

# Online Appendix:

## Do Incumbents Still Enjoy a Financial Advantage?

How Individuals Ceased to Advantage Incumbents  
While Corporate America Continues to Favor Them

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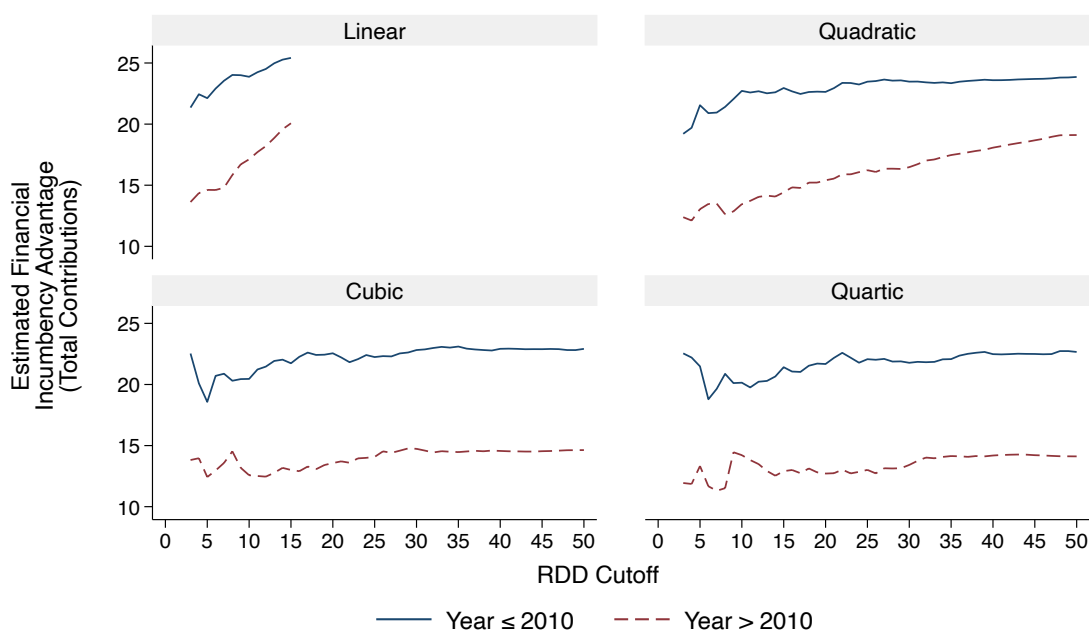
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# A RD Estimates Across Bandwidths and Specifications

In this section, we evaluate whether our conclusions are dependent on our choice of bandwidth or polynomial specifications. Specifically, we estimate separate RD regressions for pre- and post-2010 elections using bandwidths between 3 and 50 percentage points and local linear, quadratic, cubic, and quartic polynomial specifications.<sup>1</sup> All models are fit with splines. Figures A.1, A.2, and A.3 plot the estimated incumbency advantage in each time period for total contributions, contributions from individual donors, and contributions from corporate PACs, respectively. As the figures show, our results are highly similar across these alternate specifications.<sup>2</sup> In Table A.1 we also estimate our effects using *rdrobust* from Calonico, Cattaneo, and Titiunik (2014), which uses kernel regression with a triangular kernel and automatic bandwidth selection that minimizes the mean-squared error of the estimator. Our results are highly similar using this alternate estimator.

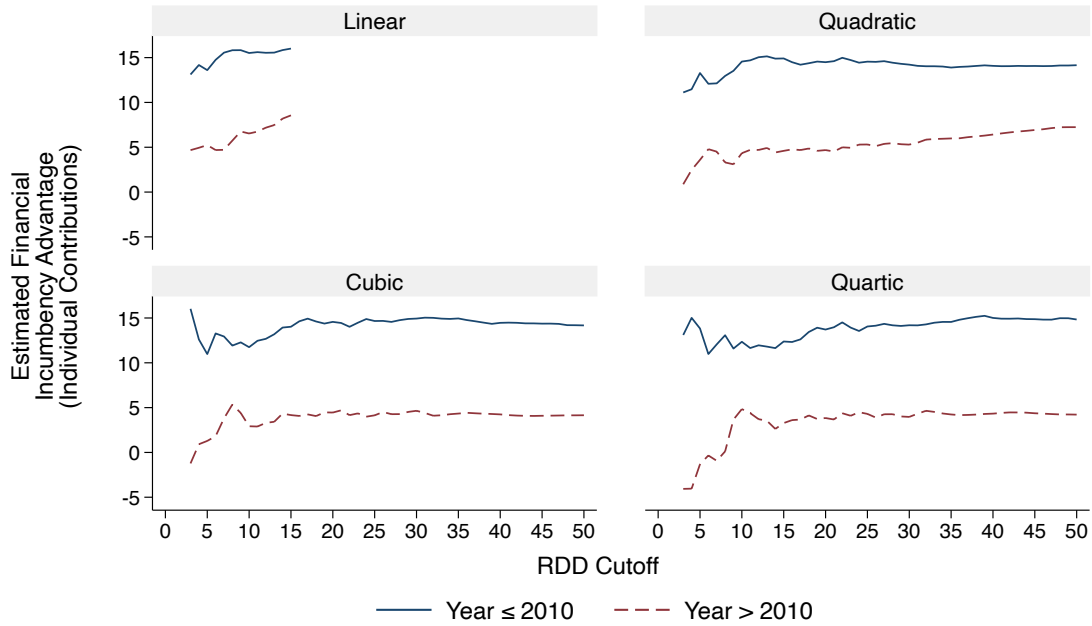
**Figure A.1 – RD Estimates of *Overall* Financial Incumbency Advantage Across Bandwidths and Polynomial Specifications.**



