Online Appendix
No Experienced Required: Early Donations and Amateur Candidate Success in Primary Elections

A Contribution Assignment using *arealOverlap*

To isolate in-district donors, it is necessary to identify whether donors contributed to candidates that were running in the same congressional district as the donor. In many cases, the FEC only provides the ZIP code for each individual contribution made to candidates that can be used to assign contributions to the congressional district they originated in (Gimpel et al., 2008). However, not all ZIP codes are located within a single congressional district. In fact, approximately 18% of ZIP codes are split between two or more districts for any one congressional map. To overcome this issue associated with isolating in-district donors, we use a Python script for ArcGIS and accompanying R package *arealOverlap* developed by Curiel and Steelman (2018). This package allows us to locate individual donations to their likely congressional district of origin using only the ZIP code associated with the donation. The *arealOverlap* package accomplishes this by using the population distribution of a ZIP code and its corresponding congressional districts and assigns a ZIP code to the congressional district it shares the highest proportion of its population with.

To calculate the overlap between ZIP codes and congressional districts, the process first merges Census ZCTAs with Census Block Groups (CBGs), the smallest level of geography with demographic information and made up of approximately 40 Census blocks. When there was not perfect overlap between either a congressional district or ZCTA and CBG, the population is weighted by the geographic overlap between the two levels being merged, as is standard in spatial methods. The process then uses the three-way intersection between congressional districts, ZCTAs and CBGs to calculate the given population of a ZCTA within a congressional district and vice versa. Assignment of a ZIP code, and its corresponding donations, to a congressional district is then based on the ZIP code and congressional district pair for which the greatest population overlap exists. Given the over 220,000 CBGs, 43,000 ZCTAs and 435 congressional districts, the script took approximately 80 minutes to run per Congress.

B Supplementary Results

Table 2: Early Contributions as a Predictor for Total Contributions, 2014-2018

	DV: Logged Total Primary Fundraising
Experienced Candidate	4.078^{***}
	(0.472)
In-District Contributions	0.082
	(0.052)
Out-District Contributions	0.521^{***}
	(0.052)
PAC Contributions	0.098^{*}
	(0.054)
Self-Financing	0.260^{***}
	(0.040)
# of Candidates in Race	-0.215^{***}
	(0.035)
Female	0.761^{**}
	(0.308)
Experienced * In-District	-0.005
	(0.082)
Experienced * Out-District	-0.240^{***}
	(0.089)
Experienced * PAC	-0.025
	(0.080)
Experienced * Self-Financing	-0.219^{***}
	(0.067)
Constant	5.439^{***}
	(0.319)
Observations	898
R^2	0.493
Adjusted R^2	0.487
Residual Std. Error	3.742 (df = 886)
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 3: Early Contributions as a Predictor for Total Contributions 2014-2018 By Party

	DV: Logged Total Primary Fundraising	
	Democratic Candidates	Republican Candidates
Experienced Candidate	3.771***	3.966***
	(0.749)	(0.607)
In-District Contributions	0.096	0.083
	(0.072)	(0.078)
Out-District Contributions	0.555***	0.484***
	(0.071)	(0.075)
PAC Contributions	0.138**	0.046
	(0.070)	(0.087)
Self-Financing	0.277***	0.242***
	(0.059)	(0.052)
# of Candidates in Race	−0.029	−0.307***
	(0.080)	(0.041)
Female	1.226***	0.609
	(0.402)	(0.485)
Experienced * In-District	−0.068	0.031
	(0.123)	(0.112)
Experienced * Out-District	−0.153	−0.281**
	(0.143)	(0.117)
Experienced * PAC	−0.013	−0.028
	(0.110)	(0.121)
Experienced * Self-Financing	−0.306***	−0.168**
	(0.113)	(0.084)
Constant	3.514***	6.776***
	(0.525)	(0.425)
Observations	382	516
R^2	0.559	0.474
Adjusted R^2	0.546	0.462
Residual Std. Error	3.558 (df = 370)	3.802 (df = 504)
Note:	3	*p<0.1; **p<0.05; ***p<0.01

