Supplementary Information for Election-Denying Republican Candidates Underperformed in the 2022 Midterms

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A Incumbency and the Election-Denying Candidate Underperformance Across Offices

There are two important potential sources of variation in how much election-denying candidates underperform. First, denying the election might be more important for political actors with direct influence over the ways state elections function; hence, we might expect the issue to be more salient and underperformance to be larger in races for secretary of state, governor, and attorney general. On the other hand, members of the House do vote on the certification of the Electoral College, so who voters will think of as most responsible for election administration is unclear. Second, the other advantages of incumbency might serve to dampen the underperformance, allowing incumbents more freedom to deny the election if they so wish. Figure SI.1 explores both of these patterns. In the figure, we plot coefficient estimates that reflect the overall estimate for each office, as well as the underperformance separately for incumbents and non-incumbents.

Figure SI.1 – The Underperformance of Election-Denying Candidates Across Offices and Incumbency.

Note: No Secretary of State incumbents denied the election results in our sample; hence, this estimate is omitted from the top row of the plot.

Although we are cutting a relatively small dataset quite finely, there is some evidence that the underperformance is larger in statewide offices—specifically in secretary of state and governor races. The underperformance to AGs seems smaller, though, and the underperformance to US Senators seems larger as well. The House stands out as the office where the underperformance is smallest (and indeed, zero). We formally test whether the underperformance to statewide offices and the underperformance to Congress are significantly different and find that the underperformance to statewide offices is 3.5 percentage points larger than the House and Senate with a p-value of 0.006.

Table SI.1 – Possible Advantage of Election-Denying Candidates in 2022 Republican Primary Races for Governor, Secretary of State, and Attorney General.

	Primary	-Election	Vote Share
	(1)	(2)	(3)
Election-Denying Candidate	0.017	0.019	0.016
	(0.027)	(0.031)	(0.036)
N	293	291	277
# States	36	34	33
Pres Vote Share	Yes	No	No
# Cand FEs	Yes	Yes	Yes
State FE	No	Yes	No
State by Office FE	No	No	Yes

Robust standard errors clustered by state in parentheses. All columns use States United classification for election deniers, which is the only classification that includes all primary candidates.

The explanation of these discrepancies is unclear and will require follow-up research after the 2024 election cycle with more data.

Interestingly, we do not find a consistent pattern with respect to incumbency. No secretary of state incumbents denied the election, so the entire underperformance estimated in these offices accrues to non-incumbents. In governor and AG races, the underperformance appears to be larger for non-incumbents than for incumbents. On the other hand, in the House and Senate, the opposite appears to be the case; here, we document underperformance for incumbents but not for non-incumbents.

B Advantage to Election-Denying Candidates in Primary Elections

While election-denying candidates may be disadvantaged in the general election, many observers have concluded that they enjoyed a considerable advantage in primary elections. To investigate this, we can compute the average vote-share advantage or disadvantage for election-denying candidates. We run regressions of the form

Primary Vote Share_{ios} =
$$\beta Deny \ 2020_i + \delta X_{ios} + \epsilon_{ios}$$
, (1)

where the outcome variable is candidate i's primary-election vote share for office o in state s. The main explanatory variable is the same as before. Here, optional controls will include presidential vote share, state fixed effects, or state-by-office fixed effects. We also control in all specifications for the number of candidates in the race by using fixed effects for each possible number of candidates observed in the data. This is important because each additional candidate in a primary mechanically (weakly) reduces the average vote share of all candidates in the race.

Table SI.1 presents the results for these three specifications. Across the specifications, we see a relatively stable but very noisy estimate ranging from 1.6 percentage points in column 1 to 1.9 percentage points in column 2. In all three specifications, standard errors are large, and we cannot rule out somewhat large effects. This important limitation notwithstanding, the estimated advantage seems surprisingly small relative to some prominent claims.

C Distribution of Election-Denying Candidates

In this section, we plot the number of denying and non-denying candidates by office and incumbency status, using our combined measure of election denialism.

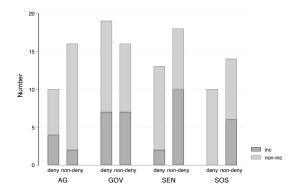


Figure SI.2 – Barplot plots the number of election-denying and non-denying candidates across office and incumbency status.

D Alternative 538 Classification

In this section, we re-estimate our main results with a different classification of election-denying candidates. Here, using the 538 data, we define election-denying candidates as anyone who either "fully denied" the election results or "raised questions" about it. The results are presented in Table SI.2.

Table SI.2 – 538 Denier Classification Robustness of Underperformance of Election-Denying Candidates in 2022 Races for Governor, Senator, Secretary of State, and Attorney General.