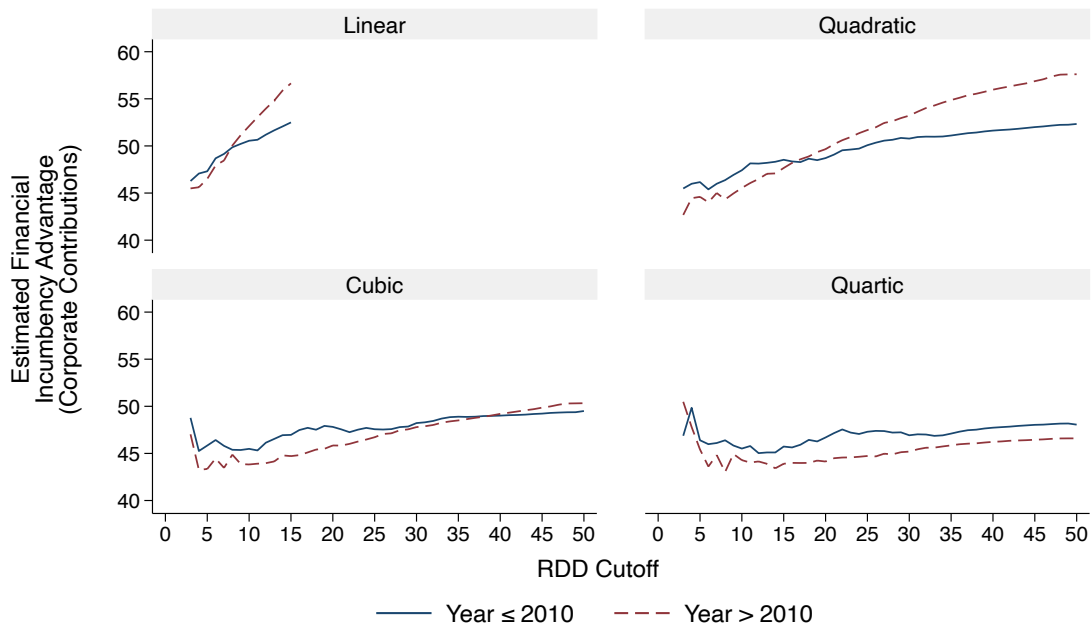
<sup>1</sup>We exclude bandwidths greater than 25 percentage points for the linear specification.

<sup>2</sup>In fact, we find that the estimated incumbency advantage among corporate PACs after 2010 grows relative to the pre-2010 period as the bandwidth increases.

**Figure A.2 – RD Estimates of Financial Incumbency Advantage Among *Individual Donors* Across Bandwidths and Polynomial Specifications.**



**Figure A.3 – RD Estimates of Financial Incumbency Advantage Among *Corporate PAC Donors* Across Bandwidths and Polynomial Specifications.**



**Table A.1 – RD Estimate of the Effect of Incumbency on Democratic Share of Contributions Estimated Using *rdrobust* from Calonico, Cattaneo, and Titiunik (2014).** Because *rdrobust* is not designed to estimate interaction terms, this table reports the results from RDs estimated separately for years through 2010 (first row) and after 2010 (second row).

	Dem. Share of Money ( $t + 1$ )		
	Total Contributions	Contributions from Corporate PACs	Contributions from Individuals
Dem. Win in 1980 - 2010	22.95 (1.19)	47.59 (1.55)	15.14 (1.20)
Dem. Win in 2011 - 2022	13.84 (1.77)	45.68 (2.46)	4.75 (1.71)
N	11,056	8,623	13,917
Bandwidth (percentage points)	6.65	5.81	8.17

