arise if their less preferred candidate wins (relative proximity).

This last mechanism follows from basic spatial models of electoral participation and voting in which individuals evaluate the potential policy consequences of voting (rather than abstaining) or choosing one candidate rather than another (e.g., Downs 1957, Aldrich 1983). Claassen (2007) tests both the extremity and relative proximity accounts using pooled ANES data to explain reported measures of participation, including campaign giving. Building on that effort, we test the additional possibility that individuals prefer candidates who are simply ideologically closer to them. Additionally, we have access to a larger sample of respondents and take advantage of a

¹⁶ This is consistent with work by Jacobs and Page (2005), who find that the mass public's attitudes on foreign policy appears largely unrelated to elite foreign policy preferences.

¹⁷ There are clearly other factors that motivate the decision to give beyond those considered here, such as social networks, etc. This analysis captures one factor of this choice.

¹⁸ The other two categories of donors identified by Francia et al. are investors (those who donate for personal material incentives) and intimates (those who donate for social reasons).

measure of giving that does not rely on self-reports. We now examine in greater detail the different ways in which ideological motives may affect contribution behavior.

One explanation for why more ideologically extreme individuals are more likely to contribute is that extremity leads one to participate more in an effort to pursue nonmedian outcomes, a form of the purposive motivations of ideologues proposed by Francia et al. (2003).¹⁹ If people are more dissatisfied as policies move away from their preferences, then individuals who are more extreme have more to lose if they forgo donating or voting and allow median outcomes to persist.²⁰ For example, liberal donors may give to candidate *L* to encourage her not to move too far to the center in pursuit of votes. At the same time, there is evidence that in the United States both parties pursue non-median policies (Bafumi and Herron 2010), in which case concerns about moderate policies may not be the most salient motivation for contribution behavior.

A second possibility is that it is not extremity and the resulting fear of nonmedian outcomes that drives contribution behavior, but instead how closely a citizen feels a party aligns with her own views. In this account, individuals are more likely to support a party and its candidates when they perceive the party as offering an ideological position close to their own (a loyalty view). Indeed, this account stresses ideological proximity in a way that presupposes voters are somewhat myopic, considering only the fit between their personal preferences and a given party, and not the relative desirability of that party compared to the likely alternative of the other party winning office. For example, liberal donors give to candidate L the more they agree with his policies, regardless of the policies offered by candidate R.

Finally, a third explanation focuses not on the difference between the median voter and more extreme voters or on the ideological proximity of each party, but instead on the fact that electoral competition in the United States is structured by two-party competition. In particular, because the political parties offer competing and relatively divergent policy alternatives, voters do not face a choice between the median voter's preferred policy and their own, or between their preferred party and nothing at all, but between two partisan bundles. This means that for most standard models of policy utility, extreme voters have more to lose from the other party winning office than do centrists. For example, liberal donors compare how much they like the policies of candidate L relative to the policies offered by candidate R to determine whether to give to L.

To illustrate this logic, consider a simple one-dimensional spatial model in which voters have a preferred policy x_i and gain utility $-(x_i-X)^2$ when policy X is implemented. There are two parties, the left and the right, which respectively offer and pursue policies $x_1 = -1$ and $x_r = 1$ if elected. Voters are distributed uniformly on the interval -2 to 2, with a median voter $x_m = 0$.²¹

¹⁹ Green et al. (2015) find suggestive evidence that policy interests motivate donation behavior.

²⁰ Of course, an equilibrium in which only extremists contribute and therefore win on policy grounds may not be sustainable if there are centrist voters.

 $^{^{21}}$ This model abstracts away from the question of where party positions come from or why, *ex ante*, the parties do not converge. In doing so, it also sets aside the question of whether donations are motivated by a desire to shape primary election outcomes.

In this model, it is easy to see that the expected utility loss to a voter of the election being won by the more ideologically distant party is larger when the voter is more extreme. For example, for the median voter, her expected utility is -1 if either party wins office, and so she is indifferent as to who wins. For a voter whose ideal point is the same as the left party, her expected utility is -4 if the right party wins and 0 if the left party wins, which yields a difference of 4. But for a voter whose ideal point is even farther to the left at $x_i = -2$, her utility if the left party wins is -1 but if the right party wins it is -9, a difference of 8. Results are the same if one considers right-leaning voters who face the prospects of a left-wing victor.

In this situation, which voter would be most willing to bear a personal cost to increase the chances that their preferred party wins office?²² Holding all else constant, it is those who have the most to lose if the other party wins instead of their preferred party. So far, we have assumed that voters share common beliefs about their own ideological self-placement and their perceptions of the parties, but if one allows individuals to vary in their assessments both of their own ideological placement and of the positions of the parties, one can estimate each individual's perceived policy loss associated with the more distant party winning.²³ Most simply, setting aside questions of scaling and strategic responses by other voters, if one assumes quadratic policy loss then the cost any voter would be willing to experience now to decide the election would be proportional to $|(x_i-x_r)^2 - (x_i-x_l)^2|$.

