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AN EVALUATION OF THE TRIAL-HEAT AND ECONOMY FORECAST OF THE PRESIDENTIAL VOTE IN THE 2000 ELECTION

JAMES E. CAMPBELL
University at Buffalo, SUNY

Although pollsters tell everyone that polls only reflect the views of likely voters at a specific point in time, everyone nevertheless uses polls to get a read on the future. The problem is that polls as literal forecasts are not especially accurate until late in the campaign. However, when interpreted in light of their historical relationship to the vote and taking the economic context of the intervening campaign into account, polls conducted at the outset of the campaign have been useful in obtaining much more accurate predictions of the division of the popular two-party presidential vote. This is what the trial-heat and economy forecasting model does. This evaluation and update of the model address two questions about the model: (a) How accurate was it in the 2000 presidential election? and (b) What lessons might we take away from this election?

Based on (a) the in-party candidate's share of the two-party support in the Gallup Poll's trial-heat or presidential preference question that was available at Labor Day and (b) the second-quarter growth rate in the gross domestic product (GDP), as released in August by the Bureau of Economic Analysis, the forecasting model predicted that Al Gore would receive 52.8% of the two-party popular vote. Although the model's forecast typically is a mix of about two-thirds poll and one-third economy, because the early September poll was about evenly split between Bush and Gore (a very slight tilt to Bush at the time), the forecast for Gore almost entirely reflected the strong second-quarter GDP growth rate. Of the 14 presidential elections from 1948 to 2000, the second-quarter election year economy ranked fourth strongest (5.3% annualized). This was well over what appeared to be the satisfaction threshold of voters. Of the 9 previous elections with second-

quarter economic growth over 2.5% (annualized), seven in-party candidates won and only two lost. All four of the in-party candidates who ran with weaker second-quarter economies lost.

Although ballots were still being counted more than 2 weeks after the election, it appears that Gore in fact received about 50.3% of the national two-party popular vote. The forecast overpredicted Gore's share of the two-party vote by 2.5 percentage points. This error is larger than the mean absolute error of out-of-sample forecasts of 1.5 percentage points but well within the historical range of out-of-sample errors for the model. Three out-of-sample errors (for 1952, 1956, and 1996) were larger than this year's error (Campbell, 2000b, p. 37). Considering that the polls at the time of the election were off by a percentage point and that the unanticipated aspects of the campaigns make some difference, the forecast error was within the acceptable range. Still, recognizing that (a) one should not expect zero error in a presidential forecast because the forecasts are based on imperfect poll and economic data and that (b) the campaigns take unforeseeable turns that may affect voters in ways that the models cannot anticipate ahead of time, it would be advisable to learn what we can from this election and strengthen the model if possible.

To the extent that the trial-heat and economy model was in error this year, why was it? There are two ingredients in the model: the polls and the economy. Although there are reasons to be increasingly wary of the polls, with extraordinary volatility owing to dubious methods of determining who are likely voters, the polls this year were not a problem for the forecast. The polls alone would actually have produced a very accurate forecast this year.[1]

Also, as Table 1 demonstrates, the model applied at later stages in the campaign gave increasing weight to the polls, gave decreasing weight to the economy, and became increasingly accurate in this year's election. The October and November timings of the model, depending less on the economy and more on the polls, were quite accurate.

Because the Labor Day forecast for Gore was based largely on the economy, the problem of overpredicting the Gore vote is most likely related to the economy. Either the model overestimated the impact of the economy (as measured), or the unanticipated aspects of the campaign offset the economic tide anticipated to favor Gore.[2] My guess is that both are true. Elections without an incumbent in the race are less

TABLE 1
Forecasting the 2000 Presidential Vote Using Trial-Heat Polls
and Second-Quarter Economic Conditions, 1948-1996

Predictor Variable	Labor Day	Late September	October	November
Preference poll two-party percentage for the in-party candidate	0.49 (8.52)	0.54 (9.01)	0.59 (8.06)	0.62 (7.70)
Second-quarter growth rate for the real gross domestic product (GDP) (nonannualized)	2.29 (4.57)	2.20 (4.59)	1.79 (3.30)	1.51 (3.30)
Constant	25.85	23.41	20.61	18.39
Adjusted R^2	.91	.92	.90	.89
Poll value in 2000	48.96	48.89	46.67	47.78
GDP value in 2000	1.302	1.302	1.302	1.302
Predicted vote in 2000	52.8	52.6	50.5	49.98
Error (from 50.3% Gore vote)	2.5	2.3	0.2	0.3

SOURCE: Updated from Campbell and Wink (1990). See Table 1.8 in Campbell (2000b, p. 36) or Table 1.5 in Campbell's *The American Campaign* (2000a, p. 19). For comparison, the two-party Gore percentage in the final Gallup Poll released on election day was 48.9%, an error of 1.4 percentage points. The two-party Gore percentage in the final Zogby Poll released on election day was 51.1%, an error of 0.8 of a percentage point.
NOTE: $N = 13$. Dependent variable: the two-party popular vote for the in-party's presidential candidate. The coefficients in parentheses are t ratios. The October model is 20 days before the election. The November model is 5 days before the election. The two-party vote for Gore was 50.266%.

of a referendum on the in-party's performance than elections with an incumbent running. Voters may be more inclined to focus credit or blame personally on the incumbent president than a would-be successor of the president's party.