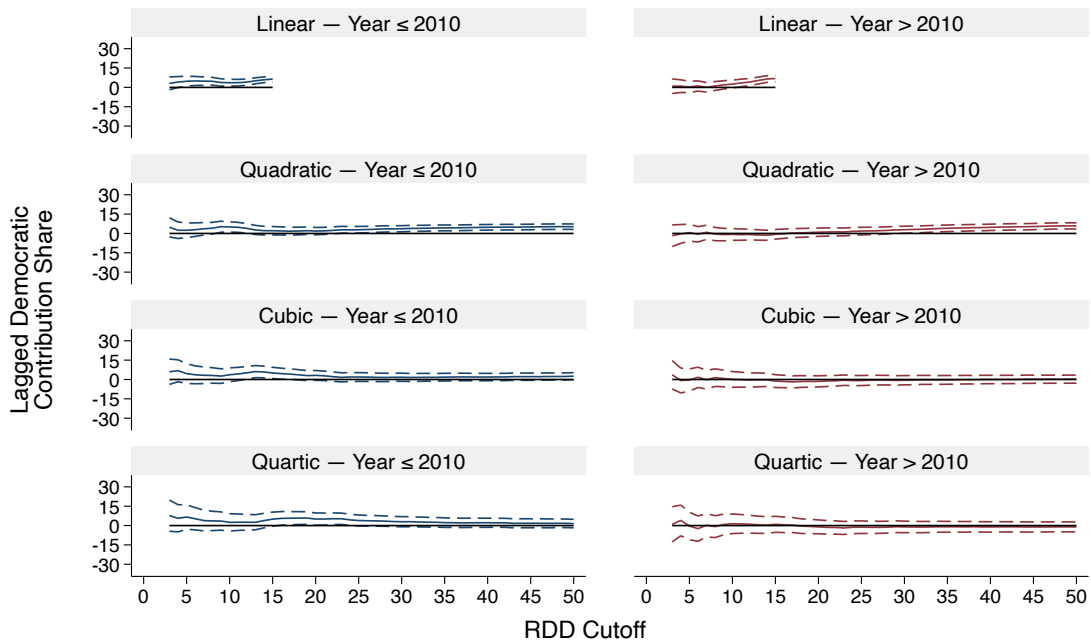
Note: Robust SEs in parentheses.

## B Assessing Continuity in RD Sample

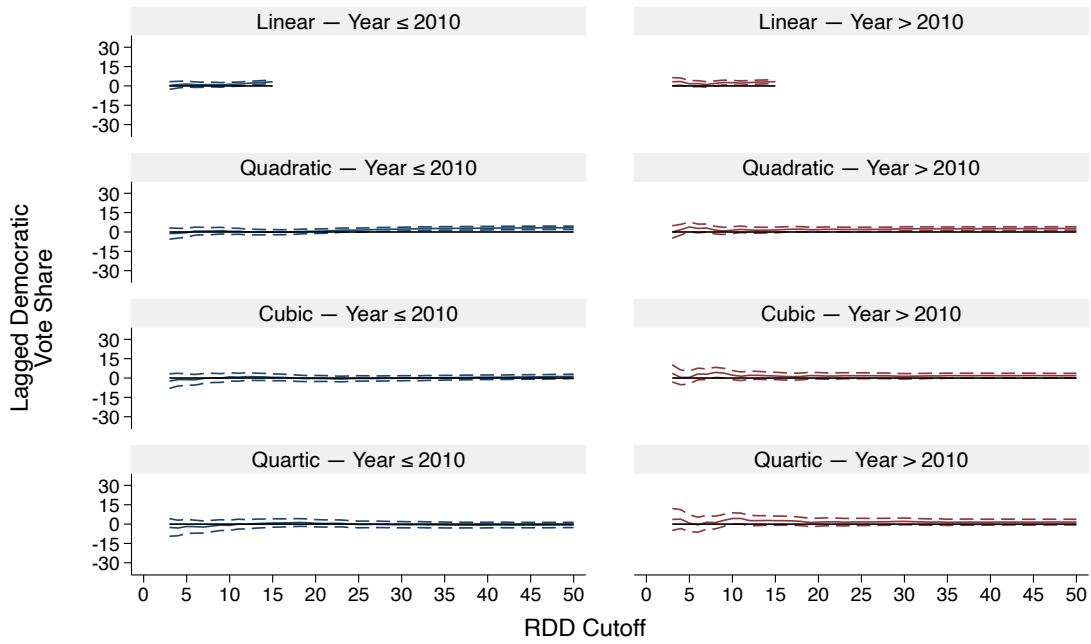
In this appendix, we present standard continuity checks for the RD design. Figure B.1 shows that lagged contribution shares are balanced across the threshold, and Figure B.2 shows the same for lagged vote shares. Figure B.3 presents a McCrary (2008) density test, which fails to reject the null of no sorting at the cutoff. Finally, Table B.1 tests for balance on candidate gender and finds no discontinuity.

