

# The Financial Incumbency Advantage: Causes and Consequences

**Alexander Fournaies** London School of Economics  
**Andrew B. Hall** Harvard University

*In this article, we use a regression discontinuity design to estimate the causal effect of incumbency on campaign contributions in the U.S. House and state legislatures. In both settings, incumbency causes approximately a 20–25 percentage-point increase in the share of donations flowing to the incumbent’s party. The effect size does not vary with legislator experience and does not appear to depend on incumbent office-holder benefits. Instead, as we show, the effect is primarily the result of donations from access-oriented interest groups, especially donors from industries under heavy regulation and those with less ideological ties. Given the role of money in elections, the findings suggest that access-oriented interest groups are an important driver of the electoral security of incumbents.*

Incumbents possess many advantages over challengers in U.S. elections.<sup>1</sup> The overall “incumbency advantage” might reduce the incentives for incumbents to exert effort on behalf of their constituents, or it might not, depending on its sources. If it is the result of voters rewarding incumbents for effective representation, then it need not diminish these incentives. On the other hand, if the advantage of incumbents stems from other factors not directly linked to how they represent their constituents, it may well distort their calculus while in office. In this article, we connect the advantage of incumbents to the role of money in elections, and we trace incumbents’ financial advantage back to the behavior of interest groups who desire access to those in office.

A large literature in political science studies the electoral advantage of incumbents (e.g., Ansolabehere and Snyder 2002; Ansolabehere and Snyder 2004; Cox and Katz 1996; Erikson 1971; Gelman and King 1990; Hirano and Snyder 2009), but our knowledge of its sources remains incomplete. A separate literature studies the connections between incumbents and access-oriented interest groups, offering theoretical motivations for the ways interest groups support incumbents, both financially and

otherwise (Baron 1989; Hall and Deardorff 2006; Hall and Wayman 1990; Snyder 1990, 1992). Finally, a third literature studies the links between campaign contributions and electoral outcomes and suggests that, on the whole, receiving and spending more money boosts vote share (e.g., Erikson and Palfrey 2000; Gerber 1998, 2004; Green and Krasno 1988; Jacobson 1978, 1990) and can help “scare off” opponents (Box-Steffensmeier 1996; Goodliffe 2005). In this article, we connect these three literatures. We show that incumbency causes a large increase in campaign contributions, that is, that there is a large financial incumbency advantage that precedes, and helps generate, the electoral incumbency advantage we observe. We demonstrate that access-oriented interest groups create a large fraction of this financial incumbency advantage and are thus an important driver of—and beneficiary of—the electoral incumbency advantage.

Incumbents substantially out-raise challengers, on average, across all U.S. legislatures (e.g., Ansolabehere and Snyder 2000; Hogan 2000; Jacobson 2009; Krasno, Green and Cowden 1994; Magee 2012; Moncrief 1992). But this does not necessarily imply that incumbency, *per se*, delivers a financial advantage. Much of the

<sup>1</sup>Fournaies acknowledges financial support from The Augustinus Foundation, Frimodt-Heineke’s Foundation, and Knud Højgaard’s Foundation. Hall acknowledges financial support from the Institute for Quantitative Social Science. An online appendix containing additional statistical results is available at <http://dx.doi.org/10.1017/S0022381614000139>. Data and replication code are available at [andrewbenjaminhall.com](http://andrewbenjaminhall.com).

observed advantage might instead stem from the fact that incumbents differ from challengers in many unobserved ways, including in their underlying characteristics and those of the districts in which they tend to sit.<sup>2</sup> Simply comparing the average receipts of incumbents and challengers cannot separate the preexisting differences between incumbents and challengers from the differences that result from occupying political office. This is equally true when investigating the kinds of donors that give to incumbents and challengers; although interest groups favor incumbents with their donations,<sup>3</sup> this could be driven in large part by the preference of strategic donors for different kinds of candidates and different types of districts, rather than because these donors care about access to office *per se*. We must investigate alternative evidence.

We use a regression discontinuity design (RDD)<sup>4</sup> (e.g., Lee 2008) in U.S. House and state legislative elections to estimate the financial incumbency advantage, that is, the increase in contributions caused by the random assignment of party incumbency.<sup>5</sup> We present evidence that party incumbency causes a substantial increase in campaign contributions (approximately a 20–25 percentage-point jump in the share of total contributions), and we investigate the donor groups responsible for this pattern. We carry out tests that show that strategic interest groups direct money to incumbents in exchange for access (and not for some of the other reasons often put forward), and we show that access-oriented interest group donors account for approximately two-thirds of the overall causal financial incumbency advantage. Moreover, interest groups representing industries that are heavily regulated or that underwent fundamental changes in their regulatory environment (e.g., energy, technology, health care, and transportation) are more likely to coordinate and target incumbents.

The article is organized as follows. First, we explain our empirical strategy. Second, we briefly describe the datasets we use to study the financial

incumbency advantage. Third, we present our results and use subgroup analyses to discuss potential causal mechanisms. Finally, we conclude with a short discussion.

## Empirical Strategy

A simple comparison of incumbent and challenger campaign receipts does not estimate the causal effect of incumbency on campaign receipts, for obvious reasons. Those who win an election are not directly comparable to those who do not. In addition, incumbents may be strategic in their decision to run for reelection. In a pooled analysis, moreover, unobserved differences across districts with open elections, those with uncontested incumbents, and those with incumbents running against challengers will be confused with the effects of incumbency. Forms of bias like these threaten most estimates of incumbency advantages. RDDs provide a solution to these selection problems by focusing on close elections in which incumbency is “as if” randomly assigned to either the Democratic or Republican party (see Imbens and Lemieux 2008; Lee 2008). If the campaign contributions donated to the party in the next election cycle in districts it barely won differ systematically from the donations the party receives in districts it barely lost, this difference can be attributed to the impact of incumbency under weak conditions.<sup>6</sup>

More formally, the RDD estimator is defined as

$$\begin{aligned} \tau_{RDD} &= \lim_{v \downarrow c} E[Y_{it+1}(1)|V_{it} = v] \\ &\quad - \lim_{v \uparrow c} E[Y_{it+1}(0)|V_{it} = v] \quad (1) \\ &= E[Y_{it+1}(1) - Y_{it+1}(0)|V_{it} = c], \quad (2) \end{aligned}$$

where  $V_{it}$  is the forcing variable which determines whether or not treatment is assigned (if  $v_{it} \geq c$  treatment is assigned). In the present setting, this forcing variable is the Democratic vote share winning margin, that is, the difference between the Democratic

<sup>2</sup>Ansolahehere and Snyder (2000) addresses this problem of causality by using a “sophomore surge” estimator. However, resulting estimates are likely to be somewhat downward-biased because of reversion to the mean (e.g., Gelman and King 1990).

