Buying Representation: The Incentives, Ideology, and Influence of Campaign Contributors in American Politics

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Abstract

One of the foundational principles of a democratic government is that representatives do as their name implies – represent their constituencies. In defending the Constitution of the United States, Publius emphasized the need for representation in the legislature by saying, “First. As it is essential to liberty that the government in general should have a common interest with the people, so it is particularly essential that the branch of it under consideration should have an immediate dependence on, and an intimate sympathy with, the people” (Federalist 52). However, “the people” is a much more complicated term than one might initially think. Representatives must consider a variety of constituencies as they go about their work. These different groups clearly weigh in the mind of a representative with varying degrees of importance.

I suggest that one group that exerts a great deal of influence over the political process is campaign contributors, and that their influence is due to the importance of fundraising in the electoral process. Yet, donors have received far less attention from legislative scholars than their potential influence warrants. In this dissertation, I investigate the strength of this financial connection and the degree to which political donations are influencing representatives in Congress and state legislatures.

The second chapter investigates the motivations of donors and shows important differences in why people or organizations support candidates financially. Understanding why donors give money is vital for developing accurate hypotheses of how money may influences politics, yet we still know little about why donors choose to give. In this paper I present theories of why political action committees (PACs) and individuals, the two largest sources of campaign money, contribute to political candidates. PACs are primarily motivated by a desire to gain access to legislators and the legislating process while individuals are primarily motivated by ideological considerations. Additionally, a subset of PACs whose interests
align with the parties’ positions are interested in both. I test these theories using a variety of data and identification strategies. Using an original survey of donors in the 2012 election cycle, I show that individuals consistently rank ideological concerns as most important when deciding who to contribute to. Furthermore, using contribution records and election results, I show differences between individual and PAC contribution patterns. Finally, using two different within-legislator designs, I show a causal relationship between access, ideology and contributions. These results provide the most direct and comprehensive test of contributor motivations to date.

The third chapter considers how these different motivations translate into influence over legislator’s behavior in office. In this paper, I show that legislators reflect the ideological preferences of those who fund their campaigns—ideologically motivated individual donors and access-oriented political action committees (PACs). Legislators who raise more of their money from individuals tend to be more ideologically extreme. To untangle the causal direction of this relationship, I show that limits on campaign contributions, which exogenously alter a candidate’s ability to raise money from certain types of donors, affect the ideologies of legislators in office. Using an original dataset of campaign contribution limits in the states over the last 16 years, I exploit variation across states and within states over time to show that higher individual contributions lead to more extreme legislators, while higher limits on contributions from PACs yield more ideologically moderate legislators. These results suggest that campaign contributions come with ideological strings attached and that legislators represent the ideologies of their donors. The connection between donors and recipients is an important part of the story of the polarization of American legislatures.

The fourth chapter focuses further on the connection between the preferences of individual donors and the voting behavior of U.S. Senators. This chapter addresses this question by investigating the degree of ideological congruence between the preferences of senators and three constituent subsets—donors, co-partisan, 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. 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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To my parents
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Introduction
Unquestionably, one of the foundational principles of a democratic government is that representatives do as their name implies – represent their constituents. In defending the Constitution of the United States, *Publius* considers this need for representativeness in the legislature by saying, “First. As it is essential to liberty that the government in general should have a common interest with the people, so it is particularly essential that the branch of it under consideration should have an immediate dependence on, and an intimate sympathy with, the people.” However, “the people” is a much more complicated term than one might initially think. Representatives must consider a variety of constituencies as they go about their work in Washington. Fenno (1978) outlined several of these when he wrote that representatives consider geographic, re-election, primary, and personal constituencies. These different groups clearly weigh in the mind of a representative with varying degrees of importance.

Nevertheless, the words of Anthony Downs (1957) and the spirit of Harold Hotelling ring in the ears of any political scientist concerned with theories of representation. Downs’ extension of Hotelling’s linear model of competition – yielding predictions that parties will position themselves at the ideology of the median voter – is one of the canonical models of political science. Thus, any observation of deviation from the median voter is cause for investigation. And indeed, countless theories and empirical studies have explored when and why these deviations occur.

In this dissertation, it is my intention to add to this literature. While Fenno set the stage for considering a representatives’ sub-constituencies, I suggest that an additional group places strong pressures on representatives: the financial constituency. I will show that in the majority of cases, representatives are in fact quite far ideologically from the preferences of the median voter in their district. I suggest and show evidence that this is due in part to the importance of fundraising in the electoral process combined with the fact that campaign donors have much more extreme ideologies than the average non-donating voter. In this
dissertation, using a variety of data and empirics, I demonstrate this connection between legislators and donors and estimate the degree to which political donations are polarizing representatives in Congress.

1 The Puzzle

The puzzle is simply stated as such: If theories tell us that under a variety of different conditions legislators will represent the ideology of the median voter of some important constituency (usually the median voter), why does empirical evidence suggest that candidates are advocating and proposing policies that are more extreme than even voters in their districts from their own party? Bafumi and Herron (2010) presents excellent evidence of this puzzle. They shows that the ideal points of senators are much more extreme than the ideal points of the median voter and are even more extreme than the median party member in each state.

In a world governed by the median voter theory, we would expect legislators to be quite close to the median voter. However, in reality, we see that overwhelmingly this is not the case. In fact, exactly the opposite is true. In the overwhelming majority of cases, senators are more partisan than the median voter in their state. This may not come as a surprise, as we might expect some degree of partisan distance between voters and representatives. However, it is also the case that nearly every representative is also more extreme than the median partisan in his or her state. It is this observation that I find particularly puzzling. To gain traction on this empirical observation, I consider the forces affecting candidate positioning as those of “political magnets”. Clearly, the median voter exerts a strong magnetic pull on the representative. Furthermore, many suggest that partisans in the district act as another magnet. This might be the result of partisan primary voters (Burden 2001; Butler 2009a; Gerber and Morton 1998) or party leaders in Washington (Aldrich and Battista 2002; Aldrich 1995; Snyder and Groseclose 2000). However, if partisan survey respondents are
indicative of primary voters in any given district, then the story of primary elections acting as polarizing magnets fails to explain Bafumi and Herron’s result. How can it be the case that partisans pull representatives from the median voter, only then to send them past the median partisan to an even more polarized location? It is my suggestion that indeed, the typical voter and average partisan voter do exert pressures on representatives, but that previous investigations of this question are missing an important magnetic force.

This important missing force is money, which is earned by candidates from donors. Ideally, we would be able to place those that give money to candidates on the same scale as that used in previous work. Moreover, we would have these estimates for a long period of time covering many election cycles. If my hypothesis were correct, we would see representatives locating very close to the median donor.

2 The Plan

The remainder of this dissertation attempts to establish this link. The second chapter investigates the motivations of donors and shows important differences in why people or organizations support candidates financially. Understanding why donors give money is vital for developing accurate hypotheses of how money may influences politics, yet we still know little about why donors choose to give. In this paper I present theories of why political action committees (PACs) and individuals, the two largest sources of campaign money, contribute to political candidates. PACs are primarily motivated by a desire to gain access to legislators and the legislating process while individuals are primarily motivated by ideological considerations. Additionally, a subset of PACs whose interests align with the parties’ positions are interested in both. I test these theories using a variety of data and identification strategies. Using an original survey of donors in the 2012 election cycle, I show that individuals consistently rank ideological concerns as most important when deciding who to contribute to. Furthermore, using contribution records and election results, I show differences between
individual and PAC contribution patterns. Finally, using two different within-legislator designs, I show a causal relationship between access, ideology and contributions. These results provide the most direct and comprehensive test of contributor motivations to date.

The third chapter considers how these different motivations translate into influence over legislator’s behavior in office. In this paper, I show that legislators reflect the ideological preferences of those who fund their campaigns—ideologically motivated individual donors and access-oriented political action committees (PACs). Legislators who raise more of their money from individuals tend to be more ideologically extreme. To untangle the causal direction of this relationship, I show that limits on campaign contributions, which exogenously alter a candidate’s ability to raise money from certain types of donors, affect the ideologies of legislators in office. Using an original dataset of campaign contribution limits in the states over the last 16 years, I exploit variation across states and within states over time to show that higher individual contributions lead to more extreme legislators, while higher limits on contributions from PACs yield more ideologically moderate legislators. These results suggest that campaign contributions come with ideological strings attached and that legislators represent the ideologies of their donors. The connection between donors and recipients is an important part of the story of the polarization of American legislatures.

The fourth chapter focuses further on the connection between the preferences of individual donors and the voting behavior of U.S. Senators. This chapter addresses this question by investigating the degree of ideological congruence between the preferences of senators and three constituent subsets—donors, co-partisans, 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. 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.
Access, Ideology, or Both? Why PACs and Individuals Give Money
1 Introduction

Why do individuals and organizations contribute money to political campaigns? Over the last several decades a great deal of attention has been paid to the degree to which money influences electoral results (Jacobson, 1978; Green and Krasno, 1988), legislative outcomes (Groseclose and Snyder Jr, 1996; Hall and Wayman, 1990; Powell, 2012b), and representation (Bartels, 2010; Gilens, 2012). Yet, we know comparatively less regarding the underlying motivations for why individuals or organizations choose to give money in the first place (See Austen-Smith, 1995; Ansolabehere et al., 2003; Grimmer and Powell, 2013b, for notable exceptions). Nevertheless, before scholars make claims about how money affects politics outcomes, we should first understand what exactly contributors expect from their contributions. If, for example, donations are given effectively at random, then we might not be concerned about the influence of money in democratic politics. On the other hand, if contributors give to support candidates with a particular ideology, with the expectation of favors in return, or in order to influence the policy making process, then we have great reason to be interested in how a representative democracy functions in a world with political contributions. This is particularly true if those who contribute are unrepresentative of the population as a whole. It is with these factors in mind that this paper seeks to uncover the motivations underlying why individuals and organizations contribute money to political candidates.

The primary contribution of this paper is to empirically test different theories of why contributors choose to give money to political candidates. Many previous empirical studies of contributors treat the donor population as having the same motivations when giving while previous theories suggest different motivations may exist within the population of contributors. The empirical results in this paper are consistent with these theoretical predictions. Using original survey data in addition to contribution records covering several decades, I
show that the two largest sources of campaign money, individual donors and political action committees, exhibit dramatically different behavior in the political marketplace. Political groups’ contribution patterns are consistent with motives centered around access and influence. On the other hand, the contribution behavior of individual donors is consistent with purely ideological motivations. Finally, a particular group of PACs appear to care about both of these objectives.

The paper begins by outlining existing theories of why different groups contribute to political campaigns. Previous work has noted that interest groups primarily seek to gain access to the legislative process as a way to ensure that legislation best reflects their preferences on particular issues. These issues do not necessarily divide cleanly along the traditional left-right ideological scale (Hall and Wayman 1990), implying that ideology is often a second-order consideration for the average PAC when deciding who to support financially. On the other hand, existing theories of individual motivations for contributing suggest that individual donors are primarily guided by the degree to which their ideology matches the ideology of the candidate they decide to support (Ansolabehere et al. 2003).

In addition to these existing theories, I present a new theory suggesting that a certain subset of PACs are concerned with both access and ideology. These ideological groups are interested in affecting policy (similar to other PACs), yet the issues that affect these groups cleave along partisan lines, making them additionally concerned with supporting candidates who align with them politically (similar to individuals).

To test these different theories, I use a variety of data and identification strategies. Using an original survey of individual donors in the 2012 election, I show that individuals self-report that ideological considerations are paramount when deciding to whom to give money.

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1I define later in the paper how I determine whether or not to classify an interest group as a traditional PAC or as an ideological group when looking at empirical differences between the two classes of PACs. Throughout the paper, I will refer to non-ideological groups as PACs and ideologically motivated groups as “ideological groups”.
Furthermore, this consideration varies with a donor’s ideology. While the preponderance of individual donors say ideology is important when giving, more ideologically extreme donors are even more likely to say that candidate ideology is important to them when giving. To compare these results with the motivations of PACs, I use a comprehensive database of campaign contributions to candidates for state and federal legislative office. I begin by showing descriptive statistics that illustrate dramatic differences in who individuals contribute to compared with the candidates PACs and ideological groups choose to support. Consistent with access-seeking interests, I consistently find that PACs are more likely to support moderate candidates, contribute to candidates from both parties, and give to incumbent legislators.

Furthermore, I create a unique panel dataset by matching legislators’ fundraising portfolios across time. In doing so, I isolate the set of legislators who first run as challengers, win the election and then subsequently run again in the next election cycle as an incumbent. Using this set of candidates, I compare the amount of money each candidate raises from individuals and PACs as a challenger versus in the following election cycle as an incumbent. Using this within-legislator estimation strategy, I can remove any potential bias from candidate- or district-specific confounders that might influence giving from PACs, ideological groups, or individuals. The results show that upon gaining a seat in the legislature, candidates more than double the money they raise from PACs. Money from ideological groups increases by 25 percent, while fundraising from individual donors does not change. This evidence supports the theory that PACs and ideological groups value access to legislators, while individuals do not.

Finally, using the panel dataset I show that individuals and ideological groups use ideology to guide who they support financially. To show this, I look at the set of legislators who change parties while in office and compare the average ideologies of PACs, ideological groups, and individuals who give to these legislators before and after they change parties. The results show that when candidates switch party affiliations, the ideology of their indi-
vidual and ideological group contributors changes dramatically. On the other hand, PAC donations remain relatively unaffected by party switching. These results are consistent with the theory that PACs, whose issue concerns span partisan lines, care little about legislators ideologies, while individuals and ideological groups prioritize ideology.

The remainder of the paper proceeds as follows. In Section 2 I outline the existing theories of why PACs and individuals contribute money to political candidates. I then suggest that a certain group of PACs does not fit the non-ideological, access-oriented theory. I suggest instead that these group are simultaneously interested in access and ideology. Section 3 presents the empirical tests of these theories. I begin by presenting cross-sectional evidence of differences between PAC, ideological group, and individual contribution behavior. I then present results from an original survey of individual donors in the 2012 election cycle. Finally, I present results from two within-legislator designs that identify access-seeking behavior by interest groups and ideological-based giving by individuals and ideological groups. Finally, Section 5 concludes.

2 Theories of Contribution Behavior

Scholars have previously theorized why PACs and individuals contribute to political campaigns, and why those motivations may be different from one another. In this section, I outline the main theories for why each group chooses to invest financially in candidates for office. I draw distinctions between the theories and discuss existing empirical results that lend credence to each theory. Additionally, I develop a new theory outlining why ideological groups value both access and ideology. Finally, I discuss how the empirical results in this paper provide a more direct and comprehensive test of each theory.
2.1 PAC Motivations

Previous research has suggested that political action committees are interested in influencing legislators in an effort to ensure that legislation affecting their particular issue better reflects their interests. Hall and Wayman (1990) pioneered the theory of access in response to previous research that found few connections between PAC contributions and specific votes from members of Congress (Grenzke 1989; Wright 1985; Wayman 1985). Rather than buying legislators’ votes, Hall and Wayman (1990) suggested that PACs were primarily interested in buying access, thereby ensuring that their influence was felt in the creation of favorable legislation rather than the final vote on any particular bill. Moreover, access can act as a way to prevent legislation that conflicts with the interest groups’ mission from being created in the first place. This type of influence implies that PACs can be more influential by establishing long-term relationships with legislators where the interest group can continually transmit information to the legislator’s office rather than only when a specific bill is being considered (Snyder 1992). This information is more useful when transmitted to incumbents than challengers since incumbents are actively making policy, whereas challengers are only hoping to be crafting legislation in the future. We should therefore empirically observe PACs supporting incumbents once they are elected to office in order to establish a working relationship with the legislator in office.

Additionally, more experienced legislators are more valuable to PACs and ideological groups. Legislators who have a record of winning elections signal to interest groups their quality and ability to continue to win reelection (Ansolabehere et al. 2000; Carson et al. 2007; Butler 2009b). Thus, with each victory, PACs see candidates as higher quality, more influential, and more likely to win future elections—all of which are valuable qualities to interest groups. These legislators are more likely to remain in office, allowing the relationship between the interest group and legislator to continue.
Furthermore, many issues that PACs (but not ideological groups) care about do not break down cleanly along partisan lines. Because of this, PACs can argue for their cause on either side of the aisle. This implies that PACs’ can speak with legislators from either party or with legislators who have different ideological positions as they work to advance their particular issue. This suggests that ideology is not a primary consideration for PACs, and that these groups will instead give to candidates and legislators from both political parties.

Moreover, if PACs have an ideological preference at all, we would expect it to be towards more moderate legislators. This expectation is motivated by the theoretical and empirical literature that suggests more moderate candidates perform better in general election contests (Canes-Wrone et al., 2002; Brady et al., 2007; Hall, 2013). Thus these candidates are excellent targets for groups who are interested in supporting to candidates they anticipate will win. However, an extreme incumbent is certainly more valuable to a PAC than an unsuccessful moderate, suggesting that ideology takes a back seat to incumbency.

While it is difficult to observe the process of creating legislation and equally difficult to measure the degree of influence interest groups have in the policy-making process, recent studies provide evidence that is consistent with the predictions of these theories. For example, Grimmer and Powell (2013a) find that when legislators are involuntarily removed from committees, contributions from PACs related to that committee’s issue area decrease. This suggests that the value of buying access to provide this legislator with information related to the group’s interests decreases when she no longer sits on the related committee. Similarly, Fouirnaies and Hall (2013) use a regression discontinuity design to show that barely-winning candidates raise more money from PACs in future elections than candidates from the same party in districts where that party barely lost. This result suggests that that PACs value supporting candidates from the incumbent party, creating a substantial financial incumbency advantage.²

²Empirical support for the informational theory of PAC contributions can also extend beyond campaign
While each of these studies provides evidence of access-oriented PACs, I advance our understanding of this theory by providing more comprehensive evidence and further distinguishing between purely access-oriented PACs and those interest groups that value both access and ideology. I show results consistent with the theory in both cross-sectional and panel models across several election cycles. Furthermore, I use a causal identification strategy that applies broadly, as opposed to locally identified results that come with methods such as regression discontinuity designs (Imbens and Lemieux 2008). Finally, previous results fail to consider why non-ideological PACs and ideological interest groups may differ from one another. Instead they consider all interest groups in the same way. Doing so may bias the interpretation of the results if a portion of interest groups are simultaneously motivated by ideology while also valuing access.

2.2 Individual Motivations

Theories of individual donors’ reasons for giving money differ from theories of PAC motivations. Existing scholarship suggests that individual donors’ primary motivation is to give to the candidate that is ideologically closest to them. Ansolabehere et al. (2003) suggest that individual’s participation in the campaign finance marketplace is mainly a consumption good, meaning that individuals contribute because they enjoy participating in politics and find satisfaction in supporting their candidate or party of choice. These donations are not, however, intended to develop a long-term relationship between the donor and the candidate, or to produce any sort of opportunity for future access to legislators. Empirically this suggests that individuals care about the ideologies of the candidates who are elected to office. Thus, we would not expect individual donors to contribute to candidates who do not share contributions to lobbying efforts by PACs as well. Through an analysis of lobbyists who used to work in senate offices, Vidal et al. (2012) find that when the ex-staffer’s previous boss (a US Senator) leaves office, the lobbying firm’s revenues decrease as a result. While this study focuses on lobbying rather than contributions, it suggests that interest groups value the personal and long-term relationships that allow PACs to continually interact with legislators and their staff.
their party affiliation. Furthermore, individual donors may even avoid candidates from the same party who have different ideological positions. Moreover, ousting legislators who are out of step with the individual’s ideology should be important, and we should therefore expect individuals to often support ideologically palatable replacements.

There are few tests of this theory of individuals’ motivations for giving, which is surprising given the importance of individual contributors in the campaign finance marketplace. Individual contributors are the largest source of campaign money, and in the 2012 election cycle individual contributions constituted more than 70 percent of the average U.S. House candidate’s fundraising portfolio (see Chapter 2). A few recent papers point towards the ideological motivations of individuals while not specifically addressing the question. Gordon et al. (2007) investigate a specific group of individuals and their motivations for giving by looking at the patterns of corporate executives’ contributions. However, CEOs are certainly not representative of the average donor. Stone and Simas (2010) find that as candidates move towards the ideological extremes, they increase their fundraising from individual contributors. This evidence, paired with results suggesting that individual donors are ideologically polarized (Bonica, 2013b), suggests that individuals reward candidates financially for moving closer to their preferred ideology. While these results are suggestive, a direct empirical test of this theory has yet to be undertaken.

I advance our understanding of the individual contributor theory by presenting several direct tests of this theory. First, I use observational data to show that individuals behave differently from PACs in a way that supports an ideological motivation for giving. Next, I use an original survey of individual donors in the 2012 election that directly addresses the motivations for giving. These data provide a valuable view of donors’ own thoughts on the importance of various factors that determine who they support financially. Moreover, I advance our understanding of individual contributors’ motivations by looking at how individual donors respond to a quasi-random change in legislators’ ideologies. When legislators
change partisan affiliations, the composition of individual donors supporting those legislators changes dramatically, suggesting that individuals are highly responsive to the ideology to legislators as expressed through their party affiliation.³

2.3 Ideological Group Motivations

There is scant scholarship on the motivations and behavior of ideological interest groups. Ideological groups occupy an intermediate position between purely access-oriented PACs and individuals with regards to their motivations for giving. Their unique interests lead them to value access while also caring about ideology. The reason for this hybrid approach to contributions stems from the combination of these groups’ interest in advancing specific policies (as PACs also do) with the fact that their particular policy interests align along ideological and partisan lines. Examples of these groups include the The National Rifle Association, The League of Conservation Voters, or the AFL-CIO. This is not the case with a non-ideological PAC such as the American Hospital Association, where the two major parties do not have clearly delineated positions on the topics advocated by the group. These ideological groups’ interest in advancing policy implies that they should value incumbency and long-term relationships with legislators in office. This feature makes them similar to other non-ideological PACs. However, their interest in policies supported by only one particular party, however, implies that ideological groups will contribute overwhelmingly to candidates who share their partisan and ideological leanings, making them similar to individuals.

