

Representing the Preferences of Donors, Partisans, and Voters in the U.S. Senate*

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Abstract

Who do legislators best represent? This paper addresses this question by investigating the degree of ideological congruence between senators and constituents on a unified scale. Specifically I measure congruence between legislators and four constituent subsets—donors, co-partisans, supporters, and registered voters. To estimate the preferences of these groups I use a large survey of voters and an original survey of campaign contributors that samples both in- and out-of-state contributors in the 2012 election cycle. I find that senators' preferences reflect the preferences of the average donor better than any other group. Senators from both parties are slightly more ideologically extreme than the average co-partisan in their state and those who voted for them in 2012. Finally, senators' preferences diverge dramatically from the preference of the average voter in their state. The degree of divergence is nearly as large as if voters were randomly assigned to a senator. These results show that in the case of the Senate, there is a dearth of congruence between constituents and senators—unless these constituents are those who write checks and attend fundraisers.

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1 Introduction

How well do legislators represent their constituents? This is a central question in the study of democratic politics. Over the last several decades, numerous theories and empirical tests of these theories have argued over the degree to which legislators represent the preferences of their constituents (e.g. Miller and Stokes (1963), Fenno (1978), Achen (1978), Gilens (2005), Butler and Nickerson (2011)). Scholars have noted that legislators may pay closer attention to the preferences of particular groups of constituents, such as the median voter (Downs, 1957), the wealthy (Gilens, 2012; Bartels, 2010), or fellow partisans (Brady, Han, and Pope, 2007). Furthermore, recent research suggests that legislators pay little attention to the preferences of constituents altogether, instead taking positions that are far more extreme than even their most partisan supporters (Bafumi and Herron, 2010). In this paper, I provide a first look at the degree of congruence between the voting behavior of legislators and the preferences of a group of people who exert substantial influence over the electoral process: campaign contributors.

To measure the preferences of donors, I use data from an original survey of contributors to re-election seeking senators in the 2012 general election. This survey provides a unique and previously unavailable in-depth look at the preferences and demographics of a difficult-to-reach population that scholarship as well as conventional wisdom suggests wields significant influence in government (Page, Bartels, and Seawright, 2013). In the survey, I ask donors various policy questions which I use to estimate their ideological preferences on a unified scale with the preferences of voters and senators.

While studies of representation have noted the importance of donors' preferences, few have

systematically surveyed the preferences of these contributors.¹ Those who have often fail to fully consider the unique geography of the donor population. While voters can only select candidates who appear on their local ballot, donors are free to support any candidate they want, regardless of their geographic location. This means that a legislator's "financial constituency" can span the entire country, and in fact, most legislators raise a significant portion of their money from donors who do not reside in their district or state. Thus, surveys that ask whether or not a respondent contributed money often do not allow researchers to identify exactly who they supported financially. Moreover, surveys that ask about donating behavior rely on self-reported indicators of donations rather than validated donation amounts. Finally, large surveys of voters are not intended to accurately represent the population of contributors, and thus the donors sampled therein are not representative of the population of contributors. I address these problem by creating a survey that uses validated donation behavior and is stratified by senator, rather than by state or district. Thus, for each senator who sought reelection in 2012, I sample respondents from both inside and outside of their state. These features provide a more accurate picture of the composition and preferences of each legislators' donors.

To compare the degree to which donors' preferences align with the preferences of legislators and voters, I incorporate additional survey data and roll call voting and estimate the preferences of these different groups of people on a unified ideological scale. I compare donors' ideal points to the preferences of non-donating voters using the 2012 installment of the Cooperative Congressional Election Study, a

¹Bafumi and Herron (2010) and Francia et al. (2003) are notable exceptions. While these studies provide a first look at the preferences of contributors, their data do not allow them to identify which donors gave to which legislators, only that the respondents contributed money to a candidate for office. Thus, the donors in the survey are often not representative of the population of interest.

large-n survey of American voters (CCES, 2012).² I compare the preferences of donors and voters to the ideal points of legislators, which I estimate from the votes they cast in the 112th Congress.

Based on the joint ideological scaling of donors, voters, and senators, this paper reports three main findings. First, I find that legislators closely represent the ideology of campaign contributors. Among both Republicans and Democrats, senators are ideologically closest to their contributors, further from their co-partisans (voters who share the party of their legislator), and further still from the average voter. Moreover, I show that demographically, senators and contributors are nearly identical to one another in levels of income and wealth, while the average voter has nowhere near the financial resources of these two groups. Second, in contrast to the recent findings of Bafumi and Herron (2010), I show that while legislators are ideologically polarized, they are not alone in their polarized positions. In 50% of states where incumbent senators stood for reelection, I find that the median donor is *more* extreme than the senator they contributed to. In more than 2/3 of the states, more than 1/3 of donors are more ideologically extreme. Simply put, if donors have the ability to influence the types of people elected to office, the direction of this influence is likely towards the ideological extremes. Finally, I show that senators from both parties are much more ideologically extreme than the median voter in their state. The degree of distance between senators and the typical voter is often as large as if voters had been randomly assigned a senator. Given that contributors are a small minority of the population (< 5%), these results could be worrisome for democratic governance and policy making.

²From this point forward, unless otherwise specified, when referring to voters, I mean *non-donating* voters. Contributing voters I refer to as donors or contributors.

2 Who Do Legislators Best Represent?

In this section I describe various reasons why we may expect legislators to hold positions that are similar to campaign contributors. These expectations lead to the hypothesis that legislators will closely heed the preferences of donors, who are ideologically extreme. I then review several alternative explanations of legislator ideology. Each explanation yields different empirical predictions, which I proceed to test in Section 3.

Contributors: When discussing contributors, I focus here on individual donors since they comprise the largest share of money in congressional elections, making up more than half of all money contributed in the 2012 election cycle. Recent work demonstrates that individual donors are ideologically motivated when deciding whom to support Bonica (2014), and that they give more money to candidates that are closer to them ideologically. Similar to spatial models of voter decision-making that assume voters cast their ballot for the most proximate candidate (Downs, 1957), individual donors appear to allocate larger donations to candidates who are closer to their ideological position. Stone and Simas (2010) find this to be the case and show that increasingly extreme candidates raise larger amounts of money from similarly ideological and polarized donors.

Legislators spend a significant portion of their time fundraising and place a high priority on raising significant sums of money (Francia and Herrnson, 2001; Powell, 2012). There are a number of reasons why legislators would devote such a significant proportion of their time raising money. One of legislators' primary objectives is to win reelection (Mayhew, 2004), and fundraising is an important component of a successful election (or reelection) strategy. Conventional wisdom dictates that having more money to spend in a campaign provides candidates an electoral advantage (Stone and Simas,

2010). This advantage may come through persuading undecided voters or mobilizing core supporters in a variety of ways. Better funded candidates can advertise more often, canvas and mobilize a greater number of supporters, send more direct mail, and hire more and better trained campaign staff. All of these expenditures have been shown to benefit candidates electorally (Brader, 2005; Green and Gerber, 2008; Hillygus and Shields, 2009; Levendusky and Darr, 2013; Masket, 2009).

Additionally, fundraising is a component of the electoral process that candidates can continuously measure and control. Candidates are constantly aware of the amount of money they have raised and can work to increase their financial reserves through additional fundraising for months and years leading up to election day. This is one of only a few mechanisms by which candidates can continually work to improve their electoral prospects. Finally, even if candidates are relatively certain of their electoral success in the most immediate election cycle, far sighted candidates may raise money in the short term as insurance against the possibility of difficult campaigns in years to come. There may also be a variety of non-electoral goals that legislators may achieve through raising large sums of money. Candidates can use their war chests to signal to voters, potential challengers, the media, and other legislators their quality and ability as a viable candidate (Leal, 2003).

