

POLITICS

Special Issue on Forecasting the 2024 US Elections

THE POLITICAL ECONOMY MODEL:

PRESIDENTIAL FORECAST FOR 2024

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Abstract:

Our political economy model, as it has come to be called, has offered up forecasts of the American presidential election outcome since the early 1980s. The model, based on referendum theory, as measured by the job performance of the president and the economy (1948 to the present), yields a forecast from data available in the summer of the election year. We consider alternative specifications of this parsimonious model, examining the possible effects of other economic measures, Covid-19, and incumbency advantage on forecasting. The current point estimate of the core political economy model predicts the Democratic candidate will receive 48 percent of the two-party popular vote, which translates into a narrow Electoral College loss for the incumbent party. This point forecast, however, comes with a considerable amount of uncertainty. There is an 11-point spread around our point estimate, which effectively means we have a horserace on our hands, with both horses close to the finish line.

The Political Economy (PE) model has been rolled out before presidential elections since the early 1980s, making it one of the oldest political science election forecasting models (Lewis-Beck and Rice 1982; 1984a). It expresses itself in a regression equation based on two independent variables, measured in the summer of the presidential election year, and selected from pivotal explanations of voting behavior. (Most recently, it was applied to the 2020 election. See Lewis-Beck and Tien 2020). The model rests on a straightforward referendum theory, which argues that votes for the incumbent party are supplied by the president's popularity and economic growth. In many ways, the 2020 presidential contest was unusual, what with Trump's quixotic rule, the onset of COVID-19, serious economic dislocation, and pervasive racial protests, not to mention other disturbances. Nevertheless, the effects of these events were absorbed, then made manifest, through the paths the explanatory equation implies, in its before-the-fact forecast of a Biden victory. Now we draw on the same formulation, with contemporary data, in order to forecast the outcome of the 2024 presidential election. We examine the robustness of the results in various ways, before coming to our conclusion. Our focus confines itself to the presidential race, which we regard as the national political linchpin in this electoral season. As shall be seen, as of this writing (late August), the race stands neck-and-neck.

PRESIDENTIAL ELECTIONS

Our presidential election model, conceptually, reads as follows:

$$\text{Incumbent Party Vote} = \text{Presidential Popularity} + \text{Economic Growth} \quad \text{Eq.1,}$$

with the variables operationalized as Presidential Vote = the two-party share of the national popular vote for the incumbent party, Popularity = Gallup's July job approval rating for the

president, and Growth = change in Gross National Product (GNP) growth over first two quarters of the election year (We prefer GNP over GDP because the former measures foreign as well as domestic holdings, and thus appears more comprehensive. Empirically, the two variables correlate at .99 from 1948 to 2020.)

Theoretically, the model contends that the president's party will be judged at the ballot box according to its performance on central political and economic issues. Below we display the ordinary least squares (OLS) estimates:

$$\text{Vote} = 37.60 + .28*\text{Popularity} + 0.78*\text{Growth} \quad \text{Eq. 2}$$

(15.34) (5.18) (2.14)

R-squared = .75. Adj. R-squared = .72. Root Mean Squared Error = 2.76.

Durbin-Watson = 2.30. N = 19 elections, 1948-2020. Figures in parentheses =

t-ratios. * = statistical significance = .05, two-tail. (The raw 2020 GNP number was an extreme outlier, at -5.4. To render it more tractable, we winsorized it downward, to -4.14, only three times the previous most extreme negative value, of -1.38).¹

The model, though simple, forecasted the outcome of the first Trump presidential competition, in 2016, quite accurately. In fact, it foresaw the two-party popular vote share almost exactly, signaling a 51.0 percentage share for Clinton, who did receive a 51.1 percentage share (Lewis-Beck and Tien 2016). Such precision awarded the model top rank, in an accuracy review of other structural forecasting models (Campbell 2017). It seems unlikely that such precision will be repeated in this contest, but we do believe it will perform reasonably well. [The model was not as accurate in 2020—its point forecast of 43.3 predicted the correct winner, but missed

the actual percentage of the two-party vote received by Trump by 4.4 points.] Turning to the 2024 forecast itself, we plug in values (available on 8/29/24) for the predictor variables, Popularity (36 percent in July) and Growth (GNP growth, .48 available on August 29) nonannualized for the first two quarters):

$$\text{Vote} = 37.60 + .28 (36) + .78 (.48) = 48.1$$

~48 percent for the Democrat Eq.3.