Together, these conditions imply that we should often see these groups occupying a middle ground between the behavior of access-seeking PACs and ideologically motivated individuals. In any given contest, ideological groups should be more likely to support the candidate who favors their policies, leading them to often support challengers who could

³While which legislators change parties and the timing of a legislator’s change is not randomly assigned, by comparing how individual donors respond to this change with how PACs respond to the same change allows us to approach a causal result. I explain and justify this design in greater detail in later sections of the paper.
supplant an unsupportive incumbent and advance their agenda in office. We should thus observe in the cross-sectional data ideological groups giving to challengers more often than PACs do. However, when a legislator who shares these groups’ preferences is elected, we should also observe these groups directing contributions towards this new incumbent in order to establish a working relationship in an attempt to gain access to this newly-elected legislator. In this way, ideological groups simultaneously demonstrate the behavior of both non-ideological PACs and individual donors.

3 Data and Results

To test these theories of giving among PACs, ideological groups, and individuals, I use a variety of data and empirics. The first source of data is a comprehensive list of contributions to state and federal legislative candidates (Bonica, 2013b). At the state level, the data extend from 1990 through the 2012 election cycle. At the federal level, the data cover 1980 to the 2012 election cycle. These data allow me to calculate the amount of money raised by each candidate from PACs, ideological groups, and individuals.

I distinguish between PACs and ideological groups by using the classification scheme developed by the Center for Responsive Politics, a nonpartisan organization that tracks and collects campaign contribution data. CRP has developed a coding scheme that classifies the type of contributing organization by industry. For each interest group, they classify the group by the main focus or area of policy interest. These categories include various business sectors as well as a category for “labor/union” and “ideological/single-issue” groups. Based on this classification scheme, I code ideological groups as those coded as “ideological/single-issue” or “labor/union”. I include unions in the ideological group given their history of overwhelmingly supporting Democratic candidates. I also use data from an original survey of individual

4However, excluding unions from the ideological group category does not change any of the results. A complete list of groups included in the ideological group category as well as the PAC category is available from the author.
donors who gave to candidates in the 2012 election cycle. Using the survey, I illustrate the primary motivations for giving that respondents identified. I discuss in greater detail the survey methodology and characteristics of the respondents later in the paper. Using these various data, we can observe distinct differences in the patterns of giving between individuals and PACs.

3.1 Cross Sectional Data

If PACs are primarily concerned with having access to legislators in office, we would expect these groups to target more moderate legislators and candidates. This expectation is motivated by the theoretical and empirical literature that suggests more moderate candidates perform better in general election contests (Canes-Wrone et al. 2002; Brady et al. 2007; Hall 2013). Thus these candidates are excellent targets for groups who are interested in contributing to candidates they anticipate will be more likely to win the election. On the other hand, if individuals and ideological groups are guided by ideology when contributing, we should observe these groups giving to legislators who match their ideological leanings. Given the ideologically polarized views of individual donors (Bafumi and Herron 2010; Bonica 2013b); we should see individuals contributing to equally extreme candidates.

To measure this, I look at the ideologies of candidates that PACs, ideological groups, and individuals gave to in the 2012 election cycle. I use NOMINATE scores as a measure of candidate ideology and estimate a money-weighted average ideology for each contributor (Poole and Rosenthal 1997; Nolan McCarty and Rosenthal 2006). That is, for each contributor, I consider the average NOMINATE score of the candidates they gave to, weighted by the amount of money they gave to each candidate. This simple measure allows us to see the types of candidates that PACs, ideological groups and individuals give to. Following

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5In the main paper I present the results from the 2012 election cycle, however, including additional election cycles does not change the result and each previous election cycle closely mirrors the results from 2012.
the scale of NOMINATE scores, smaller values indicate more liberal ideologies while larger values indicate more conservative ideological positions. According to the theories presented in Section 2, we should see few individuals and ideological groups in the ideological center while PACs should cluster towards the moderate scores.

Figure 1 shows the distributions for each of these groups. The distribution of PAC contributors is centered over moderate scores and is unimodal. On the other hand, scores for individual donors display a bimodal distribution with fewer donors located in the center of the scale. Ideological groups look similar, but with slightly more mass in the ideological center. These results align with the theory that individuals are motivated by ideological concerns when giving while PACs favor moderation and electability over ideology. This comports with a strategy focused around access to those most likely to hold office.

Figure 1: Distribution of Donors’ Contribution Weighted Ideology Score - The left panel shows the ideology of PAC contributions in the 2012 election cycle. The middle panel shows the same measure for ideological groups. The right panel shows individuals’ ideologies, which are bimodal around the ideological extremes. These results comport with the theory that ideologically extreme individuals give to ideologically polarized candidates while PACs prefer more moderate candidates and bipartisan giving.

To further test these theories, I look at the proclivity of PACs, ideological groups, and

---

6We should note however, that the unimodal distribution among PACs could be the result of two different behaviors. The first is that PACs prefer to support moderate candidates and focus their money towards these candidates. The second is that PACs give money to ideological candidates, but from both parties, leading to a centrist average ideological score. Both of these stories could be true, and both support an access-oriented donation strategy.
individual donors to allocate their contributions across the ideological spectrum. I find that while individuals and ideological groups contribute to candidates in a narrow ideological range, PACs are more likely to give across the board to candidate with various ideological positions. If ideologically motivated individuals and ideological groups focus their contributions towards candidates who share their ideological viewpoint, this will lead to these donors focusing their money towards candidates from one of the two major parties. If PACs are non-ideological in their donation behavior, we should observe them spreading their contributions between the two parties.

A very simple way of looking at this is by comparing the percent of donors’ money that went to each of the two major parties. Figure 2 shows the incidence of bipartisan giving among PACs, ideological groups, and individuals over time. To measure this, I first calculate the percentage of a donor’s contributions that go to candidates from each party. I then create an index of bipartisan giving by “folding” this measure and rescaling it to extend between 0 and 1. Donors who give all of their money to one party have a score of 1 on this scale, while donors who equally split their money between parties are assigned a score of 0. I then take the average of this measure for PACs, ideological groups, and individuals in each year, weighted by the number of donations made by each donor. We see in Figure 2 that in every election cycle PACs have lower scores, indicating that they are more likely than individuals and ideological groups to support candidates from both parties. On the other hand, individuals almost exclusively give to candidates from only one party. Ideological groups are close to individuals in their level of support for candidates from only one of the two major parties. These results support the theory that PACs are not concerned with a candidate’s party while ideological groups and individuals focus their contributions to candidates from only one party.

The federal data is available from the 1980 election cycle to the present whereas the contribution data for state legislative races is only available from 1990 to the present. Thus results from 1980 to 1990 are only for federal donors and results from 1990 to the present include both sources.
Figure 2: **Incidence of Bipartisan Giving** – This figure shows the percent of donors who gave to candidates from both parties, weighted by the number of donations the donor made. PACs (dashed line) are more likely to contribute to candidates from both parties, whereas individuals (solid line) in all election cycles favor candidates from one party or the other. Ideological groups (dotted line) closely resemble individuals by only supporting candidates from one of the two parties.

In addition to giving to candidates from one particular party, we should also observe ideologically motivated individuals and ideological groups contributing to candidates in one location on the ideological spectrum. For example, an extremely conservative donor will not only target Republican candidates, but will especially support Republican candidates who share her ideology. Among PACs, this should not be the case. In addition to bipartisan giving, we should also see PACs spreading their contributions across the ideological scale. This could be in an attempt to give money to the most electable candidate or to support the sitting incumbent, regardless of her ideology. To show these differences I again use the NOMINATE scores of legislators running in the 2012 election. One way to measure the ideological spread of a donors’ contributions is to measure the standard deviation of the ideal points of candidates supported by that particular donor. To measure this, I calculate a contribution-weighted standard deviation for each donor. Appendix 6 shows this calculation formally. Higher values indicate contributions to a wider array of candidates while smaller
values indicate donations focus towards candidates with similar ideological positions. We expect PACs to have larger values on average than ideological groups and individuals.

Donors motivated by ideological concerns should have low standard deviations as they focus their money towards candidates who all share similar ideological positions. Non-ideological contributors should therefore have higher standard deviation scores since they invest their money across the ideological scale. Figure 3 shows the distribution of donors’ contribution-weighted standard deviations. As expected, the majority of individuals’ and ideological groups’ scores are much lower than the distribution of scores for PACs. This is consistent with the theories presented above.

![Figure 3: Standard Deviation of Donor’s Contributions](image)

Figure 3: **Standard Deviation of Donor’s Contributions** - This figure shows the distribution of standard deviations for donors the 2012 election cycle. Donors with larger values give to candidates from across the ideological spectrum while smaller values indicate donors focusing on candidates with one particular ideology. The distribution of PAC values (left panel) is shifted right compared to ideological groups (middle panel) and individual donors (right panel). This suggests that PACs give to candidates with a variety of ideologies while ideological groups and individuals give to candidates in one specific ideological location.

One concern with this measure is that PACs tend to give more often than individual donors, which may inflate the standard deviation of their donations and present an incorrect picture of PAC versus individual giving patterns. A simple OLS regression of the contributors’ standard deviation on an indicator for PACs, ideological groups, and individuals shows that individuals and ideological groups still have lower standard deviation scores even after accounting for the number of donations given. Table 1 shows these results. Contributing
Table 1: OLS Regression of Donor Standard Deviation on Donor Type. Individuals and ideological groups have lower standard deviations than PACs (omitted category), even after controlling for the number of donations made.

to candidates from across the ideological range suggests that PACs are less interested in a candidate’s ideology than individuals and ideological groups are when contributing.

Moreover, if access to legislators in office is important to PACs and ideological groups, these groups should value incumbency to a greater degree than individuals. Incumbency is necessary for candidates to grant access to the lawmaking process since incumbents (and not challengers) have the formal means of proposing, crafting, and voting on legislation. Therefore we should expect PACs and ideological groups to place a premium on whether or not a candidate currently holds office. To illustrate this, I plot the percentage of the money PAC and ideological groups give to incumbents versus the percent of individual money given to incumbents in each election cycle. Figure 4 shows these results.

Figure 4 shows that PACs and ideological groups give to incumbents more than individual donors do. In each election cycle, the majority of PAC money flows to incumbent legislators. This lends evidence to the idea the PACs are mostly supporting legislators already in office. On the other hand, in every election cycle individuals spent more of their money than PACs or ideological groups supporting challengers. Individuals who seek to elect candidates

<table>
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<th>DV: Standard Deviation of Donor’s Contributions</th>
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<tr>
<td>Log(# Donations)</td>
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<td>Individual</td>
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$^{***}p < 0.01$, $^{**}p < 0.05$, $^*p < 0.1$
with a particular ideology should be more likely to support challengers who could replace incumbents who do not represent their ideological preferences. Ideological groups split the difference between PACs and individuals. While they value ideology, they also value access, and thus support incumbents at a higher rate than individuals, yet less often than PACs.

![Percent of Money Going to Incumbents](image)

Figure 4: Percent of Money Going to Incumbent Candidates - This figure shows the percent of money spent in each election cycle supporting incumbent legislators. PACs are most supportive of incumbents in each election cycle, followed by ideological groups, and finally individuals. This suggests that PACs are more interested than individuals in maintaining a connection to legislators in office than replacing them with new legislators. Ideological groups appear to favor incumbents more than individuals, yet also value ideology as was shown previously.

### 3.2 Panel Results: Effects of Incumbency

The data presented thus far may not account for the myriad factors that could differ between incumbents and challengers. These differences may also affect whether or not PACs, ideological groups, or individuals contribute money. To account for these unobserved differences, I conduct a within-legislator analysis that isolates the effect of incumbency on PAC, ideological group, and individual contributions. The analysis is based on the following thought
experiment. Consider a legislator who runs for office as a challenger in time $t$ and wins the election. This legislator is seated in the legislature, and runs again in the next election cycle, time $t + 1$, this time as an incumbent. If we compare the fundraising portfolio of this candidate in her first election, to her portfolio in her second election, we can see the effect incumbency has on donations from these different groups.

By comparing the fundraising patterns of the same legislator across time, we account for time invariant factors that are specific to the state, district, and legislator, thus isolating the effect of incumbency on donations. By further parsing the data to only compare candidates who ran in contested elections at both time $t$ and $t + 1$, we can further remove any differences between open versus contested seats from the analysis. Finally, by looking at candidates that run in a variety of years, we can account for any temporal trends in donation behavior by PACs and individuals. In a regression framework this comparison is conducted through three separate models. In the first model, the (logged) amount of money raised from PACs by legislator $j$ is regressed on an indicator for incumbency and a legislator-specific fixed-effect ($\alpha_i$). In the second model the (logged) amount of money raised from ideological groups is regressed on the same variables. Finally, the same model is fit with individual money as the dependent variable. Comparing the values of $\hat{\beta}$, $\hat{\gamma}$, and $\hat{\zeta}$ will show us the difference in importance placed on incumbency by PACs, ideological groups and individuals.

$$\log(\text{PAC}_{jt}) = \alpha_j + \beta \text{ incumbent}_{jt} + \varepsilon_{jt}, \quad t \in \{0, 1\}$$

$$\log(\text{Ideological}_{jt}) = \alpha_j + \gamma \text{ incumbent}_{jt} + \varepsilon_{jt}, \quad t \in \{0, 1\}$$

$$\log(\text{IND}_{jt}) = \alpha_j + \zeta \text{ incumbent}_{jt} + \varepsilon_{jt}, \quad t \in \{0, 1\}$$

The value of $\hat{\beta}$ will tell us the estimated percent increase in contributions from PACs that is due to becoming an incumbent, while the value of $\hat{\gamma}$ and $\hat{\zeta}$ will show us the same
quantity among ideological groups and individual contributions. We expect the value of $\hat{\beta}$ to be larger than $\hat{\zeta}$ if PACs value incumbency more than individual contributors. If ideological groups value incumbency, $\hat{\gamma}$ should also be positive and larger than $\hat{\zeta}$. This expectation arises from the theoretical argument that when a candidate becomes an incumbent, she now has much greater value to an access-seeking interest group. As an incumbent her ability to grant access to the legislating process has increased dramatically, giving groups an incentive to support her financially. If individuals are primarily concerned with the ideology of the candidate, we would not expect becoming an incumbent to have the same allure as it does for interest groups.

![House Candidates](image)

Figure 5: **Effect of Incumbency on Contributions** - This figure shows the effects of becoming an incumbent on contributions from PACs, ideological groups, and individuals. Becoming an incumbent leads to a roughly 125% increase in contributions from PACs. Among ideological groups the effect is positive; becoming an incumbent leads to a 25% increase in contributions from these groups. However, becoming an incumbent does not have an effect on contributions from individuals. These results confirm the theory that PACs and ideological groups value access to legislators while individuals are not concerned with access.
Figure 5 shows the estimated effect of $\hat{\beta}$ and $\hat{\gamma}$, and $\hat{\zeta}$. Incumbency increases PAC contributions by nearly 125% from the previous election. The effect is also positive for ideological groups. Incumbency increases contributions from these groups by nearly 25%. On the other hand, incumbency does not appear to have any affect on individual contributions. The estimated coefficient is nearly zero and is statistically insignificant at the .05 level. These results align with the cross sectional data in Figure 4 and show that PAC’s and ideological groups’ affinity for supporting incumbent legislators is not caused by some other confounding variable, but is rather directly related to the incumbency status of a legislator.

The within-legislator design shows us that incumbency causes greater financial support among PACs and ideological groups. This result further supports the previous results and suggests a direct relationship between the access-granting privileges of incumbency and PAC and ideological group contributions. We should note that contributing to an incumbent legislator does not necessarily guarantee an interest group future access to the legislator or the law-making process. However, incumbency is certainly a necessary condition for access, and these results show that PACs and ideological groups recognize the importance of incumbency in gaining access to the legislative process. Furthermore, these groups invest their resources in a way that is consistent with attempts to increase their probability of gaining access through political contributions.

We should note that the identification strategy does not account for other factors that may change for a given legislator over time. Yet, for the estimated effect to be due to some other factor that changes when a legislator moves from being a challenger to an incumbent, it must be the case that this omitted variable affects interest groups while not affecting individuals. Possible explanations such as increases in candidates’ abilities, changes in the competitiveness of the district, franking privileges, or increased coverage by the media should not affect PACs’ willingness to contribute any differently than individual donors’. Furthermore, in the appendix, I present the same results, but restricted to the states that have no limits on
contributions from individuals or PACs. This ensures that any effect is not due to individual having lower limits than interest groups. The results in the Appendix are consistent with those shown in Figure 5. In each of these cases, the access-seeking theory for interest groups versus the ideologically-motivated theory for individuals fits the results of these models much better than any of these alternative explanations.

3.3 Accumulating Value of Incumbency

As a final test of the access-seeking hypothesis, I conduct a similar analysis as before, but over multiple consecutive election cycles. If interest groups value access and long-term relationships with legislators, then they should find legislators who stay in office longer particularly attractive. This could be the case for two different reasons. The first is that legislators who win repeatedly have demonstrated their quality as candidates and their ability to continue to win future elections. Thus, interest groups see this legislator as a safer bet in terms of her likelihood of remaining in office for years to come. Furthermore, with more terms in office, legislators gain seniority, better committee assignments, and greater experience in navigating the legislative process. All of these traits should be valuable to access-seeking interest groups, yet not particularly valuable to ideologically motivated individual donors.

To measure the accumulating value of incumbency, I replicate the analysis done in Figure 5 but instead of only looking at the difference in funding between the election cycle as a challenger and the following election, I look at the difference between election cycles after the legislator is an incumbent. In other words, I measure the difference in fundraising between elections \( t \) and \( t + 1 \) (the original results presented in Figure 5), \( t + 1 \) and \( t + 2 \), \( t + 2 \) and \( t + 3 \), and finally \( t + 3 \) and \( t + 4 \). Naturally, with each additional election cycle, the sample of legislators grows smaller since many legislators do not stay in office long enough to compete in five consecutive election cycles. However, in each case, I look at a within-legislator comparison by including a legislator-specific fixed effect, \( \alpha_j \), so as to account for
any time-invariant factors that are specific to each legislator. Additionally, this identification strategy accounts for district-level factors that do not change over time as well. Formally, these models are

\[
\log(PAC_{jt}) = \alpha_j + \beta_1 \text{incumbent}_{jt} + \varepsilon_{it}, \quad t \in \{0, 1\}
\]

\[
\log(PAC_{jt}) = \alpha_j + \beta_2 \text{SecondTerm}_{jt} + \varepsilon_{it}, \quad t \in \{1, 2\}
\]

\[
\log(PAC_{jt}) = \alpha_j + \beta_3 \text{ThirdTerm}_{jt} + \varepsilon_{it}, \quad t \in \{2, 3\}
\]

\[
\log(PAC_{jt}) = \alpha_j + \beta_4 \text{FourthTerm}_{jt} + \varepsilon_{it}, \quad t \in \{3, 4\}
\]

I also estimate similar models for ideological group contributions as well as individual contributions. If PACs and ideological groups value access, then not only should their contributions increase after legislator \(j\) becomes an incumbent \((\beta_1)\), but also in later terms \((\beta_2, \beta_3, \beta_4)\) as a legislators gain experience and the incumbency advantage grows. Empirically, this means we should see positive values for each \(\beta\) in the models (or each \(\gamma\) for ideological groups). Among individuals, we would expect the coefficients (each \(\zeta\)) to be zero as in the original model.

Figure 6 shows the results of these models. The left panel displays the results for PAC contributions. We see that after each consecutive election a legislator wins, contributions from PACs continue to increase by nearly 100%. This lends strong support to the theory that PACs see electorally successful legislators as increasingly valuable and capable of providing access to the legislative process. Among ideological groups (center panel) the evidence is less strong, but still supportive of the theory. While the original effect of incumbency suggests ideological groups are access seeking, later election results, while having a similar magnitude, fail to achieve statistical significance. This is likely due to smaller samples in each consecutive election cycle as legislators leave office. Among the first three election cycles of a legislator’s career, there is suggestive evidence supporting the theory that ideological groups value access
Figure 6: **Continuing Effect of Incumbency on Contributions** - This figure shows the changes in contributions from PACs, ideological groups, and individuals after each successful election a candidate wins. For example, the first point in each panel shows the average percent increase in fundraising a candidates gains after winning her first election (i.e. becoming an incumbent). Among PACs, this effect persists into later elections as well. After winning her second election, her contributions increase again. This is also the case after winning her third and fourth election cycle. Points are shown with 95% C.I.

to legislators in office and demonstrate this interest through increasing their contributions once a candidate becomes an incumbents and is successful electorally thereafter. However, in the final model of the center panel, we see the estimate decreases to nearly zero.

Among individuals (right panel), in each model we see little evidence that incumbency or electoral success thereafter is rewarded with larger contributions. In each model, the estimates are near zero and are statistically insignificant at traditional levels. This lends further evidence to the theory that individuals do not contribute money for reasons of gaining influence or access to the legislative process.