Given these factors, the ideology of contributors should be an ever-present concern for candidates, and we would therefore expect candidates to hew closely to the preferences of their financiers.³ Several formal theoretic treatments of this question find such equilibrium outcomes (Campante, 2011; Cameron

³An important consideration is how donors could be influencing legislative polarization over time. While answering this question is beyond the scope of this study, which focuses on the current ideological landscape, interested readers may consult Persily (2015) which discuss the increasing influence of individual contributors over the last several decades.

and Enelow, 1992).⁴ Given the primacy of ideological agreement when deciding who to support, deviations from the preferences of contributors increase the possibility that donors may abandon the incumbent for another, more ideologically suitable candidate (Francia et al., 2005; Bonica, 2014; Magleby, Goodliffe, and Olson, 2015). Furthermore, while candidates also raise money from access-oriented interest groups, in recent years the overwhelming majority of Senators' money comes from individual contributions (Jacobson, 2013).⁵

2.1 Alternative Constituencies

In this section I discuss other sources of influence over the ideology of legislators. In later sections I use a variety of data to test the empirical predictions of each of these theories along with the influence of donors discussed above.

Primary Electorate: Legislators who lose their party's nomination in a primary election are either barred from running in the general election, or face significant disadvantages after losing the party's nomination. Thus, we may expect legislators to cater to the preferences of primary voters, who are ideologically extreme compared to voters who only turn out in general elections (Fiorina, 1999). The literature however, is mixed as to the degree to which primary elections cause legislators to be ideologically extreme. Brady, Han, and Pope (2007) find that primaries do have a polarizing effect. They show that moderate candidates perform worse in primary contests. This suggests that polarization

⁴However, see (Baron, 1994) for a model with equilibrium predictions to the contrary.

⁵For example, incumbent Republicans and Democrats in the 2012 Senate campaign raised 71% and 69% of their total money from individual donors respectively (http://www.cfinst.org/pdf/vital/VitalStats_t8.pdf).

of candidates may be due to candidates choosing to locate near the median of their primary electorate (Aldrich, 1983; Owen and Grofman, 2006). However, recent work suggests that more open primary systems designed to encourage moderate, independent voters to participate have little effect on legislators' ideologies (Bullock and Clinton, 2011; McGhee et al., 2014). A possible reason for this null effect could be the fact that ideological donors remain a constant influence regardless of the composition of the primary electorate. Thus, candidates still face financial incentives to remain extreme regardless of the primary system in their state. We can further evaluate these claims by looking at the ideological congruence between legislators and voters of the same party since these voters are the majority of the primary electorate.

Median Voter: Many spatial models of elections begin with Downs' (1957) model of party ideology. This class of models predicts that when voters select the candidate who is most similar to them ideologically, the winning candidate will hold the same ideological position as the median voter. Yet, numerous studies find that this basic model of candidate positioning does not hold in practice. Intervening factors such as partisan loyalties (Bartels, 2000), persuasion efforts by candidates (Ashworth, 2006), and non-ideological voters (Tausanovitch and Warshaw, 2014) can allow candidates to take ideologically extreme positions. We can directly investigate these claims by looking at the degree of ideological congruence of legislators and the median voter in their state.

Several theoretical and empirical treatments of this question find that candidates can perform better by raising more money from ideologues (Baron, 1994; Stone and Simas, 2010; Ashworth, 2006) at the possible expense of alienating the median voter (Canes-Wrone, Brady, and Cogan, 2002). In addition to the value of raising money, the typical voter may simply not consider ideology when deciding who to vote for (Tausanovitch and Warshaw, 2014). This would allow candidates to position themselves at the

ideological extremes without fear of electoral consequences. Given the preeminence of party in determining vote choice (Bartels, 2000), voters may forgive ideologically distant candidates of the same party even when a spatially closer candidate of the opposite party is available (Sniderman and Stiglitz, 2012).

Descriptive Representation: Beyond the strategic considerations of candidates to appeal to the preferences of campaign contributors, it may be the case that legislators reflect the preferences of donors simply because candidates are demographically similar to contributors. Studies of descriptive representation suggest that “shared experiences” may be the underlying reason a representative prefers the interests of the group she most closely reflects (Mansbridge, 1999). If the average legislator is demographically similar to the average campaign contributor (Carnes, 2013), it may simply be the case that legislators reflect their preferences because they have more experience with the issues, concerns, and interests of these people. Empirically, if legislators are simply representing the preferences of the wealthy, it may also be the case that non-donors with similar demographic characteristics to donors are represented equally well.

3 Data and Methods

In this section I present the survey and voting data I use to estimate the ideological positions of voters, donors and legislators. After discussing the data and sampling strategy, I illustrate the method by which I estimate ideal points and validate those estimates against external measures of ideology. I then explain my empirical strategy and present the empirical results.

3.1 Donor Survey

To measure the ideological preferences of donors, I conducted an original survey of campaign contributors in the summer and fall of 2013. Using a survey that is drawn completely from the donor population provides a more accurate picture of the preferences of contributors than using surveys of the population that also ask if the respondent contributed money. To illustrate this point, Figure 1 shows the proportion of individual donations among congressional candidates that came from small donors (those giving less than \$200). The black lines show the same proportion of donors in the 2012 and 2010 CCES surveys. We see that the CCES survey dramatically oversamples small donors in relation to the typical congressional fundraising portfolio. This difference should come as no surprise since the CCES is not intended to be representative of the donor population.

[Figure 1 about here.]

In addition to being more representative, the survey I conduct is based on validated donation data. The Federal Election Commission (FEC) requires that any contributor who gives more than \$200 to a federal candidate register their name, contribution amount, contribution recipient, and address. This list of donors is available to the public.⁶ Using the list of donors and addresses, I mailed 20,500 letters to

⁶The list is comprehensive among donors who give more than \$200. Small donors who give less than \$200 are not required to register with the FEC. However, candidates do report the amount of money in aggregate they received from unitemized contributions. On average these small contributions add up to a small percent of the candidate's overall contributions (usually between 10 and 15 percent), see http://www.cfinst.org/pdf/books-reports/Bliss/Senate_Cand_Sources_1998-2008.pdf.

contributors who are associated with the 22 senators who sought reelection in 2012. The letter asked the donors to complete an online survey regarding their political opinions. A detailed description of the survey invitation is available in Section C in the online Supplemental Materials.

I specifically consider the 22 senators who sought reelection in this study for several reasons. Given that senators face election every 6 years, their fundraising strategies vary significantly over the course of their term. In fact, many senators do not actively fundraise in the first year or two after winning an election. Additionally, legislators who announce their retirement drastically reduce their fundraising efforts thereafter.

To draw the survey sample, I stratified the population of donors in four different ways. First, the sample is stratified by senator. Within each senator, I then draw respondents from three different groups. The first group are donors who reside outside of the senator's state yet contributed to the senator in the 2012 election cycle. This is an important population of contributors who are often missed in traditional surveys that identify respondents as contributors. This would not be concerning when studying the preferences of donors if senators raised a small proportion of their money from out-of-state sources. However, this is not the case. In fact, every re-election seeking senator raised a significant proportion of individual contributions from out-of-state donors. Figure 2 shows that on average, incumbent senators seeking reelection raised nearly 50% of their individual contributions from out-of-state sources.

After sampling out-of-state donors, I next drew a sample of within-state donors for each senator. These are contributors who both gave to the senator in the 2012 election cycle and reside in his or her state.