Examining this equation provides some clarity for its intuition. Specifically, consider a left-leaning voter who is closer to the left party than the right party $(|x_i-x_l| < |x_i-x_r|)$ and more centrist than the left party $(x_l < x_i < 0)$. What happens to this voter's calculations as the right party moves farther right? That will increase the quantity $(x_i-x_r)^2$, which will increase the value of acting to influence the election. Similarly, if the left party moves closer to the voter, this will decrease $(x_i-x_l)^2$, which also increases the willingness to act now.

We test these competing theoretical explanations for why individuals contribute using statistical models where the outcome variable is whether a registrant is a matched contributor (1 = yes, 0 = no). The first key independent variable is *Distance Farther*² – *Distance Closer*², which is coded as ideological distance to the farther party squared minus distance to the closer party squared.²⁴ Distance to each party is calculated as the absolute value of the difference between the individual's ideological placement of herself and that party, with each placement measured using a 7-point ideology scale ranging from Very Liberal to Very Conservative. To calculate each party's placement, we take the average of the respondent's

 $^{^{22}}$ An alternative phrasing of the question is "which voters are more likely to make an expressive (rather than instrumental) contribution given the stakes they perceive?" In either case, whether the choice is motivated by a desire to influence the election or just to express one's view about it, the central intuition is the same: perceived stakes will increase the benefit of contributing.

²³ For simplicity, this exposition ignores the question of whether individuals differ in their assessments of each party's chances of winning office absent contribution behavior, how contributions influence elections, or the individual cost of contributing.

²⁴ We have also estimated models in which we assume policy loss is linear in the relative distance between the two parties. For the entire sample, as well as for Democrats and Republicans separately, we continue to find evidence that greater expected policy loss is associated with a greater willingness to contribute.

ideological placement of the party and of the party's presidential nominee.²⁵ If a larger expected loss leads to a greater willingness to act, the coefficient on the *Distance Farther*² – *Distance Closer*² variable should be positive. (Below we consider the threat posed by the potential endogenous placement of party locations, which is a potential pitfall for all research [e.g., Claassen 2007] that relies on individual reported ideological placement of the parties.)

To examine the two other theoretical perspectives introduced above, we calculate two additional variables. The first is a measure of the respondent's ideological extremity, coded as *Absolute value of self-placement ideology*. This is a "folded" measure of ideology, with moderates at 0 and very liberal and very conservative individuals at 3. If extremity leads to greater motivation to pursue non-median policies, then the coefficient on this measure should be positive. The second measure is *Distance to closer party*, which is simply the absolute value of the difference between a respondent's own ideological placement and her placement of the ideology of the party closer to her. If proximity encourages participation, the coefficient on distance to closer party should be negative. Finally, a third control variable we discuss below is *Distance between parties*, which is simply the absolute value of the difference between the respondent's ideological placement of each party.²⁶

Table 3 presents results from this analysis. For ease of interpretation, all models are OLS regressions with robust standard errors. We also present parallel Logit models in SI Table S7, from which we calculate the sample marginal effect of a one unit change in the quadratic loss measure. This marginal effect is presented in row eight of Table 3.²⁷ In column (1), we present a baseline model and find that increasing quadratic loss is associated with a greater propensity to contribute (p < 0.01). In columns (2) and (3) we repeat this specification separately for self-identified Democrats (2) and Republicans (3) and find that greater expected loss is associated with more frequent contributions for both groups (p < 0.01).

In terms of magnitude, 7 % of Republicans are contributors in this dataset. Holding constant a Republican's own self-placement at 6 (Conservative) and their placement of the Republican Party at 7 (Very conservative), we can assess how their predicted probability of contributing changes as they perceive the Democratic party as becoming more liberal. When they perceive the Democrats as moderate (at 4), their quadratic loss variable is 3, and they are predicted to be 0.3 % points more likely to contribute than if they perceived the Democrats and Republicans as equally distant from their own ideology. By contrast, if they perceive that the Democrats are

²⁵ We obtain similar results if we instead use either the party or candidate placement measures. Results are available upon request.

²⁶ These measures rely on different scalings of related spatial placement measures. As such, this raises the possibility of collinearity, which will tend to inflate the standard errors of regression estimates and make it hard to find statistically significant results. We present a full correlation matrix for the different spatial measures in SI Table S6.