<sup>3</sup>This can be calculated using FEC data and National Institute On Money in State Politics data. Also, see, for example, Ansolahehere and Snyder (2000).

<sup>4</sup>Our results do not depend substantively on the choice of incumbency-advantage estimator.

<sup>5</sup>We focus on campaign contributions rather than expenditures, although the two are inevitably highly correlated.

<sup>6</sup>The random assignment of incumbency at time  $t$  ensures that the districts that receive a Democratic incumbent and those that receive a Republican incumbent have incumbents of equal quality as long as Democrats and Republicans in close elections are, on average, of equal quality. This is the sense in which candidate quality is accounted for. At time  $t+1$ , we do not want to constrain candidate quality. If challengers are lower in quality in response to the random assignment of incumbency, this is part of the causal effect of interest. It is downstream of the treatment. In addition, any fixed difference in average quality between Democrats and Republicans would not affect our results since this would only shift the intercepts at the discontinuity and not the gap that estimates the treatment effect.

share of the two-party vote and 50%, the necessary vote percentage required to win office. When this variable is above zero, the district is “treated” with a Democratic incumbent.  $Y_{i,t+1}(1)$  is the potential outcome at time  $t + 1$  if unit  $i$  is treated, and  $Y_{i,t+1}(0)$  is the potential outcome at time  $t + 1$  if unit  $i$  is not treated. In the present setting, the outcome variable is a measure of Democratic campaign-donation receipts in the next electoral cycle, and each unit is a district. The identification of the treatment effect rests on the key assumption that  $E[Y_{i,t+1}(1)|V_t = \nu]$  and  $E[Y_{i,t+1}(0)|V_t = \nu]$  are continuous in  $\nu$ . In other words, the assumption states that the only variable that “jumps” at  $\nu = c$  is the assignment to treatment—all other relevant variables must be continuous around the cutoff such that for an arbitrarily small bandwidth around the discontinuity, barely winners and barely losers are not systematically different from one another in any way except for their treatment status.

Recent work has challenged the validity of the RDD assumption in the context of the post-war U.S. House (Caughey and Sekhon 2011; Grimmer et al. 2012; Snyder 2005), presenting evidence that barely winners and barely losers are systematically different from each other. In particular, they show that incumbents appear to have an advantage in extremely close elections. However, Eggers et al. (forthcoming) presents evidence and arguments that this apparent sorting is likely the result of a fluke, which can be controlled for econometrically, and not a violation of the RDD assumption. Moreover, this sorting does not occur in state legislative elections, where there is strong evidence for the validity of the RDD (Eggers et al. forthcoming). To be especially prudent, we also go beyond Eggers et al. (forthcoming) in checking for validity in state legislative elections specifically. The online appendix reports an expansive battery of balance tests that find no evidence of sorting. We also show that our results survive a variety of robustness checks, including the use of covariates and the use of the “donut” RDD, and we focus primarily on comparisons *across* RDD estimates, which would remove any fixed bias from sorting even if it did exist. In addition, all empirical results are robust to the use of alternate incumbency advantage estimators.<sup>7</sup>

To explore the overall financial incumbency advantage, we use ordinary least squares (OLS) to estimate RDD equations of the form

$$Y_{i,t+1} = \beta_0 + \beta_1 D_{it} + f(V_{it}) + \varepsilon_{i,t+1}, \quad (3)$$

where  $Y_{i,t+1}$  measures the Democratic Party’s share of all donations in district  $i$  in election  $t + 1$ .<sup>8</sup> This includes all donations from individuals and groups, excluding candidate self-financing and party committee funds.<sup>9</sup> The variable  $D_{it}$  is a binary variable indicating the “treatment”—a Democratic victory in district  $i$  in election  $t$ —and  $f(V_{it})$  represents a function of the forcing variable, the Democratic vote-share winning margin in district  $i$  in election  $t$ .<sup>10</sup> The purpose of this function is to extrapolate to the discontinuity by accounting for the relationship between vote share and campaign donations. We might expect, for example, that Democratic vote share in election  $t$  and the Democratic share of campaign donations in the campaign for election  $t + 1$  are positively associated within the bandwidth, an association that biases observational studies of the financial incumbency advantage.<sup>11</sup> In the estimates presented below, we employ local linear regression, fitting a linear relationship between the running variable and the outcome variable within a small bandwidth and allowing the slope to vary on either side of the discontinuity (Imbens and Lemieux 2008). However, the online appendix shows that the results are highly stable across many bandwidths and many specifications of the forcing variable. Finally,  $\varepsilon_{i,t+1}$  represents the disturbance term.

Two features of the RDD are worth mentioning. First, the RDD estimator is necessarily *local*. Our estimated effects only speak, directly, to districts with close elections. It is possible, for example, that incumbency causes a bigger increase in campaign contributions in safe districts, where incumbents

<sup>8</sup>In cases in which the subsequent election is uncontested (which is rare since the initial election was so close), the incumbent is credited with receiving 100% of donations, a fact which is literally true because there are, indeed, campaign donations even in uncontested elections. All estimated results are robust, however, to the exclusion of uncontested elections.

<sup>9</sup>This definition is not necessary to find the results but is in keeping with previous literature (Snyder1992).

<sup>10</sup>The vote-share winning margin is defined as  $V_{it} = vtsh_{it} - 50\%$  where  $vtsh_{it}$  is the Democratic Party’s share of the votes received by Democrats and Republicans in district  $i$  in election  $t$  (in percentage points).