How accurate is this forecast likely to be? For each election year we use a jackknife estimate (dropping each election one at a time, re-estimating, then examining the error. See Table 1). This political economy model has correctly called the popular vote winner 84 percent of the time (16 out of 19 elections, missing only 1960, 1968, and 1976). As another evaluation aid, we can build a 95 percent confidence interval (two-tail) around our point estimate of 48, utilizing the RMSE= 2.76 and degrees of freedom = 16 : [43.5, 54.5]. Unfortunately, this band (with an 11 percentage point spread) is wide enough that we are left with considerable uncertainty. This makes sense, when we consider the point estimate, of 48 percent. Effectively, we have a horserace, with both horses close to the finish line.

Table 1. Presidential Election Predictions with the Political Economy Model, 1948-2020

Year	Popular Two-party Vote for Incumbent Party	Jack Knife Forecast	Forecast Error	Popular Vote Winner Correctly Predicted?
1948	52.4	50.3	2.1	Yes
1952	44.6	46.5	-1.9	Yes
1956	57.8	55.8	2.0	Yes
1960	49.9	52.2	-2.3	No
1964	61.3	60.2	1.1	Yes
1968	49.6	51.5	-1.9	No
1972	61.8	55.7	6.1	Yes
1976	49.0	52.12	-3.2	No
1980	44.7	40.71	4.0	Yes
1984	59.2	55.0	4.2	Yes
1988	53.9	53.2	0.7	Yes
1992	46.5	47.8	-1.2	Yes
1996	54.7	54.8	-0.1	Yes
2000	50.0	56.5	-6.5	Yes
2004	51.2	52.9	-1.7	Yes
2008	46.3	46.9	-0.6	Yes
2012	52.0	50.4	1.6	Yes
2016	51.1	51.5	-0.4	Yes
2020	47.7	45.3	2.4	Yes

Of course, so far we have focused on the popular vote. The Electoral College stands as the ultimate arbiter of presidential choice. Thus, we need to assess how the Electoral College converts popular votes to electoral college votes. Below, we forecast the Electoral College winner as we have in the past, using a bivariate ordinary least squares regression equation predicting the incumbent party's percent of the electoral college vote from its percent of the two-party popular vote.

$$\text{EC Vote} = -195.21 + 4.82 * \text{PopVote} \quad \text{Eq.4.}$$

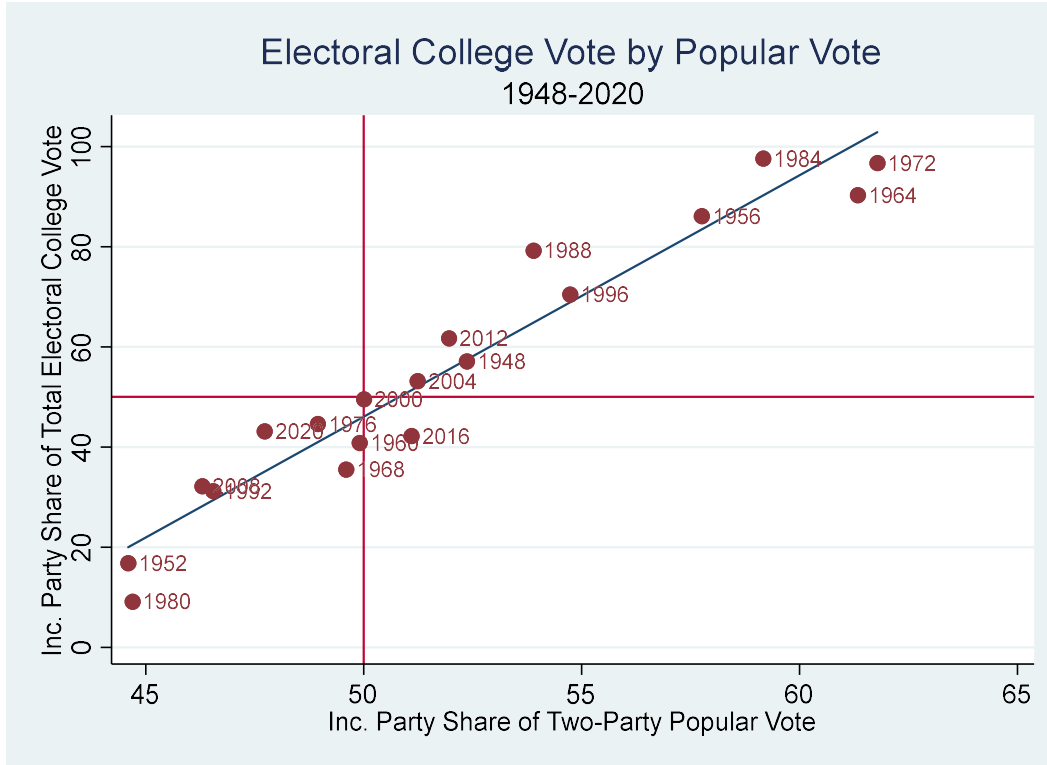
$$(-11.52) \quad (14.82) = \text{t-ratios}$$