In addition, in this particular race, the in-party candidate (Gore) failed to run a retrospective campaign emphasizing the credit that the in-party should receive because of the economy. The model anticipates that candidates acting in their own self-interest in the campaign will convert a good economy into votes. They will take credit or place blame. Candidates do not automatically receive credit or blame for economic conditions; they must convince voters to grant the credit or place the blame, and this was not done in this campaign. In short, though the model's error is well within the bounds of its record, there is enough error to be shared between the model and Gore.

Although two sources of error seem likely, there is greater justification for the model to make its specification error than for Gore to have made his campaigning error. Because of the unavailability of polling data for earlier elections, the estimation of the trial-heat and economy model is based on data from elections since 1948. Before this year's election, only 4 of these 13 prior elections were open-seat contests (1952, 1960, 1968, and 1988). Because of the few cases involved, a variant of the Labor Day model that included an interaction term (the economy with whether an incumbent was running) was indistinguishable from the simple additive model. The interaction term did not improve the model's fit (was not statistically significant) even after the 2000 election was included in the analysis.

The problem of determining from an aggregate analysis whether an in-party candidate who is not the incumbent is accorded by voters with full credit, half credit, or no credit for the economy is evident in Table 2. The first set of three equations in Table 2 does not include the 2000 election, and the second set includes 2000. The first equation in each set is the original trial-heat and economy equation. The second and third equations take into account whether the in-party candidate is the incumbent through an interaction term with the economic variable. The second equation in each set assumes that a nonincumbent of the in-party (a successor candidate) receives half the credit (or blame) that an incumbent would receive. The economic variable is multiplied by 0.5 for nonincumbents of the in-party and 1 if the in-party candidate is the incumbent. The third equation assumes that a nonincumbent is not given credit or blame for the economy. In this equation, the economic variable is multiplied by zero for nonincumbents of the in-party and 1 if the in-party candidate is the incumbent.

As the goodness-of-fit measures indicate, there is little to choose from in these three specifications of how economic conditions are attributed to nonincumbents. All three versions of the model, whether 2000 is included or excluded, are about equally strong. The version that produced the most accurate forecast for this year's election (the no-effect version) is based on an assumption that successor candidates receive no credit or blame for how their party handled the economy (apart from that already incorporated into their poll numbers). However, this is only one case and could as easily be explained by the peculiarity of the Gore campaign as anything else. The most plausible variants of the

TABLE 2

**Alternative Attribution Treatments of the Economy in the Labor Day Trial-Heat
and Economy Forecasting Models of the Presidential Vote, 1948-2000**

| | *Effect of the Economy on a Nonincumbent In-Party Candidate* | | | | | |
| | *1948-1996* | | | *1948-2000* | | |
Predictor Variable	*Full Effect*	*Half Effect*	*No Effect*	*Full Effect*	*Half Effect*	*No Effect*
Early September preference poll two-party percentage for the in-party candidate	0.49 (8.52)	0.47 (8.01)	0.45 (6.87)	0.50 (8.49)	0.47 (8.29)	0.45 (7.22)
Second-quarter growth rate for the real gross domestic product (GDP) (nonannualized)	2.29 (4.57)	2.45 (4.64)	2.35 (4.01)	2.17 (4.28)	2.43 (4.70)	2.36 (4.23)
Constant	25.85	27.17	28.21	25.25	26.87	28.19
Number	13	13	13	14	14	14
R^2	.92	.92	.91	.91	.92	.91
Adjusted R^2	.91	.91	.89	.89	.91	.89
Standard error	1.83	1.81	2.00	1.90	1.78	1.90
Predicted/expected Gore vote %	52.8	51.6	50.3	52.5	51.5	50.3
Error %	2.5	1.3	0.1	2.2	1.2	0.0

NOTE: Dependent variable: the two-party popular vote for the in-party's presidential candidate. The coefficients in parentheses are *t* ratios. To estimate the half-effect attribution, the GDP variable was multiplied by 0.5 when the in-party candidate was not an incumbent (1952, 1960, 1968, and 1988) and 1 otherwise. To estimate the no-effect attribution, the GDP variable was multiplied by 0 when the in-party candidate was not an incumbent (1952, 1960, 1968, and 1988) and 1 otherwise. A model with both an additive and interaction term (the economy with whether an incumbent was running) was also estimated. The coefficients were 1.16 for the additive GDP term and 1.28 for the interaction term, but because of the small number of cases, neither was statistically significant.