<sup>11</sup>At larger bandwidths, we might suspect that this relationship inverts. Once a candidate is particularly safe, she may receive fewer donations. Again, this justifies the use of small bandwidths. It also suggests the value of using a higher-order polynomial of the forcing variable, to account for possible nonlinearities in the relationship between the forcing variable and the outcome, a strategy we pursue in the online appendix.

<sup>7</sup>In particular, we have replicated the main analysis using the Gelman-King estimator. Results are substantively similar.

might be expected to have longer time horizons and interest groups have more to gain from access.<sup>12</sup> Nevertheless, the effect of incumbency in competitive districts is, by itself, extremely important. Competitive districts are those where incumbency status is likely to change, so the districts in our sample comprise the districts most likely to be exposed to the effects we are studying. Competitive districts are also those where campaigns are most salient (since both parties have a chance of winning), making our focus on the financial effects of incumbency in competitive races natural. As a result we are not overly concerned about the local nature of the RDD estimator.

Second, the RDD estimator captures what is sometimes called the “party” incumbency advantage, because the winning candidate at time  $t$  is not required to run again at time  $t + 1$  and may be replaced by a new copartisan. As such we must be cautious in couching all of our findings in terms of both the party and the individual (for further discussion, see Erikson and Titiunik 2012; Fowler and Hall 2013). To be clear, our estimates reflect the advantage in campaign contributions that accrues to the candidate running in election  $t + 1$  when her party—either represented by herself or a predecessor—held the office in the previous cycle. However, the party component of this overall advantage, the amount of the advantage not accruing to the individual legislator but instead to any candidate running from her party, is estimated to be zero in state legislatures (Fowler and Hall 2013). As a result, we have reason to believe the effects we estimate reflect the personal incumbency advantage exclusively. Either way, the estimated effects are meaningful, as they point to the reaction of different donor types to random changes in the identity of the party that controls a given seat in the legislature.

## Data

To examine the financial incumbency advantage, we employ a large dataset on U.S. House elections from 1980 to 2006 and state legislative elections from 1990 to 2010.

For data on state legislative election returns, we use ICPSR dataset 34297 (Klarner et al. 2013). The dataset runs from 1967 to 2010; however, we only use elections from 1988 on in order to match the

elections to data on campaign finance.<sup>13</sup> Raw data on state legislative campaign donations comes from The National Institute on Money in State Politics (<http://www.followthemoney.org>). This financial dataset provides donation records for state political races from 1990 to 2010 at the level of the individual donor. We keep all records pertaining to state lower- or upper-house general election races and discard all others. We are also able to separate individual and interest group donors by the name formatting that FollowTheMoney uses.<sup>14</sup> In addition, we use FollowTheMoney codings to group donations into industry categories. The main categories are: Agriculture, Business, Construction, Energy, Finance, Government, Healthcare, Ideological, Labor, Lawyers/Lobbyists, and Transportation. These categories come from state disclosure requirements. We merge this financial data with the election dataset using the year, state, chamber (upper or lower), and district number.<sup>15</sup>

The data on campaign spending at the federal level is provided by the United States’ Federal Election Commission and consists of information disclosed according to the Federal Election Campaign Act (FECA). FECA requires all candidates running for the U.S. House to disclose all contributions made by political action committees (PACs) and individual contributions worth more than \$200. The analysis is based on the Post-Election Cycle Summary Data Files which contain summary information about all candidates who ran for a seat in the House from 1980 to 2006.<sup>16</sup> In addition, we use the Federal Election Commission’s categorization of contributors. The main categories are: Corporate PACs, Labor PACs, Unconnected PACs, Trade, Health and Membership PACs (hereafter “THM”), Cooperative PACs, and individuals. Data on federal election results and seniority are obtained from the replication dataset

<sup>13</sup>The first state-level campaign finance observations are in 1990. Given our empirical setup, our first election observations occur in 1988, so that we can observe how barely winners and barely losers in 1988 collect campaign contributions in their next election cycle.

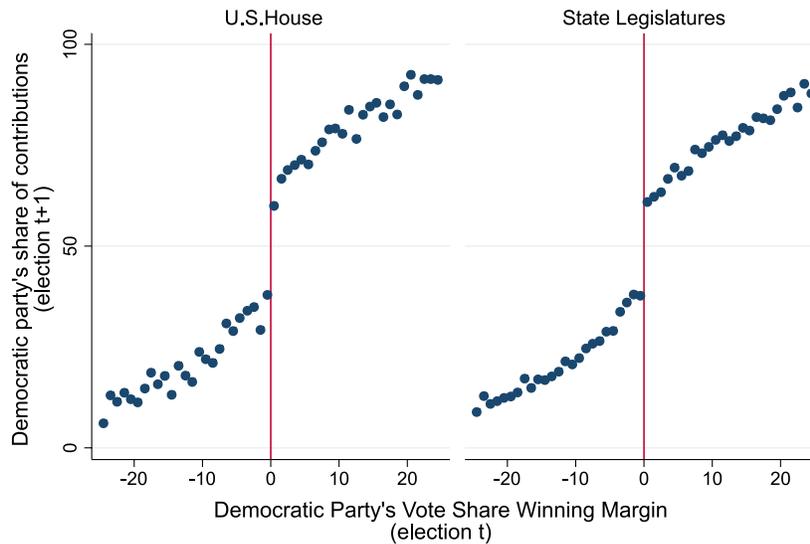
<sup>14</sup>In personal correspondence with FollowTheMoney, we have confirmed that they intentionally never use commas in interest group names, so that researchers can separate individual from group donors.

<sup>15</sup>The merge is imperfect due to discrepancies in district naming conventions between the two datasets (e.g., in New England states with named and numbered districts), but where possible we have corrected these errors. Such errors should reduce statistical power but do not present a problem in the estimates presented below.

<sup>16</sup>The data can be downloaded from <http://www.fec.gov/finance/disclosure/PostCycleSummaryDataFiles.shtml>.

<sup>12</sup>In such districts, there is no random variation in incumbency and thus no unbiased way to assess the effects of incumbency.