$$R^2 = .93. \quad \text{adj } R^2 = .92. \quad N = 19 \text{ elections, } 1948\text{-}2020. \quad \text{RMSE} = 7.22.$$

where EC Vote = the incumbent party's percent of the Electoral College vote and PopVote = the incumbent party's share of the two-party popular vote.

We see, encouragingly, that the vote of the people, as expressed in our two-party popular vote measure, translates the general will very efficiently. That is, the statistical fit is extremely high—but it is not a perfect $R^2 = 1.0$. Moreover, the transmission of popular votes to electoral college votes reveals a bit of bias, in that to win a majority of the 538 Electoral College votes (i.e., 270), the Democratic candidate in 2024 needs to win 50.9 percent of the two-party popular vote. (On this partisan bias, see Hooghe et al. 2023). Figure 1 shows the strong relationship between percent of the two-party popular vote and Electoral College vote. As can be seen, there exists an area around the regression line—a sort of Bermuda Triangle—where undemocratic outcomes occur, i.e., the popular vote winner loses the electoral college vote. This Electoral College estimate makes the hill that the Democratic nominee must climb still steeper, in terms of the popular votes needed. The 2024 Electoral College vote forecast for the Democratic candidate is 197, after plugging in the popular vote forecast of 48.1 into the equation $\text{EC Vote} = -195.21 + 4.82 * 48.1$.

Figure 1.



ECONOMICS, COVID, INCUMBENCY: THEIR IMPACT?

The standard political economy model of Equation 1, as estimated, suggests that the presidential contest is a cliff hanger, even too-close-to-call. But is that so? Are there other variables, events, or institutions that have come into play to change the game? We explore three: the economy, Covid, and incumbency. With respect to the economy, maybe growth has become the wrong performance measure. After all, much commentary these days focuses on the macroeconomic variables of unemployment and inflation, which have certainly featured large in traditional economic voting studies (Lewis-Beck 1988). Moreover, a senior economist, Dean Baker (2014, 16), contends the following: “I view the unemployment rate as the single most important measure of the health of our economy.” As an exercise, we modify our specification, keeping the same lag structure, but substituting unemployment, inflation, and disposable

personal income respectively, for the growth variable. As we see in Table 2 (columns 2, 3, and 4), the inclusion of these factors does not improve predictive power or, more tellingly, change the direction of the point estimate from a Donald Trump win to a Kamala Harris win.

Perhaps something else is going on to dilute the usual impact of the economy. Certainly, there has been considerable journalistic assessment of the supposed inability of voters “to see” the economic prosperity that the Biden administration claims to have launched (Krugman 2024). One reason for such delusion might be the lingering effects of Covid-19, which seem to have left many folks in an enduring fog, producing collectively something akin to PTSD of the public mind. (This was possibly the case in the recent elections in The Netherlands; see Mongrain et al. 2023). Covid effects, then, borrowing from J.C. Wahlke and David Easton (1965, xvi, 143), may cause presidents to lose “diffuse,” as well as “specific” electoral support. In this situation, Covid conditions the economic response. That is, the model would change as follows:

$$V = f(\text{Popularity} + \text{Growth} + (\text{Growth} \times \text{Covid dummy})). \quad \text{Eq. 5.}$$

where the Covid dummy = 1 for 2020, and 0 otherwise.