Finally, I drew a sample of donors who reside in the same state as the senator, are of the same party as the senator, but did not contribute to the senator in this election cycle.⁷ The reason for sampling these same-party and same-state donors who did not give directly to the senator is illustrated in the right panel of Figure 2. While incumbents raise a great deal of their individual contributions from out-of-state, the majority of challenger money comes from donors inside the challenger's state. Thus, incumbent senators may pay particular attention to in-state donors' preferences even if they are not giving directly to the senator since any potential primary challenger is likely to raise most of her money from these people. Figure A2 in the Supplemental Materials shows the proportion of donors in each of these strata by senator. In addition, Section A in the Supplemental Materials discusses incentives used to increase response rates and survey weighting that brings the set of respondents closer to being representative of the population of donors. Of course, if those who responded to the survey are unrepresentative of the population of donors, this would bias any results derived from the survey. Low response rates, however, are less concerning if respondents are representative of the population of interest. For example, in a meta-analysis of surveys, Groves and Peytcheva (2008) find no relationship between response rate and

⁷Since the FEC does not record the party of the donor, I estimate the contributor's party by looking at the percentage of a contributor's donations directed to candidates from each party. Those who gave more than 75% of their money to Republican (Democratic) candidates I consider Republicans (Democrats). (Bonica, 2013) shows that the overwhelming majority of donors support candidates from one party only. In 2012, 95% of individual donors fit into one of the two categories outlined above. While we do not know the partisanship of donors from the donor database, the survey asked donors to indicate their partisanship, which allows us to compare the donation-based prediction with the respondents' stated partisanship. In only 3% of cases the estimated party did not match the donors' self-described partisanship.

response bias.⁸ After applying post-survey weights, respondents are representative of the population of donors on donation amount, state of residence, and proportion of money given to either party, suggesting the survey is a representative picture of donors' preferences.⁹

[Figure 2 about here.]

Within the survey, respondents were asked to state their preferences on a variety of policy questions as well as indicate how they would have voted if they had been asked to cast a roll call vote for nine important votes that took place in the 112th Congress.¹⁰ In addition, respondents also indicated their party affiliation, ideology, and approval for their representative, senator, and the president. Finally, they were asked a series of demographic questions. I use these responses in a statistical model to estimate each respondent's ideal point. The method of estimation is discussed in Section 3.4. The list of questions asked in the survey that are used in this model is included in Section D of the Supplemental Materials.

⁸Furthermore, in a survey of presidential donors in 2012 that used a similar method of contact, Magleby, Goodliffe, and Olson (2015) find little evidence of that respondents are dramatically different from non-respondents by using matched consumer data of both respondents and non-respondents.

⁹To increase response rates, each letter contained a \$1 bill as a token of appreciation for completing the survey. This technique has been shown to increase response rates dramatically (James and Bolstein, 1990). The overall survey response rate was 14 percent.

¹⁰The roll call questions asked of contributors were: 1. Blocking EPA regulations, 2. Payroll tax holiday, 3. U.S. Columbia FTA, 4. Patriot Act Renewal, 5. ACA birth control coverage, 6. Affordable Care Act, 7. Bush Tax Cuts extension, 8. Dodd Frank Bill, 9. End Don't Ask Don't Tell

3.2 CCES Survey

To identify the ideal points of non-donating voters, I use responses to the 2012 Cooperative Congressional Election Study (CCES, 2012). The 2012 CCES is a nationally representative survey of individuals conducted prior to and immediately following the November general election. More than 50,000 people participated in the survey, providing ample responses to estimate the preferences of voters at the state level. Similar to the donor survey, several of the questions in the CCES ask respondents to express their preferences on currently debated policies and political issues. Additionally, respondents are also asked to indicate how they would have voted on a number of roll call votes that took place in the 112th Congress.¹¹ A full list of questions used to estimate voters' ideal points is included in Section D of the Supplemental Materials.

3.3 Senate Roll Call Votes

To estimate the ideological preferences of senators, I use the roll calls cast in the Senate during the 112th Congress. These data are collected and organized by Keith Poole (Poole, 2014), and have previously been used to estimate the ideological positions of legislators on a number of occasions (Poole and Rosenthal, 1997; Clinton, Jackman, and Rivers, 2004; McCarty, Poole, and Rosenthal, 2006). In the 112th Congress, senators cast 486 roll call votes.

¹¹The specific roll call votes are: 1. Ryan Budget Bill, 2. Simpson-Bowles Budget Plan, 3. Middle Class Tax Cut Act, 4. Tax Hike Prevention Act, 5. ACA birth control coverage, 6. U.S.-Korea FTA, 7. Repeal Affordable Care Act, 8. Keystone Pipeline, 9. Affordable Care Act, 10. End Don't Ask Don't Tell

3.4 Statistical Model

To estimate the ideological positions of voters, donors and legislators on a unified scale, I use a standard one dimensional ideal point model that produces one value for each respondent (Clinton, Jackman, and Rivers, 2004). This parameter is a representation of the degree to which a person is liberal or conservative on a unidimensional policy scale. While ideal points are latent values, they are estimated by using observed data. In their most common application, these observed data have been roll call votes cast in Congress where legislators either vote “yea” or “nay” for each proposal (Poole and Rosenthal, 1997). However, the statistical estimation of ideal points is a burgeoning field in the study of American politics. Recent work has expanded the use of ideal point models to incorporate a variety of actors such as voters (Gerber and Lewis, 2004), the President (Bailey, 2007), Supreme Court justices (Martin and Quinn, 2002), and state legislators (Shor and McCarty, 2011). In the case of voters, scholars often use expressions of support for policies on a survey as a “yea” vote. It is this method that I use to estimate the ideal points of voters and donors.

One limitation of ideal point models is that the estimated parameters are only comparable across actors who cast votes on the same questions. For example, we can compare two senators’ ideal points because both senators have voted on the same issues. On the other hand, we cannot directly compare a senator’s ideal point to a House member’s ideal point without some way of connecting the two bodies (conference votes are often used here). Following Bafumi and Herron (2010), I use questions that appear on both surveys as bridge votes. Moreover, to link survey respondents’ ideologies to Senators’ ideal points, several questions in both surveys probe respondents’ preferences on roll call votes cast by Senators. In the ideal point model there are 54,535 voters in the CCES survey who answered 50 questions used to create binary responses. Similarly, in the donor survey there are 2,905 donors who

answered 53 questions. Between these two surveys, 23 of the questions appear on both surveys and act as bridge votes. In the Senate, 102 senators cast 486 votes.¹² 11 of those votes appear on the CCES survey and the donor survey. A complete list of bridge votes for each survey is given in Section D of the Supplemental Materials.

To obtain the ideal points, I estimate a Bayesian item response model of the following form:

$$Pr(y_{ij} = 1) = \Phi(\beta'_j x_i - \alpha_j) \quad (1)$$

In this model, which follows Clinton, Jackman, and Rivers (2004), y_{ij} is the expressed preference of legislator (or voter or donor) i on policy j , with $y_{ij} = 1$ indicating support for the policy. This vote is determined by the voter's latent ideal point x_i as well as parameters β_j and α_j which are specific to each proposal.¹³

3.5 Validity of Ideal Points

I validate each group of ideal point estimates separately to show that the estimates align with other commonly used measures of political ideology. First, to validate the ideal points of senators in the 112th

¹²The roll call matrix includes votes cast by both Brian Schatz (D-HI), who replaced Daniel Inouye (D-HI) after his death mid-session, and Tim Scott (R-SC), who replaced Jim DeMint (R-SC) after his resignation from the Senate mid-session.

¹³While Clinton, Jackman, and Rivers (2004) provide a more detailed discussion of this statistical framework, a few specific features of the model are discussed in Section E of the Supplemental Materials. Section E also shows convergence statistics for the MCMC chain suggesting the chain converged properly, leading to reliable estimates of the ideal points.