FIGURE 1 Effect of Incumbency on Democrats' Share of Contributions



Note: Plot shows averages of the Democratic share of contributions in the subsequent electoral cycle in 1 percentage-point bins of the Democratic margin of victory in the current election. When the Democratic Party crosses the threshold from barely losing the election (when the winning margin is just below zero) to barely winning the election, its share of the next campaign's contributions increases noticeably.

for Caughey and Sekhon (2011). For details, see the online appendix to that paper.<sup>17</sup>

Our main outcome variable—the Democratic party's share of total contributions—is constructed by dividing the total amount donated to the Democratic party in a given election cycle in each district by the total amount donated to both the Democratic and Republican party in that district for that cycle. Similarly, we construct the Democratic party's share of contributions from a particular donor group (e.g., labor) by calculating the total amount donated to the Democrats by the group and dividing it by the total amount that the group donated to both parties.<sup>18</sup> In order to compare absolute amounts across years, we adjust the data to constant 1990 prices using the standard Consumer Price Index published by the Bureau of Labor Statistics.<sup>19</sup>

We construct our running variable as the difference between Democratic percentage of the two-party vote at time  $t$  and 50, the distance between the Democratic vote share and electoral victory. To do so, we drop any

elections at time  $t$  in which a third party secures either the highest or second-highest vote total. Finally, we also exclude observations in which the outcome variable is measured after a redistricting period. So, for example, close elections for most U.S. House districts in 1990 are not used because the donations received for the next election cycle (1992) occur in new districts.<sup>20</sup>

## Results

Figure 1 illustrates how incumbency affects the Democratic Party's share of total contributions. The forcing variable, the Democratic win margin, is divided into 1 percentage-point bins, and each dot represents the average of the Democratic Party's share of total contributions *in the next electoral cycle*.<sup>21</sup> There is a clear jump in campaign receipts just at the cutoff; as the vote-share winning margin approaches 0 from below, the Democratic Party's share of total

<sup>17</sup><http://sekhon.berkeley.edu/papers/RDOnlineAppendix.pdf>.

<sup>18</sup>We do not consider any donations made to third-party candidates in constructing this ratio.

<sup>19</sup>The Consumer Price Index can be downloaded from <http://www.bls.gov/data/#prices>. Series ID: CUUR0000SA0.

<sup>20</sup>For the House, we use information on off-cycle redistrictings collected and organized for Caughey and Sekhon (2011). For the state legislatures, we use redistricting information collected, and generously provided by, Carl Klarner.

<sup>21</sup>Binning reduces noise but does induce bias in the discontinuity. We never bin the data for any of our statistical analyses.

**TABLE 1 Regression Discontinuity Design Results: Effect of Incumbency on the Democratic Party's Share of Total Contributions,  $t + 1$** 

	Dependent Variable: Democratic Share of Total Contributions, $t + 1$					
	(1)	(2)	(3)	(4)	(5)	(6)
Democrat win (time $t$ )	17.15* (6.55)	20.62* (4.46)	24.94* (3.50)	23.05* (3.59)	22.37* (2.06)	20.04* (1.60)
Constant	37.69* (4.11)	37.88* (2.97)	35.71* (2.24)	38.69* (2.61)	37.68* (1.48)	39.20* (1.12)
Observations	108	329	568	815	2421	4020
Level	Federal	Federal	Federal	State	State	State
Bandwidth percentage point	1	3	5	1	3	5

*Note:* Robust standard errors in parentheses. All models are estimated using ordinary least squares (OLS) with a linear specification of the forcing variable estimated separately on each side of the discontinuity. \* $p < 0.05$ .

contributions in the next electoral cycle approaches between 35 and 40%, and as the winning margin approaches 0 from above, the share of contributions approaches 60% of the total contributions.<sup>22</sup> At both the federal and state level, incumbency causes a substantial jump in the party's share of total contributions in the reelection campaign. Interestingly, the effect size is quite similar in both settings.

The statistical analysis is consistent with the figure. Table 1 presents the main results from the RDD analysis using local linear regression to estimate Equation (3). Specifically, we include a linear term of the running variable estimated separately on each side of the discontinuity, using a variety of bandwidths as specified in the table. On average, incumbency causes approximately a 20 to 25 percentage-point jump in the Democratic Party's share of contributions both at the federal and state level.<sup>23</sup> Incumbency also has a substantial impact on the *level* of contributions. On average, incumbency approximately causes a \$275,000 jump in contributions in U.S. House elections and a \$28,000 jump for incumbents in state legislatures (measured in constant 1990 dollars).<sup>24</sup>

<sup>22</sup>As one would expect, the party's share of subsequent campaign contributions is increasing in the party's vote share (more qualified candidates attract both more votes and campaign contributions).

<sup>23</sup>The only point estimate outside of this range is in the U.S. House with a 1 percentage-point bandwidth. We suspect this estimate is slightly smaller (17%) only because of increased sampling variability. This estimate uses the smallest sample size of any of the six reported.

<sup>24</sup>Table 1 in the online appendix shows the estimated effect on total contributions.

In American legislatures, there is a substantial and causal financial incumbency advantage. The literature on the impact of campaign spending on electoral outcomes suggests that money translates into votes, although the exact conversion rate is up for debate. If money can be converted into votes, then the electoral incumbency advantage may stem, in part, from this financial advantage. Crude back-of-the-envelope calculations in which the dollar estimates obtained in this article are multiplied by the estimates of the effect of incumbents' campaign spending on vote shares from the literature suggest that the financial incumbency advantage can account for up to approximately 1.4 and 6 percentage point increases in the incumbent's vote share in U.S. House and state legislative elections, respectively.<sup>25</sup> To understand *why* incumbents and their parties have both of these advantages, then, we need to understand who generates the financial incumbency advantage. What kinds of donors support incumbents and their parties, and what factors vary this support? The next section probes these questions in order to uncover the sources of the financial incumbency advantage.

<sup>25</sup>In Table 2 in the online appendix, we evaluate the importance of the financial incumbency advantage for electoral outcomes by relating our estimates to estimates of the impact of campaign spending on vote shares from the literature. The crude idea is simply to multiply the dollar estimates obtained in this article with the estimates of the effect of incumbents' campaign spending on vote shares from the literature. While the financial advantage occurs *prior* to the electoral advantage, it is still possible that the knowledge of the electoral advantage in part drives donors to favor the incumbent's party. That is to say, when considering two outcomes from a single randomized treatment, the randomization cannot buy us the identification on the relationship between the two outcomes. To make progress, later we will consider estimates of the mapping between money and votes.