### 4 Ideological Motivations

The empirical evidence presented thus far comports with the theory that PACs and single interest groups value access while individual donors do not. In this section, I present further evidence showing that individuals and ideological groups consider the partisanship and ideology of legislators when deciding who to support financially, while PACs pay little attention to the ideological position of a candidate.
4.1 Survey of Individual Donors

The most direct way to identify individuals’ motivations for giving would be to simply ask them. To do so, I conducted a survey of individual contributors in the 2012 election cycle. When donors give more than $200 to a federal candidate in an election cycle, the Federal Elections Commission requires the donor and receiving candidate to publicly disclose the contributor’s name, address, occupation, and the date and amount of the contribution \cite{FederalElectionsCommission2002}. Using this publicly available list of contributors, I mailed 15,000 letters to donors who gave to the 22 senators who actively sought reelection in 2012. Approximately 3,000 donors responded and completed the survey online. In Appendix 6.3 I discuss the survey methodology in greater detail and address the representativeness of the sample. After weighting, the sample closely resembles the population of donors who gave to these 22 reelection seeking senators.\footnote{While not perfectly representative, the population of donors who gave to these 22 senators is very similar to the entire population of individual contributors in 2012. For this reason, I am not concerned that the survey cannot speak to the motivations of individual donors in general.}

As part of the survey, respondents were presented with several potential reasons for contributing to a political campaign. These considerations included the degree to which the recipient agreed with the donor on political issues, the degree to which the recipient’s opponent did not agree with the donor on political issues, and whether or not the recipient was engaged in a close race where the donor’s contribution might help their preferred candidate win. Respondents were then asked to indicate how important each of these considerations is for them when deciding who to support financially. Responses ranged from “1: Extremely Important” to “5: Not at all Important”.\footnote{The exact wording of this question was: How important are the following factors in your decision to make a contribution to a U.S. House or U.S. Senate candidate? 1: Extremely important, 2: Somewhat important, 3: Neither important nor unimportant, 4: Not that important, 5: Not at all important.} In addition to reasons for giving, respondents answered various questions regarding their policy preferences on several current political issues.
Using the responses to policy preferences, I estimate the ideological positions of donors using a standard one dimensional ideal point model that produces one value for each respondent (Clinton et al. 2004). This score 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 using roll call voting 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). The key to each of these methods is creating a dataset in which the actors cast votes over a variety of binary questions. Those “votes” could be endorsements by the president for legislation or judges agreeing with the majority opinion on the court. 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 donors. Smaller values indicate more liberal ideological positions.

If individual donors are motivated by ideology when deciding where to contribute money, we should see a large percentage of respondents indicating that ideological reasons are either “Very Important”, or “Somewhat Important”. Figure 7 displays the proportion of donors who provided either of these two responses to three different questions that are tied to ideological giving. Figure 7 shows these proportions on the y-axis with the estimated ideal point of the respondent on the x-axis. If ideology is a primary motivator for individual donors, not only should we see large majorities answering that these potential reasons are important, we should also see the proportion of respondents answering “Very Important” or “Somewhat

\footnote{Specifically, I estimate the ideal points using the R package \texttt{ideal} developed by Clinton et al. 2004.}
Important” to increase as respondents become more extreme. Moderate contributors should be less likely than highly ideological contributors to consider these factors important when deciding where to contribute.

Figure 7: Importance of Potential Motivations for Giving among Individuals - Each panel shows the overall proportion of respondents to the donor survey who said the reason for giving was either “Very Important” or “Somewhat Important” with a dotted line. Each potential reason for giving is shown above the figure. Each presents a different reason that is tied to ideological motivations. In each case, the proportion saying these reasons are important is high, indicating ideology is important to individual donors. Furthermore, the “U” shaped loess curve shows that the most ideologically extreme donors are even more likely to be motivated by ideology when giving.

Figure 7 shows that overall, most respondents/donors said that these factors are important motivations for giving. The dotted lines in each panel show the average proportion of all respondents who stated that each motivation was important in giving. Additionally, the “U” shape of the loess lines indicate that the most liberal and conservative respondents are even more likely to have said that these factors were important to them when deciding who to give to. Together, the high overall proportion responding “Very Important” or “Somewhat Important” as well as the “U” shaped relationship between these responses and ideology support the theory that individuals place a high value on ideological concerns when giving money. Moreover, the most ideological individuals are even more likely to value a candidate’s ideology when giving.
4.2 Panel Results: Party Switching

Unfortunately, similar survey results are not available from PACs or ideological groups. However, we can further demonstrate the ideological motivations of individuals and ideological groups while also demonstrating that PACs have little concern for the ideology of legislators by looking at additional data.

Using the database of contributions from PACs, ideological groups and individuals, I show that in the rare cases when legislators change party affiliations, the composition of their ideologically motivated donors changes as well. On the other hand, the composition of PAC contributions is mostly unaffected. Bonica (2013b) has used these contribution data to estimate the ideological positions of contributors in both federal and state legislative elections. Using these ideological scores, I estimate the changes in the average ideology of donors to legislators before and after a legislator’s partisan change. While scholars have demonstrated that most legislators are ideologically consistent over the course of their careers (Poole, 2008), legislators who change parties show a dramatic ideological shift at the time of the change (Nokken and Poole, 2004; Poole, 2005; Clinton et al., 2004). While few legislators in the House and Senate change parties, many more switches occur in the state legislatures simply because there are vastly more state legislators than representatives in Congress. In this analysis, I look at the effects of changes by 133 legislators at both the state and federal level between 1980 and 2012.

If individuals and ideological groups are motivated by ideology when contributing, these donors should react quickly to the sudden shift in a legislators party and voting behavior. Specifically, changes by legislators from the Democratic to the Republican party should be accompanied by shifts in who these legislators raise money from. Liberal individual donors and ideological groups should abandon these newfound Republicans while conservative donors may embrace their new partisan allies. Similar changes, but in the opposite
direction, should accompany switches from the Democratic Party to the Republican Party. Formally, I estimate the following models for PACs, ideological groups, and individuals:

\[
PAC \, Ideology_{ijt} = \alpha_j + \beta \, Republican_{jt} + \varepsilon_{ijt} \quad t \in \{0, 1\}
\]

\[
Ideological\, Group \, Ideology_{ijt} = \alpha_j + \gamma \, Republican_{jt} + \varepsilon_{ijt} \quad t \in \{0, 1\}
\]

\[
Individual \, Ideology_{ijt} = \alpha_j + \zeta \, Republican_{jt} + \varepsilon_{ijt} \quad t \in \{0, 1\}
\]

In these models, the dependent variable is the estimated ideology of contributor \(i\) to legislator \(j\) in the election cycle immediately preceding the partisanship change \((t = 0)\) or immediately after the party change \((t = 1)\). \(\alpha_j\) is a legislator-specific indicator variable, which provides us with a within-legislator estimate of the effect of ideological change. The value of \(\beta\) therefore shows the within-legislator average change in the ideology of PAC contributors after switching to the Republican party. \(\gamma\) and \(\zeta\) show the same estimate for ideological groups and individual contributors respectively. If individuals and ideological groups react to changes in legislators’ ideology after changing parties, then the values of \(\gamma\) and \(\zeta\) should be positive. On the other hand, we would not expect PACs to react to partisan changes, and thus, the value of \(\beta\) should be close to zero.

Figure 8 shows the results of these models. The estimated coefficients are consistent with the theory that PACs are not concerned with the ideology of legislators when deciding who to support. Moreover, the results support the idea that ideological groups and individuals care a great deal about the ideology of the candidates they support. Among ideological groups and individual contributors, when legislators switch to the Republican party, there is a dramatic shift in the average ideology of contributors who support these candidates.\(^{11}\)

In both cases, the legislator receives support from significantly more conservative donors.

\(^{11}\) Given that Bonica identifies contributor’s ideologies through the legislators they give to, there is the possibility of endogeneity when using legislators ideologies in a model of party switching. However, if this is the case, the fact that these donors gave to legislators who later switched parties should move the ideologies of the donors towards centrist values on average, which would bias against finding any effect here.
Figure 8: Effect of Changing Parties on Average Contributor Ideology - This figure shows the effects of changing parties on the average ideology of a legislator’s donors. Becoming a Republican leads to a significant conservative shift in the ideology of the average ideological group and individual contributor. Positive numbers indicate more conservative ideologies. On the other hand, becoming a Republican leads to a small and substantively insignificant shift in the average ideology of PAC contributors to the legislator after the change. Estimates shown with 95% C.I.

The effect sizes are .34 among ideological groups and .22 among individuals. These shifts represent .3 and .19 percent of the standard deviation in donor’s ideologies in 2012. On the other hand, we do not see a similarly large shift in the ideology of PAC contributors after a legislator switches parties. While the effect is precisely estimated, it is substantively small (.03), and several times smaller than the effect for ideological groups and individuals.

Changing parties is certainly not a randomly occurring event, and it is possible that the change in partisanship is perhaps partially caused by a shift in a legislator’s donors prior to the party switch rather than the move causing changes in donors’ behavior. Additionally, the lack of an effect among PACs could be the results of PACs having already anticipated
the change in partisanship while individuals and ideological groups are slower to “read the partisan tea leaves” that may suggest a party change is soon to come. To test for these possibilities I estimate the same models as in Figure 5, but rather than looking at contributors before \((t = 0)\) and after the partisan change \((t = 1)\), I look instead at the ideology of contributors in the period prior to the switch \((t = 0)\) and the election cycle before that \((t = −1)\). If it is the case that contributors are driving the decision to change parties, we should see positive coefficients indicating more conservative donors gravitating towards the legislator preceding the change, pushing the legislator towards changing parties. Additionally, if PACs are anticipating party switches, then we should see a larger positive effect among PAC contributors. Figure 9 shows that both of these alternative explanations are unlikely to be

![Figure 9: Placebo Test of Party Switching Result](image)

**Figure 9: Placebo Test of Party Switching Result** - This figure shows the effect of estimating the party switching models in the two terms prior to changing parties. This model allows us to eliminate as a possible alternative the story that contributor’s are driving the legislator’s decision to change parties or that PACs are anticipating the change better than individuals and ideological groups.
the cause of the effect in Figure 8. Among PACs, ideological groups, and individuals, the effects are small and statistically indistinguishably from zero. This suggests that ideological groups and individuals are in actuality reacting to changes in legislators partisanship while PACs are much less interested in these partisan changes when deciding where to put their money.

5 Discussion and Conclusion

In this paper I have outlined theories of how PACs, ideological groups and individuals differ in their motivations for contributing to candidates for political office. Using a variety of data, we see several empirical patterns that support the predictions of these theories. Namely, PACs contribute to more moderate candidates, give to legislators from both parties, greatly value incumbency, and are unaffected by changes in a legislator’s ideology. These results support the theory that interest groups value access to legislators in office but care little about the ideological position of these legislators. On the other hand, individuals contribute to more ideologically extreme candidates, focus their contributions towards candidates of the same ideological position, care little about incumbency, and respond to changes in legislators ideologies. Furthermore, in survey results, the overwhelming majority of individuals express that ideology is important to them when deciding which candidates to support. Taken together, these results show that they value ideology and target their donations towards those who are most similar to them.

Finally, ideological groups appear to split the difference between the two different motivations of PACs and individuals. While ideological groups behave similarly to PACs in their desire to have access to legislators, they also behave like individuals and appear to value ideology as well. This aligns with the theory that they value access as a way to advance their policy agendas, but that these agendas align with the ideological divide in contemporary American politics.
While this paper addresses the motivations for contributing, there is much work yet to be done regarding the way in which these motivations affect politician’s behavior. Additionally, scholarship that discusses the impact of money on political outcomes must begin with an accurate understanding that different groups give for different reasons. If PACs are continually seeking access through campaign contributions, a logical next step is to know what type of access (if any) they are granted by legislators and how legislation would change in the absence of such influence (see for example [Broockman and Kalla (2014)] for a discussion of how contributors are granted access at higher rates than non-contributors). When considering individual contributions, while individuals may not seek access to legislators, the value they place on ideological purity may lead to polarized and ideologically extreme candidates who seek individual contributions. Further study of these relationships is certainly warranted. As these examples illustrate, there is much more to know in the relationship between money and politics.
6 Appendix

6.1 Weighted Standard Deviation of Contributions Score:

Contributor c’s weighted standard deviation ($wsd_c$) is calculated from $N$ contributions of amount \{d_1, \ldots, d_N\} to candidates \{x_1, \ldots, x_N\}.

$$wsd_c = \sqrt{\frac{V_1}{(V_1)^2 - V_2 \sum_{i=1}^{N} d_i (x_i - \mu)^2}}$$

where

$$\mu = \frac{\sum_{i=1}^{N} d_i \cdot x_i}{\sum_{i=1}^{N} d_i} \quad V_1 = \sum_{i=1}^{N} d_i \quad \text{and} \quad V_2 = \sum_{i=1}^{N} d_i^2$$
6.2 Effect of Incumbency in States with No Contribution Limits

To further test the effect of incumbency on political contributions, I reproduce the same analysis as before, but considers only state legislative candidates in the subset of states that have no limit on political contributions. In most states, and at the federal level, political donations are capped, meaning donors can only give a certain amount of money to any one candidate. Currently, at the federal level, this limit is $5,200 for individuals and $10,000 for PACs and ideological groups. The limits vary at the state level, but four states (UT, VA, OR, and MO) have no limits on contributions from any of these groups. Thus, if the results presented in Figure 5 are due to an interest group’s ability to give more money than an individual, then we should not observe the same effect in states with unlimited contributions.

Figure 10: Effect of Incumbency on Contributions - This figure shows the effects of becoming an incumbent on contributions in states with no contribution limits. We see similar results to those shown in Figure 5, suggesting that the effect is not due to higher contribution limits on PACs than individuals. Points are shown with 95% C.I.
Figure 10 shows the results of this restricted model. We see that the effects are similar to the models displayed in Figure 5. PACs and ideological groups increase their contributions to candidates after they become incumbents. Moreover, the magnitude of the effects is similar as well. The results for ideological groups is no longer statistically significant, but this is likely due to a decrease in the sample size when restricting the models to only four states. Individuals again appear to not increase their contributions to candidates when they become incumbents. This supports the theory of access-seeking interest groups and refutes the possible concern that the effect is due to differences in contribution limits in the states and at the federal level.
6.3 Survey Methodology

To measure the ideological preferences of donors, I conducted an original survey of campaign contributors in the summer and fall of 2013. 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.\(^{12}\) Using the list of donors and addresses, I mailed 15,500 letters to 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.

I specifically consider reelection-motivated senators in this study for several reasons. Given that senators face election every 6 years, their fundraising strategies vary over the course of their term significantly. 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. Thus, I consider only those senators who would be immediately concerned with appealing to donors and voters by looking at the 22 senators who faced the voters in 2012.

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 thee 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 omitted in traditional surveys that identify respondents as contributors. For example, the CCES study asks respondents if they contributed money to candidates for the Senate. However, they only ask if the donor gave to their own senator or another senator. Those who respond that they gave to “another senator” do not indicate

\(^{12}\)The 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 very small percent of the candidate’s overall contributions (usually less than 5 percent) [Open Secrets, 2014].
which of the other senators they gave to. This would not be concerning when studying the preferences of donors if legislators raised a small proportion of their money from out of district 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.

After sampling out-of-state donors, I next drew an equal number 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. Since the FEC does not record the party of the donor, I estimated the contributor’s party by looking at the percentage of donations from each contributor that went to candidates from each party. Those who gave more than 75% of their money to Republican candidates I considered Republicans. The same was true for Democrats.\textsuperscript{13} The reason for sampling these same-party and same-state donors who did not give directly to the senator is as follows. While incumbents raise a great deal of their individual contributions from out-of-state, challengers exhibit the opposite pattern. The majority of challenger money comes from donors inside the challenger’s state. Thus, incumbent senators may pay particular attention to in-state donor’s preferences even if they are not giving directly to the senator since any possible primary challenger is likely to raise most of her money from these people.

Mixed-mode surveys administered through the mail that then direct respondents to complete the questionnaire online are known to have a low response rate (Barber et al. 2014). To 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 dramat-

\textsuperscript{13}Chapter 2 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. The survey then asked donors to indicate their actual partisanship. In only 3% of cases the estimated party did not match the donors’ actual partisanship.
ically (James and Bolstein 1990). The overall survey response rate was 14 percent. Low response rates, however, are less concerning if respondents are representative of the population of interest. In this survey, respondents contributed more money on average than non-respondents. However, 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.\[14\]

To account for the differences between respondents and the population, I implement post-survey weights that adjust the sample to better fit the population of interest. To do so, I calculate a probability of responding to the survey using a logistic regression for each senator’s donor population with the dependent variable being 1 for survey respondents. I include dummies for ”in-state”, ”out-state”, ”in-state, potential donor”, and a continuous variable for the total amount of contributions given by the donor. Ideally, a inverse probability weighting model would include other demographics to provide for balance in these factors as well. However, the donor file from which respondents are sampled does not contain any of this information. Using the regression results, I calculate a probability of responding to the survey. The weights are then the inverse of this predicted probability. To avoid giving too much influence to outlying observations, I truncate the highest 10\% of the weights and assign them a weight equal to the 90th percentile. Figure [11] shows the distribution of donation amounts in the population and in the survey after applying the weights. We see that weighting brings the survey proportions closer to the proportions in the population of donors.

\[14\]Weighting to the population of interest can only be done on variables for which we know in both the population and the sample. Since the FEC file does not contain demographic information for each donor, we cannot weight according to demographic factors.
Figure 11: **Donor Survey Weighting** - Prior to weighting there is a bias among respondents towards higher contribution amounts. The dotted line shows the distribution of contribution amounts among survey respondents. The solid line shows the distribution of contribution amounts by all donors. After weighting this difference disappears. The two distributions are overlaid on top of one another. In the second panel (after weighting) they are also overlaid, but now the weighted distribution more closely resembles the distribution in the population.
Ideological Donors, Contribution Limits, and the Polarization of American Legislatures

Portions of this chapter have been presented at the 2013 Annual Meeting of the American Political Science Association in Chicago, IL and the 2014 Center for the Study of Democratic Politics (CSDP) conference on Money and Politics at Princeton University.
1 Introduction

Scholars, pundits, and politicians have frequently lamented the degree of polarization in American politics today (McCarty et al. 2006; Levendusky 2009; Bishop 2009). A large body of research shows that political polarization extends beyond the U.S. Congress to many of the legislatures of the American states (Masket 2009; Shor and McCarty 2011; Shor et al. 2010; McGhee et al. 2011). Furthermore, this research suggests that polarization leads to a variety of negative outcomes including declines in legislative productivity (Binder 1999), increasing income inequality (McCarty et al. 2006), and lower trust in government (Galston and Nivola 2006). Moreover, polarization of legislatures indicates a growing disconnect between public opinion and policy making, resulting in potentially biased representation in Congress (Bonica et al. 2013; Bartels 2010).

While scholars are quite united in decrying the negative effects of polarization, they are much less unified as to its causes. Previous investigations into the underlying causes of polarization have shown that several intuitive culprits—gerrymandering (McCarty et al. 2009), primary election systems (McGhee et al. 2011), polarized voters (Fiorina et al. 2005; Ansolabehere et al. 2006; Bafumi and Herron 2010), and changes in congressional rule-making (McCarty et al. 2006)—are likely not as responsible as initially hypothesized.

Absent from these explanations is a thorough investigation of how money influences the ideology of candidates who run for office, and the effect that contributions have on the behavior of legislators once they are in office (but see LaRaja 2008, and Powell 2012b for notable explanations of how money influences other aspects of legislative behavior.). This paper provides such an explanation by showing the connection between donors’ ideologies and the voting behavior of politicians who need to raise money from these donors. Without question, legislators are intensely interested in being reelected (Mayhew 2004), and given this incentive, we expect them to be responsive to those people who can most credibly keep them
in office. As Schattschneider (1942) stated, “He who has the power to make nominations owns the party.” Moreover, the power to determine the nomination (or election) is not necessarily distributed equally among the electorate (Fenno 1978; Gilens 2012).

Previous research has shown that the two largest sources of campaign money, individual donors and political action committees (PACs), have dramatically different motivations when giving. Individual donors tend to be ideologically driven while PACs favor moderation, incumbency, and access above ideology (see Chapter 1). With this in mind, I demonstrate that at the same time that scholars have observed rising polarization in both federal and state legislatures (McCarty et al. 2006; Theriault 2008; Lee 2009; Shor and McCarty 2011), a similarly dramatic yet previously unnoticed pattern has emerged in how candidates fund their campaigns. In the last two decades, individual donors have risen to become the largest source of campaign money for both candidates for the U.S. House as well as the various state legislatures. This rise in individual contributions has been paralleled by a similarly large decrease in the percent of money the average candidate raises from PACs. Thus we might expect the rise in polarization over the last several decades to be related to this dramatic increase in the influence of individual donors.

After showing these aggregate patterns in candidates’ fundraising, I further show that this relationship holds at the individual level. At both the state and federal level legislators’ ideologies tend to reflect the ideology of their primary contributors. That is, candidates who receive a greater proportion of their money from individuals (PACs) are also more ideologically extreme (moderate) on average. However, identifying the causal direction of this relationship is a more difficult undertaking. While it could be that legislators respond to and represent the ideologies of their contributors, it could also be the case that ideologically extreme legislators attract ideologically extreme money. If this is case, legislators may still retain their ideologically extreme positions even after removing the ideological money flowing from donors to campaign coffers.
To untangle this relationship, I exploit the various legal limits on campaign contributions in place throughout the U.S. states. I show that lowering individual contribution limits moderates legislators in office while lowering PAC limits leads to the opposite result. I suggest that the mechanism underlying this result is that these limits can either mute or amplify the connection between donors and recipients by limiting the availability of campaign money from individuals and political groups. I show this result with an original dataset of contribution limits in all 50 states from 1990 to the present. Contribution limits vary dramatically across the states and within any given state over time, and this natural variation allows me to test the ability of limits to affect the behavior of contributors and legislators. Pairing the dataset of donation limits with a dataset of campaign donations at the state level, I show that contribution limits affect the way in which candidates raise money. Lowering the limits on contributions from individuals leads to candidates receiving smaller average donations from individuals, while also leading to more individuals bumping up against the maximum allowable contribution, thus constraining contributor behavior. Furthermore, lower limits on individuals lead to candidates raising less money overall from individual donors. The same patterns hold for PACs as well.