²⁷ Angrist and Pischke (2009, p. 103) discuss the relative merits of OLS versus limited dependent variables models and argue that OLS and limited dependent variables models (e.g., Logit) produce very similar point estimates for the marginal effects of explanatory variables. In our case, OLS and logit estimates of the influence of squared distance are very similar.

	(1) Spatial model	(2) Democrats	(3) (4) Republicans Robustness: with self- placement, Democrats	(4) Robustness: with self- placement, Democrats	(5) Robustness: with self- placement	(6) Robustness: with distance to closer, Democrats	(7) Robustness: with distance to closer, Republicans	(8) Robustness: with party polarization, Democrats	 (9) (10) Robustness: Robustnes with party saturated polarization, model, Republicans democrats 	(10) Robustness: saturated model, democrats	(11) Robustness: saturated model, republicans
(Distance to Farther Party) ² - (Distance to Closer Party) ²	0.001 [0.0001]***	0.003 [0.0003]***	0.001 [0.0002]***	0.002 [0.0004]***	0.002 [0.0003]***	0.003 [0.0003]***	0.001 [0.0002]***	0.004 [0.0003]***	0.001 [0.0003]***	0.004 [0.0005]***	0.003 [0.0005]***
Absolute value of self placement ideology (0–3)				0.011 [0.0036]***	-0.006 [0.0041]					0.000 [0.0043]	-0.020 [0.0047]***
Distance between parties (0–6)								-0.011 [0.0020]***	-0.004 [0.0018]**	-0.011 [0.0024]***	-0.008 [0.0021]***
Distance to closer party (0–6)						0.007 $[0.0032]^{**}$	0.008 [0.0028]***			0.007 $[0.0033]^{**}$	0.010 $[0.0028]^{***}$
Constant	-0.055 [0.0120]***	-0.099 [0.0162]***	-0.044 [0.0203]**	-0.105 [0.0164]***	-0.042 [0.0203]**	-0.106 [0.0164]***	-0.052 [0.0202]***	-0.073 [0.0166]***	-0.031 [0.0214]	-0.079 [0.0174]***	-0.024 [0.0215]
Observations	37,010	16,939	16,406	16,939	16,406	16,939	16,406	16,939	164,06	16,939	16,406
Demographic indicators? [detailed in note below]	Ies	ICS	ICS	ICS	Ics	I CS	ICS	ICS	ICS	ICS	ICS

 Table 3
 Predicting contributor status using perceptions of election stakes, multiple regression

Table 3 continued											
	(1) Spatial model	(2) Democrats	(2) (3) (4) (5) (6) Democrats Republicans Robustness: Robustness: Robustness: with self- with self- with self- with self- with self- placement, placement, placement distance to Democrats Democrats Closer,	(4) Robustness: with self- placement, Democrats	(5) Robustness: with self- placement	(6) Robustness: with distance to closer, Democrats	(7) Robustness: with distance to closer, Republicans	(8) Robustness: with party polarization, Democrats	(7)(8)(9)(10)Robustness:Robustness:Robustness:Robustnesswithwithpartywithpartydistancepolarization,polarization,model,to closer,DemocratsRepublicansdemocrats	(10) Robustness: saturated model, democrats	(11) Robustness: saturated model, republicans
Logit marginal effect of 1 unit change in quad dist. measure (from SI Table <i>S7</i>)	0.001	0.004	100.0	0.003	0.002	0.004	0.001	0.004	0.002	0.005	0.004
\mathbb{R}^2	0.090	0.130	0.060	0.130	0.060	0.130	0.060	0.130	0.060	0.130	0.060
Mean of DV	0.110	0.150	0.070	0.150	0.070	0.150	0.070	0.150	0.070	0.150	0.070
SD of DV	0.310	0.360	0.250	0.360	0.250	0.360	0.250	0.360	0.250	0.360	0.250
* Significant at 10 %; ** significant at 5 %; *** significant at 1 %. Robust standard errors in brackets. Weighted analysis	%; ** signifi	cant at 5 %; *	** significant	at 1 %. Robu	ist standard ei	rrors in brack	ets. Weighted	analysis			
Dependent variable is whether respondent is a matched contributor $(1 = yes, 0 = no)$. Indicators for each category of income, education, gender, household union	is whether i	respondent is .	a matched cor	ntributor (1 =	= yes, $0 = no$). Indicators	for each cate	gory of incon	ne, education,	gender, hous	schold union

â 1.0 5 Dependent variable is writerici respondent is a matched controlled (1 = membership, race, age in decades, and importance of religion suppressed

21

as extreme as their own party (located at 1), their quadratic loss score is 24 and they are predicted to be 2.3 points more likely to contribute than if they were equidistant from the two parties, all else equal. So, moving from perceiving the Democrats as moderate to extreme increases their predicted contribution rate by 2.3 points, all else equal, which represents a 33 % increase in the predicted rate of contributing over the baseline rate for Republicans. Calculations for Democrats are similar in proportional terms.²⁸