**Figure B.1 – Balance on Lagged Democratic Contribution Share.**

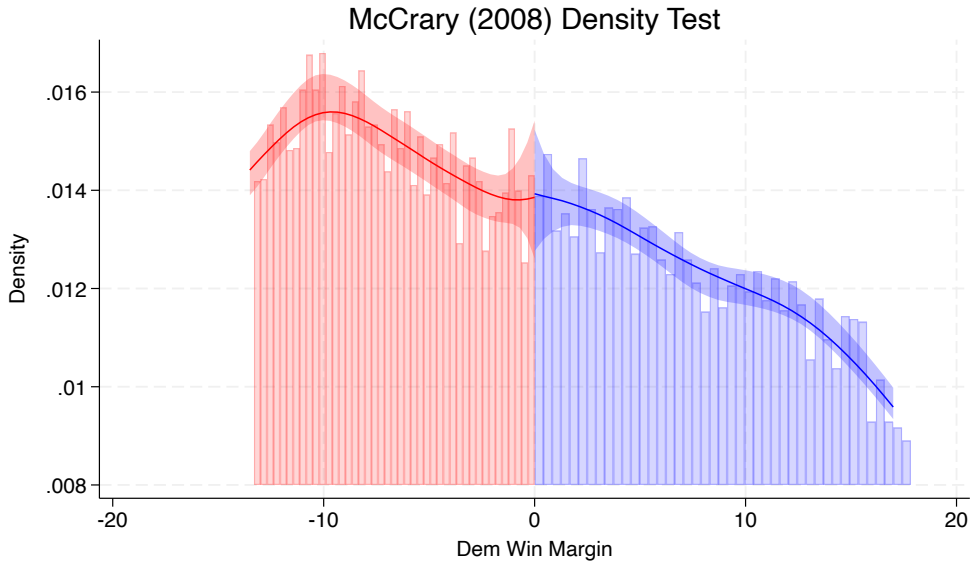
Narrow winners and losers in election  $t$  are not meaningfully different in terms of the party's share of contributions in election  $t - 1$ .



**Figure B.2 – Balance on Lagged Democratic Vote Share.** Narrow winners and losers in election  $t$  are not meaningfully different in terms of the party’s vote share in election  $t - 1$ .



**Figure B.3 – McCrary (2008) Density Test.** This figure plots the density of the running variable. We fail to reject the null hypothesis of no jump in the density of the running variable at the discontinuity ( $p$ -value = .855).



**Table B.1 – Balance on Candidate Gender.** This table tests whether the gender of the Democratic and Republican candidates differs across the RD threshold. Gender data is from Payson, Fourinaies, and Hall (2023) and Porter and Treul (2024). The sample is restricted to Congress and state legislatures.

	Dem. Candidate is Female		Rep. Candidate is Female	
	Linear	Cubic	Linear	Cubic
Dem. Win	0.005 (0.018)	0.026 (0.019)	0.015 (0.015)	0.017 (0.015)
N	11,339	39,788	12,492	39,744
Bandwidth (pp)	10	Full	10	Full

Note: Robust SEs in parentheses. Sample is restricted to candidates for Congress and state legislatures.

## C RD Estimates Over Time

Figure C.1 – RD Estimates by Decade Using Local Linear Regression and 10 Percentage Point Bandwidth.

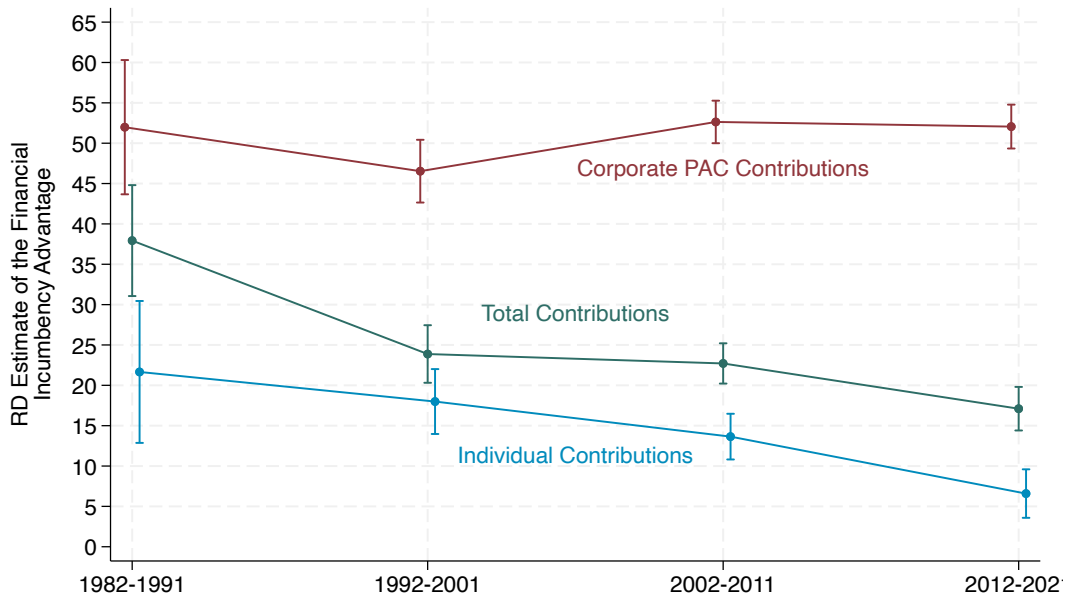
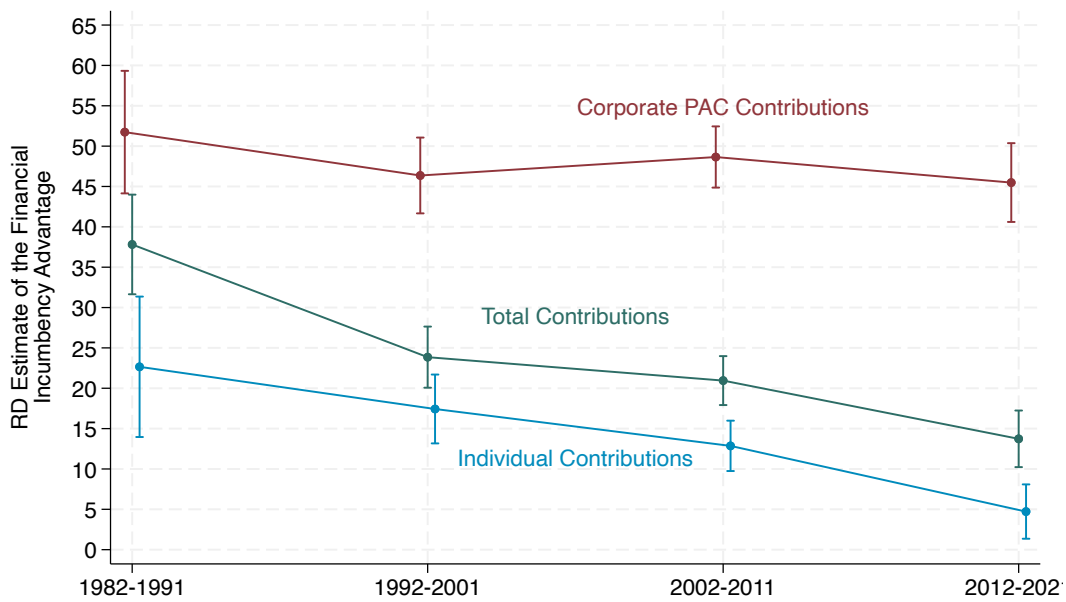