These results help us understand the influence of money in the policy making process by exploiting variation in the availability of different types of contributions to candidates due to legal limits. Because limits at the federal level have not varied for several decades, scholars have struggled to identify the relationship between money and legislative behavior in the U.S. Congress. It is partly for these reasons that there are no existing empirical studies investigating the effects of contribution limits on political polarization. However, several notable studies (Primo and Milyo, 2006; Hamm and Hogan, 2008; Stratmann et al., 2006) look to the states for variation in the existence of contribution limits to investigate the effect of contribution limits on electoral outcomes. However, I improve our ability to use contribution limits as an explanatory variable by creating an original dataset that records

50
the actual dollar amount of each limit over time rather than whether limits do or do not
exist. The US states vary widely in their contribution limits (from $200 to more than $10,000
for example), and states frequently change these limits. I record such changes in all of the
states from 1990 to the present. Being able to account for the actual limit amount rather
than simply noting the presence or absence of a limit is a dramatic improvement over the
heretofore available data. I discuss these data in more detail in Section 5.

These results are consistent with a theory in which election motivated candidates con-
sider both the Downsian incentives of the median voter while also recognizing the ability
of contributors to further improve their electoral prospects. Yet, the ideological preferences
of donors often diverge from those of the median voter. Furthermore, the availability of
money from ideologically extreme donors (individuals) versus more moderate donors (PACs)
is affected by the contribution limits currently in place. Limits that increase the potential
influence of ideologically extreme individual donors favor candidates who cater to the pref-
erences of these donors. On the other hand, limits that increase the influence of moderate,
access-seeking PACs lead to candidates endorsing policies closer to the median voter, who
tends to also be moderate and centrist (Bafumi and Herron 2010).

The remainder of the paper proceeds as follows. In Section 2 I discuss a theory of
candidate ideology, campaign donations, and contribution limits. I then show a series of
empirical patterns that suggest a strong connection between the sources of legislators’ funding
and their political ideology. First, in Section 3 I show the simultaneous increase in chamber-
level polarization and individual contributions over the last several decades. This pattern
holds at both the federal and state levels. In Section 4 I then show that this relationship
between polarization and individual contribution exists at the individual level as well. Next,
in Section 5 I show that contribution limits in the states vary across time and within states
and that these changes affect both candidate’s fundraising patterns as well as the ideology
of those legislators who are elected to office. Finally, Section 6 concludes.
2 Money and Ideology

In this section I consider the variety of interests and electoral incentives legislators face when pursuing office. Specifically, I suggest that legislators pay particular attention to the preferences of their most influential contributors, and how, given this relationship, limits on campaign contributions will affect the ideology of legislators in office. I begin by making the common assumption that voters, donors, and legislators can be placed on a unidimensional policy space and that voters select candidates based on minimizing the spatial distance between themselves and their candidate of choice (Downs, 1957), while also being susceptible to persuasion and mobilization efforts by candidates (Hillygus and Shields, 2009; Green and Gerber, 2008). Furthermore, I assume that candidates compete on this policy space and derive utility from being elected (Banks and Duggan, 2005; Hinich and Ordeshook, 1970). Thus, this standard Downsian model of political competition stipulates that ceteris paribus, those candidates that take ideological positions closer to the median voter will be more likely to win (Downs, 1957).

However, I extend the basic Downsian model by introducing an additional, and potentially influential player to the game—the campaign contributor. While many theories of candidate positioning echo the Downsian result that the policy positions of candidates will match the preferences of the median voter in their district, in practice this is often not the case (See Chapter 3). I suggest that the constant demands of fundraising for the next election help explain candidate divergence. Candidates need resources to increase their name recognition, inform and mobilize voters, and pay for campaign staff in order to win elections. No amount of ideological positioning will help a candidate that is unknown to voters. This is one reason that fundraising is such a key component of the campaigning process and occupies such a large portion of representatives schedules (Herrnson, 1995; Powell, 2012b). Thus, all things equal, candidates with more money are more likely to win an election. This
assumption is supported by an extensive literature showing that candidates with fundraising advantages are more likely to win elections (Jacobson 1990; Gerber 1998; Green and Krasno 1988, although, see Brown 2013 for an interesting exception). This could be the result of advertising (Stratmann 2009), mobilization efforts (Green and Gerber 2008), or other methods of persuading voters to support the candidate’s campaign (Gerber et al. 2011).

Yet the motivations and ideological positions of donors from whom candidates raise their money vary dramatically. Individual contributors are on average much more ideologically extreme than voters and political action committees (Brown et al. 1995; Fiorina et al. 2005; Francia et al. 2005; Bafumi and Herron 2010; Bonica 2013b). Furthermore, individual donors are more likely to be expressive in their giving patterns. That is, they choose to give to the candidate that is ideologically closest to them while giving less weight to the probability of that candidate winning the election. For example, Stone and Simas (2010) and Ensley (2009) show that not only are individual donors extreme, but they are also less concerned with the strategic consideration of a candidate’s proximity to the median voter of the district. They find that as challengers move away from the median voter, they collect more campaign resources from individuals. These donors are, they suggest, contributing as an ideologically motivated activity rather than a strategic investment.

Furthermore, previous research suggests that the overwhelming majority of PACs are interested in gaining access to legislators in office in an effort to both craft legislation that is favorable to their interests, and simply to ensure that legislators are aware of their preferred policies (Hall and Wayman 1990; Romer and Snyder 1994; Ansolabehere et al. 2003). Thus, most PACs tend to be non-ideological in their donation behavior (McCarty and Poole 1998), often giving to candidates from both parties (e.g. Jacobson 1978 and Chapter 1). Furthermore, if PACs are primarily interested in access to legislators in office, they should support incumbents and ideologically moderate challengers who are closer to the median
voter of their district, and are thus, according to Downsian logic, more likely to win the election (Canes-Wrone et al. 2002; Burden 2004). Only then can a PAC gain access to the lawmaking process (Snyder 1990, 1993). Given these objectives, PAC money may allow for greater moderation. When candidates raise money from PACs rather than individual donors, they no longer need to consider the ideologically polarized demands that come with contributions from individual donors. This allows candidates to focus their attention to the concerns of the more moderate median voter.

Given these two different sources of money, why would candidates endorse ideologically extreme policies in pursuit of money from individual donors rather than simply remaining closer to the median voter and funding their campaigns with non-ideological PAC money? This moderate strategy could be rational, yet if the amount of individual money available at the ideological poles is large enough, extremism may be the rational strategy. In certain cases the electoral penalty of deviating from the median voter may be outweighed by the ability of a candidate to raise even more money from ideological individuals and thus increase her probability of winning. In Section 3 I show that individual money has outpaced PAC contributions to become the dominant source of campaign funding. Thus, candidates face a trade off between Downsian pressures to locate at the median voter and fundraising pressures from ideologically extreme individual donors (Baron 1994; Moon 2004; Grossman and Helpman 1996). With a large enough pot of cash at the ideological fringes, the rational candidate should deviate from the median voter in pursuit of a sizable campaign war chest.

However, the ability of candidates to fundraise from these groups is affected by the amount of money they can legally raise from any one individual or interest group. For example, as a candidate raises money for her campaign, she may do so by combining money from individual donors, PACs, party groups, or funding her campaign from her own personal wealth. Contribution limits on these different groups alter the relative difficulty of raising money from these different groups. Under more restrictive limits, raising the same amount of
money requires persuading a larger number of donors to contribute. Thus, we can interpret a lower limit, on individual donors for example, as an increase in the marginal cost of fundraising from that particular group. Facing these new costs, candidates may instead turn their attention to PACs rather than raising money from individual donors as the relative cost of fundraising from PACs has decreased in comparison to fundraising from a larger number of individual donors. However, in the process of changing the sources of their campaign money, candidates have simultaneously changed the ideological composition of their contributors. Freed from the pull of ideologically extreme individual donors, successful candidates will be more moderate from both Downsian pressures and incentives to raise money from more moderate political action committees. The converse is true for lower PAC contribution limits, which will induce candidates to increasingly raise money from individual contributors. In this case, candidates funded primarily by individual donors will be further from the median voter of their district and more representative of the preferred ideology of individual contributors.

Taken together, we should see candidates who are more ideologically extreme raise more of their money from individual contributors. The opposite pattern should also be the case—more moderate candidates should raise more of their money from PACs. Additionally, when contribution limits are changed, the ideology of candidates should change as well. Lowering limits should lead candidates to decrease the portion of their fundraising that comes from the group facing new restrictions. Furthermore, this shift in portfolio compositions should translate into an ideological shift among legislators who are elected into office. For example, lower limits on individuals should lead to more moderate legislators who are increasingly funded by PACs. Similarly, lower limits on PACs should translate into more ideological candidates who raise more of their money from individual donors.
3 The Rise of Individual Donors and Polarization

In this section, I discuss the simultaneous increase in legislative polarization and money flowing to candidates from individual donors. I first present patterns in candidate fundraising for both federal and state legislators and show that individual donors are now the largest source of campaign money for the average candidate. Concurrent with the rise of individual donors is a steady increase in the ideological distance between the typical Republican and Democratic legislator. The simultaneous increases in these variables suggests that their may be a relationship between individual contributions and legislator extremism. Using individual level data on the sources of candidate funding, I show that legislators who raise more money from individual donors are, on average, more ideologically extreme.

3.1 Individuals are giving more than in the past

Candidates can raise money from a variety of sources, including from individual contributors, political action committees, party actors, or public funding. Using data from the Federal Election Commission as well as reports by state legislatures on candidate fundraising, I calculate the proportion of every candidate’s reported fundraising that comes from these various sources. Figure 12 shows that the composition of the average candidates’ fundraising portfolio has changed dramatically over the last several decades. Among candidates for the U.S. House, in 1980 half of the median candidate’s fundraising consisted of money from political action committees. Individuals, on the other hand, composed approximately 30% of the median candidate’s portfolio. The remaining money came from either political parties,

The data for candidates for the U.S. House is provided by the Federal Election Commission. Data for state legislative candidates is collected and reported individually by state legislatures. However, Bonica (2013a) has collected and combined these various databases into one unified donation file. I use this file for all candidate fundraising statistics. Data for federal candidates extends from the 1980 election cycle through the 2012 election cycle. Eight states have data extending back to the 1990 election cycle (AK, WA, OR, UT, WY, NV, MT, ID). Thereafter, coverage increases each year until reaching 49 states (NE not included) in 2002.

To calculate these values, I first calculate the percent of money raised from individuals, PACs and parties for each candidate. I then take the median value for each of these categories among all candidates.
self financing, or other sources. Since 1980 this portfolio composition has completely reversed. In the 2012 election cycle, individual contributions accounted for more than 75% of the average candidate’s money while PACs constituted slightly less than 20% of the median portfolio. A similar story plays out among state legislative candidates between 1990 and 2012.

Figure 12: Candidates’ Average Portfolios over Time - This figure shows the average percentage of money raised by candidates from individuals, PACs, and parties over time. The left panel shows this among candidates for the U.S. House of Representatives. The right panel shows this among candidates for the various state lower chambers. At both levels of government, the proportion of money candidates raise from individuals has more than doubled, while the proportion of money candidates raise from PACs has steadily decreased over the same time period.

Table 2 shows that this pattern of candidates increasingly relying on individual contributions holds true for incumbents, challengers, Democrats, and Republicans. In each of these linear models the dependent variable is the percent of a candidate’s fundraising that comes from individual contributors. The variable of interest is a linear time trend measuring
Dependent Variable: Percent of Campaign Money From Individuals

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<th>State Candidates</th>
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</table>

Table 2: Percent of Campaign Funding from Individual Donors - Over time candidates are relying more on individual contributions. This holds true for both incumbents and challengers.

the year of each observation. A positive coefficient indicates that over time the share of contributions coming from individuals is increasing. The effect is positive across models and is largest for challengers. We should note that in the combined models, the indicator for incumbency is large and negative, indicating that incumbents tend to raise less money than challengers from individual donors. This difference between incumbents and challengers fits the previously presented evidence that PACs favor contributing to incumbents over challengers. However, when splitting the sample to consider only incumbents or challengers, we see that in both cases incumbents and challengers increasing the share of contributions they raise from individual donors.

### 3.2 Individual donors are ideologically extreme

Recent scholarship shows that individual donors tend to be ideologically extreme and are primarily motivated by ideology when deciding which candidates to support. Several previous studies show that on average individual donors are more ideologically extreme than the average voter ([Verba et al., 1995](#), [Brown et al., 1995](#), [Fiorina et al., 2005](#), [Francia et al., 2005](#), [Bafumi and Herron, 2010](#)). Furthermore, I extend these results by showing that contributors are more ideological than “active partisans”, which I define as voters who identify with a
political party and engage in political activities outside of simply voting. Using data from the American National Election Study, I show that donors are distinct and more polarized than active partisans. The ANES is a biannual survey conducted during election years, and in every iteration of the survey from 1972 to 2008, respondents have been asked if they have contributed money to a political candidate. Additionally, respondents are asked to place themselves on a 7-point ideological scale that ranges from “Extremely Liberal” to “Extremely Conservative.” I identify survey respondents who report having contributed money to any political candidate. I then compare the self-reported ideology of these contributors with non-contributors who are active partisans. I consider only the ANES respondents who are in the top quartile of political involvement and regress their ideology on a variable indicating whether or not they contributed money in a political campaign. I also account for the year and state of the respondent as well as indicators for other types of political activity such as attending a rally or volunteering for a political campaign. We see that among both Republicans and Democrats, politically active donors are more ideological than those who are equally politically active, yet do not contribute money.

3.3 Individual donors are ideologically motivated

In addition to being ideologically extreme, individual donors tend to give for ideological reasons. Recent surveys of individual contributors shows that ideological similarity with a candidate is the most common reason expressed for why an individual chooses to give (See Chapter 3 and Goodliffe et al 2014 for examples). Furthermore, within individual donors, those who are the most ideologically extreme are even more likely to express ideology as the primary reason for giving (See Chapter 3). Other scholars confirm these survey results using observational data. For example, Bonica (2013c) shows that individuals tend to focus

With the exception of 2006.
The question comes from the ANES time series data and is a 7-point scale with the following response options: Extremely Liberal, Liberal, Slightly Liberal, Moderate/Middle of the Road, Slightly Conservative, Conservative, Extremely Conservative
Table 3: Donor Ideology Among Politically Active Voters - These models consider only respondents to the ANES survey who are in the top quartile of political activity. In other words, among the politically active, donors are still more ideological than non-donors. This pattern holds for both parties.

<table>
<thead>
<tr>
<th></th>
<th>Republicans</th>
<th>Democrats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donor</td>
<td>.17** (.06)</td>
<td>-.18** (.07)</td>
</tr>
<tr>
<td>Attend Event</td>
<td>-.05 (.06)</td>
<td>-.05 (.07)</td>
</tr>
<tr>
<td>Work for Campaign</td>
<td>.03 (.07)</td>
<td>-.02 (.07)</td>
</tr>
<tr>
<td>Year</td>
<td>.02*** (.003)</td>
<td>-.01*** (.003)</td>
</tr>
</tbody>
</table>

State Fixed Effects ✓ ✓
Observations 1,531 1,726

*p<0.1; **p<0.05; ***p<0.01

These results stand in contrast to a large literature suggesting that the majority of PACs tend to favor moderate legislators. Rather than ideology, PACs tend to value access to the policy making process. These preferences lead PACs to favor incumbency (Fournai and Hall 2013), legislators who sit on committees related to the group’s interests (Grimmer and Powell 2013a), and experienced legislators with a proven record of winning elections (Hall and Wayman 1990). Furthermore, PACs appear to value moderate legislators over those at the ideological extremes (Bonica 2013b). Since PACs are interested in having access to the policy making process, it follows that they would support moderate candidates over extremists as ideologically out of step legislators tend to suffer electorally (Canes-Wrone et al. 2002; Burden 2004; Hall 2013).

These three facts—individual contributions outweigh PAC donations, individual donors are ideologically extreme while PACs are quite moderate, and individual donors are ideologically motivated while PACs are access-oriented—suggest that increasing legislative polarization may partly be due to the rising influence of these ideological individual contributors.
3.4 Legislative polarization is increasing

Concurrent with the rise of individual donors, legislatures in the United States have also witnessed a steady increase in ideological polarization. Over the last several decades the ideological space between the two major parties has consistently increased. A large literature in American politics notes the increasing distance between the average Republican and Democrat (McCarty et al. 2006; Fiorina and Abrams 2008; Hetherington 2009; Layman et al. 2006). In addition to the increasing polarization of legislators in the U.S. House, newly collected data shows that this pattern also exists in the U.S. states (Shor and McCarty 2011). Figure 13 shows the difference in party medians over time for legislators in the U.S. House as well as state legislatures. In each case, the measure of polarization is based on scaling the roll call votes that are cast by sitting legislators. I limit the time in each figure to the period covered by the campaign contribution data. In both the federal and state cases, we see a steady increase in the distance between the two parties that parallels the increases in individual contributions over the same time.

To show the variation in polarization across the states, Figure 14 shows the change in party medians across time for each state. The left panel shows Republicans and the right panel shows Democrats in each state. In each plot, the x-axis shows the 1996 party median in each state and the y-axis shows the 2012 party median. If the party has not changed ideologically, the point will be near the 45 degree line. We see that this is the case for many of the states. However, there are many more states for which the median party member has moved substantially. Among Republicans, points above the 45 degree line show the party becoming more conservative over time while for Democrats, points below the 45 degree line illustrate the party becoming more liberal. There are very few states in which either party became more moderate during this time period, and when this is the case (Wyoming 2006; Shor and McCarty 2011) for an explanation of the statistical estimation of ideal points from roll call votes for U.S. House members and state legislators respectively.
Figure 13: Difference in Party Medians Over Time  - This figure shows the difference in the two parties’ median legislator ideology scores over time in both the U.S. House of Representatives as well as the state legislatures. To account for the dramatic differences in ideology across state legislatures, I compute a difference in party medians for each state. The right panel shows the median of these differences.

Republicans for example) the change is much smaller compared to the degree of polarization seen in other states.

4 Legislator Ideology and Fundraising Portfolio

Having established that individual contributors are more ideological than PACs and that candidates are increasingly funding their campaigns using individual contributions, I now investigate the degree to which this correlation holds among individual legislators. Do candidates who raise more money from individuals exhibit more ideological voting behavior? This supposition is based on the hypothesis outlined earlier that candidates who raise more of their money from ideologically extreme contributors must appeal to the interests of these donors in order to maintain the flow of campaign money from these supporters. To test this
Figure 14: **Difference in Party Medians in 1996 and 2012** - Points above the line indicate parties becoming more conservative and points below the line indicate parties becoming more liberal. In the left panel, we see that Republicans in 2012 are more conservative than in 1996 in most states. In the right panel, we see that Democrats are more liberal in 2012 than in 1996 in most states. Additionally, there are few states that have seen decreases in polarization.

relationship, I combine the contribution data with the ideal points of legislators as estimated by roll call voting. For each legislator I link the member to the contribution data for the election cycle prior to the legislative session in which she served. This allows me to compare the ideology of each legislator with the proportion of money she raised in each election cycle from individuals or PACs.

Figure 15 shows the simple bivariate plot of legislators’ ideal points in the U.S. House and the share of their campaign money that comes from individual or PAC contributions. The left panels shows this relationship for Republicans and the right panels displays the data for Democrats. The line in each plot shows the results of a simple bivariate linear model. We see that among both parties, legislators who raise more of their money from individual donors tend to be more ideologically extreme. On the other hand, the opposite is true for legislators who raise more of their money from PACs. In this case, legislators who fund
their campaigns through PAC contributions tend to be more moderate. This relationship is consistent with the idea that legislators represent the ideology and interests of their major financial supporters.

These results however, do not consider the variety of other factors that influence legislators’ ideologies. It is possible that another variable that is correlated with contributions and legislator ideology is driving these results. To help assuage this concern, I present a variety of regression results that account for these possible confounding variables. Moreover, I show that this relationship exists at both the federal and state levels.

Table 4 shows the results of these models. The key independent variable is the percent of each legislator’s contributions that came from individual donors in the election cycle prior to the legislative session. In addition to this variable, I include several control variables. The first is a measure of the legislator’s district partisan balance. When studying the U.S. Congress, scholars often use presidential election returns within each congressional district as a proxy for how conservative or liberal a district is (Jackman et al. 2008; Clinton 2006). A measure based on presidential election results has the advantage of being uniform across the country since voters are all selecting from the same two candidates. I also account for the total amount of money raised by the legislator (logged), the year of the observation, and state specific indicator variables to account for time invariant, unobserved variation across states. To account for the different effect we expect for each party I run a separate model for Republicans and Democrats. Specifically, we expect Republicans who raise more money

However, presidential election results are not frequently collected or reported at the state legislature district level. To work around this problem I collected the shapefiles of all state legislature districts from 1980 to the present. Then, using GIS software, I overlaid these districts onto similar shape files of Federal congressional districts where presidential vote shares are available. I then imputed the Democratic percent of the two-party vote share of the state legislative district by taking the Democratic vote share of the congressional district that most overlaps the state legislative district. Admittedly this is a coarse measure of partisanship, however, the results in Table 4 show that it tracks well with legislator ideology such that more liberal (conservative) districts tend to be represented by more liberal (conservative) legislators. Furthermore, using voter registration information for 2012, there is a strong correlation between the measure of district partisanship in 2012 and the percent of voters in the district who identify as Democrats.
from individual donors to be more conservative while Democrats who raise more money from
individuals should be more liberal.\footnote{It may seem easier to simply take the absolute value of
the legislators’ ideologies and combine the members of the two parties into one statistical model. However, Figure 14 illustrates why this is incorrect and can lead to inaccurate results: in many states there are Democrats with ideal points greater than zero (see AR for example) and Republicans with ideal points less than zero (see NY for example). Thus, taking the absolute value of the legislator’s ideal points will incorrectly identify the most conservative Democrats (with positive ideal points) as among the most liberal members of their party and the most liberal Republicans (with negative ideal points) as more conservative than many members of their party.}

Additionally, to account for the possibility that the effect differs among more profes-
sionalized state legislatures where representatives spend more time and money campaigning,
sit in session for more time, and are paid more for their time in office, I also run separate
models for professional and less-professional legislatures. I use the National Council of State
Legislatures definition of professionalism to determine how to code each state (NCSL, 2012)
and consider the top 10 most professional legislatures. With these variables, I model the
data using a time series cross-sectional regression. Equation 2 shows the specification for
Republican legislator $i$ in state $s$ at time $t$. The model for Democrats is exactly the same
with the exception of the party of the legislator.

$$
\text{ideal point}_{ist} = \alpha_{\text{state}}^{R} + \beta_{1}^{R}\text{share indiv}_{it} + \beta_{3}^{R}\text{dist ideology}_{st} \\
+ \beta_{4}^{R} + \beta_{5}^{R}\ln(\text{total raised})_{ist} + \beta_{2}^{R}\text{year}_{i} + \varepsilon_{ist}
$$

If it is the case that legislators who fundraise from individuals are more extreme, we
would expect to see a positive coefficient on $\beta_{1}$ for Republicans and and negative coefficient
on $\beta_{1}$ for Democrats.