Congress, I compare each senator's estimated ideal point from the joint scaling method described above with his or her corresponding DW-NOMINATE score. (McCarty, Poole, and Rosenthal, 2006; Bonica, 2013). The first panel in Figure 3 shows that this bivariate correlation is extremely high (.98). Points represented by "X"s show senators who were running for reelection.

To validate the estimates of voters' ideal points, I plot the distribution of estimated ideal points (y-axis) for respondents who indicated their self-placed ideology on a standard 7-point liberal to conservative scale (x-axis). The second panel in Figure 3 shows that there is good internal consistency between voters self-assessed ideologies and their estimated ideal points. The correlation is quite high (.77).

Figure A8 in the Supplemental Materials shows that this correlation exists when dividing voters by their party affiliation. Furthermore, Figure A7 in the Supplemental Materials shows that the ideal point estimates of voters correlate well with external measures of ideology such as presidential vote shares at the state level.

To show that the estimated ideal points of donors are sensible, I make the same comparison as with voters. Donors' self-placed ideology is mapped on the x-axis of the right panel of Figure 3. For each of the seven possible responses, I show the median estimated ideal point along with the 10th and 90th percentile estimate on the y-axis. Again, we see excellent consistency with a correlation between the two measures of .95. Figure A9 in the Supplemental Materials shows that this strong positive correlation exists when dividing donors by their party affiliation. Furthermore, Section B.3 in the Supplemental Materials demonstrates that moderates according to the ideal point model are indeed politically moderate rather than simply inconsistent in their issue positions.

[Figure 3 about here.]

4 Congruent Representation

Using the estimated ideal points, I calculate the pairwise ideological distance between senators and donors, co-partisan voters, and all voters in the senator's state. I present results that suggest that the average pairwise ideological distance between senators and donors is nearly zero, indicating nearly perfect congruence on average. I then show that the distance between senators and other groups of voters is larger, showing decreased ideological congruence. Finally, I show that senators are quite ideologically distant from the typical voter in their state. The average distance between senators and voters is nearly equal to the same measure when voters are randomly assigned to senators. This suggests ideological congruence is best found between legislators and contributors.

Ideological Congruence: Figure 4 shows distributions of the average pairwise distance between senators and voters (left panel) and senators and their donors (right panel). A value of zero indicates close ideological alignment between the voter (or donor) and the senator. With this in mind, we see much more congruence between senators and their donors than among their voters. In each panel, the distributions are separated by party. The blue distribution (dashed line) shows the congruence among Democratic senators and the red distribution (solid line) shows congruence among Republicans. The right panel of Figure 4 indicates that congruence with donors is very high for senators of both parties. The left panel shows that senators from both parties are more extreme than the typical voter. The Republican (Democratic) distribution is shifted right (left), indicating that Republican (Democratic) senators are more conservative (liberal) than most of their voters.

Figure 5 considers ideological congruence with a number of important constituencies. Specifically, Figure 5 shows the average pairwise distance between senators and voters, senators and their

co-partisans (potential primary voters), and senators and their contributors. Across both Republican and Democratic senators we see the greatest congruence between senators and contributors. Among co-partisans there is less congruence (particularly among Democrats). Supporters are defined as voters who indicated that they voted for the senator in the 2012 election cycle. Here we see slightly less congruence than among co-partisans and senators. Finally, there is a stark lack of congruence between senators and voters altogether. In other words, for both Republicans and Democrats, the average pairwise ideological distance between senators and contributors is significantly smaller than the average distance between senators and all voters in their state.¹⁴

[Figure 4 about here.]

When divergence occurs, the estimates are in the direction of the ideological extremes. That is, Democratic senators are, on average, more liberal than their voters (a negative distance measure) and Republican senators are more conservative than their voters (a positive distance measure). Figure 5 shows the average distance among all senators and reelection seeking senators so as to be comparable to the donor measure (the top point in Figure 5), which only looks at donors and senators who sought reelection. These results are consistent with the theory outlined in Section 2 that predicted legislators be more ideologically similar to donors than to the average voter. Figure A10 in the Supplemental Materials shows similar results using the median pairwise distance rather than the average ideological distance as reported here.

¹⁴To further investigate if donors' representation comes through money or other forms of political activity, I investigate the level of congruence among non-donating "activists". Table A2 in the Supplemental Materials shows that donors are more congruent with legislators than activists.

[Figure 5 about here.]

How large are these differences? To give a sense of scale, I randomly assign each voter to a senator and calculate the distance between the voter and their randomly assigned senator. This provides a way of comparing the degree of congruence in the real world with a hypothetical system of “random representation”. Insofar as the average distance between senators and their constituents is smaller than when randomly assigned, we can say that senators better represent their constituents on average than if these constituents had been randomly assigned representation. The results, however, are bleak for the average voter. As shown in Figure 5, the average distance between Democratic senators and voters is -.89. This is only 5 percent smaller than the average distance between voters and their randomly assigned Democratic senator (-.94). The results for re-election focused Democrats and their voters is slightly better. The average distance from voters in this case is -.85, which is 9 percent smaller than random assignment. The results among Republican senators is nearly the same. The average distance between Republican senators and their voters (.97) is only 6 percent smaller than the average distance between voters and a randomly assigned Republican senator (1.04). Again, reelection seeking Republicans perform better. In this case, the average distance is .71, which is 30 percent smaller than random assignment.¹⁵

Comparatively, congruence is much stronger when considering donors. Among Republicans, the

¹⁵Another way of interpreting these differences is to place them in reference to different legislators. The average distance between legislators and their voters is nearly 1. A value of 1 is slightly larger than the ideological distance between the most moderate Senators in the Republican party (Brown [0.22], Snowe [0.33], and Collins [0.23]) and the most conservative members of the same party (Lee [1.6], Paul [1.8], and DeMint [2.1]).

average pairwise distance between senators and donors is indistinguishable from zero, indicating that on average, legislators espouse the ideological positions of donors nearly perfectly. This relationship also holds among Democratic senators. The average distance between donors and Democratic senators (-.12) is smaller than the distance between Democratic senators and any other group. Among both Republicans and Democrats, the average ideological congruence between senators and donors is nearly perfect.

Among partisans, congruence is better than the connection between voters and senators, but not as tight as the relationship between donors and senators. However, on average, Republican senators seeking reelection do as good a job of representing co-partisans as they do representing donors. Among Democrats, the average distance between senators and their co-partisans (-.27) is 72 percent smaller than random assignment and 66 percent smaller than the actual representation of voters by Democratic senators. Among reelection seeking Democrats, congruence increases. The average distance between reelection seeking Democratic senators and co-partisans decreases to -.24. This distance is still twice as large as the average distance among Democratic senators and contributors. Among Republicans, the average distance between senators and their co-partisans (.16) is 84 percent smaller than random assignment and 78 percent smaller than actual congruence between voters and Republican senators. Looking only at re-election seeking Republicans, the average distance from co-partisans decreases to nearly zero.

Figure 6 shows the average ideological distance between senators and donors (circles) and senators and voters (triangles) for each state. We see that in each state (except for two), the distance between donors and senators is smaller than voters and senators on average. The two cases where this is not true are Senators McCaskill in Missouri and Brown in Massachusetts. In both cases, the senator's party does not

align with the party of the typical voter in the state. Given the partisan mismatches between the incumbent senator and voters, in these cases it is possible that these senators must pay particular attention to the preferences of average voters.

Another way of measuring representation among senators is to calculate the percentage of voters, co-partisans, and donors who are more extreme than the senator. To calculate this, I find the percentage of donors that have ideal points to the left of Democratic senators or to the right of Republican senators. Figure 7 shows that contributors consistently hold ideological positions that are more extreme than the senator. The story is quite different among voters and even supporters. In nearly every case, 75 percent of voters are less extreme than the senator, and in most cases a majority of supporters are less extreme than the senator.¹⁶

[Figure 6 about here.]