## Sources of the Financial Incumbency Advantage

The existing literature proposes many mechanisms behind the financial incumbency advantage. We focus on the three popular theories to which our data can speak. Strategic contributors might use campaign donations to buy access to the political system, making them more likely to target incumbents because they have a higher probability of being in office after the next election (Cassie and Thompson 1998; Snyder 1990). Incumbents might exploit the direct benefits of being in office to attract contributors, e.g., the franking privilege (Herrnson 1992; Levitt and Wolfram 1997). Or, incumbents might become more skilled at fundraising and might be able to build valuable connections to potential contributors while in office (Cho and Gimpel 2007; Squire and Wright 1990). We test each of these theories in turn, and we find strong support for an access-oriented theory of the financial incumbency advantage. We find less support for theories that rest on in-office experience or office-holder benefits.

### Testing Theories of Interest Group Access

The first explanation is based on the differing attitudes of contributors towards incumbents and challengers. Strategic interest groups ought to invest in the political campaigns that give them the highest return in terms of political benefits. Access-motivated interest groups—groups that care more about access to the political system than ideology—will invest more in incumbents' campaigns, for a variety of reasons. Donations to incumbents may grant immediate access to those in office. Perhaps more importantly, given the presence of an electoral incumbency advantage, incumbents are likely to stay in office for a long time, providing a higher return to investment for interest groups.

Snyder presents a strong argument for why strategic interest groups should target incumbents with their contributions:

... contributors must develop a relationship of mutual trust and respect with officeholders in order to receive tangible rewards for contributions. A contributor cannot simply buy a congressman's vote on an important bill with a \$5,000 campaign donation. Large donations over several elections, however, together with intelligent, informative discussions about matters of concern to the

contributor, may eventually yield considerable benefits. (1992, 17)

As Snyder (1992) shows, the desire for access differentiates these strategic groups from other donors, like individuals and ideological groups, who care instead about supporting the electoral bids of candidates with particular ideological positions. We might therefore expect to observe differential responses to incumbency by strategic groups and other donors, respectively.

If the jump in campaign contributions is caused by "investor" or access-motivated interest groups who focus their contributions on incumbents, one would expect to observe a difference in the treatment effect for different subgroups of contributors. More specifically, the effect on contributions from access-motivated or investor interest groups should be greater than the effect for ideologically motivated or consumption-based donors. Snyder (1990) shows that individuals and nonconnected PACs can be seen as consumption contributors because they contribute to promote a certain cause or ideology, while PACs associated with, for example, corporations, THM, and cooperatives can be seen as "investor contributors" because they tend to support candidates financially in exchange for access to the political system in the event that the candidate is elected.

To investigate this theory, we estimate equations of the form:

$$\begin{aligned} Dem\ Share_{ij,t+1} = & \beta_0 + \beta_1 D_{it} + \beta_2 Investor_j \\ & + \beta_3 (D_{it} Investor_j) + f(V_{it}) + \varepsilon_{i,t+1}, \end{aligned} \quad (4)$$

where  $Investor_j$  is a dummy variable taking the value 1 if donor  $j$  is an investor group and all other variables are defined as before. At the federal level, we follow Snyder (1990) and define consumer contributors as individuals and nonconnected PACs and investor contributors as every other donating interest group. At the state level, we apply a similar classification and define consumer contributors as individuals and ideological interest groups and investor contributors as every other donating interest group. As Equation (4) implies, we reshape the data such that we have two observations for each district-year: one observation pertaining to the Democratic Party's share of investor contributions and the other pertaining to the Democratic Party's share of consumer contributions.

In columns 1 and 2 in Table 2, we formally test whether there is heterogeneity in the treatment effect across contributions donated by investor and consumer contributors at the federal level and the state

**TABLE 2 Heterogeneity in Treatment Effect across Locations, Type of Contributors, and Seniority of Candidate**

	Dependent Variable: Democratic Share of Total Contributions, $t + 1$			
	(1)	(2)	(3)	(4)
Democratic win (time $t$ )	16.57* (3.04)	9.52* (1.40)	36.53* (5.04)	27.02* (4.06)
Investor contribution $\times$ Democrat win (time $t$ )	23.95* (2.79)	22.03* (1.28)		
Investor contributor	-1.89 (1.99)	-7.06* (0.88)		
Home-state contribution $\times$ Democratic win			6.43 (4.22)	
Home-state contribution			-9.37* (2.96)	
Previously held office $\times$ Democrat win				-5.05 (4.02)
Previously held office				-4.59 (3.19)
Constant	36.03* (2.04)	42.48* (0.98)	30.31* (3.27)	38.72* (2.80)
Observations	1136	7967	713	568
Level	Federal	State	Federal	Federal

*Note.* Standard errors in parentheses. The reported standard errors are the maximum of robust and robust standard errors clustered by elections. All models are estimated using ordinary least squares (OLS) with a linear specification of the forcing variable estimated separately on each side of the discontinuity. The outcome variable in all models is the Democratic Party's share of total contributions at  $t+1$  in percentage points. All models are estimated based on a 5 percentage-point bandwidth.  $*p < 0.05$ .

level, respectively. The relevant quantity of interest is  $\beta_3$  from Equation (4). For simplicity, we report results using a 5 percentage-point bandwidth with local linear regression for this and all subsequent analyses. However, as suggested by Table 1, all results are highly stable across bandwidths and specifications. The positive and statistically significant coefficients on the interaction terms in both columns demonstrate that party incumbency has a greater impact on campaign contributions for access-motivated contributors. While consumer-motivated donors in the U.S. House contribute 16.57 percentage points more of all their donations to the incumbent party in the next election cycle, access-oriented interest groups—“investors”—increase the percentage of donations they direct to the incumbent party by 40.52 points ( $16.57 + 23.95 = 40.52$ ). The effect for investors is more than 2.4 times as large as for consumer contributors. This difference is even larger in state legislatures, where the effect for investors is nearly 32 percentage points ( $9.52 + 22.03 = 31.55$ ), 3.3 times larger than the effect for noninvestors.