The results in Table 4 confirm that legislators who raise more money from individuals
are more likely to be ideologically extreme. Additionally, the results appear to hold in
the U.S House, among state legislators, and among both professional and non-professional
legislatures. Using the coefficients from the first two columns of Table 4, among Republicans a 50 percentage point increase in individual contributions (roughly the average increase from 1980 to 2012) leads to a legislator being .025 more ideological on the ideology scale. This is approximately 1/10th of the standard deviation of Republican ideological scores. Among Democrats the same 50 percentage point increase leads to an increase in extremism of approximately .045. This is close to 25 percent of the standard deviation of Democratic ideological scores. To further verify the robustness of these results, in Appendix 7 I split individual contributions among those that come from donors inside of the legislator’s state versus contributions that come from outside the state. It could be the case that legislators who raise money from out of state individual donors behave differently from legislators who fund their campaigns with primarily in-state contributions. However, the relationship between individual contributions and legislator ideology appears to be similar among in-state and out-of-state individual contributions. In both cases, raising more money from
Figure 15: Percent of Legislators’ Fundraising from Individuals and Ideology - These plots show the relationship between fundraising from individuals and legislator ideology for both parties. For Democrats and Republicans, legislators who raise more money from individuals are more extreme than those who rely on other funding sources. The second row shows the same relationship but for money raised from PACs. We see that Democrats and Republicans who raise more money from PACs tend to be more moderate.
Table 4: Legislator Ideology and Percent of Campaign Funding from Individual Donors - In each model the dependent variable is the legislator’s estimated ideal point. The key variable of interest is the percent of contributions coming from individual contributors, shown in the first row. If it is the case that legislators who fundraise from individuals are more extreme, we would expect to see a positive coefficient for Republicans and and negative coefficient for Democrats. This is the case in each of the models. Conversely, legislators who raise more money from PACs (the omitted category) are more moderate on average.

<table>
<thead>
<tr>
<th></th>
<th>Federal Legislators</th>
<th>All State Legislators</th>
<th>Professional Legislatures</th>
<th>Less-Professional Legislatures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Republicans</td>
<td>Democrats</td>
<td>Republicans</td>
<td>Democrats</td>
</tr>
<tr>
<td>% Individual Contributions</td>
<td>0.053***</td>
<td>−0.092***</td>
<td>0.066***</td>
<td>−0.218***</td>
</tr>
<tr>
<td></td>
<td>(0.012)</td>
<td>(0.011)</td>
<td>(0.013)</td>
<td>(0.013)</td>
</tr>
<tr>
<td>President Dem Vote Share</td>
<td>−0.316***</td>
<td>−0.558***</td>
<td>−0.454***</td>
<td>−1.035***</td>
</tr>
<tr>
<td></td>
<td>(0.039)</td>
<td>(0.016)</td>
<td>(0.034)</td>
<td>(0.028)</td>
</tr>
<tr>
<td>Ln(Total Raised)</td>
<td>0.004**</td>
<td>−0.001</td>
<td>−0.017***</td>
<td>0.019***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Election Cycle</td>
<td>0.013***</td>
<td>0.001</td>
<td>0.008***</td>
<td>−0.001**</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>State Fixed Effects</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Num. obs.</td>
<td>2,945</td>
<td>3,566</td>
<td>15,275</td>
<td>15,898</td>
</tr>
</tbody>
</table>

***p < 0.01, **p < 0.05, *p < 0.1
To further make the connection between contributors, legislator ideology, and polarization, I show that legislators who are more extreme do not pay a significant penalty in overall money raised. While there exists a relationship between legislator ideology and the type of donor funding the campaign, for individual contributions to play a role in polarization, it should also be the case that more extreme candidates are at least as well-funded (and possibly better funded) than more moderate candidates. Otherwise the pull from ideological money would be outweighed by the prospect of money from groups favoring moderate and centrist candidates. Figure 16 shows this relationship for both federal and state legislators. We see that in this simple bivariate plot, extremists do not appear to pay a penalty for their ideological positions. The horizontal axis of the figure represents the ideological score of each legislator while the vertical axis plots the log of the total money raised by the candidate. The color of each point shows the partisan affiliation of the legislator (Red = Republican). We see that candidates with moderate ideological scores (values towards the center of the horizontal axis) do not raise significantly more than candidates on the ideological fringes. In fact, among federal legislators and Democrats in state legislatures, the opposite appears to be the case.

A statistical model of this relationship shows that this pattern holds in the federal case after accounting for the district’s partisanship as well as other unobserved, time invariant factors specific to the district. Table 5 shows this result. Among state legislators, after accounting for these factors, ideology does not appear to strongly predict total fundraising. At the federal level, members of Congress who are more ideologically extreme raise more money than moderates on average. Thus, it appears as though there is no significant financial penalty paid by ideologically extreme legislators.
Figure 16: **Legislator Ideology and Total Money Raised** - These plots show the relationship between legislator ideology and the total amount of money raised by the candidate. Each point shows a legislator and is colored according to her party affiliation (Red = Republican). More ideological legislators do not pay a significant penalty in total contributions. The lines and confidence intervals are loess smoothed lines.

## 5 Contribution Limits

In both the aggregate case as well as the individual level results, we see a correlation between legislator ideology and the sources of money a legislator uses to fund her campaign. Looking at both federal and state legislators, there exists a steady rise over time in the percent of money being raised by candidates from individual donors. This upward trend is paralleled by increases in the polarization of the parties as measured by the distance between the party medians over time. Furthermore, we also see this relationship within individual legislators. The larger fraction of contributions a legislator raises from individual donors, the more likely she is to be ideologically extreme. The opposite pattern emerges when looking at PAC contributions. Individuals who fund their campaigns with a larger share of PAC money tend to be more moderate.
### Table 5: Legislator Ideology and Total Money Raised - For Democrats (Republicans), more ideological legislators do not pay a penalty in total contributions. In fact, at the federal level, the opposite is true. More ideological House members tend to raise more money overall than moderates.

While these relationships appear to be strong, we should consider these results as correlations rather than causal since we cannot be completely sure which direction the causal arrow flows. It is possible that ideologically extreme candidates receive and electoral advantage through the support they receive from equally ideological individual donors. However, it could also be the case that extreme candidates would run for office and win elections even in the absence of financial support from ideologically motivated donors. Thus, in the absence of individual donors, those candidates who are elected may yet remain ideologically extreme, and the support they receive from individual donors is simply a spurious relationship.

To test if this is the case, we would ideally want to randomly increase or decrease the availability of funds to candidates from ideologically extreme and moderate donors. This is however, an infeasible research design. However, as I will discuss in the next section, if contribution limits accomplish this task by “drying up” the pool of ideological money (or moderate money in the case of PAC contribution limits), we may observe the effect of higher or lower amounts of ideological money on the ideologies of legislators who are elected to office. Thus, under tighter contribution limits on individuals, fewer ideologically extreme candidates may choose to enter the race because they know that their primary contributors are legally limited in how much they can give. Moreover, those extremists who do enter the
race may be less successful electorally due to their inability to raise sufficient money. The opposite story would be true for increases in individual contribution limits. Furthermore, a parallel story exists for increasing or decreasing contribution limits for PACs. Thus, these policies allow us to see the effect of independent changes in the availability of money on the types of candidates who are elected to office. More broadly, this helps answer the question of whether or not legislative polarization can be explained in part through the increasing availability of money from ideologically motivated sources.

In this section I investigate whether or not contribution limits can affect both donors’ and legislators’ behavior. First I present the data on contribution limits and demonstrate the amount of variation that exists both within states across time and across states in any given year. Next, I demonstrate that when contribution limits change, candidates also change their fundraising behavior, thus affecting the composition of their campaign portfolios. Finally, I show that contribution limits also affect the ideologies of legislators in office. The results comport with the previous sections of this paper by suggesting that higher limits on individuals lead to more polarized legislators while higher limits on PACs lead to more moderate candidates.

5.1 Data

The data on contribution limits are original, and were created by combining information from various sources. The Federal Election Commission (FEC) published biannual summaries of contribution limits in the states from 1990 through 2002. For these years I use the FEC reports [Federal Elections Commission, 2002]. Data for 2003 through 2009 come from Westlaw’s online database of state statutes and constitutions. Finally, I collected limits for 2010 through 2012 from the National Council of State Legislatures [NCSL, 2012], which has compiled the most recent limits in all of the states. Some states limit donations by
calendar year, while others limit donations by election or election cycle. I convert all limits to represent the limit over a two-year period. For example, a limit of $500 per election would be entered as a $1000 two-year limit since we must account for both a primary and general election over the course of those two years. I then adjusted each entry to represent the dollar amount in 2010 dollars. Thus, a limit of $500 in 1996 is larger than a limit of $500 in 2006. Many states set limits in the early 1990s and then left those limits in place, effectively decreasing the limit over time. This may be a strategy taken by legislators to limit the influence of particular donors without having to pass new legislation in the future. On the other hand, several states account for the effects of inflation and insert clauses into the statute mandating that the limits be adjusted each election cycle by a certain percentage.

There are a few states that have no limits on campaign contributions and have never imposed such limits. Others have had the same limit for the entire period of the data. Many states have changed the law to either impose or remove limits during the time covered by these data. Additionally, many states have imposed limits for the entire period of the data, but have either raised or lowered those limits substantially. Table 6 shows which states fit into each of these categories.

<table>
<thead>
<tr>
<th>Category</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always Unlimited</td>
<td>AL, IA, IN, MS, ND, NE, PA, TX, UT, VA</td>
</tr>
<tr>
<td>Sometimes Unlimited, Sometimes Limited</td>
<td>CA, CO, ID, IL, MO, NM, OH, OR, SC</td>
</tr>
<tr>
<td>Always Limited, No Change</td>
<td>CT, DE, FL, HI, KS, LA, MA, MD, MI MN, NC, NH, OK, RI, WI, WV, WY</td>
</tr>
<tr>
<td>Always Limited, but Change Limits</td>
<td>AK, AR, AZ, GA, KY, ME, MT, NJ, NV NY, SD, TN, VT, WA</td>
</tr>
</tbody>
</table>

Table 6: Changes in Contribution Limits by State. While most states have always had limits, there are a number of states that have never had limits and several states that have changed from unlimited to limited contributions during the time covered in this data (1996 - 2012). Among states that have always had limits, many adjust those limits up or down.

A few states have four year election cycles in the lower house (AL, MD, LA, MS, ND). These states' limits are also adjusted to a two year donation metric. To do this, I calculate the total amount a person could contribute in the four year period and divide by two. While there is some error in this measure, I chose to do this over other methods to obtain uniformity across the data.
One concern with these data is that limits are endogenous to polarization. I will address this concern initially here, and again after presenting the results of the models. The concern of endogeneity is that legislatures that are more or less polarized may be systematically more likely to increase or decrease limits on contributions. Thus, limits are a result of polarization, not a cause. There are several reasons to believe that this is not the case.

At first glance, it may appear that more conservative states have remained unlimited, however, states such as Iowa, Virginia, and Pennsylvania, are far from one-party legislatures and have at times covered by this data been controlled by the Democratic party. Additionally, among those states that have always had limits, there are states that are dominated by either party.

Furthermore, when states adopt changes to their limits, there is no correlation between changes in limits (increases or decreases) and the party in power. Moreover, changes in limits are uncorrelated with the amount of money candidates are raising from individuals or PACs. In other words, in states where individual (PAC) contributions constitute a larger share of contributions, we do not see limits to individuals (PACs) increasing or decreasing as a response. Finally, a search of newspaper articles and media reports around the time of changes shows that in no cases are legislators or advocates for reform citing polarization or increasing partisanship as a reason for imposing contribution limits. In nearly all cases, reformers cite a desire to remove corruption or the perception of corruption from legislative politics as their main motivation.

In addition, the models I present here will measure the average effect of changes in limits within states. Thus, if it is the case the more conservative states are more likely to have higher limits, the model will account for this since the effect is not identified by differences across states but rather changes within states. Finally, the results presented here are estimated using the lower chambers of the various state legislatures. If limits are passed through legislation, these laws must not only clear the lower house, but also pass the upper
house and be signed by the governor. Thus, the potential endogeneity related to the partisan balance or ideological composition of the lower house is muted by the fact that what happens to contribution limits in the state is also affected by the composition of the upper house and preferences of the governor, which are both out of the control of lower chamber members. Taken together, all of these evidences provide us with greater confidence that contribution limits are exogenous to individual legislators’ ideologies.

5.2 Fundraising Behavior

In this section I show that changes in contribution limits affect the fundraising patterns of candidates. Specifically, I show that when states decrease limits, the average contribution given to candidates decreases, the number of donors hitting the maximum contribution limit increases, and the average amount of money raised by candidates from the limited source decreases. All of these results suggest that contribution limits have meaningful effects on candidates’ fundraising portfolios.

Figures 17, 18, and 19 show these relationships visually for individual contribution limits and PAC contribution limits. In each plot, every point is one candidate in one election cycle. The horizontal axes show the contribution limits on a logged scale. In Figure 17 the y-axis shows the average contribution amount for each candidate on a logged scale. We see that for both individuals and PACs, higher limits lead to larger average contributions. The lines displayed over the plots show a best fit line with a cubic polynomial. The solid line shows the relationship for all of the data. This line appears to be shifted down because of the preponderance of candidates who raised no money from either individuals or PACs regardless of the limits. The dashed line omits these candidates who raise no money from

There are a few cases (roughly 1 percent of observations) in which the average contribution amount for some candidates is actually larger than the legal contribution limit. I suspect that these aberrant cases are the result of inaccurate reporting by the candidate or clerical errors when recording the contributions by the various Secretaries of State. It is also possible that a few donors are simply giving more than the legal limit. Excluding these observations does not substantively change any of the results.
individuals or PACs. The results for states with unlimited contributions are also shown on the far right of the plot and the large blue points shows the average values (including zeros and excluding zeros).

Figure 17: Average Contribution under Different Limits - Each point in the plot represents a candidate-election dyad. We see that in general, when there are higher limits, there are also larger average contributions. This is true for both individuals contributors and PACs. Both the horizontal and vertical axes are shown on a logged scale. The solid line shows a line of best fit using a cubic polynomial. The dashed line is the same, except candidates with values of zero are omitted. The large points on the unlimited column show the averages for states with unlimited contributions (including and omitting zeros respectively).

While the average contribution decreases as limits go down, we would also expect the number of people who are constrained by the legal limit to increase as the limit decreases. The percentage of people who contribute the maximum amount provides us with a measure of the portion of the candidate’s portfolio that is potentially constrained by the implementation of a contribution limit. While it is possible that these “maximizers” may not give more should the limit be increased, it is also the case that they are the most likely people who would increase their contributions should the limit be raised since they are currently constrained by the cap on contributions. Figure 18 shows that the percent of people contributing the maximum is effectively zero when limits are larger than $8,000, but this number increases
as limits decrease. At the minimum limit in the data, $200, on average eight percent of contributors are giving the maximum allowable amount. However, when we consider only candidates that have at least one donor giving the maximum, the percentage of donors giving the maximum increases across all limits. The effect becomes most pronounced among PACs.

![Graph](image)

**Figure 18: Percent of Donors contributing Maximum Allowable Amount** - Each point in the plot represents a candidate-election dyad. We see that in general, as limits are lowered, a larger percentage of a candidate’s donors are limited in their giving by the legal maximum. This is true for both individuals contributors and PACs. The horizontal axes is shown on a logged scale. The solid line shows a line of best fit using a cubic polynomial. The dashed line is the same, except candidates with values of zero are omitted.

Finally, in Figure 19 I show that when limits increase, candidates raise more money from the group facing these higher limits. Both the x and y-axes are on a logged scale. Again we see that different contribution limits affect the money candidates raise for their campaigns. Higher limits lead to candidates raising more money in total from individuals or PACs.

To show that these relationships between contribution limits and fundraising behavior are robust, Table 7 shows the results of a fixed effects model with controls for district partisanship, district median income, an indicator variable for the partisanship of the legislator, and a linear time trend. Additionally, I include district fixed effects to account for unobserved, time invariant factors that may affect donations in the district. To account for states
that have no limit on contributions, I include an indicator variable that is equal to 1 when the state does not impose contribution limits. When limits are present, I include an interaction variable that is equal to the logged limit amount times an indicator that is equal to 1 when limits are imposed. This allows me to investigate the marginal effect of increasing limits while also measuring the one-time effect of removing limits. I test separate models for individual and PAC limits with three different dependent variables for a total of six models. The first dependent variable is the log of the average contribution for each legislator from either individuals or PACs. The second dependent variable is the percent of the candidate’s donors who gave the maximum allowable limit. In this model I do not include cases with no contribution limit since it is impossible for a person to give the maximum allowable amount. The final dependent variable is the log of the total amount of money raised by the candidate from either individuals or PACs. In each model one observation represents one candidate in
one election cycle.
### Table 7: Effect of Contribution Limits on Fundraising Behavior

The first model shows that no limits or increasing individual (PAC) limits leads to larger average contributions from individuals (PACs). The second model shows that decreasing individual (PAC) limits leads to a larger percentage of individual (PAC) donors being constrained by the maximum contribution amount. The final model shows that no limits or higher individual (PAC) limits lead to candidates collecting more total contributions from individuals (PACs). Each model includes controls for district partisanship, district median income, a dummy variable for the partisanship of the legislator, and a linear time trend. For observations with a dependent variable value of zero, I add one so as to include the observation when logging the data. However, omitting these observations from the models does not substantively change the result.

<table>
<thead>
<tr>
<th></th>
<th>Log Average Contribution</th>
<th>Percent Donors Maximizing</th>
<th>Log Total Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individuals</td>
<td>PACs</td>
<td>Individuals</td>
</tr>
<tr>
<td>Individual Unlimited</td>
<td>1.66***</td>
<td></td>
<td>.735**</td>
</tr>
<tr>
<td></td>
<td>(.244)</td>
<td></td>
<td>(.367)</td>
</tr>
<tr>
<td>Limited * ln(Ind Limit)</td>
<td>.245***</td>
<td>-.056***</td>
<td>.170***</td>
</tr>
<tr>
<td></td>
<td>(.032)</td>
<td>(.004)</td>
<td>(.048)</td>
</tr>
<tr>
<td>Pac Unlimited</td>
<td>1.86***</td>
<td></td>
<td>1.36***</td>
</tr>
<tr>
<td></td>
<td>(.195)</td>
<td></td>
<td>(.279)</td>
</tr>
<tr>
<td>Limited * ln(PAC Limit)</td>
<td>.235***</td>
<td>-.032***</td>
<td>.188***</td>
</tr>
<tr>
<td></td>
<td>(.023)</td>
<td>(.003)</td>
<td>(.033)</td>
</tr>
<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fixed Effects</td>
<td>District</td>
<td>District</td>
<td>District</td>
</tr>
<tr>
<td>Observations</td>
<td>61,076</td>
<td>61,597</td>
<td>41,630</td>
</tr>
</tbody>
</table>

*p<0.1   **p<0.05   ***p<0.01
In every model the coefficients on limits align with the results in Figures 17, 18, and 19. In each model the effects are large, and I will consider each model in turn. When considering the effect of limits on the average contribution amount, for both individuals and PACs, increasing the limit leads to larger average contributions. On average, a 100 percent change in the contribution limit (for example, Alaska doubled their individual contribution limit from $1,000 to $2,000 between 1993 and 1994) leads to a 25 percent increase in the average contribution amount for individuals and a 24 percent increase in the average contribution amount for PACs. The effects of removing limits entirely are much larger, as we would expect. When looking at the percent of donors who contribute the maximum (columns 3 and 4), the effect of limits is smaller. This is likely because the majority of contributors do not give the maximum amount. Nevertheless the estimates are statistically significant and in the hypothesized direction. For example, among individual contributors, a 50 percent decrease in the contribution limit (for example, Alaska changed their limit back to $1,000 from $2,000 in 2007) leads to a six point increase in the percent of people contributing the maximum allowable amount. Among PACs, a similar change yields a 3 percentage point increase of people contributing the maximum amount. The final model (columns 5 and 6) considers the effect of contribution limits on the total amount raised by candidates from either individuals or PACs. When changing individual limits, a 100 percent increase in the contribution limit leads to a 17 percent increase in the total amount raised from individuals. When increasing PAC contribution limits, a similar doubling of the limit leads to a 18 percent increase in the total amount raised from PACs. Again, completely removing the limit has a much larger effect on contribution behavior. As a further robustness check, I conduct the same models using individual candidate fixed effects. These results, contained in Appendix 7, show that the effect of contribution limits on fundraising behavior holds even when looking at the same legislator across time. The drawback of this model is that many candidates, particularly challengers, do not run for office more than once, and thus their fundraising
behavior is omitted in a legislator-specific model.

These results suggest that contribution limits at the state level are more than words on paper. They actually constrain and alter the fundraising of legislators and change the relationship between candidates and contributors.