To test this possibility, we estimate the model in Table 2 (column 5), in order to see if there are additional Covid effects, across the Trump administration and the Biden administration.² Of course, this assumes Covid is putting the break on growth. Instead, it might be that Covid is putting the brake on Popularity, in which case the following model might be preferred (see the estimates in column 6).

$$V = f(\text{Growth} + \text{Popularity} + (\text{Popularity} \times \text{Covid dummy})). \quad \text{Eq. 6.}$$

We see that, in this formulation, the COVID effects on popular vote are minimal. Comparing the results to the Political Economy model as the baseline (Table 2, column 1), little change in the model fit statistics occur, and neither of the Covid interaction variables are

statistically significant at any reasonable level. Furthermore, and importantly, the effects of the economy on presidential vote choice continue to be statistically and substantively significant. Contrary to the arguments of some, the economy continues to matter (Donovan et al. 2019; Small and Eisinger 2020; Lewis-Beck and Martini 2020; Tien and Lewis-Beck 2023).

An important institutional leverage for Biden rested with his incumbency advantage. Now that Vice President Kamala Harris is running in his stead, precious votes could be lost. Moreover, the incumbency advantage appears stronger for candidates who are *elected* incumbents, rather than *appointed* incumbents. That is to say, a sitting president who took office by means other than their own election (i.e., Truman, Johnson, Ford). The elected incumbent advantage model would read as follows:

$$\text{Vote} = f(\text{Popularity, Growth} \times \text{Elected President, Elected President}), \quad \text{Eq. 7}$$

where Growth (GNP change) is interacted with the Elected President variable, scored 1 = an election with an elected incumbent running, or scored .5 = an election with no elected incumbent running. (For example, De Ferrari 2015 finds that economics has a different impact when non-incumbents run in Latin American democracies). In Table 2 (column 7), the OLS estimates for this model are encouraging, in that the approval, elected president, and interaction (growth x incumbency) coefficients are statistically significant. Moreover, there are gains in goodness-of-fit, with an $R^2 = .82$. Tellingly, the Root Mean Squared Error drops to 2.40.³ This model makes clear the relevance of both the economy and the incumbency context, in determining the electoral success of President Biden's campaign. Since he is no longer running, his incumbency advantage, such as it is, will not be available to Harris. Perhaps she can make up the advantage, which would certainly help her in such a tight race.

There does exist, in addition to Model 7, another possibility for specification of the incumbency effect, explored in earlier work (Lewis-Beck and Tien 2004). This Model 8 (see Table 2, column 8) consists of three independent variables: Popularity, (GNP x Elect), and Incumbent Closeness, where 1 = incumbent party candidate is the elected president (1956,1972, 1980, 1984, 1992, 1996, 2004, 2012, 2020) or is united with the president who left office early (1948, 1964, 1976 -- and Harris in 2024); 0 = if the incumbent party candidate has a tolerable association with the previous president (1988, 2008, 2016); -1 = if the incumbent party candidate and the president are not united (1952, 1960, 2000). Model 8 forecasts 49.1 percent of the two-party popular vote, compared to the Model 7, which forecasts 47.1. Thus, this more nuanced incorporation of incumbency effects gives candidate Harris more support. Nevertheless, it, too, still fails to generate an Electoral College forecast that reaches the 270 votes needed to win.

Table 2. Forecasting the 2024 U.S. Presidential Election: A Comparison of Predictors

	Pol-Econ (1)	Unem- plymnt (2)	Infla- tion (3)	DPI (4)	GNP* Covid (5)	Appro v* Covid (6)	Elected Incmbnt Advant g (7)	Incmbnt Close- ness (8)
2024 value								
July presidential approval	0.28 * (5.18)	.31* (5.57)	.36* (5.76)	.33* (6.11)	.26* (4.73)	.26* (4.73)	.28* (6.09)	.28* (6.79)
GNP change	0.78* (2.14)				1.17* (2.25)	1.18* (2.25)		
Unemployment rate change		.01 (-0.84)						
Inflation rate change			.54 (1.11)					
Disposable Personal Income change				.87 (.97)				
GNP change * Covid dummy					-1.04 (-1.06)			
Pres approval * Covid dummy						.10 (1.06)		
GNP * Elect							.98* (2.88)	.91* (3.01)
Elected pres. running							4.02* (1.82)	
Incumbent party advantage								1.89* (2.89)
Constant	37.6* (15.34)	37.18* (13.32)	33.39 * (8.75)	34.27 * (9.91)	37.50* (15.37)	37.50* (15.37)	34.75* (12.80)	36.95* (19.33)
R-squared	0.75	0.70	0.70	0.70	.77	.77	.82	.86
Adj. R-squared	0.72	0.66	0.67	0.66	.72	.72	.79	.83
RMSE	2.76	3.06	3.01	3.04	2.75	2.75	2.40	2.12
D-W	2.30	2.08	2.04	1.97	2.39	2.39	1.48	2.12
2024 forecast*	48.1	48.5	47.8	48	47.4	47.4	47.1	49.1