In columns (4) and (5), we assess whether these results are robust to including a measure of individual ideological extremity, the key theoretical predictor in the model where extremists are seeking to prevent median outcomes. The variable has inconsistent signs for the two groups, suggesting extremism alone does not explain contribution behavior. Including this measure diminishes the coefficient for the *Distance Farther*² – *Distance Closer*² variable for Democrats and increases it for Republicans, but in both cases the quadratic loss variable remains significant (p < 0.01). Focusing on the new variable, for Democrats moving from moderate to extremely liberal is associated with a 3 point increase in the predicted probability of contributing (p < 0.01), but for Republicans the effect is negative and not statistically significant.

In columns (6) and (7), we incorporate the measure of *Distance to closer party*, the key variable in the proximity model. Including this measure has almost no effect on the estimated coefficient for *Distance Farther*² – *Distance Closer*². However, the coefficient on *Distance to closer party* is *positive*, which means citizens are less, not more, likely to give when they perceive the closest party as ideologically similar to them.

Similarly, in columns (8) and (9) we consider the possibility that perceived polarization affects contributions (it could be that polarization causes people to believe the stakes of the election are higher, which would tend to increase participation, or that it instead causes them to believe neither party will do a good job of representing their views, which could alienate them and therefore diminish participation). Greater perceptions of polarization, measured using *Distance between parties*, are associated with fewer contributions for both groups, but *Distance Farther*² – *Distance Closer*² remains positive and statistically significant for members of both parties.

Finally, in columns (10) and (11) we include both *Distance Farther*² – *Distance* $Closer^2$ and the other measures and find that the quadratic loss variable remains significant (and, in fact, has a larger effect than in the earlier specifications). The effect of one's own perception of self-ideological extremity is now negative for both Democrats and Republicans (although it is statistically significant only for the latter), providing little evidence for the view that more extreme individuals are intrinsically more engaged. As before, the proximity account finds little support: Greater distance to the closer party increases, rather than decreases, rates of giving.

 $^{^{28}}$ For a Democrat whose self-placement is liberal and perceives the Democratic Party as very liberal, moving from perceiving the Republican Party as moderate to perceiving it as very conservative increases the predicted rate of contribution by 6.9 points. This is a proportional increase of 46 % relative to the baseline for Democrats in this sample.

Finally, polarization continues to be associated with fewer contributions, supporting the alienation account.

One limitation of this analysis is that we lack a source of exogenous variation in perceptions of the ideological positions of the two parties. Consequently, it could be that individuals who are motivated to give inflate reported divergence from their least preferred party or minimize reported divergence from their more preferred party compared to those who do not give. This pattern could also arise through a process of reverse causality if engagement with politics leads to perceptions of the greater polarization of the parties.²⁹ These are important and well-understood weakness of all observational analysis of survey data. We consider one robustness test to assess the importance of the first potential sources of bias, but acknowledge that survey data cannot provide conclusive evidence about causal relationships.

Specifically, to address the concern about inflating self-reported divergence to justify donations, we ran our models separately for each party and each category of ideological self-placement. This holds fixed where each individual places herself, and estimates relationships using only variation in relative placement of the two parties within each category of self-placement and partisanship. For Republicans, we find largely consistent patterns, with the largest positive effect of quadratic loss for Republicans who place themselves as "middle of the road" or "somewhat conservative" (differences in these point estimates across groups are not statistically significant). We also find the largest effect of the quadratic loss measure among Democrats who place themselves as "middle of the road," but we find an unexpected and statistically significant negative coefficient for "somewhat conservative" Democrats. Again, however, few of the differences across individual ideology are statistically significant.

Overall, these results provide new evidence that individuals who perceive more is at stake in a given electoral environment are more likely to make campaign donations. Contributors are more extreme on average than non-contributors, but it does not appear to be extremism itself that motivates participation. Nor is it that those who believe one party offers positions closer to their own are more likely to give (instead, ideological proximity alone is associated with reduced giving). Finally, simply believing that the parties offer stark choices, all else equal, reduces giving. Instead, it is individuals who perceive they have much more to lose if their less-preferred party wins relative to their preferred party who are most likely to give.

Ideology of Recipient Candidates is a Weak Predictor of Contributor Ideology

The final question we examine is whether the ideologies of the candidates and groups that an individual gives to predict that individual's personal ideology. In particular, the revealed-preference model underlying the construction of the

²⁹ Such a pattern could also arise through measurement error, if less engaged individuals give less and also provide more centrist assessments of the party's positions.