5.3 Legislator Ideology

In this section I examine the degree to which limits on contributions may increase or decrease polarization of state legislators. The logic behind this connection flows from the relationships demonstrated in the preceding sections of this paper. Different types of contributors have different ideological motivations and candidates who favor donations from these different types of contributors differ dramatically in their ideologies. Furthermore, I have shown that limits affect the composition of candidates’ portfolios. The next step is to investigate if this change also affects the ideological preferences of those who are elected to office.

Since legislators face pressures from all of their contributors while in office, I include both individual and PAC limits in each model to isolate the effect of changes in one type of limit while holding the other limit constant. I present the results of several regression models. Each observation is one legislator-election cycle dyad and in each model the dependent variable is the legislator’s estimated ideal point. Similar to the models in the previous section, I include an indicator variable that is equal to 1 when the state does not impose contribution limits. When limits are present, I interact the logged limit with an indicator that is equal to 1 when there are limits. This allows me to investigate the marginal effect of increasing limits while also measuring the one-time effect of removing limits. Table 8 presents the results of these models. In each case I conduct a separate analysis for Republicans and Democrats. This allows us to investigate the possibility that there are differing effects across the parties. Moreover, since the theory outlined above stipulates that contributions relate to legislator extremeness, the effects should have opposite signs for each party. In each model
I include the same set of control variables that have been used previously. I account for the partisanship of the legislator’s district, the median income of the district and a linear time trend to account for any general trend in polarization over time. Moreover, I test the model for professional legislatures and states with non-professional legislatures.
### Table 8: Legislator Ideology and Contribution Limits

In each model the dependent variable is the legislator’s estimated ideal point. The models show that individual limits moderate legislators while PAC limits polarize legislators. These results dovetail with previous results that show more extreme legislators are more reliant on individual contributions while more moderate legislators are associated with PAC contributions. Thus limiting contributions from individuals leads to less ideological legislators. Similarly, limiting PAC contribution leads to more ideological candidates. The results are generally consistent across the two parties and in professional and non-professional legislatures.

<table>
<thead>
<tr>
<th></th>
<th>All Data</th>
<th>Professional Legislatures</th>
<th>Non-Professional Legislatures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Republicans</td>
<td>Democrats</td>
<td>Republicans</td>
</tr>
<tr>
<td>Individual Unlimited</td>
<td>.275*** (0.096)</td>
<td>-.174* (0.096)</td>
<td>.629*** (0.227)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.406*** (0.109)</td>
</tr>
<tr>
<td>Limited * ln(Ind Limit)</td>
<td>.029** (0.013)</td>
<td>-.030* (0.013)</td>
<td>.054** (0.027)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.061*** (0.016)</td>
</tr>
<tr>
<td>Pac Unlimited</td>
<td>-.133** (0.063)</td>
<td>.217*** (0.060)</td>
<td>1.16*** (0.192)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.135** (0.072)</td>
</tr>
<tr>
<td>Limited * ln(PAC Limit)</td>
<td>-.009 (0.008)</td>
<td>.021** (0.008)</td>
<td>.033† (0.021)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-.052*** (0.016)</td>
</tr>
<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fixed Effects</td>
<td>State</td>
<td>State</td>
<td>State</td>
</tr>
<tr>
<td>Observations</td>
<td>30,840</td>
<td>33,867</td>
<td>6,980</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>23,851</td>
</tr>
</tbody>
</table>

†p<0.15  *p<0.1  **p<0.05  ***p<0.01
The results demonstrate a significant relationship between contribution limits and legislator ideology. For Republicans (Column 1) removing individual contribution limits leads to a predicted change in ideology of .275. This change represents two thirds of the standard deviation of Republican ideal points (.45). In addition, increasing individual limits also leads to more ideologically extreme Republicans. A 100 percent increase in the contribution limit leads to an ideological shift of .029. This is smaller than the change related with moving to no limits, but still represents seven percent of the standard deviation among Republican ideal points. As predicted, in the Republican model the sign of the coefficients for PAC limits is in the opposite direction, indicating that increasing PAC contribution limits leads to more moderate Republicans holding office. The effect of removing PAC limits leads to a predicted change in ideology of -.133, which is about half the size of the effect of removing individual contribution limits.

Among Democrats (Column 2) we see a similar story as for Republicans but in the opposite direction. Increasing individual contribution limits leads to more liberal Democratic legislators. A 100 percent increase in the contribution limit leads to a shift of -.030 in the legislator’s predicted ideal point. This change is six percent of the standard deviation of Democratic ideal points (.50). The coefficient for moving to unlimited individual contributions among Democrats is larger (-.174), and is roughly one third of the standard deviation of Democratic ideal points. Additionally, among Democratic legislators, the effect of PAC contribution limits is substantial and in the direction we would expect. Increasing PAC limits leads to more moderate Democratic legislators, which is the opposite of the result for individual limits, and is in accordance with the theory. Moreover, the effect of moving to unlimited PAC contributions shifts Democratic legislators’ predicted ideal point .217, which is 43 percent of the standard deviation of Democratic ideal points.

When subsetting the data to consider the professionalism of the state legislature, we see results that are similar in direction to the models that include all of the data. I leave for
future research investigating possible explanations for why the effect may differ across states based on professionalism and other institutional factors that may vary across states.

Overall, these results demonstrate that contribution limits have substantial effects on legislator behavior and can affect the ideology of legislators elected to office. Furthermore, the results shown here address the larger question of how campaign contributions affect the ideology of those elected to office. Contribution limits allow us to estimate this effect by changing the availability of certain kinds of money to candidates. The results align with the patterns shown in the first sections of this paper that show polarization rising in tandem with increasing contributions from individual donors.

6 Discussion and Conclusion

In this chapter I have shown that legislators reflect the composition of their contributors. Those who raise more of their money from individuals tend to be more ideologically extreme. This is true for both Republicans and Democrats at the federal and state level. Furthermore, I test the directionality of this relationship by showing that changes in contribution limits at the state level affect the way in which legislators raise money. These changes in portfolio composition also lead to changes in the types of legislators who are elected to office. Higher individual limits lead to more ideologically extreme legislators in office while higher PAC limits lead to more moderation. These results speak to the influence of money in politics and help explain the rise in legislative polarization over the last several decades.

As mentioned earlier, a natural question to pose when considering these results is whether or not the observed effects are truly due to changes in contribution limits, rather than some unobserved factor that may affect both contribution limits and polarization. I previously discussed a variety of reasons why we should believe that changes in contribution limits are not endogenous to legislator’s ideologies and can therefore be used to estimate the effect of money on legislative polarization. However simply reviewing the results of Table 8 in
light of the theory helps build an even stronger case that these results are not driven by a confounding variable.

For example, citizens in a state may observe the legislature becoming increasingly polarized and turn to limiting contributions as a way to remedy this problem. If they were to enact limits at this time, we would observe that limits correlate with higher polarization, when in reality contribution limits have no effect, or perhaps even a moderating effect. This could explain the results for PAC contribution limits (rows 3 and 4 in Table 8), which show that PAC limits lead to more polarized legislators. However this fails to explain the moderating effect of individual limits in rows 1 and 2 of Table 8. On the other hand, states with less polarization may be able to enact limits because a less polarized legislature is able to pass legislation where a polarized legislature would be gridlocked. In this case, we would expect to see limits correlate with less polarization and more moderate legislators. This could explain the results for individual limits in rows 1 and 2 that show limits moderating legislators. Yet this does not explain the polarizing effect of lower PAC limits in rows 3 and 4 of Table 8.

This suggests that the theory and data outlined in the preceding sections can explain the moderating effect of individual limits and simultaneous polarizing effect of PAC limits better than a story of a confounding, unobserved variable. Of course, the ideal scenario would be to randomly assign legislators to a contribution limit regime and observe the difference in ideology that results. However, this is neither practical nor legal, and thus not an option.

The results in this paper suggest that legislators’ ideologies closely align with contributors’ preferences and that changes in the financial landscape affect the polarization we observe in American legislatures. I show that not all contributors are created equal – individuals are more polarized than voters and appear to be a driving force behind recent increases in legislative polarization.

Nevertheless, campaign contribution limits can affect this relationship.
tribution limits dramatically shapes the composition of candidate’s fundraising portfolios. Lower limits lead to smaller average contributions, more donors begin constrained by the contribution limit and less money raised from these groups overall. Given these effects, it follows that when individual limits are lowered, successful legislators are more moderate while when PAC limits are lowered, legislators are more ideologically extreme. Thus, limits have the ability to both moderate and polarize at the same time.

Yet, these results do not immediately suggest that the cure to the problem of polarization in American legislatures is to immediately limit individual contributions and allow unlimited contributions from political action committees. The influence of money in politics is wide-ranging (Ansolabehere et al. 2003), and the effect of contribution limits on polarization should be considered in the context of other results suggesting campaign contributions, the amount, and sources of money may also affect candidate quality (Hamm and Hogan 2008), electoral competition (Stratmann et al. 2006), and the public’s trust in their representatives (Primo and Milyo 2006) and the system by which they are selected.
7 Appendix: Additional Empirical Results

7.1 Estimation of Legislator Ideal Points

To estimate the ideal points of state legislators, I use the method developed by Clinton, Jackman, and Rivers (2004) (CJR). This method involves estimating a one-dimension, Bayesian item response model of the following form:

\[ P(y_{ij}) = P(U_i(\psi_j) > U_i(\eta_j)) \] (3)

Where \( P(y_{ij}) \) is the probability that legislator \( i \) votes “yea” on proposal \( j \). This decision is determined by the utility differential associated with voting “yea” or “nay”. \( U_i(\psi_j) \) is the utility associated with voting yea on proposal \( j \) and \( U_i(\eta_j) \) is the utility of voting nay on the same proposal. Thus the legislator votes “yea” when the utility of doing so is greater than voting “nay”. These utilities are based on a spatial model in which legislators have a quadratic utility function with an unobserved ideal point \( x_i \). Thus, \( U_i(\psi_j) = -||(x_i - \psi_j)||^2 + \varepsilon_{ij} \) and \( U_i(\eta_j) = -||(x_i - \eta_j)||^2 + \upsilon_{ij} \). Given these utility functions, we can rewrite Equation 3 as:

\[
P(y_{ij}) = P(U_i(\psi_j) > U_i(\eta_j)) \\
= P(-||(x_i - \psi_j)||^2 + \varepsilon_{ij} > -||(x_i - \eta_j)||^2 + \upsilon_{ij}) \\
= P(\upsilon_{ij} - \varepsilon_{ij} < 2(\psi_j - \eta_j)'x_i + \eta_j'\eta_j + \psi_j'\psi_j) \\
= \Phi(\beta_j'x_i - \alpha_j)
\]

As shown in (CJR) this formulation easily conforms to a probit model with an unobserved regressor, \( x_i \) representing the legislators ideal policy. To estimate the ideal points of state legislators, I create an \( N_s \times K_s \) matrix of legislators and votes for each state, where state \( s \) has \( N_s \) unique legislators who have served in office and \( K_s \) votes have come before the
legislature during the time period covered by the data. This will yield one ideal point 
estimate per legislator, i.e. these estimates are “static” ideal points. No legislator will have 
voted on all $K_s$ of the proposals (either due to not being a member of the legislature at that 
time, or being absent while in the legislature), however, the model accommodates this by 
simply considering these values as missing observations.

It is well known in models of ideal point estimation that the recovered parameters are 
not identified without a series of assumptions. The first identification problem is one of re-
scaling, in which the model parameters $Z$ are not identified from the same set of parameters 
that are rescaled or shifted in either direction, i.e. $\gamma Z + \zeta$. To overcome this problem, I 
impose the commonly used restrictions that the recovered parameters have mean zero and 
standard deviation one. The second identification problem is one of invertability, wherein 
the parameters $Z$ are not identified from $-1 \cdot Z$. In other words, should Republicans have 
positive or negative ideal points? The choice is arbitrary, and I impose the assumption that 
Republican ideal points are larger than Democratic ideal points by imposing informative 
priors on the model. I assign prior values of 1 and -1 for Republicans and Democrats 
respectively with a prior precision of .001. This ensures that Democrats are on the same 
side of the ideological scale in each state.

After estimating the ideal points of legislators in each state, we are faced with the problem 
of comparability across states. Since state legislators do not serve in other states’ chambers, 
no legislator votes on proposals outside of his or her own state. Thus, the ideal points 
obtained from one state will not have a comparable scale to the parameters obtained in 
another state. Various methods have been developed for overcoming this problem. Each of 
these methods leverages “overlap” between actors or votes. For example, Shor et al. (2010) 
uses the fact that many state legislators go on to serve in the US Congress and vote on the 
same proposals in the House as a way to bring state legislature ideal points onto the same 
scale. Bonica (2013b) uses the idea that many state legislators across states share the same
donors as a way to ensure comparability. [Shor and McCarty (2011)] use legislator responses to a common survey of legislators’ preferences to estimate comparable ideal points across states. Their set of legislators with estimated ideal points is a subset of my data and cover nearly 85% of the legislators I include in my analysis. Thus, to link legislators across states in my data I use their estimates in the following way. For legislators that are included in both datasets I estimate the following simple linear model in each state:

\[ Y_{i}^{\text{shor}} = \beta_s Y_{i}^{\text{barber}} + \varepsilon \]

Where \( Y_{i}^{\text{shor}} \) is the ideal point of legislator \( i \) in state \( s \) as estimated by [Shor and McCarty (2011)] which is comparable across states, and \( Y_{i}^{\text{barber}} \) is the ideal point of the same legislator I estimate using the model outlined above. Once I have the estimated \( \hat{\beta}_s \), I then create a new estimated ideal point \( \hat{Y}_{i}^{\text{barber}} \) using the following model:

\[ \hat{Y}_{i}^{\text{barber}} = \hat{\beta}_s \cdot Y_{i}^{\text{barber}} \]

This creates a new set of ideal points, \( \hat{Y}_{i}^{\text{barber}} \), that include all of the data used to estimate \( Y_{i}^{\text{barber}} \), however, now the estimates are comparable across states because they have been projected onto the common space created by the \( Y_{i}^{\text{shor}} \) estimates. The projection creates estimates that are very similar to those used in [Shor and McCarty (2011)] and the two measures correlate at .98.

### 7.2 Additional Empirical Results

#### Split Individual Donations by In-District and Out-of-District

Previous research at the federal level has noted that congressional candidates heavily rely on out of state individual donations [Gimpel et al. 2008]. In many cases, candidates...
raise more than half of their individual money (which makes up the majority of congressional fundraising) from out of state sources. This pattern does not hold at the state level, however. In fact, since 1994, nearly all individual money has come from individuals living within the candidate’s state. Nevertheless, it could be the case that money coming from out of state has different ideological strings attached. Out of state donors may differ from in state donors in their motivations for giving and in the types of candidates they choose to support.

Table 9 replicates the results of Table 4 but divides the percent of individual contributions into the percent of individual contributions coming from within the state and outside the state. There may be reason to believe that candidates who are more ideological will have to appeal to donors who share their ideology but do not reside inside the state if the state contains a lack of donors with similarly extreme ideologies. However, it is also possible that the most vulnerable candidates will be aided by money coming from outside the state as a way for ideological donors to support the party in other parts of the country. The effect of out of state contributions appears to be largest among Democrats, while among Republicans the effect of in state contributions is roughly equal to in state donations.
Table 9: Effect of In and Out-of-State Money on Legislator Ideology - In each model the dependent variable is the legislator’s estimated ideal point. The key variables of interest are the percent of contributions coming from individual contributors from within (shown in the first row) and outside of the legislator’s state (second row). If it is the case that legislators who fundraise from individuals are more extreme, we would expect to see a positive coefficient for Republicans and and negative coefficient for Democrats. This is the case in each of the models.
<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>Log Average Contribution</th>
<th>Percent Donors Maximizing</th>
<th>Log Total Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individuals</td>
<td>PACs</td>
<td>Individuals</td>
</tr>
<tr>
<td>Individual Unlimited</td>
<td>.381***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.147)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited * ln(Ind Limit)</td>
<td>.049***</td>
<td>-.017***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.017)</td>
<td>(.003)</td>
<td></td>
</tr>
<tr>
<td>Pac Unlimited</td>
<td>208</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.447)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited * ln(PAC Limit)</td>
<td>.026</td>
<td>-.016***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.055)</td>
<td>(.004)</td>
<td></td>
</tr>
<tr>
<td>Controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fixed Effects</td>
<td>Legislator</td>
<td>Legislator</td>
<td>Legislator</td>
</tr>
<tr>
<td>Observations</td>
<td>43,752</td>
<td>44,017</td>
<td>39,916</td>
</tr>
</tbody>
</table>

*p<0.1  **p<0.05  ***p<0.01

Table 10: Individual Legislator Fixed Effects for Limits Affecting Legislator Behavior
Representing the Preferences of Donors, Partisans, and Voters in the U.S. Senate

Portions of this chapter have been presented at the 2014 Annual Meeting of the Midwest Political Science Association in Chicago, IL and the 2014 Center for the Study of American Politics (CSAP) Conference at Yale University.
1 Introduction

How well do legislators represent their constituents? This is a central question in the study of democratic politics. However, answering this question has proved quite difficult. 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 et al. 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 conventional wisdom suggests wields significant influence in government (Page et al. 2013). Any person who contributes more than $200 is required by law to provide the Federal Election Commission (FEC) their name, address, donation amount and donation recipient. I use this list of donors to conduct an original survey of contributors to the 22 incumbent senators who sought reelection in 2012. 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. 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 large-n survey of American voters.
Voters in the CCES answered many policy preference questions that also appear in the survey of donors. Finally, 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. Using common questions in each survey that mimic roll call votes cast in the 112th Congress, I link the responses of each voter, donor and legislator in order to compare the ideal points of these different groups on a unified ideological scale.

Based on the ideological scaling of donors, voters, and senators, this chapter 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 16 of the 22 states where incumbent senators stood for reelection, I find that the median donor is as extreme or more polarized than the senator they contributed to. Simply put, if donors’ have the ability to influence the types of people elected to office, the direction of this influence is towards the ideological extremes. Indeed, senators sit quite comfortably amidst contributors on the ideological scale. 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. These results show that in the case of the Senate, there is a startling lack of congruence between constituents and senators—unless these constituents are the kind who

From this point forward, unless otherwise specified, when referring to voters, I mean non-donating voters. Contributing voters I refer to as donors or contributors.
write checks and attend fundraisers. Given that contributors are a small minority of the population (< 5%), these results could be worrisome for democratic governance and policy making.

These results are consistent with a theory of legislator ideology in which ideologically polarized donors exert influence over politicians through the threat of withholding donations from candidates who do not align with donors’ policy preferences. If donors contribute money to the candidate that is closest to them ideologically (See Chapter 1), then we expect those candidates who espouse the ideological positions of the typical donor to have financial advantages in the race. In this way candidates may have a rational incentive to disregard the preferences of the median voter in favor of policies favored by the average donor.

The rest of the paper proceeds as follows. In Section 2 I discuss various potential influences over candidates’ ideologies and explain how one such influence, campaign contributors, provide legislators who support their ideological positions an electoral advantage. These various sources of influence yields certain empirical predictions which I test in the remainder of the paper. Section 3 discusses the unique geography of campaign contributors and motivates the design of the donor survey. I then describe the data from the donor survey, the CCES survey, and roll call votes cast by senators in the 112th Congress. Section 4 shows evidence of congruent representation among the 22 senators who ran for reelection in the 2012 election cycle. Section 5 illustrates descriptive similarities between donors and senators and further illustrates how senators better represent donors both ideologically and descriptively. Section 6 offers concluding thoughts.

There is certainly a lively debate in the literature regarding the effectiveness of campaign spending on electoral results (Jacobson 1978, 1990; Gerber 1998; Brown 2013). As I describe later, it is nevertheless the fact that incumbents and challengers alike perceive fundraising to be critical to winning reelection (Francia and Herrnson 2001). Furthermore, observationally, candidates who raise more money tend to win reelection more often.
Why are Legislators so Extreme?

In this section I describe various reasons why we may expect contributors to exert influence over the ideological positions of both challengers and incumbents seeking reelection. 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.

Influence of 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 who to support (e.g. Chapter 1, Bonica (2013c)), 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), donors 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 2012b). 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. Before any votes are cast in the primary or general elections, candidates work hard to gain the support of campaign contributors who will fund their increasingly expensive campaigns. 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 persuasion of undecided voters or mobilization of 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 the money in their coffers through additional and more intensive 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.

Furthermore, there may 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). Furthermore, candidates often use their campaign money to support other like minded candidates (Powell, 2012a) or to assist vulnerable party members (Jenkins and Monroe, 2012).

While the political class is quite unified regarding the effect of spending on election results, scholarly findings in this area are far from settled as to whether or not increased spending garners more votes. Several authors have found little relationship between spending and vote totals (Jacobson, 1990; Levitt, 1994; Brown, 2013), while other suggest that a significant positive relationship exists (Green and Krasno, 1988; Gerber, 1998).

Other mechanisms by which candidates can continually improve their electoral fortunes could include polling voters to better understand their preferences (Butler and Nickerson, 2011), introducing legislation favorable to the district, or bringing home pork projects (Grimmer, 2013). However, unlike fundraising, each of these requires additional resources that candidates may not have access to.
Given these factors, there are a variety of reasons to believe that the ideology of contributors is an important and ever-present concern for candidates. Thus, candidates should hew closely to the preferences of their financiers. Since individual donors are ideologically extreme and polarized (e.g. Chapter 1, Francia *et al.* [2005]; Bonica [2013b]), financially successful candidates will also be ideologically extreme. This has implications for both challengers seeking their first victory as well as for seasoned incumbents. Challengers who run for office need to appeal to the preferences of donors to fund their campaigns. Without such financial support, these candidates are unlikely to successfully inform and persuade voters who would otherwise be unaware of their campaign. In this way donors act as gatekeepers, keeping ideologically unpalatable candidates from running a viable campaign. Observationally, this could play out in two different ways. First, donors may select extreme candidates who share their ideological stripes. Secondly, candidates who would otherwise espouse moderate policies may change their positions to align with the preferences of potential contributors. Furthermore, once in office, legislators must continue to closely heed the preferences of donors. Deviations from the preferences of these contributors opens the door for the possibility that donors may abandon the incumbent for another, more ideologically suitable candidate. In this way, donors also act as ideological watchmen, keeping legislators in line with the threat of cutting off the flow of valuable campaign money.