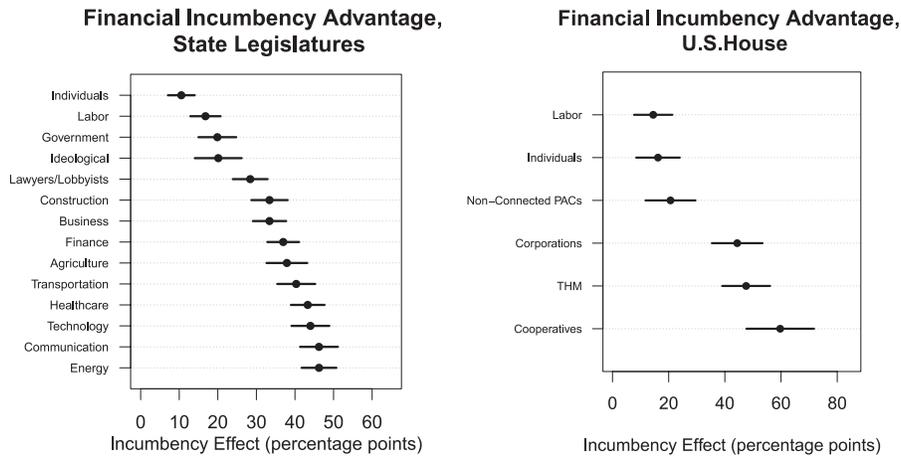
This is not the same as saying that access-motivated contributors donate more, on average, to incumbents,

which could be driven in part by these contributors preferring, for example, higher quality candidates; rather, this is evidence that access-motivated contributors change their contribution patterns based purely on incumbency status in a way other donors do not.

In the online appendix (Table 3), we calculate the difference in these effects in terms of overall dollars, rather than in percentages. In the U.S. House, investors direct \$165,700 more to the Democratic Party after it wins a close election. The overall financial incumbency advantage in levels in the U.S. House is \$275,600, as the first column of Table 3 shows. Access-oriented interest groups are therefore responsible for roughly 60% of the financial incumbency advantage in the House. In state legislatures, this relationship is even more pronounced. Here, the investor-specific effect is roughly \$20,000, comprising 71% of the financial incumbency advantage.

To evaluate this causal mechanism further, we obtain industry-specific estimates of the financial incumbency advantage by reestimating Equation (3) (the baseline specification from the previous section) using industry-specific outcome variables. Figure 2 presents the estimated RDD effects for the different

FIGURE 2 Financial Incumbency Advantage by Donor Type, State Legislatures and U.S. House



*Note:* Sensitivity of different interest group industries to incumbency. Estimates are from separate RDDs based on Equation (3) where the outcome is the share of contributions at  $t + 1$  from that industry that flow to the incumbent party in the subsequent electoral cycle. Ninety-five percent confidence intervals from robust standard errors. Donor categories come from codings in original datasets and result from disclosure requirements at the state and federal levels.

types of contributors at the state and federal levels, respectively. The general pattern at both the federal and state level appears to be the same: the effect is smaller for consumer contributors (nonconnected PACs/ideological groups and individuals) than for investor contributors.

The access hypothesis also implies that, among strategic interest groups, those with less ideological leanings ought to respond more strongly to incumbency. Labor unions, though perhaps strategic, are also deeply linked to the Democratic Party. Therefore, they are unlikely to shift donations to the Republican Party, even if the Republican candidate wins election. Corporations, on the other hand, are less beholden to one party and so should switch donations between the two parties more readily. The estimates presented in Figure 2 are consistent with this story: the jump in campaign contributions to the Democratic Party after a Democratic win is greater for corporate contributions (approximately 50–70%) than for labor contributions (approximately 20%). Ideological groups in state legislatures—groups that are formed for a single issue—likewise are somewhat insensitive to incumbency because of their ideological leanings. Less ideological groups, who require access to state government in order to further their policy goals, exhibit a high degree of sensitivity.

Industries that are highly regulated, and industries that underwent significant changes in their regulatory environment during the studied period,

such as energy, technology, health care, and transportation (Joskow 2005; Kearney and Merrill 1998), appear to be particularly inclined to channel their resources towards incumbents in state legislatures. In other words, the industries that have the most to win or lose from new government regulation are the same industries that seem to coordinate and target their contributions towards incumbents. Though the classifications are coarser at the federal level, the same general pattern is observed. Strategic interest groups still value access to the incumbent, even when the incumbent is of the opposite party—evidence of the sheer importance of access.<sup>26</sup>

### Testing Theories of Office-Holder Benefits

The second explanation for the financial incumbency advantage is based on the benefits associated with being in office. Under this explanation, direct office-holder advantages “that House members use to attract electoral support [...] also help them to raise campaign money. Nonincumbents possess none of these advantages” (Herrnson 1992, 862). The franking privilege makes direct-mail solicitation easier for incumbents (Herrnson 1992; Jones and Hopkins 1985),

<sup>26</sup>This “access” could take the form of donors asking for favors, but it could equally result from incumbents holding interest groups over a barrel, demanding donations in exchange for favorable political actions. These opposite (but not mutually exclusive) possibilities should be investigated further.

and traveling benefits give incumbents an advantage in attracting new contributors via personal visits (Shaw and Gimpel 2012), to pick two examples. It is easier for a member of the U.S. House to exploit these direct benefits in her own congressional district than outside it (Fenno 1978). For example, the franking privilege can only be used to send mail to addresses in an incumbent’s own congressional district, and in-state fundraising activities can more easily be disguised as expenses related to a Representative’s district office than out-of-state fund-raising activities.<sup>27</sup> These observations generate a clear prediction for this theory.

If the observed jump in incumbent-party campaign receipts is caused by incumbents who use direct office-holding benefits to attract more campaign contributions, then we would expect the jump in campaign contributions coming from home-state contributors to be far greater than the jump in campaign contributions coming from out-of-state contributors.<sup>28</sup> Indeed, were office-holder benefits the only cause of the financial incumbency advantage, we might imagine out-of-state donors to ignore incumbents almost completely.