CFscore (Bonica 2014) and similar measure of individual ideology (Hall 2015, Hall and Snyder N.d.) assumes that a candidate's pattern of support is a measure both of the candidate's ideology and the ideology of those who give to the candidate (e.g., Bonica 2014, p. 369, Eq. 1). These measures appear to provide reasonable estimates of candidate ideology, but whether they also provide useful estimates of contributor

ideology is unknown. To date, the literature lacks a direct measure of donors' policy ideology. If contribution patterns reveal individual ideology, it would allow for indirect observation of citizen ideology, an important factor in many theoretical accounts of political behavior.

To answer this question, we again take advantage of the CCES's battery of policy questions to estimate a granular measure of individual-level ideology. This is the factor analysis policy ideology scale we introduced above. We examine the relationship between individual-level policy ideology and individual-level (dynamic) CFscores in Fig. $2.^{30}$ Panel A plots the density of individual-level CFscores among matched contributors in our dataset by self-identified partisanship. These data are bimodal, with Democrats clustered on the left and Republicans on the right. (The small number of "Others" [Independents and third party identifiers] who are in the contributor data, about 4 % of the sample, tend slightly liberal.)

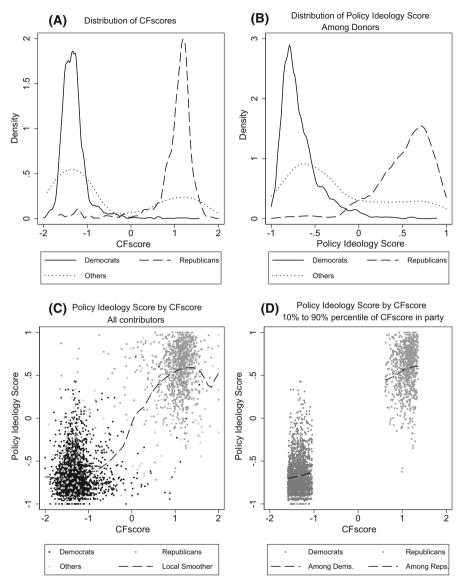
In panel B, we plot the density of individual-level policy ideology for those respondents who appear in Panel A. As with the CFscores, this measure is also highly bimodal, with Democrats clustered on the left and conservatives on the right. If both measures are bimodal, is it also the case that more ideologically extreme (moderate) members of each party are also estimated to have more extreme (moderate) CFscores? In Panel C, we plot the individual-level relationship between the CFscore measure of ideology and the policy ideology scale.

Each point matches a respondent's policy ideology score (vertical axis) to their CFscore (horizontal axis). Democrats are plotted as black circles, Republicans as grey squares, and "Others" as light grey triangles. As one would expect, Democrats are largely clustered in the lower left quadrant and Republicans mostly in the upper right. Additionally, the overall relationship between these two variables is upward sloping, as is shown by dashed black line which is a locally weighted polynomial smoother of the individual-level relationship between the CFscore and policy ideology.

As is also clear from the plot, the individual-level relationship between the CFscore and policy ideology is relatively modest within parties. That is, among the Democrats clustered in the lower left portion of the figure, large changes in CFscores are related to only small changes in policy ideology. Thus, the slope of the polynomial smoother is nearly flat in the lower left quadrant of the figure, increases in the middle of the figure (where there are very few moderate CFscores), and then is again flat in the upper right quadrant.³¹ Using all of these data, the within-party

³⁰ Because our measure of policy ideology is taken in October 2012, we also created a CFscore for each respondent that is specific to the year 2012. Specifically, we calculated a dollar-weighted average CFscore of the candidates to which the donor gave in the 2012 cycle and use this as the donor's 2012 CFscore for robustness analysis that appears in the SI. We find similar results with this 2012 CFscore.

³¹ If instead of conditioning on party we simply divided the CFscores into 3 bins, with one cut at -0.5 and another at 0.5, we see similar results. Within the bottom and top bins, CFscores are only weakly related to variation in individual-level policy ideology (r = 0.14 in both conditions).



Note: Partisans include leaners. See text for details. Source: Merged CCES/DIME.

Fig. 2 Relationship between policy ideology and CFscore by party

correlation between the CFscore and policy ideology is r = 0.42 for Republicans and r = 0.22 for Democrats. Even this 0.42 correlation for Republicans is driven by a handful of liberal self-identified Republicans (5.4 % of Republican contributors have CFscores < 0). The correlation between ideology and CFscore for Republican contributors with a CFscore > 0 is r = 0.17. For Democrats with a CFscore < 0, the correlation between policy ideology and CFscore is 0.10. In panel D we plot only the data for Democrats and Republicans after restricting attention to cases with CFscores between the 10th and 90th percentiles in each party to lessen the influence of outlying cases. Among Democrats, the middle 80 % of CFscores (between the 10th and 90th percentiles) range from -1.53 to -1.14, and for Republicans from 0.61 to 1.36. For Democrats, moving from the bottom 10 % of plotted CFscores to the top 10 % is predicted to increase policy ideology by 0.057 units, which is about 25 % of a standard deviation of ideology for this sample. For Republicans, a comparable shift increases predicted ideology by about 0.13 units, or about one half of a standard deviation for this sample.