*= this row bases itself on the final GNP numbers released on August 29, 2024

Dependent variable = incumbent president's party share of the two-party vote.

Presidential approval = presidential approval rating, as measured by the first Gallup Poll in July of the election year.

GNP change = Gross National Product, as percentage change (non-annualized) in GNP (constant dollars) from the fourth quarter of the year prior to the election to the second quarter of the election year, data from Bureau of Economic Analysis (<https://www.bea.gov/>).

Unemployment rate change = percentage change in unemployment rate from the fourth quarter of the year prior to the election to the second quarter of the election year, data from U.S. Bureau of Labor Statistics (<https://www.bls.gov/>)

Inflation rate change = percentage change in inflation rate from the fourth quarter of the year prior to the election to the second quarter of the election year, data from U.S. Bureau of Labor Statistics (<https://www.bls.gov/>)

Disposable Personal Income change = percentage change in disposable personal income from the fourth quarter of the year prior to the election to the second quarter of the election year, data from Bureau of Economic Analysis (<https://www.bea.gov/>).

(GNP change * Covid dummy) and (Pres Approval * Covid dummy) are interaction variables where Covid dummy is scored 1 for 2020, and 0 for all other election years.

GNP x Elect = the growth rate in the real GNP across the first six months of the election year times whether an elected president is running (scored 1) or not running (score .5)

Incumbent Party Advantage where 1 = incumbent party candidate is the elected president (1956, 1972, 1980, 1984, 1992, 1996, 2004, 2012, 2020) or is united with the president who left office early (1948, 1964, 1976 -- and Harris in 2024); 0 = if the incumbent party candidate has a tolerable association with the previous president (1988, 2008, 2016); -1 = if the incumbent party candidate and the president are not united (1952, 1960, 2000),

R-squared = the coefficient of multiple determination; the Adj. R-squared = the R-squared adjusted for degrees of freedom; RMSE = Root Mean Square Error; D-W = Durbin-Watson statistic; * = statistical significance at .05 one-tail; the figures in parentheses are t-ratios; N = the 19 presidential election observations, 1948-2020.

CONCLUSIONS

As of this moment (late August), our political economy model forecasts a nip-and-tuck presidential race, with either party almost equally likely to lose. While this forecast floats on a raft of uncertainty, it is not an “empty” forecast. For one, the fact that the Democrats are no longer running an elected incumbent will probably impose a cost in votes. For another, a “too-close-to-call” race carries considerable information, instructive for voters and other political actors, in their strategic quest to gain ground and cross the line first. Like other forecasts made from a distance in time, they may be averted by a pro-active citizenry.

Research documentation and data that support the findings of this study have not yet been verified by PS's replication team. Data will be openly available at the Harvard Dataverse upon publication of the final article.

Conflicts of Interest

The authors declare no ethical issues or conflicts of interest in this research.