[Figure 7 about here.]

While these results suggest dramatic difference in representation, they cannot directly speak to any causal effects. Nevertheless, the observational patterns are inconsistent with a number of prominent

¹⁶This result stands in contrast to Bafumi and Herron (2010) who find that only 20% of contributors are more extreme than their senators. While both studies find incongruence between legislators and voters, unlike their result, the data presented here are consistent with the theory that legislators are pulled to the ideological extremes by contributors. This divergence from Bafumi and Herron (2010) is possibly due to the difference in sampling designs. As discussed earlier, the donor survey used here provides a more accurate picture of each senator's population of contributors while contributors in the CCES are unrepresentative of the actual population of donors.

theories of legislative behavior. This inconsistency should cause us to reconsider many of these existing theories. First, the data do not comport with a story of legislators aligning with the median voter of their district. In every case, each senator is ideologically distant from the median voter in the state. Moreover, the data are also inconsistent with a theory of legislators strategically locating between some weighted ideological average between the median primary voter and the median general election voter. These are two commonly referenced theories of legislative behavior. The data are, however, consistent with a theory of legislators responding to and representing the average position of their donors. This congruence could be due to the pressures legislators feel to represent an important constituency that they consistently rely upon to fund their expensive campaigns. However, we should also note that these data alone cannot completely rule out the possibility that legislators share the average position of donors for some alternative reason. Future research should build upon these new findings to further establish strong causal relationships between donor's preferences and legislators' behavior in office. Establishing initial empirical patterns while also showing the causal pathways is a tall order for any one particular study.

5 Descriptive Representation

The previous section demonstrated tight congruence between donors' and senators' ideologies. In this section I present additional results that illustrate descriptive congruence between donors and senators when looking at measures of wealth and income. Furthermore, I show that demographics alone do not explain the congruence between donors and legislators. Ideological distances between senators and wealthy non-donors are larger than among the donor population. Moreover, I show how senators and voters are very different from one another on these dimensions. This is a distinction that has not

previously been tested empirically, but is important to investigate as the result allows us to disentangle a story of donor's influence over policy from a story of representation of donors preferences based purely on demographic similarities between legislators and contributors.

Detailed measures of the income of campaign contributors are difficult to find.¹⁷ Measures of donors' net wealth have never before been measured. Yet numerous surveys show that the wealthy often hold distinctly different preferences from the poor and middle class (Page, Bartels, and Seawright, 2013; Page and Hennessy, 2010; Gelman, 2008). Furthermore, scholars suggest that policy better reflects the preferences of the wealthy over the preferences of more-numerous yet less-affluent electorate (Gilens, 2012; Bartels, 2010). Thus, if the wealth of donors aligns more closely with the demographics of the Senate, this provides an additional piece of evidence to suggest that contributors are well represented by those in government. Furthermore, the ideological congruence between donors and senators provides a potential mechanism for previous findings that the preferences of the affluent are more often translated into policy: legislators listen to the preferences of the wealthy in order to obtain or maintain the flow of campaign contributions. Finally, large differences in the wealth of voters and their senators show yet another way in which there is a lack of congruence between voters and their senators (Carnes, 2013).

Figure 8 shows the distribution of income for non-donors from the CCES and contributors from the donor survey. On average, donors are much wealthier than non-donors. Among non-donors, more than half reported having an estimated annual family income of less than 50 thousand dollars. This stands in

¹⁷Francia et al. (2003) is a notable exception, yet their data are now nearly 20 years old. Changes in the demographics of donors may lead to important changes in that time. However, comparing the distributions of income between Francia et al. (2003) and this survey show a similar distribution of income among donors after adjusting for inflation.

sharp contrast to the less than 3 percent of donors who reported having a similar income. On the other hand more than 30 percent of donors reported having a family income larger than \$350 thousand while less than 5 percent of non-donors have equally high incomes.

[Figure 8 about here.]

The difference between voters and their senators and the similarity between donors and senators becomes even more apparent when looking at wealth rather than income. To measure wealth of non-donors I use the Federal Reserve's Survey of Consumer Finances calculation of American households' net worth.¹⁸ To measure senators' wealth I use data provided by the Center for Responsive Politics (Center for Responsive Politics, 2014).¹⁹ The right panel of Figure 8 shows that the distribution of wealth among donors is quite similar to the distribution of wealth among senators. Among both groups, a large proportion report a net worth of more than 10 million dollars. This stands in stark contrast to the 69% of Americans who fall in the bottom category of the figure. These results show us that not only are contributors well represented in terms of policy, they are also well represented descriptively according to measures of income and wealth. The story is quite different among voters.

¹⁸This measure will likely be biased downwards as not all Americans are voters and scholarship has shown that registered voters are more likely to have higher incomes than unregistered voters. However, as shown in Figure 8, it is unlikely that the bias is enough to move many people from the bottom category since the threshold is quite high at \$250 thousand dollars in net wealth.

¹⁹In calculating the net worth of senators, legislators record the value of their assets and liabilities using broad categories. The Center for Responsive Politics uses both the upper bound, lower bound and average of each category to calculate three values of net worth. I report the median with error bars showing the median using the minimum and maximum value calculations.

Similar to the results for political preferences, legislators and voters are very different from one another when looking at income and wealth.

Is it the case, however, that the congruence between legislators' and contributors' political preferences is simply due to demographic similarities between these two groups? If the average legislator is demographically similar to the average campaign contributor, it may simply be the case that legislators reflect their preferences because they have more experience with the issues, concerns, and interests of wealthy people. If this is the case, then the theory suggesting that legislators choose to represent the preferences of donors because of their *influence* over legislators' electoral fates is less convincing.

[Figure 9 about here.]

Figure 9 shows that the story of donor's influence better fits the data than a story of purely descriptive representation. To test the influence theory against a story of descriptive representation, I look at the ideological congruence between legislators and equally wealthy non-donor voters. To do so, I subset the CCES data to only voters who reported having an income of \$150,000 or more and recompute the average pairwise distance between their ideal points and the ideal point of their legislator. This subset consists of the richest 4 percent of the CCES survey and represents the wealthiest 10% of Americans. The left panel in Figure 9 shows that congruence between donors remains stronger than among wealthy non-donors. Among Democrats and Republicans, the average pairwise distance for donors is smaller than the same measure for non-donors.

As a final test, I consider only those donors and voters with incomes less than \$125,000 and calculate the average pairwise distance between these respondents and their senator. This subset contains the overwhelming majority (93%) of CCES survey respondents while only including the bottom 25% of

donors. The right panel of Figure 9 shows that ideological congruence among these less-affluent donors remains high while the distance between legislators and voters is still much larger. Figure A12 in the Supplemental Materials shows these same comparisons but considers only wealthy and less-affluent co-partisans rather than all voters in a senator's state. In both cases, donors retain the smallest average ideological distance from senators, even when looking only among the wealthy.