We have also examined whether this result is affected by measurement error. Perhaps for individuals who give few contributions, the CFscore is a less valid measure of ideology. Similarly, the CFscore may be less accurate in a presidential election year when most donations go to presidential candidates, particularly the frontrunners for each party. In SI Figure S10 we reproduce panel D of Fig. 2 separately for donors who made only one donation, donors who made 2–4 donations, and donors who made 5 + donations in 2012, as well as for individuals based only on their 2010 (non-presidential race) contributions. With the possible exception of Republicans who gave 5 or more donations in 2102, we do not find any evidence of stronger relationships between the CF score and policy ideology across the frames.

Overall, within party, and particularly for Democrats, variation in CFscores does not appear to explain much variation in our measure of policy ideology.³² The key implication of this finding is that in comparing among the partisans who give to their party's candidates it may be incorrect to presume that the set of candidates one gives to is a valid indicator of the individual's ideology as measured by their policy opinions. Contributions clearly distinguish which party the contributor supports, but within each party coalition, contributors' policy ideology is only somewhat related to the ideology one would estimate based upon the candidates to which they donate and the set of donations those candidates receive from other groups and individual donors. These conclusions are somewhat tentative given the various potential sources of measurement error in merging and estimation, and in particular given issues in comparing scaled ideology based on different items, but they suggest more work is merited before viewing ideology imputed from donation behavior as reliable estimates of individual-level policy preferences.

Discussion and Conclusion

Money is the lifeblood of political campaigns, but our understanding of the population of contemporary donors and how they are different from others who participate in the political process is somewhat limited. In this paper, we present novel survey data merged to administrative records about who contributes and votes

³² We have also replicated this analysis using different outcome measures: Approval for Obama minus Approval for Congress and self-placement ideology. Self-placement ideology helps mitigate concerns about differences in statistical procedures to scale ideology generating part of the discrepancy. For both measures, we see large differences between the parties, but within parties, the CFscore measure does not predict much observed variation. See Figure S12 in the SI for analysis using self-reported ideology.

to understand the demographic and ideological representativeness of the "donorate" relative to the larger potential electorate of registered voters. We show that donors are less demographically diverse, older, wealthier, and better educated than their fellow partisans. Furthermore, they participate at higher rates and hold more extreme policy views.

We find that the perceived stakes of the election are more closely correlated with the choice to donate than are ideological extremity per se or ideological proximity to a preferred candidate. Potential donors appear to make the choice to contribute in light of the dynamics of two party competition, and use their contributions as complements to participation in elections. This result is a different conclusion than in Barber et al. (2016), who find that donors are more likely to contribute to ideologically (or vocationally) proximate candidates. A variety of differences between the studies may generate these different conclusions. Probably most importantly, we analyze whether or not an individual from the full population donates at all, while Barber et al. analyze which Senate candidate among many a donor gives to, conditional on making at least one donation. Because non-donors are not included in their sample, they cannot examine this initial choice to contribute. More minor differences may also be important, such as different sets of survey questions fielded and analyzed. Future work should field questions of donors and non-donors from both studies to try to evaluate when donors are motivated by stakes (relative positions of two candidates) versus when donors are motivated by affinity toward single candidates or instrumental motivations.

Of course, our analysis provides insights only into a particular subset of donors (those who participate in the CCES and are successfully matched to their contribution records in DIME). As such, they are subject to important concerns about representativeness and whether the patterns we observe in this context would replicate in other elections and years. These caveats aside, there is no reason this basic approach cannot be repeated, potentially providing a panel analysis of campaign contributions over time matched with survey data. Indeed, the value of this analysis may be such that it should become standard practice to merge not just voting behavior, but also administrative records of campaign giving, to large scale survey efforts. As this analysis shows, in doing so we can obtain new insights into the composition of the donor base, their policy views, and apparent motivations for giving.

Moreover, it may be useful to conduct similar analysis not just in the United States, but also in other settings where both voting and contribution records are publicly available. While such approaches have previously been confined to the United States, understanding whether similar issues of representativeness arise in other democratic governments is an important issue in comparative political economy and comparative political behavior. Any such effort will have to grapple with the same concerns about subject privacy that we address, but it is precisely because of the value of these data that those concerns are likely to arise.

