THE COST OF RULING:

AN EXPLORATION IN U.S. GUBERNATORIAL ELECTIONS

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Key Words:

Nannestad and Paldam, cost of ruling, shrinking support, U.S. state gubernatorial elections

Abstract

The cost of ruling is a well-established inductive law in political science. In the developed democracies, incumbent parties incur a penalty of 2 to 3 percentage points per term, on average. We argue that this estimate obscures the fact that the share of the vote going to the incumbents does not decrease the longer they stay in office. Rather, as long as they are re-elected, incumbents win about the same share of the vote. This stays relatively constant until they are defeated, at which time the loss averages 12 percentage points independent of the number of terms the party has been in control.

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Introduction

Notwithstanding the electoral advantage that accrues to the political party occupying the state's executive office (Bennett and Long 2019), and even after controlling for other effects on the vote function (Lewis-Beck and Stegmaier 2013), the incumbents on average incur what Nannestad and Paldam (2009) called a "cost of ruling." In the developed democracies of Europe, the North Atlantic, and the Pacific, this incumbent penalty is estimated to range from 2 to 4 percentage points per term (Budge et al., 277; Cuzán 2022, 39; Lewis-Beck, Nadeau, and Belanger 2004, 285; Martin 2014, 288; Nannestad and Paldam 1999, 3; Wlezien, 2017, 723). Indeed, Budge considers this generalization to be "[p]ossibly the best-supported inductive 'law' in political science" (2019: 321).

In this paper, we set out to explore this phenomenon in detail with data on U.S. gubernatorial elections. Specifically, we set out to answer the following question: "Is the cost of ruling something that is incurred somewhat uniformly throughout the spell of a party's stay in the executive mansion, or does it vary by election?" To the best of our knowledge, no one has previously undertaken such study in the American states. But first, a word about what this article is not: It is not yet another attempt to explain the "cost of ruling." There are many other theories already on offer (e.g., Nannestad and Paldam 1999; Paldam and Skott 1995; Stevenson 2002; Thesen, Mortensen and Green-Pedersen 2019; Wlezien 2017). Our purpose is strictly limited to finding an answer to the aforementioned question.

Data and Method

The data, obtained from the Wikipedia,[1] consists of 800 U.S. state gubernatorial elections variously held between the 1930s, a decade which saw many incumbents go down to defeat, and the present. These elections offer an advantage over cross-national data sets in that most elections are held simultaneously according to the same rule, at the same time of the year, for the same length of term (four years in most instances), and involve only two effective parties, Democrats and Republicans.[2] The series for each state starts with an election in which the current incumbent is defeated. (In the southern states, the series can start as late as the 1970s, when the century-long Democratic stranglehold on state government was broken.) This initiates a new party spell or string that continues until the incumbents are ousted, an eventuality that occurs at the end of anywhere from 1 to 10 terms in office, following which a new party spell gets under way. Our database includes the state's name, the election year, the vote from the election in which incumbent party was first ushered into office through every succeeding election until its defeat, and the party's identification, Democrat, Republican, or independent or third party.

We organized the history of every state, from the first election that enters our data set through 2020, into party strings or spells. The first election of every string, the one which the former opposition or "out" party won, is labeled E_0. All such initial party spells constitute our cohort. Every subsequent election in which the incumbent made a bid for re-election takes a number from 1 to 10. No party made it to E_{11}. Only "closed" strings, that is, party spells that start and finish within our data set, are included. Omitted are "open" strings, those that as of the 2020 election had not concluded with the defeat of the incumbents. For a given spell, the vote at E_0 represents the vote that

propelled to the statehouse the party for which the string pertains. While the literal incumbent at that election is thus the defeated party, we apply the label "incumbent" to the party described in the new string. Also, we partition the winners of every election into two groups, those that won the subsequent election, and those that did not.