**Heterogeneous Effects:** While the points discussed above suggest strong reasons why legislators would deviate from the preferences of the average voter in favor of the preferences of donors, it may still the case that voters maintain a degree of control over a legislator’s ideology. An appropriate metaphor is that of the median voter placing legislators on an “ideological leash”. While legislators may deviate from voters’ preferences for reasons discussed above, their freedom to wander towards the ideological poles is kept within bounds by the centripetal forces of the median voter.

Empirically, this lead to a positive correlation between the ideological location of the
median voter and the voter’s legislator. In other words, a more conservative median yields a more conservative legislator. Numerous studies find this relationship to hold (Canes-Wrone et al. 2002; Clinton 2006; Rothenberg et al. 2011). However, while these results suggest legislators are responsive to the changes in the location of the median voter, we do not know how long the “ideological leash” between these voters and legislators is. In states (or districts) where the party of the median voter aligns with the party of the legislator, the representative may be given greater leeway to vote along party lines and cater to the preferences of ideologically extreme contributors (Sniderman and Stiglitz 2012). In states where the median voter is unaffiliated or a member of the opposing party, the median voter may demand more congruent representation.

In certain situations, legislators are elected in “misaligned districts”–districts represented by legislators from one party yet containing more voters of the opposite party. In these cases, scholarship shows that these legislators take extra care to cultivate a reputation of moderation and bipartisanship. Regarding these mismatched legislators, Grimmer (2013) finds that they take great care to emphasize their bipartisan efforts and district-specific accomplishments while also avoiding partisan rhetoric so as not to alienate opposing partisans, whose votes they need to win reelection. In these cases, we should expect misaligned legislators to hew more closely to the ideology of the median voter, thus moving away from the more ideological position of the average donor of her party. Empirically this leads to a smaller distance on average between the legislator’s ideal point and the ideal points of voters compared to this same measure in districts or states where legislators’ parties align with the average voter’s partisanship.

2.1 Alternative Sources of Influence

Primary Electorate: Legislators who lose their party’s nomination in a primary election are either barred from running in the general election, or at the very least face significant
disadvantages after losing the party’s nomination. Both of these hurdles make obtaining office nearly impossible without first securing the party nomination through a primary contest. Thus, we may expect legislators to cater to the preferences of primary voters, who are ideologically extreme compared to voters who turn out in general elections but not the primary (Fiorina, 1999). The literature however, is mixed as to the degree to which primary elections cause legislators to be ideologically extreme. [Brady et al. (2007) find that primaries do have a polarizing effect. They show that moderate candidates are more likely to face primary challengers who are ideologically more extreme. This suggests that polarization of candidates from both parties may be due to candidates choosing to locate near the median of a polarized, 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 legislator’s ideologies (Bullock and Clinton, 2011; McGhee et al., 2013). A possible reason for this null effect could be the fact that ideological donors remain a constant influence even after opening the primary election to more moderate voters. Thus, candidates still face financial incentives to remain extreme regardless of the primary system in their state.

**Median Voter:** The majority of the most basic spatial models of elections take Downs’ (1957) model of party ideologies as a starting point. 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 ideology does not hold in practice. Intervening factors such as partisan loyalties (Bartels, 2000), persuasion efforts by candidates (Baron, 1994; Ashworth, 2006), and inattentive voters who may not use ideology at all when voting (Tausanovitch, 2008).

Joe Lieberman (I-CT) and Lisa Murkowski (R-AK) provide rare examples of losing in the primary election yet succeeding in the general. This would be particularly true if candidates entered the race with a particular ideology and then maintained that position during the primary and general election as well as throughout their careers (Poole, 2008).
and Warshaw (2014a) can lead to candidates abandoning the median voter for the ideological extremes. Perhaps the most damning evidence against convergence to the median is that in districts with nearly the same partisan leanings, legislators from different parties compile dramatically different voting records (Krehbiel 1993, Lee et al. 2004). In fact, Senators from the same state (with identical constituencies) but from different parties diverge ideologically from one another substantially.

Several theoretical and empirical treatments of this question find that candidates can perform better by raising more money from ideologues at the possible expense of alienating moderate voters (Baron 1994; Stone and Simas 2010; Ashworth 2006). 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 2014b). 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.

**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 this particular type of representation increases “shared experience”, which may be the underlying reason for a representative’s preferences for the interests of the group she most closely reflects (Mansbridge 1999). 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 these people. These considerations lead to the observation that candidates and donors share similar policy preferences mainly because they also share many demographic characteristics. Additionally, the difference (ideological
and demographic) between candidates and the average non-donating voter should be much larger. However, if legislators are simply representing the preferences of the wealthy, it should 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 20 shows the distribution of total donation amounts in the population of FEC-recorded donors, the survey of donors I conduct, and the set of donors in the CCES survey. We immediately see that donors in the CCES survey gave substantially less on average than the population of senate donors contained in the FEC file. This difference should come as no surprise since the CCES is not intended to be representative of the donor population. We should however, be cautious of statements about the population of donors that are derived from unrepresentative samples.

In addition to approaching a representative sample of donors, 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
Donor Population Compared to Survey Results

![Graph showing distribution of donation amounts]

Figure 20: Donation Amounts among All Donors, Donor Survey, and CCES Donors - The distribution of contribution amounts in the donor survey (dashed line) is nearly identical to the distribution of donation amounts in the population of donors (solid line). Donors in the CCES survey (dotted line), however, gave significantly less on average. This suggests that donors in the CCES are not representative of the population of donors, necessitating a new survey of donors to obtain an accurate picture of donors’ preferences.

amount, contribution recipient, and address. This list of donors is available to the public.

Using the list of donors and addresses, I mailed 20,500 letters to 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 Appendix 8.

I specifically consider the 22 senators who sought reelection in this study for several reasons:

The 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 near 15 percent) (Campaign Finance Institute 2014).
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. Thus, I consider only those senators who would be immediately concerned with appealing to donors and voters by looking at the 22 senators who faced the voters in 2012.

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 omitted in traditional surveys that identify respondents as contributors. For example, the CCES study asks respondents whether they contributed money to candidates for the Senate. However, they only ask whether the donor gave to their own senator or another senator. Those who respond that they gave to “another senator” do not indicate which of the other senators they gave to. 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. Figure 21 shows an example of the geographic distribution of individual donors for a senator from each party. Each point represents a donor who gave to the senator, with the size of the point proportional to the donation amount. We see that a large fraction of individual contributors reside outside of each senator’s state. Using Senator Hatch as an example, a survey that did not identify out of state contributors would not consider contributors who comprise nearly 90 percent of Hatch’s financial support. Figure 22 shows that this is not only the case with these two examples, but is common across all senators.

After sampling out-of-state donors, I next drew an equal number of within-state donors
Figure 21: **Senator’s Donors Are Largely from Out-of-State** - Unlike voters, donors are not constrained to contribute only to candidates from their district or state. In fact, much of senator’s money comes from donors who do not live in the state represented by the senator. This figure shows two examples of the geographic diversity in donor locations for a Republican and Democratic senator. Both Senator Hatch and Senator Brown of Ohio were running for reelection in 2012. Senator Hatch raised 87% of his money from individual donors outside of Utah. Senator Brown also raised a large share of his individual donor money (43%) from outside of Ohio.

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. Since the FEC does not record the party of the donor, I estimated the contributor’s party by looking at the percentage of donations from each contributor that went to candidates from each party. Those who gave more than 75% of their money to Republican candidates I
considered Republicans. The same was true for Democrats. The reason for sampling these same-party and same-state donors who did not give directly to the senator is illustrated in Figure 22. While incumbents raise a great deal of their individual contributions from out-of-state, challengers exhibit the opposite pattern. The majority of challenger money comes from donors inside the challenger’s state. Thus, incumbent senators may pay particular attention to in-state donor’s preferences even if they are not giving directly to the senator since any possible primary challenger is likely to raise most of her money from these people. Figure 33 in Appendix 10 shows the proportion of donors in each of these strata by senator. In addition, Appendix 10 discusses the how I weight the survey to bring the set of respondents closer to being representative of the population of donors.

Figure 22: Out-of-State Individual Money - The left panel shows the distribution of average shares of individual money coming from out-of-state donors. On average, incumbents collect more than half of the individual money they raise from out-of-state donors. However, the distribution is much different among Senate challengers. Challengers raise the overwhelming majority of their individual contributions from donors inside their home state. The right panel shows this relationship over time. Since 1980, incumbents have raised more of their individual money from out-of-state donors than challengers have. Each year, the difference is between 10 and 15 percentage points (shown with 90% confidence intervals).

Mixed-mode surveys administered through the mail that then direct respondents to complete the questionnaire online are known to have a low response rate (Barber et al., 2014). To 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. Low response rates, however, are less concerning if respondents are representative of the population of interest. In this survey, respondents contributed more money on average than non-respondents. However, 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.

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. In addition, respondents also expressed 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 Appendix 9.

### 3.2 CCES Survey

To identify the ideal points of 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. Multiple universities collaborate on the survey with half of the survey consisting of a common set of questions asked of all respondents. The remaining questions are divided among teams with groups of 1000 voters being asked questions specific to each university team. One

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Weighting to the population of interest can only be done on variables for which we know in both the population and the sample. Since the FEC file does not contain demographic information for each donor, we cannot weight according to demographic factors.

advantage of using the CCES “common content” to measure the preferences of voters is the incredibly large number of respondents in the survey. 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. Finally, the survey collects standard information such as party affiliation, ideology, and demographics. A full list of questions used to estimate voters ideal points is included in Appendix 9.

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 et al. 2004, McCarty et al. 2006). In the 112th Congress, senators cast 486 roll call votes.

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 et al. 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


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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). The key to each of these methods is creating
a dataset in which the actors cast votes over a variety of binary questions. Those “votes”
could be endorsements by the president for legislation or judges agreeing with the majority
opinion on the court. 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, on which the House and
Senate vote on identical legislation, often serve as these “bridge votes”. As an extension
of this idea, if two surveys include a series of identical questions, then the ideal points of
respondents from each survey can be compared so long as a number of respondents answered
these common questions. Furthermore, if the common votes cast by respondents are actual
votes taken from the roll calls cast in Congress, then the ideal points of these voters can be
compared on the same scale to the ideal points of legislators as well. It is this strategy that

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It is also possible to ensure comparability by holding the ideal point of an actor who votes in both bodies
fixed. For example, Shor et al. (2010) gain comparability across state legislatures by holding constant the
ideal points of state legislators who go on to serve in the US Congress.

In a working paper, Lewis and Tausanovich critique models that “link” voters to legislators and suggest
that the decision making process among the two groups is sufficiently different as to render comparisons
of ideal points across groups invalid. I address this concern in a variety of ways. First, I include as many
questions as possible to help address the critique that voters are often casting fewer votes than legislators
in ideal point models. Additionally, I include other demographic information in the model that has been
shown to contain ideological content among both voters and legislators. Furthermore, comparisons between
donors and voters will still be valid even if error is introduced in the comparisons between legislators are non-
legislators. Inasmuch as I am interested in comparing the differences between donors and voters in relation
I use to allow for comparability of the ideal points between voters, donors, and senators. In the ideal point model I estimate there are 54,535 voters in the CCES survey who express 294 binary “votes”. Similarly, in the donor survey there are 2,905 donors who cast 153 “votes”. Between these two surveys, 57 of the votes appear on both surveys and act as bridge votes. In the Senate, 102 senators cast 486 votes. 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 Appendix 9.

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

\[
Pr(y_{ij} = 1) = \Phi(\beta_j' x_i - \alpha_j)
\]  

(4)

In this model, which follows Clinton et al. (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 \(\beta_j\) and \(\alpha_j\) which are specific to each proposal. While Clinton et al. (2004) provide a more detailed discussion of this statistical framework, a few features of the model are worth discussing here. In the Bayesian framework, the model requires several identifying assumptions. First, as is common in Bayesian ideal point models and for local identification, I assume that the distribution of ideal points has mean zero and a standard deviation of one. Secondly, to fix the directionality of the estimates, I arbitrarily assign liberal ideal points to have senators, any bias between legislators and non-legislators in the model should not affect the validity of these comparisons.

It is not the case that voters in the CCES and contributors in the donor survey answered hundreds of individual questions. For many questions they chose one value on a five or seven point Likert Scale (such as “Do you have a favorable or unfavorable impression of the political movement known as the Tea Party?”). These responses are then dichotomized Bafumi and Herron (2010). Thus one question with 5 response options becomes 5 dichotomous responses. Each dichotomous question can be interpreted as “Did the respondent indicate ‘yes’ to any response equal to or less than this value?” This approach is only used for questions with naturally increasing values, such as increasing support or approval of a policy or person.

The 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.
smaller values. Thus, negative values indicate more liberal voters (senators) and positive values indicate more conservative voters (senators). One concern with Bayesian models is determining whether or not the estimates have converged to, and then sampled from, the true posterior distribution. Appendix 11 shows convergence statistics for the MCMC chain suggesting the chain converged properly, leading to reliable estimates of the ideal points.

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 Congress, I compare each senator’s estimated ideal point from the joint scaling method described above with his or her corresponding DW-NOMINATE score. These scores are commonly used in a variety of studies of American politics to measure the ideology of legislators (McCarty et al., 2006; Bonica, 2013b). The first panel in Figure 23 shows that this bivariate correlation is extremely high (.98). Moreover, the correlation appears to be high among legislators from both parties and for both reelection-seeking senators as well as those who are not on the ballot in 2012.

To validate the estimates of voters’ ideal points, I plot the median voter’s ideal point in each state against the share of the vote obtained by the Republican presidential candidate in 2012. Presidential vote returns have frequently been used to measure the average ideology of states and congressional districts. The second panel in Figure 23 shows that this correlation is quite high (.85). We see a strong positive relationship between presidential election results and the median voter’s ideal point for each state.

As starting values for the Gibbs sampler I assign each voter and donor a value of \{-0.8, -0.5, -0.2, 0, 0.2, 0.5, 0.8\} based on their response to a seven point question of their self-identified political ideology with those identifying as “Very Liberal” being assigned -.8. Democratic legislators are assigned a starting value of -.5 with Republican senators begin assigned a starting value of .5. Each voter, donor, and senator’s ideal point parameter is assigned a prior value equal to the starting value with a prior precision of 1. The Gibbs sample ran for a total of 300,000 draws with a 250,000 burn in period.

The lonely point in the bottom left of the plot represents the District of Columbia, where Romney took home a paltry 7% of the vote.
Validating the ideal points of the donors is slightly more difficult as there are no existing estimates of campaign contributors’ ideal points that have themselves been validated. Therefore to show that the ideal points are sensible, I compare them against the donors’ self-reported ideology on a -50 to 50 scale with -50 being “very liberal” and 50 being “very conservative”. The measures correlate well (.91), suggesting that the ideal points accurately reflect contributors’ political preferences.

Figure 23: **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. Points represented by “X”s show senators who were running for reelection. The middle panel shows the correlation between the median voter’s ideal point in each state and the vote share won by Romney in the 2012 general election in that state. The right panel shows the correlation between the ideal points of donors who responded to the donor survey and the respondents’ self-reported ideology. In each case, the correlation is high, suggesting that the estimates obtained from the joint scaling of senators, voters in the CCES survey, and contributors in the donor survey are valid.

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

Bonica (2013b) provides new estimates of the ideologies of contributors based on their contribution records. His measures of candidate ideology correlate very well with existing measures of ideology based on roll call voting. However, his estimates of contributors have not been validated against any other measure, simply because they are the first of their kind. Thus, validating my measures of donor ideology against his is somewhat equivalent to validating his measures against mine. Happily for both measures, they correlate highly (.86).
nearly zero, indicating nearly perfect congruence on average. I then show that the distance between senators and co-partisans is larger, showing decreased congruence between legislators and their co-partisan voters. Finally, I show that senators are 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.

**Average Effects:** Figure 24 shows the average pairwise distance between senators and voters, senators and their co-partisans, 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, and 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. Similarly, the average distance between senators and contributors is also smaller than the average distance between senators and all voters.

When differences occur, the direction of the estimates is 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 24 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 24), which only looks at donors and senators who sought reelection. These results are consistent with the theories outlined in Section 2 that predicted legislators would espouse the policy preferences of donors rather than representing the preferences of the average voter.

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
Figure 24: **Average Distance between Legislators and Donors, Partisans, and Voters** - This figure shows the average distance for each of these three groups. Additionally, the top point shows the average distance between voters and a randomly assigned senator. The distance is calculated by taking the average of the senator’s ideal point minus the voter’s (or co-partisan, or donor) ideal point. We see that 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.

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 24, 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.

Comparatively, congruence is much stronger when considering donors. Among Republicans, the 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 any other distance measure among Democratic senators. As stated before, these results are consistent with the idea that legislators’ ideologies should closely reflect the policy preferences of donors at the expense of the average voter. 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, Republican senators seeking reelection do as good a job of representing their ideological positions on average as they do with 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. When considering reelection seeking Democrats, congruence increases as the average distance between 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.
As an additional test of this relationship, Figure 25 shows for each state the ideological position of the senator plotted along with the ideology of the median donor, the median co-partisan and the median voter of their state. Nearly 75% of the time, the estimated ideology of the median contributor is more extreme than the ideology of the senator (and 95% credibility interval). This 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 align ideologically with contributors. This divergence 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.

Figure 25 also shows that contributors consistently hold ideological positions that are more extreme than the average partisan. In 17 of the 22 states surveyed, the median contributor is more extreme than the median partisan in that state. Interestingly, the difference between contributors and partisans appears to be larger among Democrats than among Republicans. Of the 5 states where the median partisan is as extreme (or in the case of WY, more extreme) than the median contributor, 4 of those states are represented by Republican senators. However, with only 6 Republican senators seeking reelection in 2012, we cannot be too certain of this relationship. Yet, the pattern shown here warrants further investigation.

**Effect Heterogeneity:** The hypotheses discussed in Section 2 suggested that in states where the median voter’s ideal point is on the other side of the ideological scale from a legislator’s party, we should observe the legislator paying greater attention to the preferences of the median voter. To test this prediction, I analyze the degree of congruence among senators who are “partisan mismatches”. These are cases where the party of the senator does not align with the overall partisan composition of the state. The discussion in Section 2
Figure 25: Ideal Point Estimates of Senators, Donors, Partisans, and Voters - This figure shows the location of the ideal point estimates of senators (with 95% credibility interval), the median ideal point of donors (“$”), the median ideal point of their co-partisans (“P”), and the median ideal point of voters in their state (“V”). Only incumbent senators who were running for reelection in 2012 are displayed. The plot is ordered from most liberal senator (Kirsten Gillibrand D-NY) to the most conservative senator (Orrin Hatch R-UT). We see that in only 4 cases is the estimated ideology of the senator (and 95% credibility interval) more extreme than the median ideology of her contributors. Moreover, in every case but one, the median ideology of the donors is as extreme or more extreme than the co-partisans of each senator.

suggested that in these cases, legislators would have less leeway to disregard the preferences of voters in favor of the preferences of their co-partisans and donors. Instead, they may give greater weight to the ideological positions of voters. In these states, this may be the case.
as successful candidates must win over a significant portion of independent voters who are more likely to vote based on ideological proximity than partisans (Jessee 2009). Moreover, these legislators must also convince many voters of the opposing party to vote against their partisan leanings, which is a difficult undertaking given the correlation between partisanship and vote choice (Bartels 2000). As an example of these “partisan mismatches”, Figure 26 shows the distribution of ideal points for voters, co-partisans, and donors for three such states. In each case, we see that a significant proportion of voters have ideal points on the other side of the ideological spectrum from the partisans and donors of the senator’s party. Likewise, we also see that in these three cases the senators’ ideal points appear to be further from the median ideology of their donors and much closer to the median voter’s ideal point.

To test the partisan mismatch hypothesis more comprehensively, I calculate the average distance between each senator and voters, partisans, and donors as was done in the previous section. However, this time I split the sample by whether or not the senator is a partisan mismatch in the state. I consider a senator to be mismatched if voters in her state supported the presidential candidate of the opposite party. For example, Massachusetts overwhelmingly supported President Obama in 2012 while Scott Brown was the Republican senator from this state. Similarly, West Virginia’s electoral votes went to Mitt Romney in 2012 while the state is represented by Democratic Senator Joe Manchin. If the hypothesis is confirmed, we should see the average distance between the legislator and her voters decrease in these mismatched states while the average distance between the legislator and her co-partisans and donors should increase.

Figure 27 shows that in mismatched states senators heed more closely to the ideological preferences of the average voter. This is illustrated by the smaller distance between senators and their voters in mismatched states (triangle points) compared to states where the party of the senator aligns with the partisan composition of the state (circle points). Among co-partisans and donors, the average distance from the senator switches signs, indicating that
Figure 26: Examples of Mismatched Senators in WV, MO, and MA - The top row of figures show the distributions of ideal points in three “mismatched” states, i.e. states who supported the opposite party as the senator in the 2012 presidential election. The bottom row of figures shows three non-mismatched states for comparison. The dotted line in each panel shows the distribution of ideal points of all voters in the state. The solid black line shows the distribution of ideal points of voters who identify with the party of the incumbent senator running for reelection. The solid green line shows the distribution of ideal points of the senator’s donorate. Above these distributions are displayed the medians of each distribution as well as the estimated ideal point of the senator including the 95% credibility interval (shown as a vertical bar). The presence of a large proportion of voters from the opposing party and the moderate positions of the senator’s ideal points suggests these “mismatched” senators give more attention to the average voter. The senators in mismatched states are more moderate than the average co-partisan and donor. Additionally, in these cases, the absolute distance between the senator and donors increases in mismatched states. Each of these results suggests that the ideological pressure applied by the median voter is greater in mismatched states and that there is greater ideological congruence between the median voter and senators in these states.