6 Discussion and Conclusion

Who do legislators represent while in office? This paper shows that senators are most representative of campaign contributors. I illustrate this point by estimating the ideological positions of legislators, voters and contributors on a unified ideological scale. I do this by linking roll call votes by senators in the 112th Congress with survey responses of voters in the CCES and of donors in an original survey of campaign contributors. Results show that legislators' ideologies most closely align with the preferences of campaign contributors while senators ideal points are quite distant from the ideological preferences of the average voter. The distance between voters and their senator is nearly as large as if voters were randomly assigned to their senator, indicating that congruence between voters and their representatives in Congress is quite weak. However, in states in which senators' parties do not align with the majority of the voters in their state, the tie between legislators and the median voter appears to be stronger. In these cases, the average distance between voters and their senator is significantly smaller while the distance between legislators and contributors increases. In addition to closely representing the policy preferences of contributors, senators are also very similar to contributors demographically on measures of income and wealth. On the other hand they are significantly wealthier than the average non-contributing voter. The results presented above are consistent with a theory in which legislators adhere to the ideological

preferences of their contributors. However, it could also be the case that we could observe perfect congruence between legislators and donors in a hypothetical scenario in which legislators were more moderate. The logic behind this hypothetical argument is that if donors choose to support the legislator that is ideologically closest to them, then regardless of where legislators position themselves, we should observe ideological congruence between donors and legislators. The problem with this argument is that there is a distinct lack of moderate donors.²⁰ Thus, if legislators were to locate at the center, they would expose themselves to the possibility of another candidate entering with an ideologically extreme position that aligns more closely with the typical donor.

Another important consideration is that the present study cannot completely answer the question of causality - that is, if we were to exogenously change the ideological composition of a legislator's donors, would that legislator adjust his or her ideology accordingly? Uncovering this relationship in a causal framework would be a difficult and impressive undertaking. However, before establishing this important relationship, it is equally important to first demonstrate the fact that the ideologies of contributors and legislators are so similar. This empirical fact in and of itself has thus far been difficult to establish. Thus, future work should take up the important next step of showing not only who senators best represent, but also why.

Many scholars of democratic governance suggest that successful democratic governance requires that

²⁰80% of donors in the CCES do not indicate the moderate position on a 7 point ideology scale. Similarly, 90% of donors in the Senate survey do not take the moderate position. Also, Figure A4 in the Supplemental Materials shows the lack of moderates using the ideal point scaling. Given the lack of moderate donors, we may not be able to generalize the results of these data to this unique set of contributors.

legislators represent the preferences of their constituents (Dahl, 1971; Gilens, 2005). The results presented here illustrate that the level of representation is not distributed uniformly—rather it is highly correlated with a person’s willingness to support a legislator financially, which in turn is a function of wealth and income. This relationship has large implications for the direction of public policy, but may also impact feelings of efficacy, trust, and political equality among the American public.

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Small Donor Contributions - Congressional Candidates

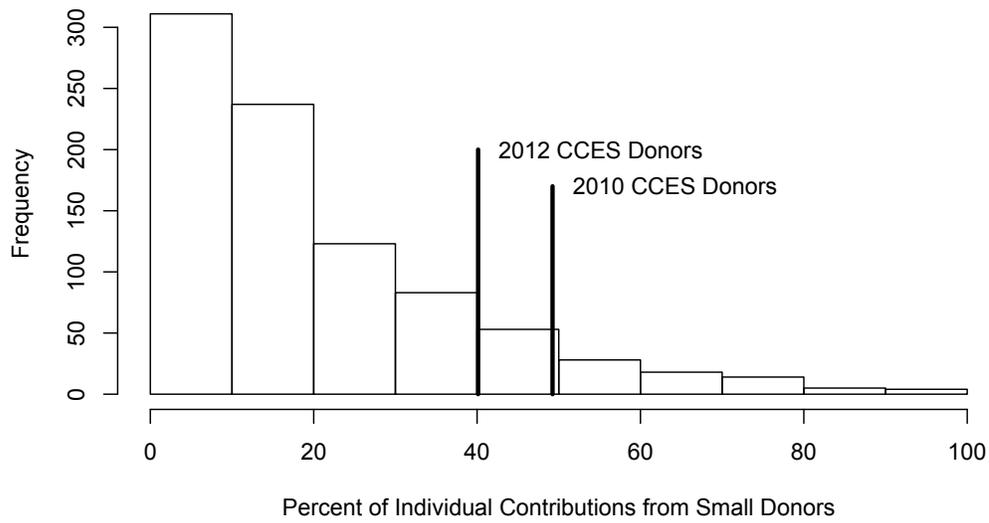


Figure 1: Percent of Individual Donations from Small Donors (< \$200) - The black lines indicate the proportion of donors in the CCES survey who qualify as small donors. The CCES contains many more small donors than most congressional candidates' fundraising portfolios.

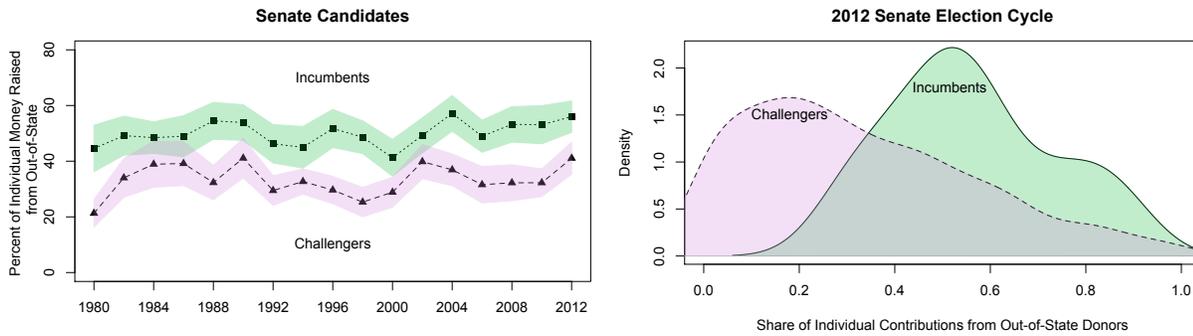


Figure 2: Out-of-State Individual Money - The left panel shows this relationship over time. Since 1980, incumbents have raised more of their individual money from out-of-state donors than challengers have (shown with 90% confidence intervals). The right panel shows the distribution of average shares of individual money coming from out-of-state donors in 2012.

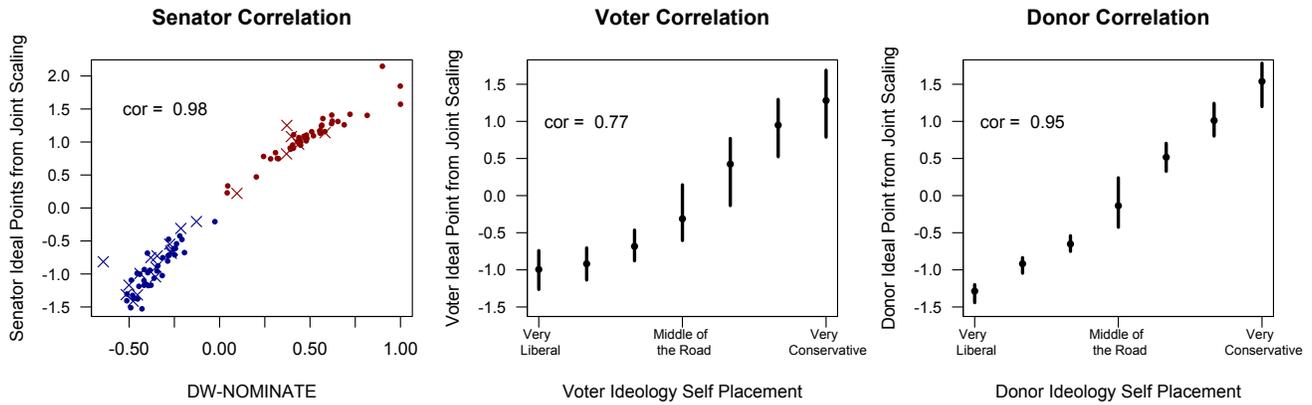


Figure 3: Validity of Ideal Point Estimates - The left panel shows the correlation between the ideal points of senators as estimated from the joint scaling procedure and the same senators' ideal points as estimated using DW-NOMINATE. The middle panel shows the correlation between voters' self-reported ideology in the CCES survey and their estimated ideologies using the joint scaling method. Each point is the average ideal point among voters for each option on a seven point ideology question (with 10th to 90th percentiles shown). The right panel shows the correlation among donors from the donor survey.