		General-Election Vote Share							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Election-Denying Candidate	-0.026	-0.019	-0.026	-0.028	-0.020	-0.022	-0.025	-0.026	
	(0.010)	(0.010)	(0.009)	(0.011)	(0.012)	(0.015)	(0.012)	(0.018)	
N	116	116	116	95	53	69	68	42	
# States	42	42	42	39	16	20	19	13	
Pres Vote Share	Yes	Yes	Yes	Yes	No	No	No	No	
State FEs	No	No	No	No	Yes	Yes	Yes	Yes	

Sample is Republican candidates for attorney general, secretary of state, governor, and U.S. Senate. Robust standard errors clustered by state in parentheses. Columns (1) and (5) use the 538 denier classification from the paper that only classifies a candidate as an election denier for the stance 'fully denied'. Columns (2) and (6) classify a candidate as a denier if their 538 stance was 'fully denied', 'no comment', or 'avoided answering'. Columns (3) and (7) classify a candidate as a denier if their 538 stance was 'fully denied' or 'raised questions'. Columns (4) and (8) use the same 538 classification from the paper except omit observations with the stances 'avoided answering' and 'no comment'. Columns 1-4 include controls for 2020 presidential voteshare.

Table SI.3 – Underperformance of Election-Denying Candidates in 2022 Races for Governor, Senator, Secretary of State, and Attorney General.

		General-Election Vote Share						
	(1) States	(2) 538	(3) WaPo	(4) Combined	(5) States	(6) 538	(7) WaPo	(8) Combined
	United	000	Wai o	Combined	United	000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Combined
Election-Denying Candidate	-0.033	-0.026	-0.030	-0.029	-0.045	-0.020	-0.028	-0.032
Dem Pres Voteshare	(0.015) -0.921 (0.091)	(0.010) -0.967 (0.068)	(0.010) -0.962 (0.066)	(0.010) -0.971 (0.066)	(0.026)	(0.012)	(0.013)	(0.012)
N	85	116	116	116	32	53	72	68
# States Pres Vote Share State FEs	38 Yes No	42 Yes No	42 Yes No	42 Yes No	11 No Yes	16 No Yes	21 No Yes	20 No Yes

Sample is Republican candidates for attorney general, secretary of state, governor, and U.S. Senate. Robust standard errors clustered by state in parentheses. Columns labeled States United use election-denier classifications from SUDC, which do not include Senate or House races. Columns labeled 538 use election denier classifications from 538. Rows labeled WaPo use election denier classifications from the Washington Post. Columns 1-4 include controls for 2020 presidential voteshare

E Full Table Specifications

This section provides fuller versions of the general-election (Table SI.3) and primary-election regression (Table SI.4) tables showing the coefficients of the control variable for presidential vote share.

Table SI.4 – Full Version of Possible Advantage of Election-Denying Candidates in 2022 Republican Primary Races for Governor, Senator, Secretary of State, and Attorney General.

	Primary	-Election	Vote Share
	(1)	(2)	(3)
Election-Denying Candidate	0.017	0.019	0.016
	(0.027)	(0.031)	(0.036)
Dem Pres Voteshare	0.043		
	(0.047)		
N	293	291	277
# States	36	34	33
Pres Vote Share	Yes	No	No
# Cand FEs	Yes	Yes	Yes
State FE	No	Yes	No
State by Office FE	No	No	Yes

Robust standard errors clustered by state in parentheses. All columns use States United classification for election deniers, which is the only classification that includes all primary candidates.

F List of Election-Denying Candidates

In this section, we show the raw data on which statewide candidates are classified as election-denying candidates across our three data sources. The results can be found in Tables SI.5-SI.13.

A ✓ indicates that the candidate was classified as denying the results of 2020 election by either 538, WaPo, or States United. A blank indicates the candidate was classified as not having rejected the election. A "-" indicates that the candidate was not considered by the source.

Table SI.5 – Republican Candidates for Attorney General Classified as Deniers

State	Candidate	General Election	538	SUDC	WaPo
$\overline{\text{AL}}$	MARSHALL, STEVE	Won		✓	✓
AZ	GLASSMAN, RODNEY		-	\checkmark	-
AZ	HAMADEH, ABRAHAM	Lost	\checkmark	\checkmark	\checkmark
CA	EARLY, ERIC		-	\checkmark	-
FL	MOODY, ASHLEY	Won	\checkmark	\checkmark	\checkmark
GA	GORDON, JOHN		-	\checkmark	-
ID	LABRADOR, RAÚL R.	Won	\checkmark	\checkmark	
ID	MACOMBER, ARTHUR		-	\checkmark	-
IL	SHESTOKAS, DAVID		-	\checkmark	-
KS	KOBACH, KRIS	Won	\checkmark	\checkmark	\checkmark
MD	PEROUTKA, MICHAEL ANTHONY	Lost		\checkmark	\checkmark
MI	DEPERNO, MATTHEW	Lost	\checkmark	\checkmark	\checkmark
MN	ANDERSON, SHARON		-	\checkmark	-
MN	WARDLOW, DOUG		-	\checkmark	-
NV	CHATTAH, SIGAL	Lost		\checkmark	\checkmark
OH	YOST, DAVE	Won			\checkmark
SC	WILSON, ALAN	Won	\checkmark	\checkmark	\checkmark
TX	GOHMERT, LOUIE		-	\checkmark	-
TX	PAXTON, KEN	Won	\checkmark	\checkmark	\checkmark
VT	PAIGE, H. BROOKE		-	\checkmark	-
WI	MUELLER, KAREN		-	\checkmark	-