Figure C.2 – RD Estimates by Decade Using *rdrobust* from Calonico, Cattaneo, and Titiunik (2014).



## D Panel-Based Replication of RD Estimates

To evaluate whether our results generalize beyond the set of districts featuring close contested general elections, we adapt two prior panel-based estimators of the vote-share incumbency advantage to our setting. While these estimators require stronger assumptions than the RD, they provide more power and allow us to extend our analysis to a larger set of elections.

First, we adapt the *sophomore surge* (Alford and Brady 1989; Alford and Hibbing 1981; Cover 1977; Erikson 1972) and *retirement slump* (Cover and Mayhew 1981) measures of the vote-share incumbency advantage to our setting. Specifically, the *sophomore surge* compares the gain in vote share of candidates running as first time incumbents to their vote share as non-incumbents. Similarly, the *retirement slump* captures the decrease in a party’s vote share from the previous election after an incumbent leaves office. We adapt these measurement strategies by substituting candidates/parties’ vote-share outcomes for their financial outcomes. Finally, following Jacobson (2015), we plot the average of these two measures, or the *surge*. We prefer the *surge* over either of its component parts because averaging helps even out potential biases in the *retirement slump* and *sophomore surge*.<sup>3</sup> As Figure D.1 illustrates, our central conclusions remain unchanged using this alternative estimator.

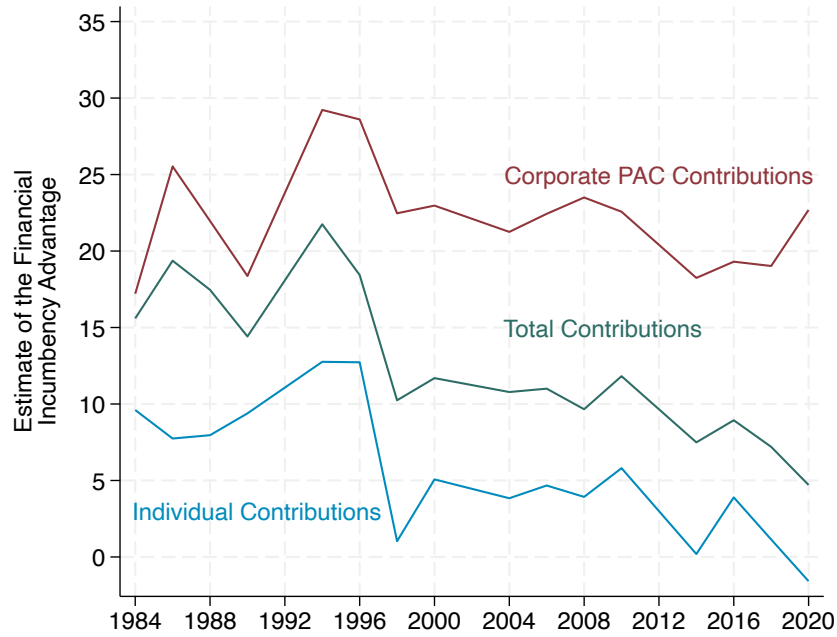
Second, we adapt the Gelman and King (1990) estimator to our setting. This estimator regresses the Democratic party’s vote share on their previous vote share and an incumbency dummy. Figure D.2 plots our estimates from this method. As is apparent, our results are highly similar using this method.