TABLE 3
**Out-of-Sample Presidential Vote Forecast Errors for
Trial-Heat and Economy Models With Full and Partial Attribution
of Economic Effects for Nonincumbents of the In-Party, 1948-2000**

| Election | Actual | In-Party Percentage of the Two-Party Popular Presidential Vote | | | |
| | | Full Attribution to Nonincumbent | | Half Attribution to Nonincumbent | |
		Expected	Error	Expected	Error
1948	52.3	49.7	+2.6	50.3	+2.0
1952	44.6	47.3	−2.7	47.5	−2.9
1956	57.8	54.2	+3.6	54.4	+3.3
1960	49.9	49.9	0.0	50.4	−0.4
1964	61.3	61.6	−0.3	61.3	0.0
1968	49.6	49.7	−0.1	48.3	+1.3
1972	61.8	60.0	+1.8	60.3	+1.5
1976	49.0	47.3	+1.7	48.2	+0.7
1980	44.7	43.8	+0.9	42.1	+2.6
1984	59.2	59.4	−0.2	59.8	−0.7
1988	53.9	54.1	−0.2	53.4	+0.5
1992	46.5	47.0	−0.5	47.6	−1.1
1996	54.7	58.3	−3.5	58.5	−3.7
2000	50.2	52.8	−2.5	51.6	−1.3
Mean absolute error			±1.5		±1.6
Median absolute error			±1.3		±1.3
Largest absolute error			±3.6		±3.7
Standard deviation of absolute error			1.3		1.2

model would seem to be the original version or the half-effects version. The half-effects version is just as strong or slightly stronger in terms of the goodness of fit and would have reduced the error this year to about the average out-of-sample error.

Table 3 presents the out-of-sample errors for the original full-effect and the half-effect versions of the trial-heat and economy model. Again, there is no clear winner between these two versions. The original version of the model has a slightly smaller mean absolute error but has a slightly higher standard deviation of errors. Of the 14 elections, the full attribution (original) version produced smaller errors in 8 elections, and the half-effects version produced smaller errors in 6 elec-

tions. With no solid record to choose between these two variants of the model and without even solid grounds to dismiss entirely the no-effects variant, probably the most prudent approach to this is to consult both the full- and half-effects models until future elections allow a winner to be declared between them.

As to the second possible source of this year's error, quite unexpectedly given economic conditions, Gore ran a prospective and partisan campaign rather than a retrospective and consensus-oriented campaign. As Gore put it in his acceptance speech at the Democratic convention, "This election is not an award for past performance. I'm not asking you to vote for me on the basis of the economy we have." The most plausible explanation of this strategy is that the vice president wished to avoid becoming entangled in the various scandals associated with the Clinton administration. He went to great lengths to avoid even mentioning the president he had served with for 8 years. In the three presidential debates, he did not mention President Clinton by name even once, and when he deviated from this, it became news. The day before the election, a headline to a front-page story in *The New York Times* read as follows: "Gore Rallies Base: Vice President Invokes Clinton Name During 19-Hour Swing" (Seelye, 2000). With President Clinton's approval ratings hovering around 60%, despite his impeachment and public dissatisfaction with him on a personal level, it would seem that Gore probably miscalculated in not using the president in the campaign and more certainly erred in downplaying the administration's role as stewards of the prosperity. Whether the nation is better off as a result of this miscalculation is up to each reader, but the error of the trial-heat and economy model as well as most of the other models would probably have been reduced had Gore run the expected retrospective campaign. No hand recount needed.

NOTES

1. Based on a bivariate forecasting model predicting the in-party vote by the in-party candidate's share of the Labor Day preference poll, Gore would have been expected to receive 51.1% of the vote, just .8 of a percentage point higher than his November vote percentage.

2. It has been suggested that the broad-based economic numbers used by this and other models may have exaggerated how good the economy really was going into this election. However, the subjective indicators support the very positive numbers used in this and other models.

According to the Gallup Poll, 66% of Americans in late spring (and later numbers remained around this level) said that economic conditions were good or excellent. At the same time in the 1996 election year, 30% reported the economy as being good or excellent, and in 1992 only 12% characterized that economy in those terms. Similarly, satisfaction with "the way things are going in the United States" was only at 20% in 1992, rose to 37% in 1996, and soared to 59% in 2000.

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James E. Campbell is a professor of political science at the University at Buffalo, SUNY. He is a former APSA Congressional Fellow and program director for political science at the National Science Foundation. He is the author of The American Campaign: U.S. Presidential Campaigns and the National Vote, Cheap Seats: The Democratic Party's Advantage in U.S. House Elections, *and* The Presidential Pulse of Congressional Elections. *He coedited* Before the Vote: Forecasting American National Elections *and is also the author of numerous journal articles.*