## Electoral Crime Under Democracy: Evidence from Brazil

Andre Assumpcao\*

June  $1^{st}$ , 2019

## Abstract

 $\mathrm{TBU}$ 

**Keywords:** electoral politics; judicial politics; comparative politics; illegal behavior and the enforcement of law; political economy.

JEL classification: D72; K42; P48.

<sup>\*</sup>Ph.D. Candidate, Department of Public Policy, The University of North Carolina at Chapel Hill. Contact details: aassumpcao@unc.edu.

Table 1: Descriptive Statistics

	N	Mean	St. Dev.	Min	Max
Age	9,470	46.34	11.02	17	86
Male	9,470	.793	.405	0	1
Political Experience	9,470	.091	.287	0	1
Campaign Expenditures (in R\$)	9,470	52,555	210,742	0	4,949,250
Convicted at Trial	9,470	.641	.480	0	1
Convicted on Appeal	9,470	.537	.499	0	1
Probability of Election	9,442	.191	.393	0	1
Vote Distance to Election Cutoff (in p.p.)	9,442	-4.09	9.55	-92.82	12.83
Total Vote Share (in p.p.)	9,442	10.13	17.98	0.00	100.00

Table 2: Electoral Crime Rulings

	App	Appeals			
Trial	Affirmed	Reversed	Reversed		
Not Convicted	3380	22	0.6		
Convicted	5059	1009	16.6		

Table 3: First-Stage Regressions

	Outcome: Convicted at Trial			
	(1)	(2)	(3)	
Convicted on Appeal	.766*** (.006)	.753*** (.007)	.738*** (.009)	
Individual Controls Fixed-Effects		Yes	Yes Yes	
Observations Adjusted- $\mathbb{R}^2$ F-stat	9,470 .633 16,364.9***	9,470 .649 1,094.0***	9,470 .861 21.7***	

Note: First-Stage regressions here report the correlation between being convicted at trial and being convicted on appeal for all candidates who have had their candidacy challenged under charges of electoral irregularities. I present results including and excluding individual politician characteristics; municipal, electoral, and party fixed-effects; and use robust standard errors. \*p<0.1; \*\*\*p<0.05; \*\*\*\*p<0.01

Figure 1: Instrument Point Estimates and CIs

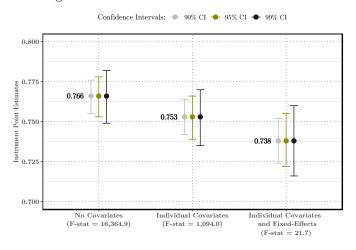


Table 4: Hausman Test of Instrument Strength

Outcome	Hausman Statistic	p-value
1. Probability of Election	109.28	.000
2. Total Vote Share	205.57	.000
3. Vote Distance to Election Cutoff:	1.88	.170
3.1. City Councilor	65.44	.000
3.2. Mayor	93.43	.000

Table 5: The Effect of Electoral Crime on the Probability of Election

	Outcome: Probability of Election						
_	OLS	OLS	OLS	IV	IV	IV	
	(1)	(2)	(3)	(4)	(5)	(6)	
Convicted at Trial	208*** (.009)	151*** (.009)	163*** (.014)	272*** (.011)	213*** (.010)	231** (.016)	
Individual Controls Fixed-Effects	-	Yes -	Yes Yes	-	Yes -	Yes Yes	
Observations Adjusted- $\mathbb{R}^2$ $F$ -stat	9,442 .065 653.58***	9,442 .149 104.02***	9,442 .303 2.46***	9,442 .059 707.35***	9,442 .143 108.9***	9,442 .300 2.47***	

Note: The regressions here estimate the effect of being convicted at trial on the probability of election for all candidates who have had their candidacy challenged under charges of electoral irregularities. Columns 1 and 4 display models not including individual candidate characteristics; columns 2 and 5 include age, gender, marital status, education level, political experience, and the amount spent in their campaign; columns 3 and 6 also include municipal, electoral, and party fixed-effects. I report robust standard errors for all specifications in this table. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 6: The Effect of Electoral Crime on the Total Vote Share

	Outcome: Total Vote Share (in p.p.)						
	OLS	OLS	OLS	IV	IV	IV	
	(1)	(2)	(3)	(4)	(5)	(6)	
Convicted on Appeal	$-12.945^{***}$ (.418)	-8.316*** (.337)	-9.943*** (.529)	$-16.804^{***}$ $(.478)$	-11.765*** (.399)	-13.254*** (.624)	
Individual Controls Fixed-Effects	-	Yes	Yes Yes	-	Yes	Yes Yes	
Observations Adjusted- $\mathbb{R}^2$ F-stat	9,442 .119 1,278.91***	9,442 .379 361.57***	9,442 .606 6.15***	9,442 .109 1,360.8***	9,442 .371 368.19***	9,442 .602 6.14***	