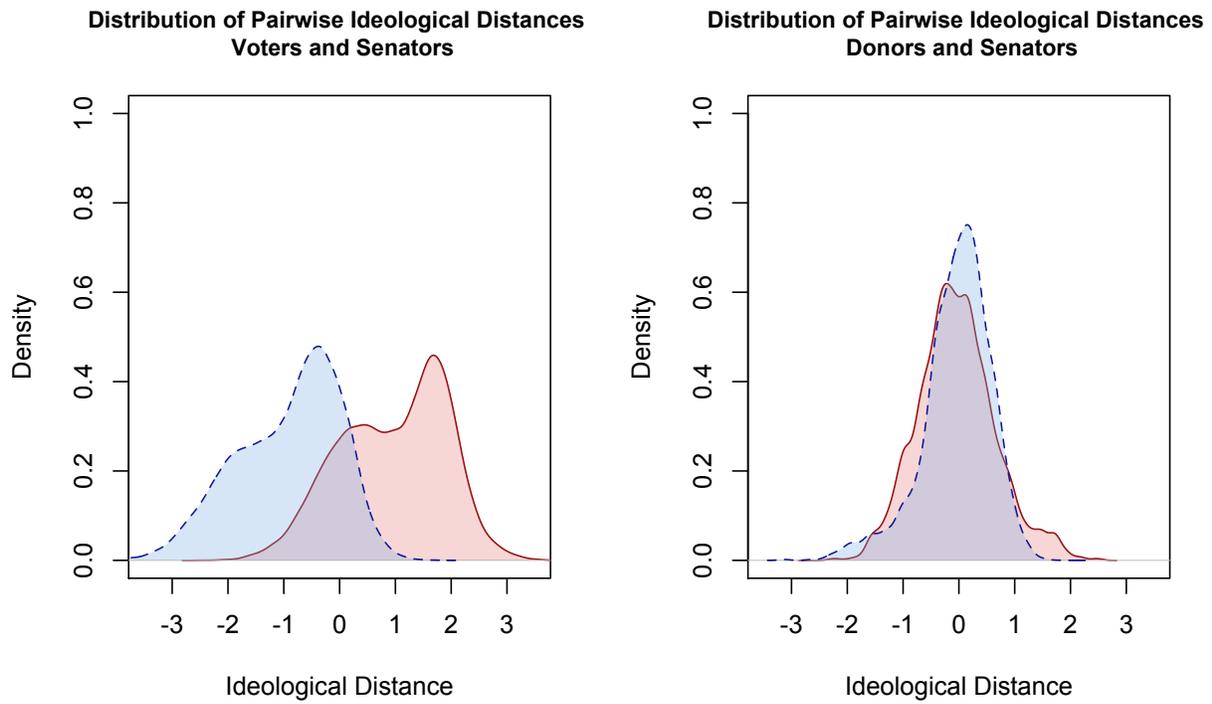


Figure 4: Distribution of Ideological Distances - The left panel of this figure shows the distribution of ideological distances between senators and all voters in their state. The right panel of this figure shows the distribution of ideological distances between senators and their donors. Here we see that senators' ideologies are quite similar to their donors'.

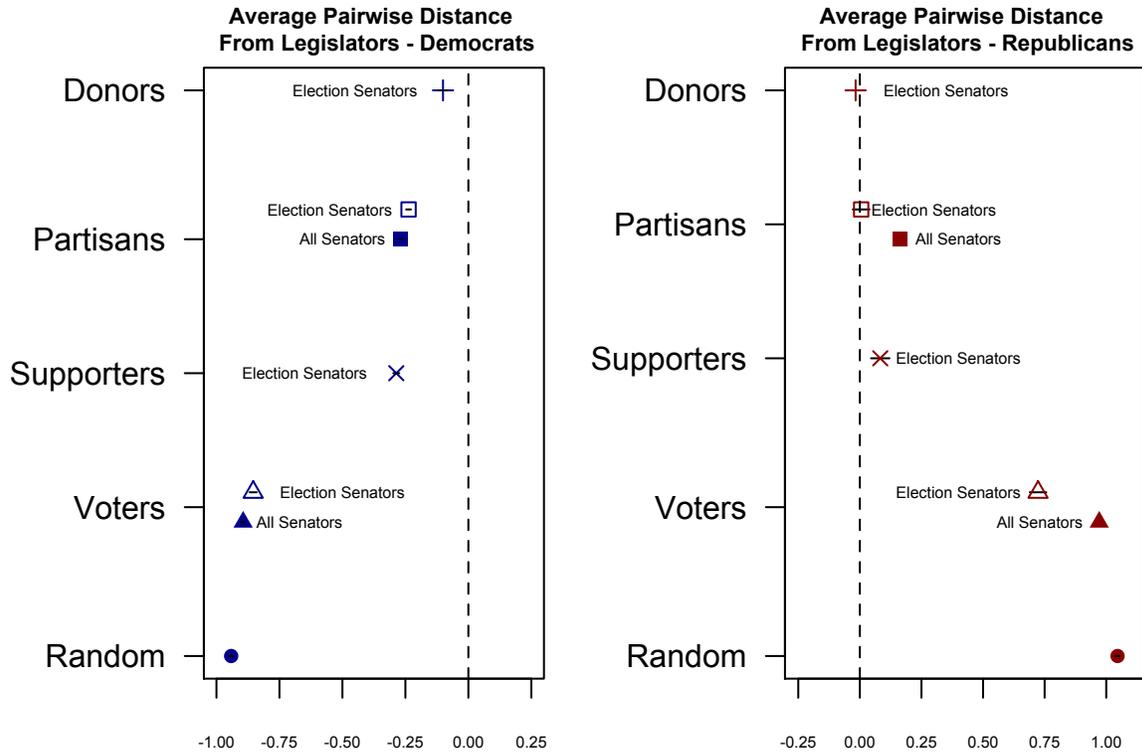


Figure 5: Average Distance between Legislators and Donors, Partisans, Supporters, and Voters
 - This figure shows the average distance for each of these four groups. Additionally, the bottom point shows the average distance between voters and a randomly assigned senator. The distance is calculated by taking the mean of the difference between the senator's ideal point and voters' ideal points (or co-partisans, or donors, etc.). The degree of congruence between senators and donors is higher (the distance is nearly zero) than among any other group. Furthermore, we see no more congruence between senators and their voters than if legislators had been randomly assigned to voters. Points contain 95% confidence intervals, but are often too small to be seen.

Average Ideological Distance by State

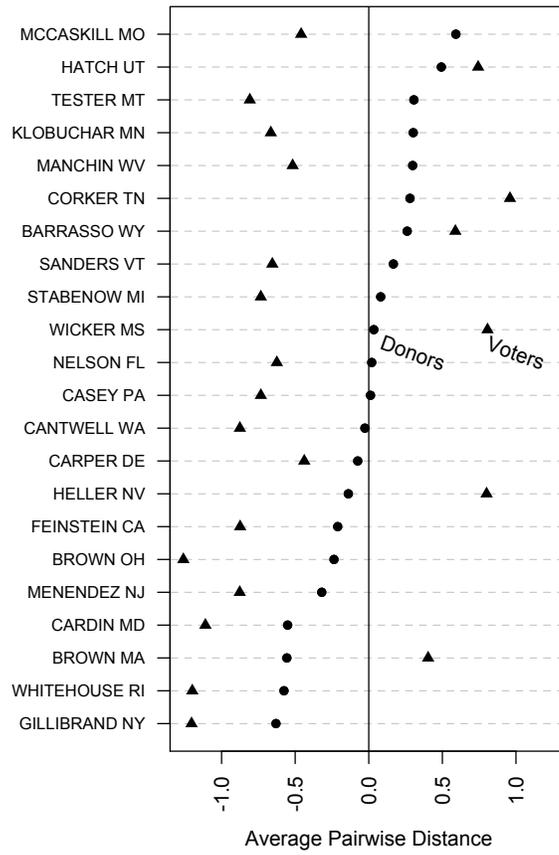


Figure 6: Average Ideological Distance By State - In 20 of the 22 cases, the average distance between donors and the senator is less than the average distance between voters and the senator.