Findings

Table 1 displays the descriptive statistics of our data. The initial cohort numbers 306. Again, the first election initiates a new party string, and no spell exceeds 11 elections. At every election, roughly 2/5 of incumbents fail to win another term, an attrition rate that is reasonably constant over our data set.

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Table 1 about here

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As we utilize statistical estimations based on a presumption of normality, we checked the distribution of votes for incumbent governors over our entire data set. Figure 1 shows the result: A distribution sufficiently Gaussian for standard statistical computations.

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Figure 1 about here

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Table 2 summarizes the overall findings. Elections are numbered from 0, the one that elevates the incumbent to the governorship, to the one at which the last incumbent is ousted, 10 being the maximum in our data. As noted in Table 1, our data includes 306 party spells. By definition, all 306 new incumbents won at E_0, a tautological survival rate of 1.00. The mean vote at E_0 is 53.20%. This value is not directly comparable to the incumbent votes thereafter, however, as the E_0 vote is that of winners only, while in every election thereafter a portion of the incumbents lose, depressing the overall mean. To address that, we separate incumbents into two subsets: those who won at the next election (E+1) and those who lost. From this table we extract a number of observations.

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Table 2 about here

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While we include standard deviations in the table, we offer Figure 2 to illustrate the data spread underlying just the four rightmost means in the top row of Table 2. It is this variability that underlies our analysis when we turn to the scatter diagrams that follow.

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Figure 2 about here

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Observation #1. **First Re-Election**.

The vote of the winners at E1 went up by 3.74 percentage points (57.31-53.57), while that of the losers shrunk by 9.21 percentage points (52.42-43.21). Those who won at E_1 did so by a significantly greater margin than that of their initial victory (see Appendix 1, Table 1.a).

Observation #2. **A Step Up or a Bump?**

The mean vote difference between winners at E_1 and E_2, down 2.4 percentage points (58.06-55.66) is borderline statistically significant at p = 0.012. Thus, it is a close call whether the jump from E_0 to E_1 represents a bump followed by a dip, or a step up.

Observation # 3. Subsequent Re-elections.

Comparing means between the rows of Table 2 can be misleading because of the decreasing frequency of cases. The mean of a small sample is not as reliable as a mean of a large one. For this reason, we turn to the scatter. Figure 3 includes E_0 for visual completeness, but this election is excluded from the re-election regression shown as the dotted line. From E_1, to defeat, incumbent vote is without a statistically significant change with term. See Appendix 1, Table A.2.

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Figure 3 about here

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Observation #4. The Loss

In like manner to Figure 3, we regressed the vote of the losers against term as shown in Figure 4. Aagain the slope cannot be said to be non-zero (Appendix 1, Table A.2). When a governorship falls, it does so abruptly, independent of term, and at a large vote loss, a rule-of-thumb estimate being about 12 percentage points below the average re-election results (55.42-43.29).

To graphically illustrate the suddenness of the fall, Figure 5 arranges the spells such that whatever its duration, its losing vote is plotted at the right, 306 points in our case. Working leftward are the 209 winning votes which preceded the loss, then the 98 that preceded that, and onward to the initial re-elections of the two spells that endured 10 years. As with Figure 3 and 4, Figure 5 shows insignificant slope up until the defeat (Appendix 1, Table 2.a).

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Figure 5 about here

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Observation #5. Difference in Vote by Party.

It may be of interest that we found another statistically weak difference (p=0.03) in the mean winning vote between Democrats (55.65%) and Republicans (54.47%), but without a substantial implication for this study.