Although our findings on demographics confirm earlier research, one unique advantage of our data is that these measures of participation and contribution behavior are not subject to the potential reporting biases associated with selfreported voting and contributing. Additionally, our data allow us to assess the magnitudes of the differences between donors and non-donors compared to differences by voter participation. Further, because comparisons are made within a survey with constant time and mode of interview of both donors and non-donors, we can rule out differences in survey setting or time of interview as generating apparent differences between the two populations.

The fact that moderates are less likely to give remains a puzzle if donations are instrumental. In a setting where parties pursue non-median policy outcomes and contributors are extreme relative to voters, centrists would seem to have an incentive to donate. Put differently, if one's benchmark model is a simple median voter account in which parties are competing for the median voter, why are centrists ignored in many cases and why do they not respond by pulling the parties toward them? Our analysis of why people give provides one explanation: Donation behavior responds more to relative than to absolute policy positions. Centrists thus perceive less at stake than their more extreme counterparts, who view the chances of their less preferred party winning office with greater concern. That is, so long as the parties are roughly equally distant from the median voter, centrists have less to lose from one party winning rather than the other by sitting on the sidelines compared to more extreme voters who perceive one party as offering a far superior policy bundle. Thus, a simple spatial model of the expected ideological cost of forgoing voting explains giving patterns better than measures of respondent extremity, proximity to one party, or perceptions of polarization.³³

Our finding that donations appear to be motivated by perceptions of the stakes in the election outcome also has implications for the way in which candidates and campaigns seek to raise money. Centrists, for example, are not useful targets unless they perceive one party as substantially more extreme. In fact, across all levels of voter ideology, our findings imply that those seeking donations have an incentive to exaggerate the perceived extremity of the other party. It is this incentive that may motivate the statements made by candidates in closed-door fundraisers that are occasionally leaked to the public, e.g. Mitt Romney's discussion of the "47 percent" or Barack Obama's denigration of rural voters who "cling to guns or religion or antipathy toward people who aren't like them." These statements may be conscious attempts to make contributors feel that the threat of the other party winning office is too large to simply sit on the sidelines.

Finally, this work also implies some caution about using measures of individuallevel ideology derived from which candidates a citizen supports with her campaign donations. While patterns of donations *across* the parties seem to accurately capture partisan divides, within parties these patterns are weak. In other words, factors apart from policy ideology appear to explain variation in which candidates a citizen supports, suggesting that donation data may not be particularly valuable to impute individual-level policy ideology.

For those concerned with understanding the dynamics of contemporary American party politics, our results offer mixed evidence. On the one hand, that centrists are

³³ An alternative explanation for the greater likelihood of donations from more extreme individuals is candidate fundraising behavior (see, e.g., Johnson 2010). Candidates at the fringes of the ideological spectrum may have a harder time raising funds from more pragmatic PAC or corporate donors, and so instead make efforts to reach out to ideological individual candidates.

underrepresented among donors is one potential explanation for the ideological pull of the parties toward the extremes. On the other hand, if one is concerned that those with money are inherently more conservative than those with less resources, finding that Democratic contributors are more liberal than other Democrats should reduce fears that the party of the left is constrained in its policy positions by the views of its donors.