Summary: The consistently small distances between senators’ ideal points and contributors’ ideal points supports the theory that legislators closely represent the interests of donors. This is true for both Democratic and Republican senators. Among Democrats, the distance between senators and co-partisans is larger. Among Republicans, this is also the case when
Figure 27: Average Distance: Party Mismatched versus Party Matching States - This figure shows the average distance for voters, co-partisans and donors from their respective senators. The figure shows these distances by party, with Democrats in the left panel and Republicans in the right panel. Additionally, triangles show the average distances in states that are partisan mismatches with the senator. I define a partisan mismatch as a state where voters supported the presidential candidate from the opposing party as the senator in the 2012 election. We see that in mismatched states, the average distance between senators and their voters decreases dramatically. Among co-partisans and donors, the distance flips signs. Senators become more moderate than their co-partisans and donors in mismatched states. Additionally, the average distance either remains the same or increases (with the exception of Republican donors).

considering all Republican senators, but not when looking at Republican senators who sought reelection in 2012. Among both parties, the large distances between senators’ ideal points and voters’ ideal points supports the theory that legislators disregard the preferences of the average voter in order to cater to the preferences of influential and ideologically polarized constituencies. Finally, the smaller distances between senators and voters in mismatched states is consistent with the theory of partisan mismatches, which suggested that the distance between senators and their voters would decrease when the party of the senator does not align with the average partisanship of the state.
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 (Francia (2003) is a notable exception, yet their data are now nearly 20 years old), and measures of donors’ net wealth have never before been measured. Yet income and wealth have been shown to be one of the most important predictors of political opinions, with numerous surveys showing that the wealthy often hold distinctly different preferences from the poor and middle classes (Page et al. 2013; Page and Hennessy 2010). 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 an explanation 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

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Comparing the distributions of income between Francia (2003) and this survey show a similar distribution of income among donors after adjusting for inflation.
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 28 shows the distribution of income for non-donors from the CCES and contributors from the donor survey. The differences are immediately apparent. On average, donors are much wealthier than non-donors. Among CCES respondents, more than half of non-donors reported having an estimated family income of less than 50 thousand dollars in the previous year. This stands in 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 28: Income and Net Wealth of Americans, Donors and Senators](image)

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. While
the CCES survey did not ask about levels of wealth, I use the Census Bureau’s calculation of American households’ net worth instead. To measure senators’ wealth I use data provided by the Center for Responsive Politics. The middle panel of Figure 28 shows the dramatic difference in the median net worth of Americans ($69 thousand) compared to those in the Senate ($1.7 - 4.1 million). This difference decreases significantly when looking at the median net wealth of campaign contributors ($1 - 2.5 million). The right panel of Figure 28 shows that not only are the medians similar, but the distribution of wealth among donors is also 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 86% of Americans who fall in the bottom two categories 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. 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 the 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

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This 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 28, 86% of all Americans, unregistered and registered voters, fall in the bottom two categories of the net worth scale.

In 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.
legislators’ electoral fates is less convincing.

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Figure 29: **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.

Figure 29 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 recomputed 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 29 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.
While an income of $125,000 hardly classifies a person as poor, I retain the high cutoff simply because there are so few donors who have incomes less than $125,000. This subset contains the overwhelming majority (93%) of CCES survey respondents while only including the bottom 25% of donors. The right panel of Figure 29 shows that ideological congruence among these less-affluent donors remains high while the distance between legislators and voters is still much larger. If we were forced to find a silver lining to the lack of congruence between voters and their legislators, we should note that comparing the distances between wealthy and non-wealthy voters (rows 1 and 3 of the left and right panels of Figure 29), the average distance appears to be nearly the same. Figure 32 in the Appendix shows these same comparisons but considers only wealthy and less-affluent co-partisans rather than all voters in a senator’s state. While the distances decrease, in both cases, donors retain the smallest average ideological distance from senators, even when looking only among the wealthy.

6 Concluding Remarks

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.

A basic tenant of successful democratic governance requires that 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 in the United States, but may also impact feelings of efficacy, trust, and political equality among the American public.
7 Additional Empirical Results

In this section I present additional empirical evidence that helps address possible criticisms of the previously described results.

One possible critique of these results is that the CCES survey over samples voters from one of the two parties in each state and thus the estimate of the median voter in each state is biased. While the CCES provides evidence that the survey is indeed representative of state demographics (CCES, 2012), an additional test of the partisan balance in the CCES would be to plot the percentage of Republicans and Democrats in each state against an external measure of partisan strength, such as presidential vote shares. Figure 30 shows that states with higher proportions of Republican (Democratic) respondents also had higher Republican (Democratic) vote shares in the 2012 election. This provides evidence for the partisan balance of the CCES, thus also supporting the validity of the ideal point estimates of the median voter and co-partisans in each state.

Figure 30: CCES Partisans and 2012 Vote Share - We see a strong relationship between the CCES partisanship by state and the actual vote share in the 2012 election, lending evidence for the validity of the CCES survey’s partisan balance by state.
Another possible critique of these results is that those who are estimated to have moderate ideal points are in fact not that moderate. It could rather be the case that moderates are simply extreme on issues, but inconsistent as to which side of the political spectrum they fall (Converse 1964). For example, a respondent who believes abortion should be outlawed entirely (extremely conservative position) but favors expanding Medicare to cover all Americans (extremely liberal position) may appear moderate when this voter in reality is anything but moderate. To test for this, I consider five questions in the CCES that had more than four possible response options ranging from very conservative to very liberal. For each of these questions I calculate whether the respondent gave an extreme response (i.e. the most extreme response option on either side of the scale). Figure 31 shows the estimated ideology of each respondent plotted against the number of extreme responses they provided. The red line shows a loess smoothed regression line. We see that those with moderate estimated ideal points provided fewer extreme responses than those on the ideological edges. These results support the idea that voters with centrist ideal points truly are moderate ideologically, rather than simply extreme but ideologically inconsistent. This also lends support to the validity of the estimates used in the previous sections that show senators are out of line with the preferences of the majority of their voters who have moderate ideal points.

The questions addressed the topics of abortion, climate change, economic growth, political ideology, and support for the Tea Party.
Figure 31: **Ideology and Extreme Survey Responses** - This figure shows the estimated ideal point of voters (x-axis) and the number of extreme responses they provided (y-axis) to five CCES questions that had 4 or more response options. The red line is a loess smoothed regression line. Those with moderate ideal points give fewer extreme responses (1 on average), rather than simply providing extreme responses to questions but on opposite sides of the political spectrum.
The results presented in Figure 32 replicate those in Figure 29, but consider only co-partisans rather than all voters in a senator’s state. Congruence is higher among donors than among wealthy non-donor partisans.

Figure 32: **Average Distance: Senators-Donors and Senators-Wealthy Co-partisans** - 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 co-partisans that congruence is larger among donors than among non-donors.
Dear First_Name,

We are writing to ask for your help in understanding the views of registered voters on important political issues facing America. To help give valuable input on these issues, we invite you to participate in a special online survey conducted through Princeton University.

You were selected at random from a publicly available list of voters in America. This online survey takes approximately 10 minutes to complete and your answers are completely confidential. None of your information will ever be shared with political organizations or the public.

To ensure that only voters who have been invited can participate in the survey, we have provided a unique access code. To begin the survey:

1. Enter the following URL into any web browser: http://PrincetonVoterSurvey.com
2. Click on “Take The Princeton Voter Survey”
3. Enter the following “Access Code” in the space provided: ACCESS_CODE

If you have trouble accessing the survey, please email us at puvote@princeton.edu or call the survey helpline at 609-375-8981. Your responses are voluntary and will be kept confidential. If you have any questions about your rights as a study participant, you may contact the Princeton University Institutional Review Board by telephone at 609-258-3105.

Enclosed is a small token of appreciation to thank you in advance for participating in the study. We hope that you enjoy sharing your thoughts and opinions within the questionnaire and we look forward to receiving your response.

Sincerely,

Michael Barber
PhD Candidate
Department of Politics
Princeton University

Brandice Canes-Wrone
Donald E. Stokes Chair of Public and International Affairs
Woodrow Wilson School
Princeton University
9 Survey Questions

Using responses from the survey, I include a variety of questions. Many questions are directly related to a voter’s opinion on policies that are currently debated between the parties and have previously been shown to have clear differences between liberal and conservative respondents. Bolded questions indicate questions that are used to bridge between surveys. Furthermore, I include additional questions that may not be overtly political yet have been shown to be predictive of both voters’ and legislators’ ideological positions.

9.1 Donor Survey Questions

- For whom did you vote for President?

- EPA Amendment: Vote to repeal the EPA’s finding that greenhouse gases endanger human health and the environment as well as block the EPA from regulating greenhouse gases and weaken fuel economy standards.

- Extension of the payroll tax holiday and unemployment insurance benefits: Vote to extend through the end of 2012 the payroll tax holiday and unemployment insurance benefits.

- US - Colombia Free Trade Agreement: Vote to approve a free trade agreement between the United States and Colombia.

- Patriot Act Renewal: Vote to renew the government’s Patriot Act powers to search records and conduct roving wiretaps in pursuit of terrorists.

- Birth Control Coverage: Vote to prevent employers from opting out of birth control coverage in health policies unless the employer is a religious organization with moral objections.
• Affordable Care Act: Vote to require all Americans to purchase health insurance, set up health insurance exchanges, and increase taxes on those making more than $280,000 a year.

• American Tax Payer Relief Act: Vote to permanently extend the Bush Era Tax Cuts for individuals making less than $400,000 per year.

• Dodd-Frank Financial Reform Bill: Vote to increase oversight of financial institutions and establish a Bureau of Consumer Financial Protection.

• End Don’t Ask Don’t Tell: Vote to allow gays to openly serve in the armed services.

• Allow illegal immigrants, who were brought to the United States as minors, to pursue citizenship without returning to their country of origin.

• An amendment to the U.S. Constitution requiring a balanced budget.

• Reduce restrictions on offshore energy production.

• Allow individuals to divert a portion of their Social Security taxes into personal retirement accounts.

• Implement requirements to lower the amount of greenhouse gases produced by American businesses.

• An amendment to the U.S. Constitution banning gay marriage.

• Allow capital punishment for certain crimes.

• Allow the U.S. military to use force in order to prevent Iran from possessing a nuclear weapon.
• Regulate campaign contributions from corporations and unions.

• Allow the government to target suspected terrorists outside of official areas of conflict.

• In general, do you feel that the laws covering the sale of firearms should be made more strict, less strict, or kept as they are?

• In general, do you agree or disagree that it was a mistake to invade Iraq?

• Which one of the following options best describes your view on abortion?

• Do you have a favorable or unfavorable impression of the political movement known as the Tea Party?

• Would you say that OVER THE PAST YEAR the nation’s economy has gotten better or gotten worse?

• Do you approve of disapprove of the job Barack Obama is doing as President?

• During the past 2 years, did you do any of the following? You may mark more than one option.
  
  – Attend a local political meeting (such as a school board or city council meeting)
  
  – Put up a political sign (such as a lawn sign or bumper sticker)
  
  – Work for a candidate or campaign
  
  – Attend an event sponsored by a political candidate (such as a fundraiser, rally, or dinner)
  
  – Talk to a family member, friend, or coworker about the 2012 election

• How important are the following factors in your decision to make a contribution to a U.S. House or U.S. Senate candidate?
– The candidate is from my state or district
– I know the candidate personally
– The candidate is in a close race
– The candidate’s position on the issues is similar to mine
– I was asked by a friend, coworker or family member
– I think the candidate will help people and businesses in my state or district
– The candidate could affect my industry or work
– The candidate’s opponent is unacceptable
– I think the candidate and their staff will listen to my concerns once elected
– To make a difference in the outcome of the election
– I was asked by a political organization or group

- In the last 2 years, have you personally contacted any of the following people or members of their staff, either by phone, letter, in person, or through email?

- Have you ever personally met any of the following people or members of their staff?

- Using the sliding scales, please place the following individuals according to how liberal or conservative you think they are.
  – Barack Obama
  – Mitt Romney
  – Yourself

- In politics, as of today, do you consider yourself to be a Republican, a Democrat, an Independent, or something else?
• What racial or ethnic group best describes you?

• Are you female or male?

• Thinking about politics these days, how would you describe your own political viewpoint?

• Thinking back over the last year, what was your household’s annual income?

• What do you think is the current net worth of your household?

9.2 CCES Survey Questions

• Over past FOUR YEARS - Lost A Job

• Over past FOUR YEARS - household’s annual income

• OVER THE NEXT YEAR - Economy

• Responsibility for US Economy

• Afghanistan - mistake

• Institution Approval - Congress

• Institution Approval - Supreme Court

• Vote - 2008

• Climate Change Government Action Support

• Immigration - Grant legal status

• Immigration - Increase border patrol

• Immigration - Allow police to question
• Immigration - Fine US businesses

• Immigration - Prohibit services

• Immigration - Deny automatic citizenship

• Jobs at the Expense of Environment

• Gay Marriage Support

• Affirmative Action Support

• Balanced Budget Preference

• Roll Call Votes - Ryan Budget Bill

• Roll Call Votes - Simpson-Bowles Budget Plan

• Roll Call Votes - Middle Class Tax Cut Act

• Roll Call Votes - Tax Hike Prevention Act

• Roll Call Votes - U.S.-Korea Free Trade Agreement

• Roll Call Votes - Repeal Affordable Care Act

• Roll Call Votes - Keystone Pipeline

• Roll Call Votes - Affordable Care Act of 2010

• Roll Call Votes - End Don’t Ask, Don’t Tell

• Born Again Christian

• Importance of religion

• Church attendance
- Frequency of Prayer
- Religious Preference
- Interest in news and public affairs
- Home ownership
- Military service
- Union membership
- Approve troops to - Ensure the supply of oil
- Approve troops to - Destroy a terrorist camp
- Approve troops to - Genocide or a civil war
- Approve troops to - Assist democracy
- Approve troops to - Protect allies
- Approve troops to - Help UN
- Approve troops to - None
- Raise Taxes versus Spending Decreases
- Income Tax versus Sales Tax Increases
- Using the sliding scales, please place the following individuals according to how liberal or conservative you think they are.
  - Republican Party
  - Democratic Party
– Tea Party Movement
– Supreme Court
10 Sampling and Weighting Methodology

Figure 33 shows the population of donors for each senator, divided into the three different strata by which the sample was drawn. The population of interest for each senator is a combination of three different sub-populations of donors: 1. Donors to the senator who reside in the senator’s state, 2. Donors to the senator who do not reside in the senator’s state, 3. Donors who reside in the senator’s state, are of the same party as the senator, but did not give to the senator in the most recent election cycle. This last group can be considered the most likely “potential donors” for a senator as well as the people most likely to fund a primary challenger’s campaign. The first panel of Figure 33 shows the percent of donors who gave to the senator and reside in the senator’s state. The second panel shows the percent of donors who gave to the senator and reside outside of the senator’s state. The third panel shows the percent of donors who reside in the senator’s state, are of the same party, yet did not contribute to the senator in the 2012 election cycle.

To account for the differences between respondents and the population, I implement post-survey weights that adjust the sample to better fit the population of interest. To do so, I calculate a probability of responding to the survey using a logistic regression for each senator’s donor population with the dependent variable being 1 for survey respondents. I include dummies for ”in-state”, ”out-state”, ”in-state, potential donor”, and a continuous variable for the total amount of contributions given by the donor. Ideally, an inverse probability weighting model would include other demographics to provide for balance in these factors as well. However, the donor file from which respondents are sampled does not contain any of this information. Using the regression results, I calculate a probability of responding to the survey. The weights are then the inverse of this predicted probability. To avoid giving too much influence to outlying observations, I truncate the highest 10% of the weights and assign them a weight equal to the 90th percentile. In Figure 33 and Figure 34, the circles
represent the unweighted proportions, the “x”s show the proportions in the population, and the triangles show the proportions in the survey after applying the weights. We see that in nearly all cases, weighting brings the survey proportions closer to the proportions in the population of donors. Figure 34 shows the median contribution amount by senator for the same three subsamples of the survey. Again, we see that the median contribution amount of the weighted survey data moves closer to the median contribution amount in the population.
**Figure 33: Results of Weighting** - The circles show the percentages in the unweighted survey data. The x's show the percentages in the weighted survey data. In nearly all cases, weighting brings the sample closer to the population proportions.
### In State Donors

<table>
<thead>
<tr>
<th>States</th>
<th>Mean Donor Total Contribution (Logged Scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEINSTEIN-CA</td>
<td>400</td>
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<tr>
<td>MANCHIN-WV</td>
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<tr>
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### Out of State Donors

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<th>States</th>
<th>Mean Donor Total Contribution (Logged Scale)</th>
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### In State, Potential Donors

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**Figure 34: Results of Weighting** - The circles show the median total contribution amount in the unweighted survey data. The circles show the amounts in the unweighted survey data. The x’s show the amounts in the weighted survey data. In nearly all cases, weighting brings the sample closer to the population proportions.
11 Convergence Statistics

Figure 35: **Distribution of Geweke MCMC Convergence Statistics** - The statistic follows a standard normal distribution. Thus, values closer to zero indicate convergent chains. Values larger than 1.96 or smaller than -1.96 indicate chains that did not converge. A Geweke statistic is calculated for each of the more than 55,000 ideal points. The distribution of these statistics shows that the preponderance of ideal points appear to have converged. 7 percent of the ideal points have Geweke statistics greater than 1.96 or less than -1.96, only slightly larger than the 5 percent we would expect from random chance. The vertical dashed lines show the values -1.96 and 1.96 respectively.
These figures show convergence statistics for a sample of the ideal point parameters.

Figure 36: **Trace Plots of MCMC Chains** - The first three plots are of legislators, plots four through six are of voters, and plots seven through nine of donors. Each group appears to have converged equally well.
Figure 37: **Autocorrelation Plots of MCMC Chains** - The first three plots are of legislators, plots four through six are of voters, and plots seven through nine of donors. There is a sharp drop off in autocorrelation in each chain, which suggests the chain was taking independent draws from the posterior distribution, i.e. proper convergence.
Figure 38: **Posterior Distributions** - This figure shows the distribution of posterior values for each of the nine people sampled on the unified ideological scale. Normally distributed posterior distributions indicate proper convergence.
Conclusion
The argument of the preceding chapters is that there is a tight relationship between legislators and those who fund their campaigns. The title of this dissertation was chosen not only for its alliterative appeal, but also because each chapter speaks specifically to one of the ways in which this relationship exists.

1 Summary

Chapter 2 established the different reasons, or incentives, motivating the two major sources of money in legislative elections. PACs are primarily motivated by a desire to gain access to legislators and the legislating process while individuals are primarily motivated by ideological considerations. Understanding that each group gives for dramatically different reasons explains empirical patterns that we observe in later chapters.

Chapter 3 then investigates the influence that each of these groups has over the types of legislators who are elected to office. Given that individual donors are ideologically extreme and give to legislators who match their ideological positions, we would expect legislators who raise more of their money from individuals to be more ideologically extreme. Likewise, legislators who raise more of their money from interest groups tend to be more politically moderate. To untangle the causal direction of this relationship, I show that limits on campaign contributions, which exogenously alter a candidate’s ability to raise money from certain types of donors, affect the ideologies of legislators in office. Thus, it appears that money indeed can cause ideological polarization or moderating, depending on the source of the money.

Finally, Chapter 4 turns to the ideology of contributors and senators in office. This chapter showed the level of ideological congruence between the preferences of senators and three important groups of constituents—donors, co-partisans, and registered voters. The chapter demonstrated that senators’ preferences reflect the preferences of the average donor better than any other group.
Taken together, this work suggests that legislators are responsive and representative, but of a very specific group of constituents—the donor class.

## 2 Future Studies of the Donor Class

While this dissertation pushes forward our understanding of the preferences and influence of campaign contributors, it also opens several opportunities for further studies of this important group of people. I now consider the most urgent extensions of each chapter in turn.

Chapter 2 shows empirical results consistent with interest groups seeking access to the legislative process. However, the observational data presented here cannot speak to the logical next question: does money actually buy access? Answer this question is deceptively difficult. Since legislators are not obligated to release their schedules, we as scholars are left to wonder whether campaign contributions grant interest groups access to the legislative process. Furthermore, previous approaches to this question have found roll call voting to be an unfruitful dependent variable. Thus, answering this vexing question may be best accomplished by undertaking an experimental approach as pioneered by Butler (see Butler and Nickerson (2011); Butler and Broockman (2011); Butler et al. (2012) for examples of experiments in legislative politics).

Chapter 3 and 4 demonstrate an important connection between legislators and individual donors. However, as also shown in those chapters, this relationship exists in tandem with pressures from non-contributing voters, and interest groups as well. Thus, to fully explore the relationship between these different groups and legislator’s behavior in office, a formalization of the relationships we observe in these two chapters could help elucidate the complex interactions. Such a model could take as a starting point the empirical results observed in Chapter 2 that individual donors appear to give for ideological purposes while interest groups appear to give for non-ideological, access-oriented reasons. Combining these features with a legislator who much persuade voters in an electoral context would be an excellent starting
place for an enlightening model of political ideology.

Going forward, as we continue to understand the factors influencing the process of representation, it is vital to understand how different groups of constituents influence the policy making process. Identifying those groups who may have unequal influence is an important step in the pursuit of understanding the democratic process in general.
References


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Snyder, J. M. (1992). Long-term investing in politicians; or, give early, give often. JL & Econ. 35, 15.


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