Discussion

As noted at the outset, by now it is a commonplace that "it costs vote to rule." A common measure of the incumbent penalty is arrived at by dividing the net change in incumbent vote across its spell in office by the number of consecutive terms served. In the developed democracies, across hundreds of elections the average loss is between 2 and 3 percentage points per term (Budge et al. 2012, 276; Cuzán 2022, 39). A multi-variable model of the U.K. vote function yields a similar magnitude (Lewis-Beck, Nadeau, and Belanger 2004, 285). We investigated this phenomenon more closely, employing data on U.S. gubernatorial elections from the 1930s, the earliest start date of any of our party spells, to 2020. We found that what happens is not well-described as a "shrinking of support," as Cuzán (2021, 2022) has it, for this phrase suggests a more or less continuous rate of vote loss from election to election during an incumbency. Nor do we find that "the longer an incumbent government has been in power, the more votes it loses" (Stevenson 2002, 157-158). The data on gubernatorial elections reveals something quite different: Incumbents who win re-election do so at approximately the same vote time after time. The vote holds relatively constant, until it doesn't—and then it craters. The defeat comes about abruptly, and the loss is large—on average 12 percentage points below what it received in the previous election, independent of the number of terms in office. Figure 6 is a schematic representation of this "swim or sink" pattern with data displayed in Table 2 through E5.

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Figure 6 about here

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Dividing 12 percentage points by 4 or 6 terms yields an average loss of 3 to 2 percentage points per term, what Budge and others have suggested, but as spells of 4 to 6 terms comprise only 48 out of a total of 306, or 16%, that summary is not general. For the 208 spells of 1 to 2 terms (more than two-thirds of the total) the cost of governing would mathematically be 12 or 6 percentage points per term. We thus deem that the cost of governing calculated without regard to spell length is not well suited as a generalization.

Conclusion

Since Paldam (1991, 19) it is an accepted axiom that "it costs votes to rule." As Budge puts it, "possibly the best-supported inductive 'law' in political science is that government parties will lose around 2 to-3 percentage points of their previous vote in the following election" (2019, 321).). This value is often computed by taking the net change in incumbent vote over its spell in office and dividing by the number of terms, although comparable results are obtained with multi-variable models. We dug deeper into this relationship with data on U.S. gubernatorial elections and found that a 2 to 3 percentage point estimate does not represent what generally happens between when a party is first elevated to office and when it is ejected. Incumbent vote does not "shrink." Rather, it "swims or sinks." Neither does the vote loss grow larger the longer the incumbency lasts. The winners' vote holds reasonably constant election after election until the fall, when it drops roughly 12 percentage points regardless of how long they have remained in office.

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Appendix 1.

Table A.1. Tests for Equal Means

Ho:	E0 = E1	E1 = E2
count	209	98
mean	53.57/57.31	58.06/55.66
p (paired)	<0.001	0.012
alpha = 0.01	Reject Ho	Do not reject Ho?

Table A.2. Tests for Zero Slope

	Figure 3	Figure 4	Figure 5
n	450	306	450
Mean	56.93	43.29	56.93
Slope	-0.066	0.251	-0.458
Intercept	57.08	42.67	60.46
r	-0.015	0.073	-0.107
Sx	1.712	1.756	1.712
Sy	7.301	6.031	7.301
b	-0.066	0.251	-0.458
Sy-x	7.308	6.024	7.267
Sb	0.201	0.196	0.200
t	-0.325	1.278	-2.286
df	448	304	448
p	0.745	0.202	0.023
Ho: Slope = 0 alpha = 0.01	Do Not Reject Ho	Do Not Reject Ho	Do Not Reject Ho

Appendix 2. Elections Data.

As noted in the text, our elections data were drawn from the Wikipedia. The readiest way to access the data of any state in the Wikipedia is to enter the following phrase in google or the Wikipedia itself: "YEAR STATE gubernatorial election," e.g., "1938 Rhode Island gubernatorial election." That link takes one to a page showing the photos of the main party candidates, names and parties of other candidates, the results, and a source, in this case, John Leo More, ed., *Congressional Quarterly's Guide to U.S. Elections*, Congressional Quarterly, 1938. As well, the page includes links to the next and the previous election and another to "Category: Rhode Island gubernatorial elections," which in turn has links to all elections in that state starting in 1776. In more recent elections, the page includes much more information, including the political context in which the election took place, the nomination contest, the primary results, the general election campaign, polls leading up to the election, the final results, all candidates and parties included, and the turnout. Other Wikipedia general election pages include

https://en.wikipedia.org/wiki/Template:United_States_gubernatorial_elections

https://en.wikipedia.org/wiki/Category:Gubernatorial_elections_in_the_United_States_by_year

https://en.wikipedia.org/wiki/Category:Gubernatorial_elections_in_the_United_States_by_state