Table 4: Early Contributions as a Predictor for Total Contributions, 2014-2018 (Negative Binomial for DV Overdispersion)

	DV: Logged Total Primary Fundraising
Experienced Candidate	0.667^{***}
	(0.099)
In-District Contributions	0.012
	(0.011)
Out-District Contributions	0.074^{***}
	(0.011)
PAC Contributions	0.003
	(0.011)
Self-Financing	0.043^{***}
	(0.008)
# of Candidates in Race	-0.039^{***}
	(0.008)
Female	0.128^{**}
	(0.064)
Experienced * In-District	-0.004
	(0.017)
Experienced * Out-District	-0.045^{**}
	(0.018)
Experienced * PAC	0.003
	(0.016)
Experienced * Self-Financing	-0.036^{***}
	(0.014)
Constant	1.644^{***}
	(0.069)
Observations	898
Log Likelihood	$-2{,}758.738$
θ	2.109^{***} (0.188)
Akaike Inf. Crit.	5,541.477
Note:	*p<0.1; **p<0.05; ***p<0.01

Table 5: Candidate Early Contributions as a Predictor for Candidate Success, 2014-2018

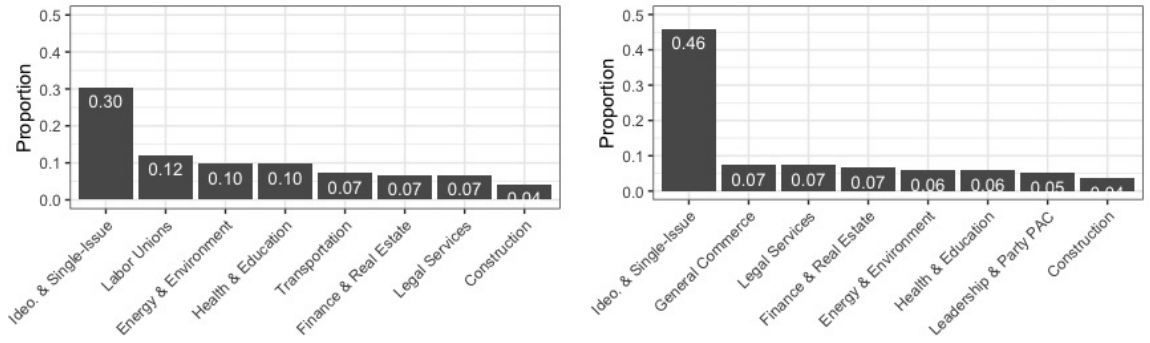
	DV:Amateur Won the Primary Election	
	Democratic Races	Republican Races
Experienced Candidate	0.385*	0.179
	(0.218)	(0.282)
In-District Contributions	−0.039	−0.046
	(0.043)	(0.063)
Out-of-District Contributions	0.107***	0.130***
Out of State	(0.038)	(0.050)
Out-of-District Contributions	0.110**	0.143**
In State	(0.044)	(0.062)
PAC Contributions	0.109***	0.070*
	(0.029)	(0.039)
Self-Financing	0.001	0.006
	(0.025)	(0.034)
Female	0.134	−0.551
	(0.217)	(0.396)
Observations	183	99
Log Likelihood	−207.549	−114.588
Note:		*p<0.1; **p<0.05; ***p<0.01

Table 6: Candidate Early Contributions as a Predictor for Candidate Success, 2014-2018 with Interaction by Party