Table SI.7 – Republican Candidates for Governor Classified as Deniers

State	Candidate	General Election	538	SUDC	WaPo
AL	BLANCHARD, LINDY		-	√	_
AL	IVEY, KAY	Won	\checkmark	\checkmark	\checkmark
AL	ODLE, DEAN		-	\checkmark	-
AR	WASHBURN, FRANCIS		-	\checkmark	-
AZ	LAKE, KARI	Lost	\checkmark	\checkmark	\checkmark
AZ	NEELY, SCOTT DAVID		-	\checkmark	-
AZ	SALMON, MATT		-	\checkmark	-
AZ	ZEN, PAOLA TULLIANI		-	\checkmark	-
CA	MERCURI, DANIEL R.		-	\checkmark	-
CA	WILLIAMS, MAJOR		-	\checkmark	-
CA	ZACKY, LEO S.		-	\checkmark	-
FL	DESANTIS, RON	Won		\checkmark	\checkmark
GA	PERDUE, DAVID A.		-	\checkmark	-
GA	TAYLOR, KANDISS		-	\checkmark	-
IA	REYNOLDS, KIM	Won		\checkmark	\checkmark
ID	HUMPHREYS, EDWARD R.		-	\checkmark	-
ID	LITTLE, BRAD	Won	\checkmark		\checkmark
ID	MCGEACHIN, JANICE		-	\checkmark	-
IL	BAILEY, DARREN	Lost			\checkmark
IL	SOLOMON, MAX		-	\checkmark	-
KS	SCHMIDT, DEREK	Lost		\checkmark	\checkmark
MA	DIEHL, GEOFF	Lost	\checkmark	\checkmark	\checkmark
MD	COX, DAN	Lost	\checkmark	\checkmark	\checkmark
ME	LEPAGE, PAUL R.	Lost		\checkmark	\checkmark
MI	DIXON, TUDOR M.	Lost	\checkmark	\checkmark	\checkmark
MI	KELLEY, RYAN D.		-	\checkmark	-
MI	REBANDT, RALPH		-	\checkmark	-
MI	SOLDANO, GARRETT		-	\checkmark	-
NE	CONNELY, MICHAEL		-	\checkmark	-
NE	HERBSTER, CHARLES W.		-	\checkmark	-
NE	RIDENOUR, BRELAND		-	✓	-

Table SI.9 – Republican Candidates for Governor Classified as Deniers

State	Candidate	General Election	538	SUDC	WaPo
CO	GANAHL, HEIDI	Lost			√
MN	JENSEN, SCOTT	Lost			\checkmark
NV	GILBERT, JOEY		-	\checkmark	-
NV	HAMILTON, EDDIE		-	\checkmark	-
NV	LEE, JOHN J.		-	\checkmark	-
NY	GIULIANI, ANDREW		-	\checkmark	-
NY	ZELDIN, LEE	Lost		\checkmark	\checkmark
OH	BLYSTONE, JOE		-	\checkmark	-
OH	HOOD, RON		-	\checkmark	-
OH	RENACCI, JIM		-	\checkmark	-
OK	SHERWOOD, MARK		-	\checkmark	-
OR	CHRISTENSEN, REED		-	\checkmark	-
OR	RICHARDSON, AMBER R.		-	\checkmark	-
PA	BARLETTA, LOUIS		-	\checkmark	-
PA	GALE, JOSEPH CHARLES		-	\checkmark	-
PA	GEROW, CHARLES R.		-	\checkmark	-
PA	MASTRIANO, DOUGLAS V.	Lost	\checkmark	\checkmark	\checkmark
SD	NOEM, KRISTI	Won			\checkmark
TN	LEE, BILL	Won		\checkmark	
TX	ABBOTT, GREG	Won		\checkmark	\checkmark
TX	HARRISON, DANNY		-	\checkmark	-
TX	HUFFINES, DON		-	\checkmark	-
TX	PRATHER, CHAD		-	\checkmark	-
TX	WEST, ALLEN B.		-	\checkmark	-
WI	FISCHER, ADAM J.		-	\checkmark	-
WI	KLEEFISCH, REBECCA		-	\checkmark	-
WI	MICHELS, TIM	Lost		\checkmark	\checkmark
WI	RAMTHUN, TIMOTHY		-	✓	_