To test this, we estimate the equation:

$$\begin{aligned} Dem\ Share_{ij,t+1} = & \beta_0 + \beta_1 D_{it} + \beta_2 Home\_State_{ijt} \\ & + \beta_3 (D_{it} Home\_State_{ijt}) + f(V_{it}) \\ & + \varepsilon_{i,t+1}, \end{aligned} \quad (5)$$

where  $Dem\ Share_{ij,t+1}$  is the share of donations in district  $i$  flowing to the Democratic Party in election  $t + 1$  from either home state ( $j = 1$ ) or from out of state ( $j = 0$ ). The variable  $Home\_State_{ijt}$  is an indicator variable taking the value 1 if donor  $j$  is in district  $i$ ’s state.<sup>29</sup>

<sup>27</sup>Members of Congress have not been able to send mass mail outside their districts since 1992 when the provision that previously permitted this was ruled unconstitutional. In regressions not reported in the article, we have tested for in-state versus out-of-state effects before and after 1992. Donors do appear slightly more sensitive to the geographical distinctions after 1992, but the differences are not statistically significant.

<sup>28</sup>We use the distinction between home-state versus out-of-state contributors instead of in-district versus out-of-district contributors for a practical reason: postal codes cut across congressional districts, but they do not across state lines. This means that we can always identify the state of a contributor but not always the congressional district. To avoid any misclassification, we focus on whether contributions are coming from the same state as the Representative or not.

<sup>29</sup>Contributions from individuals are excluded from this analysis because FEC’s data do not contain the addresses of all individuals who donated.

The third column in Table 2 shows how the financial incumbency advantage varies across home-state and out-of-state contributions.<sup>30</sup> The coefficient of interest is  $\beta_3$  from Equation (5), the interaction of the treatment with the home-state indicator. As the results show, we cannot reject the null hypothesis that home-state and out-of-state contributors respond to incumbency in the same manner. Furthermore, the point estimate on  $\beta_3$  is small, and out-of-state donors, who presumably do not gain from office-holder benefits, still respond extremely strongly to incumbency. Indeed, incumbency causes a 33.52 percentage-point gain in the share of all out-of-state donations a candidate receives, despite the fact that out-of-state donors are unlikely to gain from the incumbent’s office-holder benefits.<sup>31</sup>

### Testing Theories of Experience

The third explanation is based on experience: “Fundraising aptitude is cultivated and learned, not inborn” (Cho and Gimpel 2007, 255; Squire and Wright 1990). Over time politicians learn certain skills and acquire knowledge that facilitate fundraising, and challengers are disadvantaged because “this knowledge is often limited to incumbents” (Cho and Gimpel 2007, 255). For example, political networking is probably more effective in Washington D.C. than in a small congressional district far from the Capitol. This means that compared to a challenger, it is easier for an elected politician who spends a lot of time in Washington D.C. to develop a network of important lobbyists, interest groups, corporations, and individuals that could contribute to her campaign. If the jump in campaign contributions is driven by incumbents who gradually become more experienced and acquire skills, contacts, etc. over the period of time they are in office,

<sup>30</sup>In order to examine the heterogeneity across in-state and out-of-state contributors, we reshape the data such that we have two observations for each district-year: One observation pertaining to the Democratic Party’s share of in-state contribution and the other pertaining to the Democratic Party’s share of out-of-state contributions.

<sup>31</sup>We cannot conclude from this test that office-holding benefits do not matter at all; the home-state effect is, of course, still large and positive. It is possible that home-state donors are responding to office-holding benefits while out-of-state donors are responding to other factors that in-state donors do not care about. But we can certainly rule out that office-holder benefits are the only large driver of the financial incumbency advantage, since donors continue to reward incumbency even when they cannot plausibly receive these benefits.

we would expect heterogeneity in the treatment effect across first-time incumbents and more experienced incumbents.

To test this, we estimate the equation:

$$\begin{aligned} Dem\ Share_{i,t+1} = & \beta_0 + \beta_1 D_{it} + \beta_2 Held\_Office\_Before_{it} \\ & + \beta_3 (D_{it} Held\_Office\_Before_{it}) \\ & + f(V_{it}) + \varepsilon_{i,t+1}, \end{aligned} \quad (6)$$

where all variables are defined as before and  $Held\_Office\_Before_{it}$  is a dummy indicating that the Democratic candidate in district  $i$  at time  $t$  previously held a seat in the U.S. House. The coefficient of interest is  $\beta_3$ , the interaction that tests whether the effect is larger for previous incumbents. Again, we use a 5 percentage-point bandwidth around the discontinuity.

The results presented in column 4 in Table 2 do not support the seniority hypothesis either. If seniority were driving the jump in campaign contributions, we would expect a positive and statistically significant coefficient on the interaction term,  $\beta_3$  from Equation (7), which directly tests the prediction that the effect should be larger for those who have held office before. However, the coefficient is *negative*, and we cannot reject the null hypothesis that it is zero.

Carrying this idea further, we can also test for the effect of differing levels of seniority on the financial incumbency advantage. To do so, we restrict the sample to only elections in which an incumbent is running for reelection at time  $t$  and, at time  $t + 1$ , either the same incumbent is running again having gained reelection at time  $t$ , or, if she lost at time  $t$ , her replacement is running as an incumbent at time  $t + 1$ .<sup>32</sup> To put this another way, the “treatment” group is the set of districts in which the senior incumbent wins reelection at time  $t$ , and the “control” group is the set of districts in which a new junior incumbent wins election at time  $t$ . The outcome variable is the incumbent share of all donations at

time  $t + 1$ —either the senior incumbent’s share, if the district is treated, or the junior incumbent’s share, if the district is a control district.

Thus, we estimate equations of the form

$$Inc\ Share_{i,t+1} = \beta_0 + \beta_1 Inc\_Winner_{it} + f(S_{it}) + \varepsilon_{i,t+1}, \quad (7)$$

where  $Inc\ Share_{i,t+1}$  is the share of all contributions that go to the incumbent running for reelection in election  $t + 1$  in district  $i$ . The variable  $Inc\_Winner_{it}$  is an indicator variable that takes the value of 1 when district  $i$  reelections the incumbent candidate in election  $t$ . The function  $f(S_{it})$  represents the function of the (new) running variable, the incumbent’s vote share (rather than the Democrat’s vote share like before). Again, we use a 5 percentage-point bandwidth around the discontinuity.