Note: The regressions here estimate the effect of being convicted at trial on the total vote share for all candidates who have had their candidacy challenged under charges of electoral irregularities. Columns 1 and 4 display models not including individual candidate characteristics; columns 2 and 5 include age, gender, marital status, education level, political experience, and the amount spent in their campaign; columns 3 and 6 also include municipal, electoral, and party fixed-effects. I report robust standard errors for all specifications in this table. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 7: The Effect of Electoral Crimes on the Vote Distance to Election Cutoff

	Outcome:	Vote Distance to	Election Cutoff	(in p.p.)
	OLS	IV	OLS	IV
	(1)	(2)	(3)	(4)
Convicted at Trial	575***	849***	-5.172***	-7.381***
	(.064)	(.075)	(1.905)	(2.184)
Individual Controls	Yes	Yes	Yes	Yes
Fixed-Effects	Yes	Yes	Yes	Yes
Sample	City Council	City Council	Mayor	Mayor
Observations	7,100	7,100	2,342	2,342
Adjusted- $R^2$	.431	.428	.384	.382
F-stat	3.54***	1.86***	3.55***	1.85***

Note: The regressions here estimate the effect of being convicted at trial on the distance to the election cutoff for candidates who have had their candidacy challenged under charges of electoral irregularities. All models include individual candidate characteristics and municipal, electoral, and party fixed-effects. Since election rules differ by office type, I split the sample into city council candidates (columns 1 and 2) and mayor candidates (columns 3 and 4). I report robust standard errors for all specifications in this table.  $^*p<0.1;$   $^{**}p<0.05;$   $^{***}p<0.01$ 

Table 8: Heterogeneous Sentencing across Trial and Appeals

	(1)	(2)	(3)	(4)	(5)	(6)
	$\beta_{\mathrm{trial}}$	$\beta_{ m appeals}$	$\beta_{\mathrm{difference}}$	Std. Error	$t ext{-stat}$	$p ext{-value}$
Elected to Office	223	267	.044	.086	.509	.611
Age	001	.000	001	.003	418	.676
Male	.029	.022	.007	.039	.173	.862
Political Experience	089	013	076	.079	957	.339
Campaign Expenditures (ln)	029	028	001	.029	034	.973
Marital Status:						
Divorced	006	.026	032	.039	826	.409
Legally Divorced	.066	.028	.039	.050	.772	.440
Single	008	.043	051	.040	-1.264	.206
Widowed	.029	011	.040	.064	.624	.533
Educational Levels:						
Completed ES/MS	160	234	.074	.090	.818	.413
Incomplete ES/MS	116	259	.143	.135	1.065	.287
Can Read and Write	066	286	.220	.174	1.267	.205
Completed HS	191	259	.068	.086	.798	.425
Incomplete HS	108	264	.156	.133	1.179	.238
Completed College	218	300	.083	.099	.832	.405
Incomplete College	177	270	.093	.125	.742	.458

Note: In this table, I report the coefficients of two regressions using the same covariates on the probability of receiving an unfavorable ruling at trial (column 1) and on appeals (column 2). I then recover the distributions of the differences in betas and test H0:  $\beta_{\text{difference}} = 0$  for all covariates in the regressions (columns 3-6). Robust standard errors are clustered at the municipal-election pair level (equivalent to the judge-level error shared by all candidates in one municipality during one election period); party-fixed effects are included in both regressions but are not reported here.

Figure 2: Instrument Correlation with Covariates

Coefficients: - Trial - Appeals

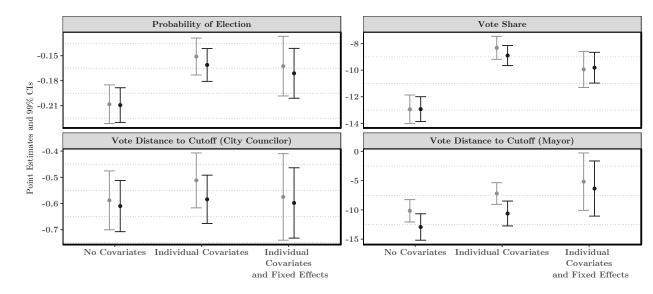


Table 9: The Effect of Electoral Crimes on Voter Engagement

	$Dependent\ variable:$						
	Party	-Level	Election-Level				
	Voter Invalid Turnout Votes		Outcome: Outcome: Voter Inval Turnout Vote (percent) (percent				
	(1)	(2)	(3)	(4)			
Share of Candidacies Invalid at Trial	.003 (.007)	.222*** (.076)	001 (.009)	.134* (.070)			
Individual Controls Fixed-Effects	- Yes	Yes	Yes	- Yes			
Observations Adjusted- $\mathbb{R}^2$ F-stat	5,322 .997 763.1***	5,322 .973 81.8***	3,757 .995 298.3***	3,757 .946 28.2***			

Note: The regressions here estimate the effect of the share of candidates convicted at trial overall the total office vacancies on voter turnout and the number of invalid votes (both logged). I aggregate observations up to the party and election level and control for municipality and election year fixed-effects. I report robust standard errors, clustered by elections and municipalities, for all specifications in this table. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01