Table SI.11 – Republican Candidates for U.S. Senator Classified as Deniers

State	Candidate	General Election	538	SUDC	WaPo
AL	BRITT, KATIE	Won	√	-	√
AZ	MASTERS, BLAKE	Lost		-	\checkmark
GA	WALKER, HERSCHEL JUNIOR	Lost		-	\checkmark
KY	PAUL, RAND	Won		-	\checkmark
MD	CHAFFEE, CHRIS	Lost	\checkmark	-	\checkmark
MO	SCHMITT, ERIC	Won	\checkmark	-	\checkmark
NC	BUDD, TED	Won		-	\checkmark
NH	BOLDUC, DONALD C.	Lost		-	\checkmark
NV	LAXALT, ADAM PAUL	Lost	\checkmark	-	\checkmark
OH	VANCE, J. D.	Won	\checkmark	-	\checkmark
OR	PERKINS, JO RAE	Lost	\checkmark	-	\checkmark
PA	OZ, MEHMET C.	Lost		-	\checkmark
WI	JOHNSON, RON	Won	\checkmark	-	

Table SI.13 – Republican Candidates for Secretary of State Classified as Deniers

State	Candidate	General Election	538	SUDC	WaPo
AL	ALLEN, WES	Won		\checkmark	
AR	WILLIAMS, EDDIE JOE		-	\checkmark	-
AZ	BOLICK, SHAWNNA		-	\checkmark	-
AZ	FINCHEM, MARK	Lost	\checkmark	\checkmark	\checkmark
CA	HAMM, RACHEL		-	\checkmark	-
CA	PAINE, JAMES		-	\checkmark	-
CO	PETERS, TINA		-	\checkmark	-
CT	RAPINI, DOMINIC	Lost		\checkmark	\checkmark
GA	BELLE ISLE, DAVID C.		-	\checkmark	-
GA	HICE, JODY		-	\checkmark	-
ID	MOON, DOROTHY		-	\checkmark	-
ID	SOUZA, MARY		-	\checkmark	-
IN	MORALES, DIEGO	Won		\checkmark	\checkmark
KS	BROWN, MIKE		-	\checkmark	-
MA	CAMPBELL, RAYLA	Lost		\checkmark	\checkmark
MI	KARAMO, KRISTINA ELAINE	Lost	\checkmark	\checkmark	\checkmark
MN	CROCKETT, KIM	Lost	\checkmark	\checkmark	\checkmark
MN	VAN MECHELEN, ERIK		-	\checkmark	-
NE	SCHRODER, REX		-	\checkmark	-
NM	TRUJILLO, AUDREY	Lost	\checkmark	\checkmark	\checkmark
NV	GERHARDT, JOHN CARDIFF		-	\checkmark	-
NV	MARCHANT, JIM	Lost	\checkmark	\checkmark	\checkmark
OH	ADAMS, JOHN		-	\checkmark	-
SC	BLANDFORD, KEITH		-	\checkmark	-
VT	PAIGE, H. BROOKE	Lost	\checkmark	\checkmark	\checkmark
WI	SCHMIDTKA, JUSTIN D.		-	\checkmark	-
WI	SCHROEDER, JAY		-	\checkmark	-
WY	GRAY, CHUCK	Won	√	✓	✓

Table SI.15 – Underperformance of Election-Denying Candidates in 2022 Races by Office Interacted with Incumbency.

		General-H	Election V	ote Share	;
	(1) AG	(2) SOS	(3) GOV	(4) SEN	(5) House
deny	-0.037	-0.024	-0.042	-0.005	0.001
dolly	(0.014)	(0.014)	(0.018)	(0.014)	(0.003)
inc	0.031 (0.021)	0.025 (0.012)	0.114 (0.059)	0.032 (0.021)	0.035 (0.006)
$inc \times deny$	0.054 (0.024)	(0.012)	0.020 (0.047)	-0.037 (0.024)	-0.013 (0.005)
N Pres Vote Share	26 Yes	24 Yes	35 Yes	31 Yes	393 Yes

Sample for each row is Republican candidates for attorney general, secretary of state, governor, U.S. Senate, and U.S. House respectively. Each estimate is from a separate model with only candidates for the given office. Robust standard errors clustered by state in parentheses. All columns use the aggregated denier classification. Columns 1-5 include controls for 2020 presidential voteshare

G Incumbency and the underperformance to Election-Denying Candidates Across Offices

Here we provide Table SI.15 to match the incumbency coefficient plot.