	Dependent variable:	
	Amateur Won the Primary Election	
	Democratic Races	Republican Races
Experienced Caniddate	0.836**	0.695
	(0.374)	(0.478)
In-District Contributions	−0.055	−0.072
	(0.050)	(0.077)
Out-of-District Contributions *Out of State*	0.132***	0.144**
	(0.051)	(0.071)
Out-of-District Contributions *In State*	0.152***	0.205***
	(0.055)	(0.078)
PAC Contributions	0.076**	0.044
	(0.038)	(0.055)
Self-Financing	0.001	0.006
	(0.026)	(0.035)
Female	0.108	−0.651
	(0.221)	(0.407)
Experienced * In-District	0.073	0.091
	(0.071)	(0.105)
Experienced * Out-of-State	−0.079	−0.059
	(0.070)	(0.093)
Experienced * In-State	−0.122	−0.162
	(0.076)	(0.105)
Experienced * PAC	0.075	0.069
	(0.056)	(0.078)
Observations	183	99
Log Likelihood	−204.783	−112.399
Note:		*p<0.1; **p<0.05; ***p<0.01

Table 7: Predicting the Amount of Early Out-of-District Donations as a Function of PAC support, 2014-2018

	Dependent variable:
	Logged Early Out-of-District Fundraising
Presence of Ideo/Single-Issue Early PAC Money	6.714***
	(0.636)
# of Candidates in Race	−0.009
	(0.051)
Female	0.263
	(0.684)
Democratic Candidate	−0.404
	(0.427)
Female*Democratic Candidate	0.744
	(0.915)
Constant	3.592***
	(0.464)
Observations	603
R^2	0.171
Adjusted R^2	0.164
Residual Std. Error	4.395 (df = 597)
F Statistic	24.629*** (df = 5; 597)
Note:	*p<0.1; **p<0.05; ***p<0.01



(a) Donations to Experienced Candidates (b) Donations to Amateur Candidates

Figure 3: Proportions of Early PACs Donations by Industry Type, 2014-2018

Proportions are generated using the total number of candidates who received donations from PACs by industry type. For example: # of candidates who received PAC donations from labor unions / total # of candidates who received PAC donations. As a reminder, these numbers are relatively small because PAC activity in the primary only accounts for a small minority of overall early giving. For instance, only 110 or 10% of candidates from 2014-2018 received early money from an ideological / single-issue PAC.

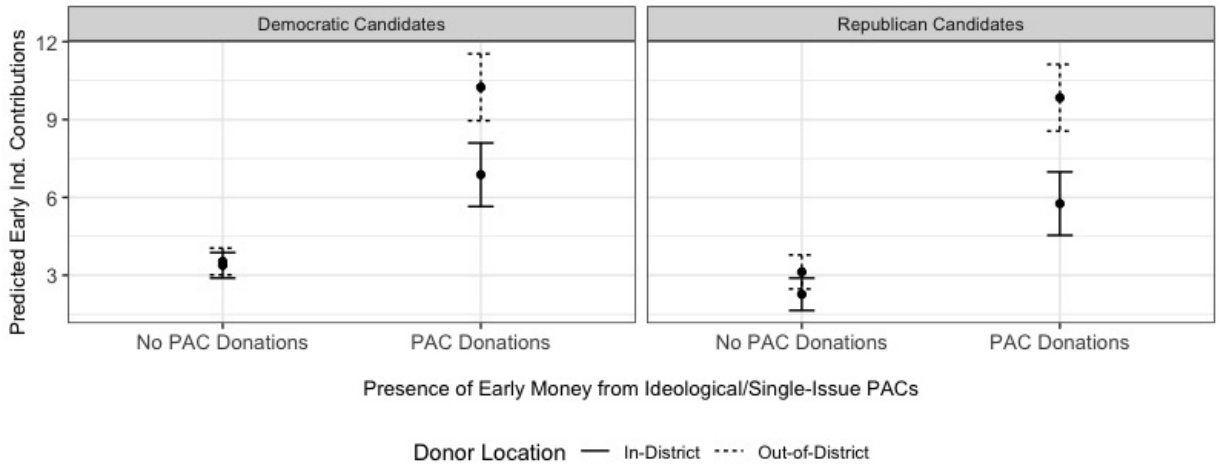


Figure 4: Predicted Probably of Out-of-State Early Donations to Amateur Candidates by Party

Dots represent predicted probabilities from a logistic regression model, where out-of-district fundraising is explained by out-of-state PAC donations. Coefficients are plotted with 95% confidence intervals.