Overall, the congruence of these two panel methods with our preferred RD specification suggests that our central results are not an artifact of a small sample of closely contested general elections. These panel-based estimates are not without their drawbacks, however. Both panel methods are restricted to districts featuring contested general elections in two consecutive cycles, introducing selection bias. In addition, these methods do not provide balance on underlying political trends in a district or the quality of the incumbent’s opponent, among other potential biases. For these reasons, we prefer the RD estimates reported in the main paper.

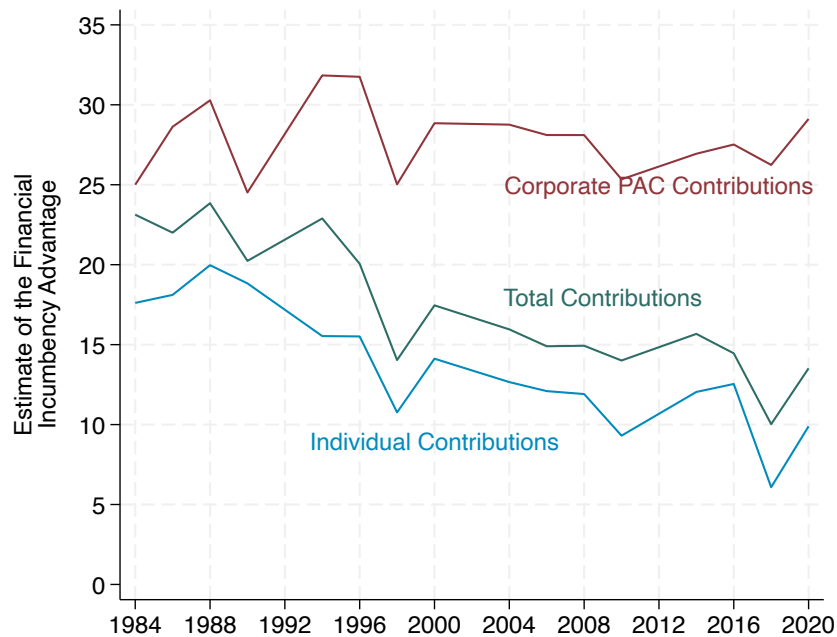
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<sup>3</sup>In particular, the *sophomore surge* is thought to underestimate the incumbency advantage due to regression to the mean, while the *retirement slump* may overestimate the incumbency advantage because departing incumbents are likely of higher quality (and, thus, better fundraisers) than their replacements. Generally, the *sophomore surge* is thought to underestimate the incumbency advantage more than the *retirement slump* overestimates the incumbency advantage. The key advantage of the RD estimates presented in the main paper is that they provide balance on these potential confounders.

**Figure D.1 – *Slurge* Estimate of the Financial Incumbency Advantage Over Time.**



**Figure D.2 – Gelman and King (1990) Estimate of the Financial Incumbency Advantage Over Time.**



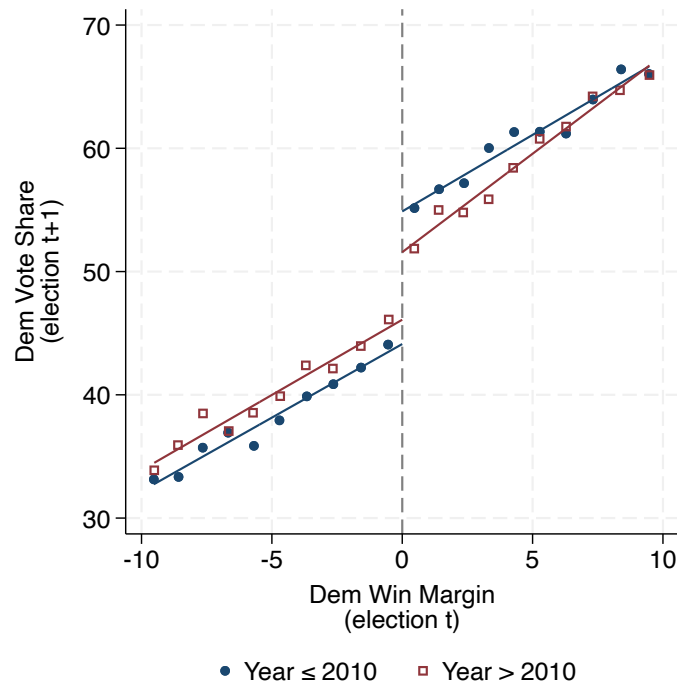
## E The Decline of the Electoral Incumbency Advantage

Jacobson (2015) and Rogers (2023) document the decline of the vote-share incumbency advantage in U.S. House and state legislative lower chambers using panel-based designs, respectively. With the benefit of updated data and the RD design, this section extends these results across American electoral settings.

First, Figure E.1 plots the vote-share incumbency advantage before and after 2010 across all offices in our sample. The figure shows that, up until 2010, the partisan vote-share incumbency advantage was approximately 11. After 2010, however, this advantage has declined to 6 percentage points, or an approximately 45% decline.