Table 1. Descriptive Statistics

Elections	805
Terms	756
Strings or Spells	306
Mean Terms	2.47
S.D. Terms	1.75
Wins	450
Rate	0.595
Mean Vote	51.93
S.D. Vote	9.55
All calculations done by the authors from data obtained in the Wikipedia.	

Table 2. Summary Means and (Standard Deviations)

								Win at E+1			Lose at E+1		
Election E	Count	Winners	Losers	Survival	All	All Winners	All Losers	Count	Vote at E	Vote at E+1	Count	Vote at E	Vote at E+1
0	306	306	0	1.00	53.20	53.20	0.00	209	53.57	57.31	97	52.42	43.21
					(5.09)	(5.09)			(5.45)				
1	306	209	97	0.68	52.84	57.31	43.21	98	58.06	55.66	111	56.66	43.19
					(9.82)	(7.39)	(7.13)		(8.32)				
2	209	98	111	0.47	49.04	55.66	43.19	61	56.36	57.08	37	54.50	43.88
					(8.80)	(7.15)	(5.29)		(8.17)				
	98	61	37	0.62	52.09	57.08	43.88	32	57.91	57.79	29	56.16	40.93
					(9.17)	(7.15)	(5.45)		(7.79)				
4	61	32	29	0.52	49.77	57.79	40.93	19	57.49	57.81	13	58.23	44.52
					(10.80)	(6.08)	(7.37)		(5.34)				
5	32	19	13	0.59	52.41	57.81	44.52	13	59.42	57.86	6	54.32	46.37
					(9.66)	(8.92)	(2.81)		(8.88)				
6	19	13	6	0.68	54.23	57.86	46.37	9	57.77	60.64	4	58.06	44.43
					(8.43)	(7.76)	(1.67)		(7.63)				
7	13	9	4	0.69	55.65	60.64	44.43	7	58.83	50.93	2	67.00	42.50
					(9.36)	(5.94)	(3.71)		(4.06)				
8	9	7	2	0.78	49.06	50.93	42.50	2	44.00[3]	51.00	5	53.70	47.72
					(7.02)	(6.73)	(3.54)		(10.47)				
9	7	2	5	0.29	48.66	51.00	47.72	0	57.91		2	51.00	46.65
					(2.22)	(1.27)	(1.78)						
10	2	0	2	0.00	46.65	0.00	46.65						
					(0.49		(0.49)						
Overall Weighted Mean					51.93	55.42	43.29		55.69	56.93		55.03	43.29