References

- Baker, Dean. 2024. "Do People Think the Economy is Bad Because the Media Failed, or Because the Economy is Actually Bad? Media Failure." *The Nation*, July pp. 16-17.
- Campbell, James E. 2017. "Introduction: A Re-cap of the 2016 Election Forecasts," *PS: Political Science & Politics* 50:331-32.
- Donovan, Kathleen, Paul M. Kellstedt, Ellen M. Key, and Matthew J. Lebo. 2019. "Motivated Reasoning, Public Opinion, and Presidential Approval." *Political Behavior* 42:1201–1221.
- De Ferrari, Ignazio. 2015. "The Successor Factor: Electoral Accountability in Presidential Democracies." *Comparative Political Studies* 48(2):193-230.
- Hooghe, Marc, Dieter Stiers, and Michael S. Lewis-Beck. 2023. "Has the Electoral College Grown More Disproportional? An Analysis of Election Results, 1876-2020," *Politics and Policy* 51(April): 167-183. <http://dx.doi.org/10.1111/polp.12521>.
- Krugman, Paul. 2024. "The Matrix of Consumer Discontent." *The New York Times*. July 9.
- Lewis-Beck, Colin and Nicholas F. Martini. 2020. "Economic Perceptions and Voting Behavior in U.S. Elections." *Research and Politics*, 7(4):1-6.
- Lewis-Beck, Michael S., 1988. *Economics and Elections: The Major Western Democracies*. Ann Arbor, MI: University of Michigan Press.
- Lewis-Beck, Michael S., and Tom W. Rice. 1982. "Presidential Popularity and Presidential Vote." *Public Opinion Quarterly* 46:534-537.
- Lewis-Beck, Michael S., and Tom W. Rice. 1984. "Forecasting Presidential Elections: A Comparison of Naive Models." *Political Behavior* 6(1):9–21.
- Lewis-Beck, Michael S., and Charles Tien. 2004. "Jobs and the Job of President: A Forecast for 2004." *PS: Political Science and Politics* 37(4):753-758.
- Lewis-Beck, Michael S., and Charles Tien. 2016. "The Political Economy Model: 2016 US Election Forecasts." *PS: Political Science and Politics* 49: 661-663.
- Lewis-Beck, Michael S., and Charles Tien. 2020. "The Political Economy Model: A Blue Wave Forecast for 2020." *PS: Political Science and Politics*, 2020, DOI: <https://doi.org/10.1017/S1049096520001365>.
- Mongrain, Philippe, Will Bruce, Ruth Dassonneville, and Michael S. Lewis-Beck. 2023. "A Political Economy Model Forecast for the 2023 Dutch Election." October 12. *Blog LSE*

EUROPP. <https://blogs.lse.ac.uk/euoppblog/2023/10/12/a-political-economy-model-forecast-of-the-2023-dutch-election/>

Small, Raphael, and Robert M Eisinger. 2020. “Whither Presidential Approval?” *Presidential Studies Quarterly* 50 (4):845–863.

Tien, Charles. 2024. “Replication Data for The Political Economy Model: Presidential Forecast for 2024.” *PS: Political Science & Politics*.

Tien, Charles and Michael S. Lewis-Beck. 2023. “Economics, Covid, Election Forecasting: Did Trump Escape Blame?” *American Politics Research* 51(5): 619-632.
<https://doi.org/10.1177/1532673X231168584>

Wahlke, J. C., and David Easton. 1965. “A Framework for Political Analysis.” In *The ANNALS of the American Academy of Political and Social Science* 360(1):179-180. Englewood Cliffs, N.J.: Prentice-Hall. <https://doi.org/10.1177/000271626536000117>

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Endnotes

¹ We adjusted the economic data for our 2020 forecast as all second quarter economic numbers were extreme outliers due to COVID-19. GNP change over the first two quarters of the election year dating back to 1948 has ranged from -1.38 to 4.18. We calculated the GNP change to be three times the lowest number, yielding a data point of -4.14. While this may appear to be a reasonable adjustment for such a gross outlier it was not the only possible adjustment. We considered alternative adjustments, such as using first quarter GNP growth only (instead of the two quarter measure the model employs). We did not favor this alternative adjustment because it ignores the pandemic and openly violates the theoretical two-quarter model specification we have always used. Certainly, one can continue to argue about what adjustment should be made. For example, *The Economist* model contended the economic impact amounts to The Great Recession plus 40 percent (*Forecasting the US 2020 Election*, 2020). That adjustment is, in some sense, arbitrary, as ours could be. However, we base our forecast on our theory, the empirical track record of the model, and our reasoned assessment of the economic reality going into that election.

² The results in Table 2 are with the adjusted GNP number for 2020. To test for the possibility that this adjustment is causing us to not find a Covid-19 effect, we also ran the model with the raw 2020 GNP number of -5.4. The results with the raw 2020 number are essentially the same with the coefficient on the interaction variable changing to -1.07 from -1.04 while still failing to achieve statistical significance.

³ An alternative specification of the incumbency advantage model would be to include the growth variable in equation 7. With this alternative specification, we run into high multicollinearity as only the popularity variable is statistically significant, while the R-squared is a high .83.

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