Table E.1 evaluates this decline more formally. The three columns present results for the U.S. Congress, state executive offices, and state legislative offices, respectively. The estimated vote-share incumbency advantage before 2010 across all levels of government in our sample is approximately 10 to 11 percentage points. After 2010, we find consistent evidence of a substantial decline in this advantage. In the U.S. Congress, the vote-share incumbency advantage has declined by 6.5 percentage points, or a 60% decline. In state

**Figure E.1 – RD Estimate of the Effect of Incumbency on Democratic Vote Share.** This figure plots averages of the Democratic vote share across bins of the Democratic winning margin in the current election. A narrow Democratic victory in the current election substantially increases the party’s vote share in the subsequent cycle, but to a lesser extent after 2010.



**Table E.1 – RD Estimates of the Effect of Incumbency on Democratic Vote Share.** This table reports the estimated vote-share incumbency advantage in Congress, statewide executive offices, and state legislatures using a 10% bandwidth and local linear regression with a spline. A narrow Democratic victory in the current election substantially increases the party’s share of contributions in the subsequent cycle, but to a lesser extent after 2010.

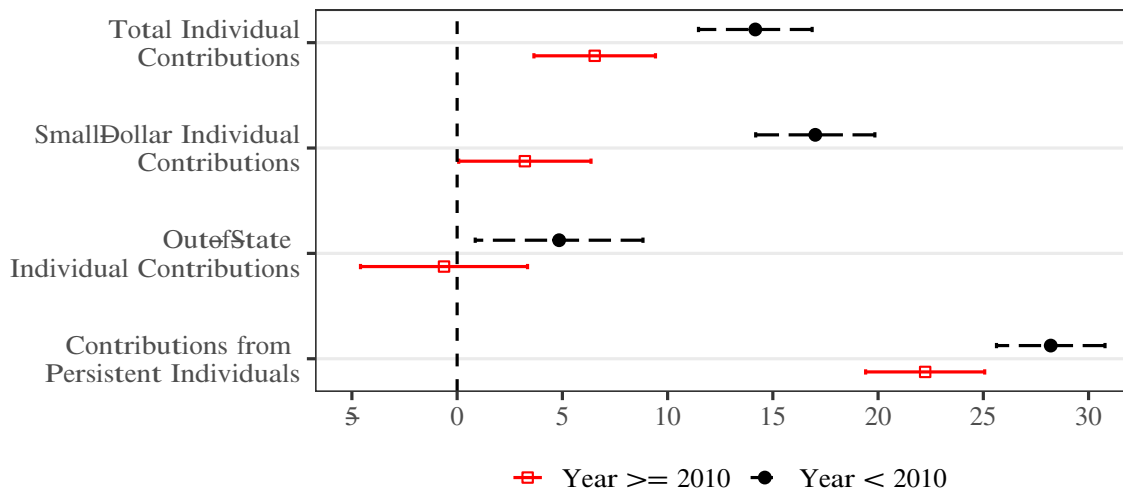
	Dem. Vote Share ( $t + 1$ )		
	Congress	State Exec.	State Leg.
Dem. Win	10.09 (1.02)	10.19 (2.18)	10.97 (0.71)
Dem. Win · Post 2010	-5.57 (1.82)	-10.13 (3.01)	-5.05 (1.05)
N	2,107	698	12,197
Bandwidth (percentage points)	10	10	10

Note: Robust SEs in parentheses.

legislatures, this advantage has declined 5 percentage points, or a 45% decline, while the vote-share incumbency advantage has entirely disappeared in statewide executive offices.

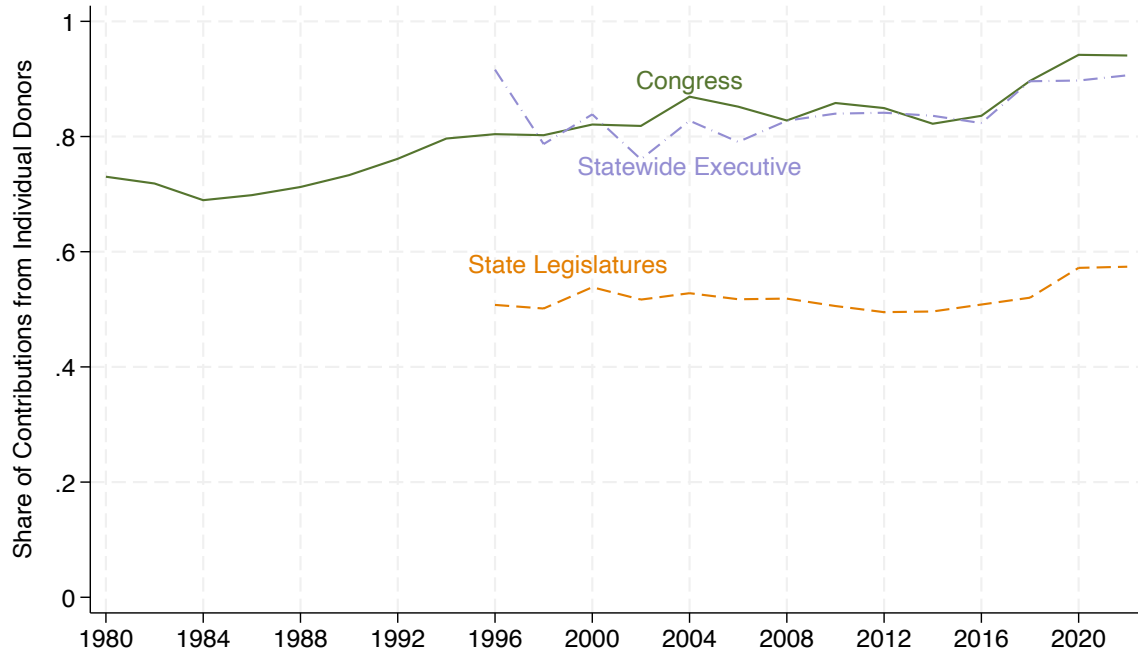
## F Individual Donor Heterogeneity Since 2000