Figure 1. Distribution of Incumbent Vote

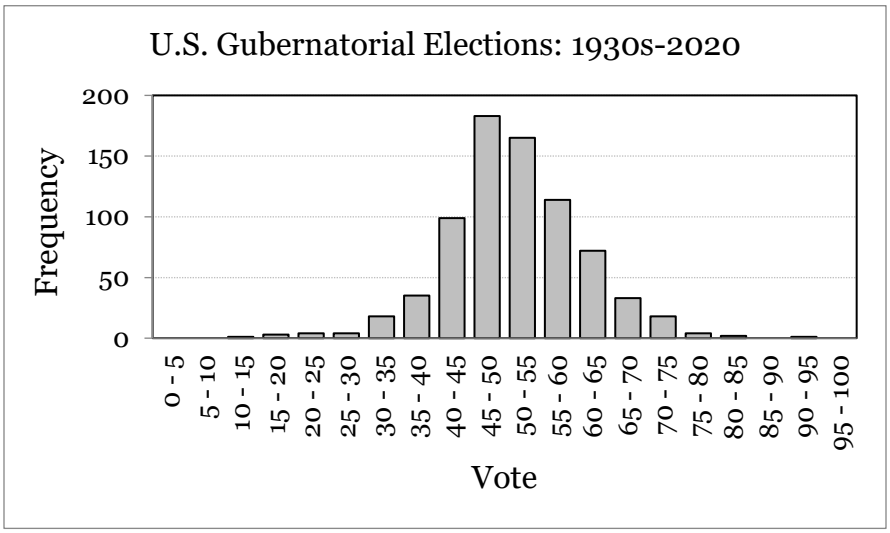
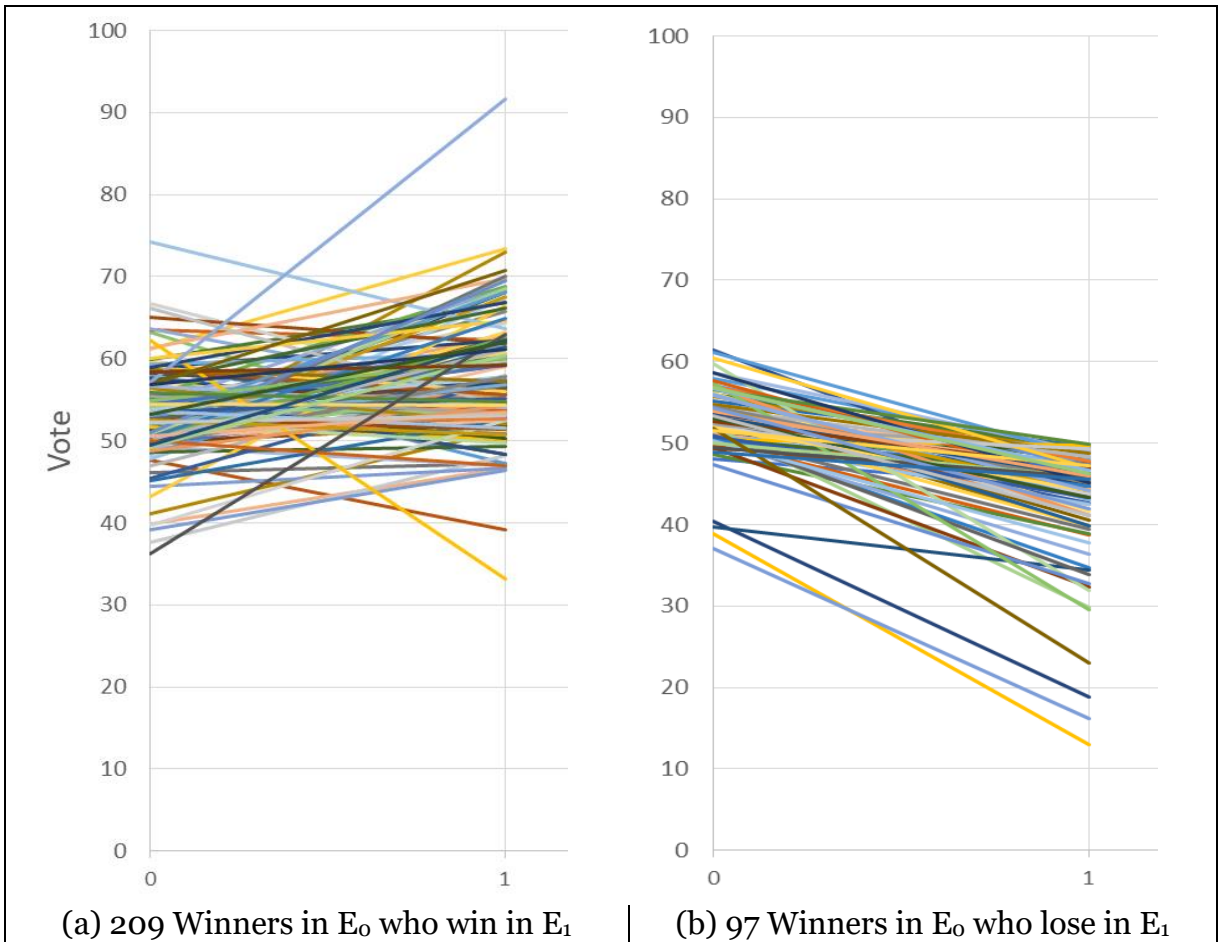