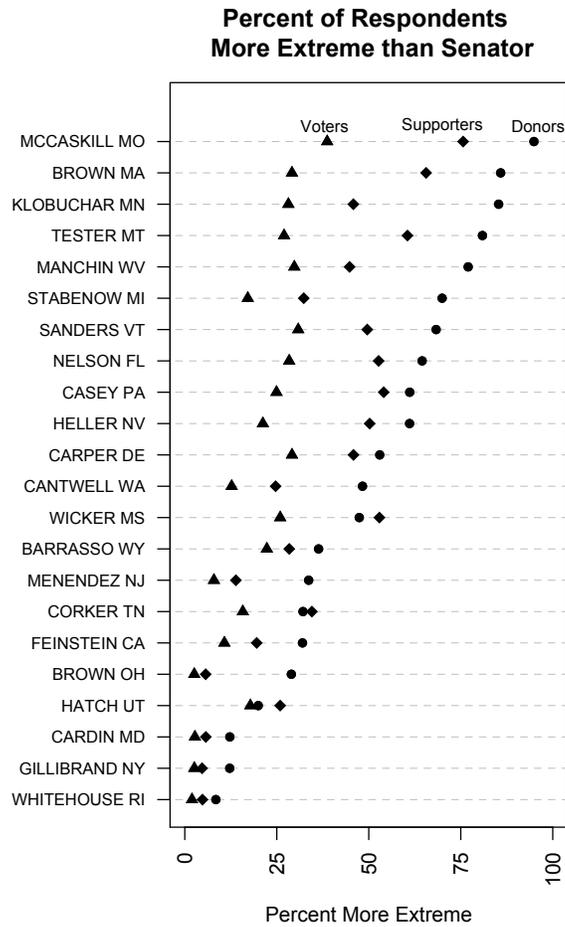


Figure 7: Percent of Respondents Who Are More Extreme than their Senator - In more than half of the cases, the majority of donors are more extreme than the senator. More extreme is defined as having an ideal point to the left of a Democratic senator or to the right of a Republican senator. Senators near the bottom of the figure are more extreme than nearly all voters, supporters, and donors.

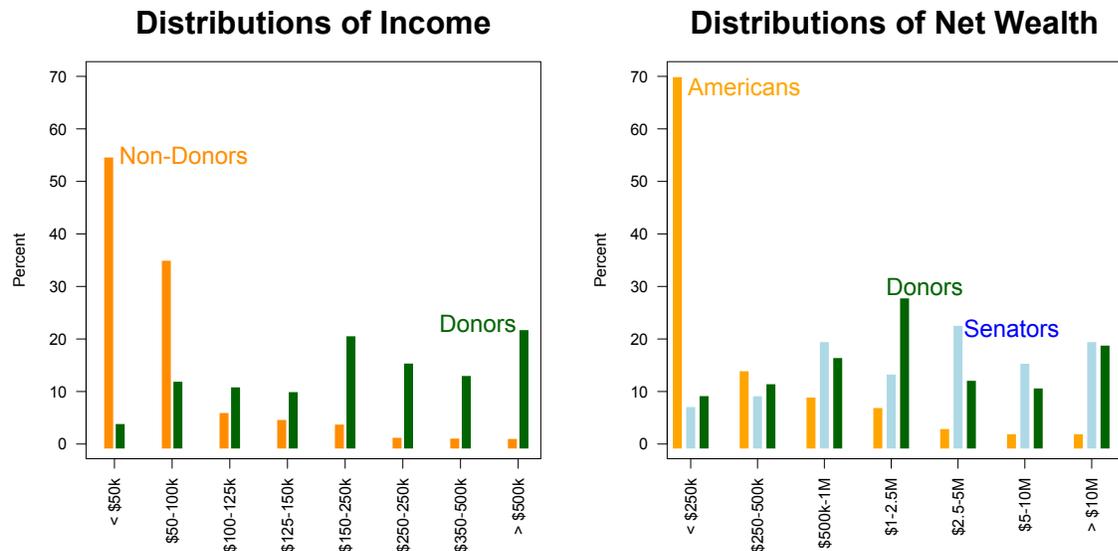


Figure 8: Income and Net Wealth of Americans, Donors and Senators - The left panel of this figure shows the difference in distributions between voters who did not contribute money and donors surveyed in the donor survey. The green bars show the distribution of reported income of donors. The orange bars show the distribution of income of respondents in the CCES survey who did not contribute money. The right panel shows the distribution of reported wealth among Americans, donors and senators in the 112th Congress. Data for Americans is reported by the Federal Reserve.

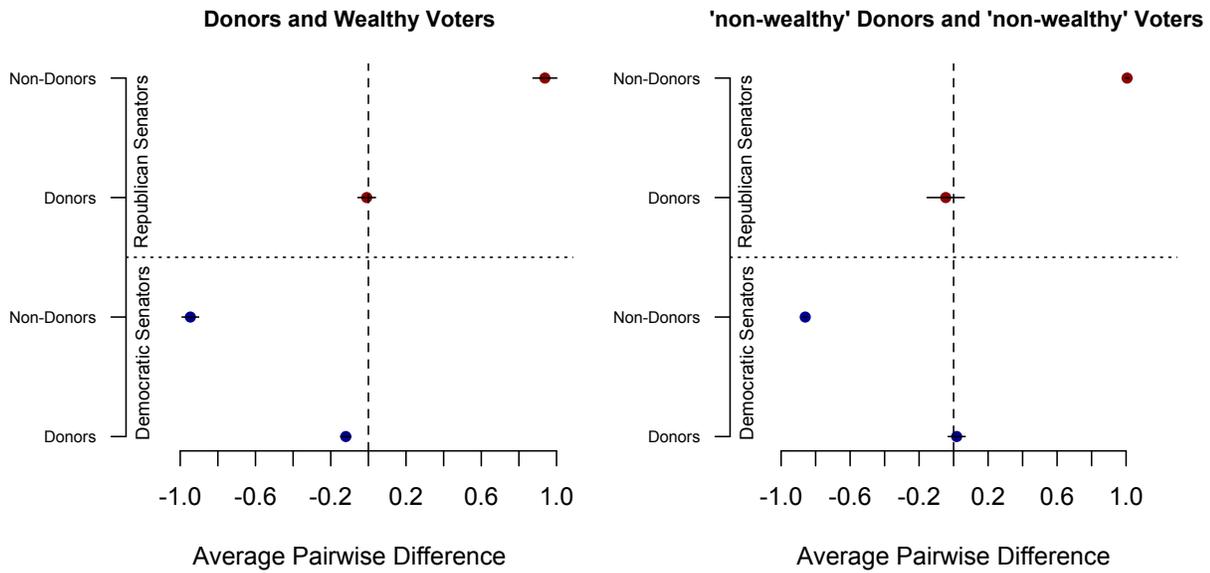


Figure 9: Average Distance: Senators-Donors and Senators-Wealthy Voters - This figure shows the average pairwise distance between senators and donors and senators and *wealthy* co-partisans. We see that even when considering only wealthy voters that congruence is larger among donors than among non-donors.