**Figure F.1 – RD Estimates by Type of Individual Contribution, 2000-2022.** This figure reports estimates of the financial incumbency advantage among various groups of individual donors using a 10% bandwidth and local linear regression with a spline. The sample in this figure is restricted to the years 2000 to 2022. The financial incumbency advantage has declined across all types of individual donors, but primarily among small-dollar donors.



## G Composition of Campaign Contributions Over Time

**Figure G.1 – Share of Campaign Contributions from Individual Donors Over Time.** This figure plots the share of campaign contributions made by individual donors over time in elections for the U.S. Congress, American state legislatures, and statewide executive offices. Individual donors play an increasingly important role in American campaign finance.



## H Citizens United and the Corporate PAC Incumbency Advantage

A prominent change in the campaign finance landscape during our period of study is the Supreme Court’s 2010 decision in *Citizens United v. FEC*, which struck down bans on corporate and union independent expenditures. Before the ruling, approximately 23 states prohibited such expenditures in state elections, while the remaining states already permitted them. A growing literature exploits this cross-state variation in a difference-in-differences framework to study the electoral and policy consequences of the ruling (see, e.g., Klumpp, Mialon, and Williams 2016; Abdul-Razzak, Prato, and Wolton 2020; Spencer and Wood 2014).

Since *Citizens United* affected only independent expenditures—spending not coordinated with candidates’ campaigns and excluded from our measure of the financial incumbency advantage—the ruling would not directly affect our results. However, the ruling may have had an indirect effect. In states where corporations were previously barred from making independent expenditures, firms that wished to influence elections had to rely more heavily on soliciting direct contributions from their managers and employees through corporate PACs. After *Citizens United* opened the independent expenditure channel in these states, corporations may have substituted away from direct PAC contributions, potentially altering the incumbency advantage in direct contributions.<sup>4</sup>

To examine whether these substitution patterns are present in our data, Table H.1 reports the corporate PAC incumbency advantage in state legislative races separately for the 23 states whose independent expenditure bans were struck down (“CU-affected”) and the 27 states that already permitted such spending.<sup>5</sup> For each group, we report estimates from two specifications: local linear regression with a 10 percentage-point bandwidth and a third-order polynomial on the full sample.

As Table H.1 shows, the corporate PAC incumbency advantage is similar across CU-affected and non-CU-affected states in both the pre- and post-2010 periods. If anything, we find that the financial incumbency advantage *increased* in states affected by *Citizens United*. This pattern is consistent with our interpretation that the trends we document in the main paper reflect broad changes in donor behavior rather than responses to any single legal reform.

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<sup>4</sup>Since our outcome variable is measured as a share of total district fundraising, substitution patterns would have to be asymmetric across incumbents and non-incumbents to affect our results.

<sup>5</sup>We classify states following Abdul-Razzak, Prato, and Wolton (2020) and Klumpp, Mialon, and Williams (2016). The CU-affected states are: AK, AZ, CO, CT, IA, KY, MA, MI, MN, MO, MT, NC, ND, OH, OK, PA, RI, SD, TN, TX, WV, WI, and WY.

**Table H.1 – Corporate PAC Incumbency Advantage by *Citizens United* Status.** This table reports the estimated corporate PAC incumbency advantage in state legislative races, separately for states whose corporate/union independent expenditure bans were struck down by *Citizens United* (2010) and states that were not directly affected. Each panel reports estimates from local linear regression (10pp bandwidth) and a third-order polynomial (full sample).

	CU-Affected States		Non-CU-Affected States	
	Linear	Cubic	Linear	Cubic
Dem. Win	49.48 (1.74)	49.85 (1.64)	51.55 (2.05)	51.50 (1.90)
Dem. Win · Post 2010	4.37 (3.01)	2.96 (2.80)	-2.14 (3.30)	-1.13 (3.05)
N	6,113	22,690	4,753	19,260
Bandwidth (pp)	10	Full	10	Full

Note: Robust SEs in parentheses.