References

- Ahler, D. J., & Broockman, D. E. (N.d.). "Does Polarization Imply Poor Representation? A New Perspective on the 'Disconnect' Between Politicians and Voters." Working paper, Stanford Graduate School of Business, retrieved at https://people.stanford.edu/dbroock/sites/default/files/ ahler_broockman_ideological_innocence.pdf.
- Aldrich, J. (1983). A Downsian spatial model with party activism. American Political Science Review, 77, 974–990.
- Angrist, J. D., & Pischke, J.-S. (2009). Mostly harmless econometrics. Princeton: Princeton University Press.
- Ansolabehere, S. 2012. COOPERATIVE CONGRESSIONAL ELECTION STUDY, 2012: COMMON CONTENT. [Computer File] Release 1: April 15, 2013. Cambridge, MA: Harvard University [producer] http://cces.gov.harvard.edu.
- Bafumi, J., & Herron, M. C. (2010). Leapfrog representation and extremism: A study of American voters and their members of Congress. *American Political Science Review*, 104(3), 519–542.
- Barber, M. 2014a. "Access, Ideology, or Both? Why PACs and Individuals Give Money." Working paper, Brigham Young University.
- Barber, M. 2014b. "Representing the Preferences of Donors, Partisans, and Voters in the U.S. Senate." Working paper, Brigham Young University.
- Barber, M., Canes-Wrone, B., & Thrower, S. (2016). "Sophisticated Donors: What Motivates Individual Campaign Contributors?" Forthcoming American Journal of Political Science, available at http:// michaeljaybarber.com/research/.
- Bartels, L. (2008). Unequal democracy: The political economy of the new gilded age. Princeton: Princeton University Press.
- Bonica, A. (2013). Database on Ideology, Money in Politics, and Elections: Public version 1.0 [Computer file]. Stanford, CA: Stanford University Libraries. http://data.stanford.edu/dime.
- Bonica, A. (2014). Mapping the ideological marketplace. *American Journal of Political Science*, 58(2), 367–386.
- Brady, H. E., Verba, Sidney, & Schlozman, K. L. (1995). Beyond SES: A resource model of political participation. *American Political Science Review*, 89(2), 271–294.
- Brown, Jr, Clifford, W., Hedges, R., & Powell, Lynda W. (1980). Belief structure in a political elite: Contributors to the 1972 presidential candidates. *Polity*, 13(1), 134–146.
- Brown, C. W, Jr, Clifford, W., Powell, L. W., & Wilcox, C. (1995). Serious money: Fundraising and contributing in presidential nomination campaigns. Cambridge: Cambridge University Press.
- Carroll, R., Lewis, J. B., Lo, J., Poole, K. T., & Rosenthal, H. (2009). Measuring bias and uncertainty in DW-NOMINATE ideal point estimates via the parametric bootstrap. *Political Analysis*, 17(3), 261–275.
- Claassen, R. L. (2007). Campaign activism and the spatial model: getting beyond extremism to explain policy motivated participation. *Political Behavior*, 29(3), 369–390.
- Downs, A. (1957). An economic theory of democracy. New York: Harper Collins.
- Fowler, L. L., & McClure, R. D. (1990). Political ambition. New Haven: Yale University Press.
- Francia, P. L., Green, J. C., Herrnson, P. S., Powell, L. W., & Wilcox, C. (2003). The financiers of congressional elections: investors, ideologues, and intimates. New York: Columbia University Press.
- Francia, P. L., Green, J. C., Herrnson, P. S., Powell, L. W., & Wilcox, C. (2005). Limousine liberals and corporate conservatives. *Social Science Quarterly*, 86(4), 761–778.

- Gilens, M. (2012). Affluence and influence: Economic inequality and political power in America. Princeton: Princeton University Press.
- Grant, J. T., & Rudolph, T. J. (2002). To give or not to give: Modeling individuals' contribution decisions. *Political Behavior*, 24(1), 31–54.
- Green, D. P., Krasno, J. S., Panagopoulos, C., Farrer, B., & Schwam-Baird, M. (2015). Encouraging small donor contributions: A field experiment testing the effects of nonpartisan messages. *Journal of Experimental Political Science*, 2(2), 183–191. doi:10.1017/XPS.2015.1.
- Hall, A. B. (2015). What happens when extremists win primaries? American Political Science Review, 109(1), 18–42.
- Hall, A. B., & Snyder, J. M. (N.d.). "Candidate Ideology and Electoral Success." Working paper, Harvard University, available at https://dl.dropboxusercontent.com/u/11481940/Hall_Snyder_ Ideology.pdf.
- Huber, G. A., & Arceneaux, K. (2007). Identifying the persuasive effects of presidential advertising. *American Journal of Political Science*, 51(4), 957–977.
- Jacobs, L. R., & Page, B. I. (2005). Who influences U.S. foreign policy? American Political Science Review, 99(1), 107–123.
- Jacobson, G. C. (1978). The effects of campaign spending in congressional elections. American Political Science Review, 72(2), 469–491.
- Johnson, B. (2010). Individual contributions: A fundraising advantage for the ideologically extreme? American Politics Research, 38(5), 890–908.
- LaRaja, R., & Schaffner, B. (2015). Campaign finance and political polarization: When purists prevail. Ann Arbor: University of Michigan Press.
- Layman, G. C., Carsey, T. M., Green, J. C., Herrera, R., & Cooperman, R. (2010). Activists and conflict extension in American party politics. *American Political Science Review*, 104(2), 324–346.
- Lipsitz, K., & Panagopoulos, C. (2011). Filled coffers: Campaign contributions and contributors in the 2008 elections. *Journal of Political Marketing*, 10(1–2), 43–57.
- Panagopoulos, C., & Bergan, D. (2006). Contributions and contributors in the 2004 presidential election cycle. *Presidential Studies Quarterly*, 36(2), 155–171.
- Romer, T., & Snyder, J. M, Jr. (1994). An empirical investigation of the dynamics of PAC contributions. *American Journal of Political Science*, 38(3), 745–769.
- Schattschneider, E. (1960). *The semisovereign people: A realist's view of democracy in America*. Rinehart and Winston: Holt.
- Vavreck, L. (2007). The exaggerated effects of advertising: The dangers of self-reports. *Quarterly Journal of Political Science*, 2(4), 325–343.