We estimate this equation first using all incumbents. In this case, the question being tested is: does an incumbent who wins *reelection* receive more money than a candidate running as an incumbent for the first time? This is a different question from the original RDD, in which we compared outcomes when one party had incumbency status versus when the other party had incumbency status. In that case, the “treated” districts had Democratic incumbents and “control” districts had Democratic challengers. In this case, “treated” districts have representatives who have served at least one previous term while “control” districts have first-time incumbents.

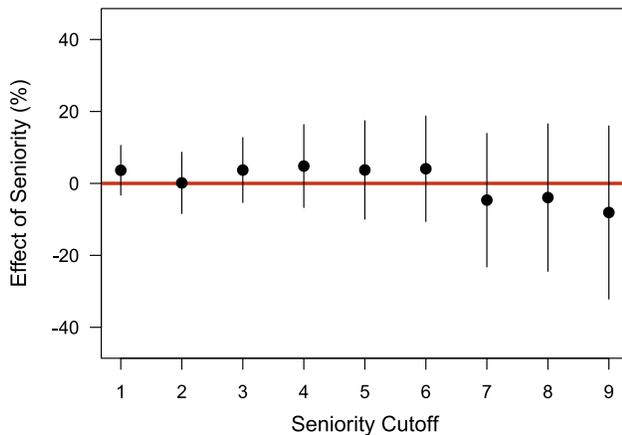
Next, we subset the data to only incumbents with at least two terms of service at time  $t$  who run for reelection at time  $t + 1$ , and then three, and so on.<sup>33</sup> In each case, we are testing the question: when an incumbent with  $x$  or more terms of seniority wins reelection, does she get more money than a first-time incumbent running for reelection? Under the experience hypothesis, the advantage to the incumbent should increase across these estimates.

Figure 3 plots the estimated effects across levels of seniority. For each level of seniority on the horizontal axis, we reestimated the RDD using only elections in which one incumbent with at least that level of

<sup>32</sup>Typically selecting on the decision to run again induces bias in the RDD. Here, however, this selection occurs both in the treated districts (selecting on the senior incumbent running again) and in the control districts (selecting on the junior incumbent running again). As long as senior incumbents and junior incumbents do not differ in this form of selection bias, the estimates will be unbiased. Even if they do, the comparison across estimates will not be biased so long as the difference in the selection effect is constant across levels of seniority among the senior incumbents. What is more, even if there is such differential selection bias, it will bias us towards finding higher effects at higher levels of seniority, which is not what we find.

<sup>33</sup>When comparing *across* RDD estimates, we are performing a somewhat observational study. Seniority is, of course, not randomly assigned. Nevertheless, we suspect the comparison is informative. It is hard to propose a source of selection bias that would make the effect appear flat across levels of seniority. For example, incumbents in close elections may be lower quality than other incumbents. This would not flatten out the effects across levels of seniority unless incumbents in close elections became increasingly low quality over time.

**FIGURE 3 Effect of Seniority on Share of Contributions**



*Note:* Testing the experience hypothesis. The financial incumbency is flat across levels of incumbent seniority. Each point is an estimate from a separate regression discontinuity design (RDD) using the indicated seniority cutoff to estimate Equation (7). The bars are 95% confidence intervals from robust standard errors.

seniority was running.<sup>34</sup> If experience is valuable, we should see the effect increase across levels of seniority. Instead, the line is flat. Indeed, the effect is very small even for one-term incumbents, suggesting that almost all of the gain in campaign contributions occurs in the very first reelection campaign.<sup>35</sup>

## Conclusion

There is a large financial incumbency advantage in U.S. legislatures. Depending on the value of money for electoral security, this advantage may explain a significant portion of the electoral incumbency advantage. But this advantage does not come equally from all donors. Instead, while individuals and ideological interest groups support candidates based on a variety of other factors, access-motivated interest groups coordinate intensively on incumbents. As a result, access-motivated interest groups generate approximately two-thirds of the financial incumbency advantage.

<sup>34</sup>We drop the 33 cases in the data in which two incumbents run against each other.

<sup>35</sup>The logic is as follows. When we compare Democratic winners to Democratic losers, we see that incumbency, overall, causes a large increase in donations. When we then compare repeat-incumbents to first-time incumbents, we see that the effect is near zero. Logically, then, the largest increase must be between the time a candidate runs as a challenger and the first time she runs again as an incumbent.

Uncovering the sources of the financial incumbency advantage also informs theories of representation. We find that home-state donors respond to incumbency in the same manner as out-of-state donors, suggesting that incumbents do not provide tailored benefits to local groups through the use of their office, and we find even stronger evidence that the financial advantage of incumbents does not depend on how long they have served in the legislature. Although office benefits and seniority are still no doubt important factors in other parts of the political process—and indeed may still help create the electoral incumbency advantage—their connection to campaign finance is limited.

On the other hand, strategic interest groups are highly sensitive to incumbency. Even among these groups, the more regulated and less ideological account for a larger share of the advantage. By investing in incumbents over time, these interest groups are able to create long-lasting connections that can pay off in a variety of unobservable ways. While such an access advantage has long been understood from a theoretical perspective (e.g., Olson 1965; Schattschneider 1960), its precise magnitude, along with its basis in the modern American campaign finance system, has been obscure.

The electoral incumbency advantage may provide elected officials with poor incentives if it insulates them from reelection concerns and thus leads them to exert less effort on behalf of their constituents. However, it is also possible that the electoral advantage we observe is simply the result of incumbents behaving “well” and being rewarded by voters, in equilibrium. The financial incumbency advantage we uncover is consistent with the former view. Strategic interest groups with particular goals—like the policy desires of regulated industries—coordinate to support incumbents financially. This financial support offers incumbents an amount of electoral security independent from the actions they take on behalf of their constituents if, as seems likely, strategic interest groups differ from constituents in their preferences for policy and other forms of government activity.

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Alexander Fournaiies is a Ph.D. Candidate in the Department of Government at London School of Economics, Houghton St, London WC2B, U.K.

Andrew B. Hall is a Ph.D. Candidate in the Department of Government at Harvard University, Cambridge, MA 02138