Figure 2. Voting Trajectories, E_0 to E_1[4]



(a) 209 Winners in E_0 who win in E_1 | (b) 97 Winners in E_0 who lose in E_1

Figure 3. Incumbent Votes by Term. Winners Only

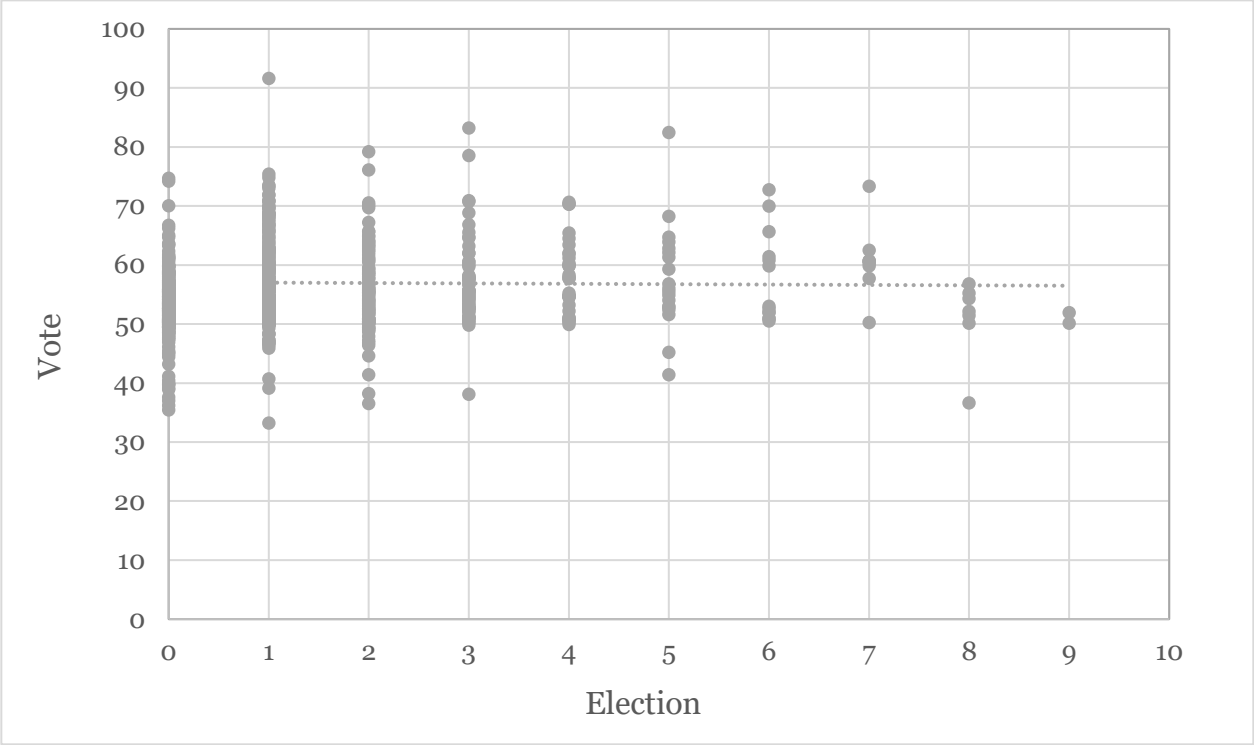


Figure 4. Incumbent Votes by Term, Losses Only

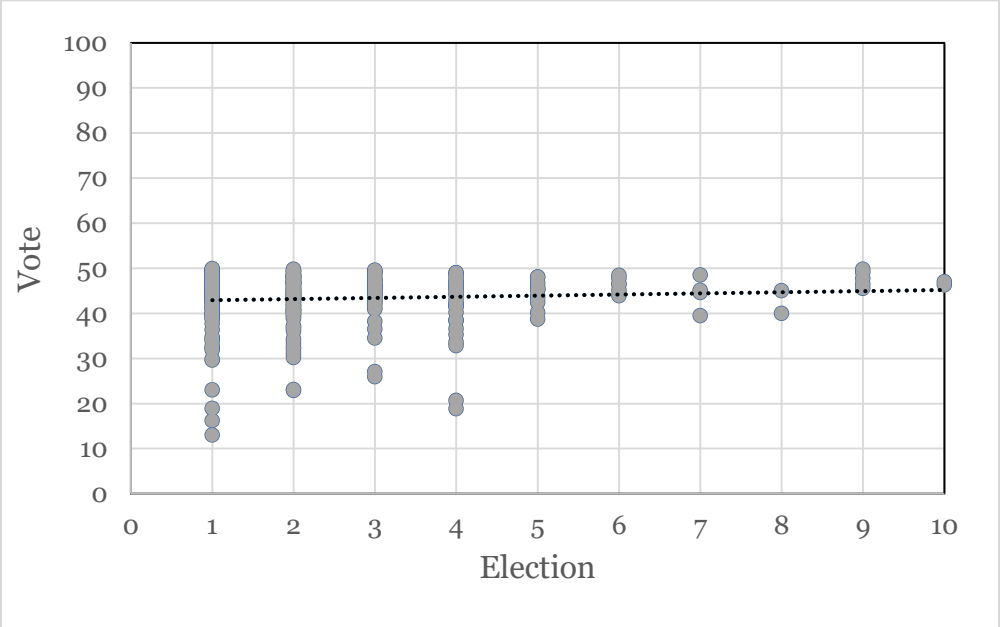


Figure 5. Incumbent Vote, Elections Preceding Defeat

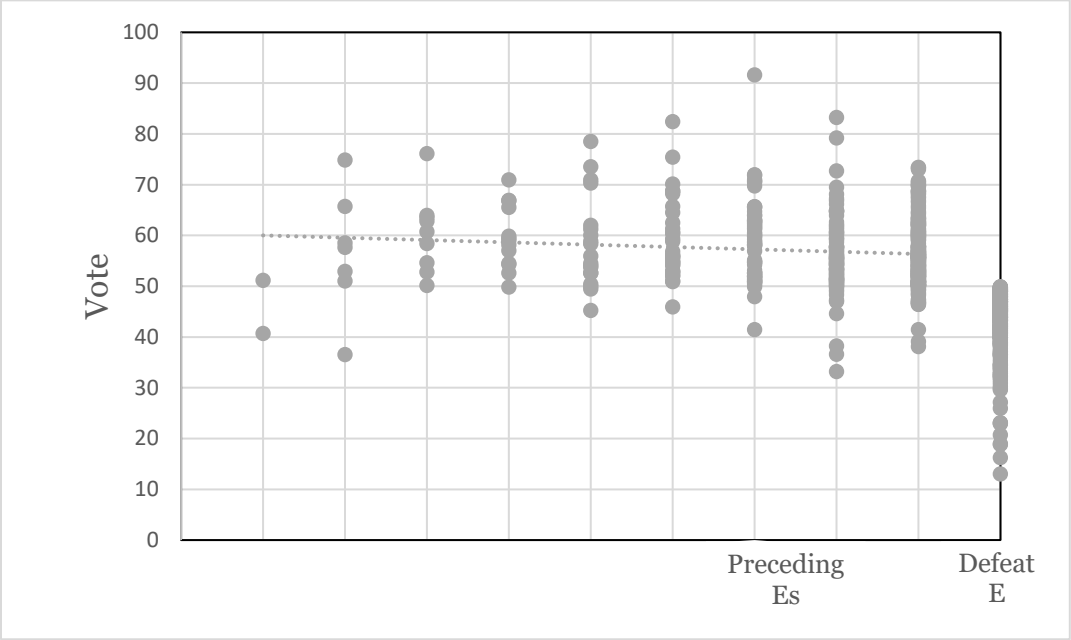
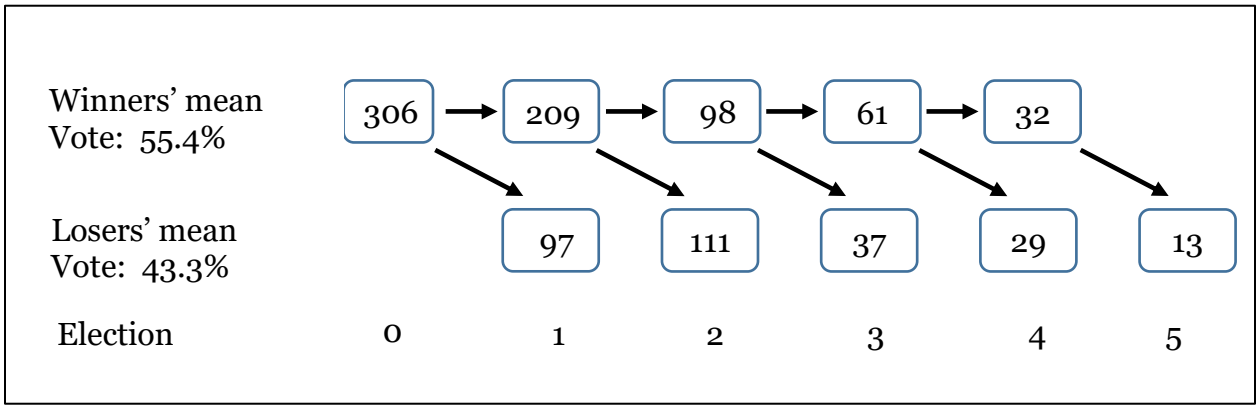


Figure 6. A "Swim or Sink" Schematic Representation of Incumbency



[1] Although the use of the electoral data in the Wikipedia is becoming more acceptable, it can still raise some eyebrows. Yet, we are unaware of any study that demonstrates that the data is systematically biased or in error. Moreover, beyond the raw data one finds there valuable information on the context in which the elections took place, independent or third party candidacies, and so on. This is very helpful in large-N studies where one encounters at least a few cases that need elucidation. For additional information on these data, see Appendix 2.

[2] Only rarely has a third party candidate won the governorship, and then in only a handful of states (e.g., Maine, Minnesota, Rhode Island). In earlier decades, a number of states held gubernatorial elections every other year, but presently only two still do so, New Hampshire and Vermont. Seventy percent of the elections in our data were held every four years. Also, four states hold elections in odd years: Louisiana, Kentucky, New Jersey, and Virginia.

[3] The mean lowered by Wisconsin, 1942, in which the Progressives won with 49.6%, but the winner died before inaugurations, and the state Supreme Court gave it to the Republicans, who had 36.4%, thus a re-election.

[4] Odd-appearing outliers merit checking. The lower-right point of Figure 2 comes from the Republican Louisiana governor ousted in 1983, that winner then losing in 1987 to a usurping Democrat (thus not a party change), who won with 33% in a three-way race. The Democratic incumbent, who came in second, then withdrew so that his co-partisan replacement would avoid a runoff. The upper right data point is Earl Warren's 92% California re-election in 1946, endorsed by both parties.