We can also check how our forecast prevails if we substitute trial-heat polls later than July. Table 1 includes subsequent forecasts that we made, based on equations using recent trial-heat polls conducted at those points later in the campaign timeline. There we see that models of the vote from dates before and after the conventions yielded virtually no changes in the forecast (52.6% or 52.7% Obama). The first debate shifted the forecast of the Obama vote downward, but only slightly. Using a model including polls after that debate, we predicted a 51.4% share for Obama. This is a little less than the president received on Election Day.

ACKNOWLEDGMENTS

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NOTE

1. We would have forecasted a nearly identical share (52.9%) only using LEI, that is, without the polls.

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PROXY FORECASTS: A WORKING STRATEGY

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Our Proxy Model of presidential election forecasting declared, from data issued six months before the November contest, that Obama would garner 52.7% of the two-party popular vote. [See the model release in our *Monkey Cage* blog-post (Lewis-Beck and Tien 2012a) on September 18, 2012, and in the October issue of *PS* (Lewis-Beck and Tien 2012b).] Thus, that forecast called the correct winner, with a point estimate error of only 0.9 percentage points.

Before the 2012 election, we offered two forecasting models: our long-standing Jobs Model and our new Proxy Model (Lewis-Beck and Tien 2012b). Whereas the Jobs Model derives from voting behavior theory, the Proxy Model derives from a data-driven search. Unexpectedly, the two models did not converge in their forecasts. We felt a scientific obligation to announce a preference, and initially gave the nod to the Jobs Model (Lewis-Beck and Tien 2012b). However, an accumulation of external evidence finally convinced us to give the nod instead to the Proxy Model.

The Proxy Model Applied

The Proxy Model for vote forecasting bases itself on an empirical surrogate for that vote, measured prior to the election. The model reads as follows:

$$\text{Vote}_t = f(\text{Vote Proxy}_{t-x}) \quad (1)$$

where Vote_t = the percentage of the two-party popular vote; Vote Proxy_{t-x} = an observed indicator of the unobserved vote, measured at a prior time. The proxy variable we identify can be labeled the National Business Index (NBI), so

$$\text{Vote} = f(\text{NBI}_{t-x}) \quad (2)$$

where NBI = respondent share who say "business conditions are better" minus the respondent share who say "business conditions are worse," as reported in the national University of Michigan Survey of Consumers. The NBI, measured in April about six months before the November 2012 election, maximizes its correlation with incumbent vote, r = .83. (Other variables could be added and were, for example, incumbency, presidential popularity, macroeconomic indicators, at different lags. None added significantly to the predictive power of the single variable model below.)

The simple regression estimation for the Proxy Model yields

$$\underset{(48.23)\quad(3.69)}{\text{Vote}_t = 51.67^* + .09^* \text{NBI}_{t-6} + e} \quad (3)$$

$$\text{R-sq.} = .69, \text{Adj. R-sq.} = .64, \text{SEE} = 2.96,$$

$$\text{D-W} = 2.45, \text{n} = 8 \text{ (1980–2008)},$$

* = statistical significant at .05, two tails, figures in parentheses are t-ratios.

The equation has statistical strengths in addition to the fit statistics. Within-sample, it predicts the popular vote winner every year, on a mean absolute error of only 2.19 points. Forecasting out-of-sample, as in 2012, involves the following calculations. The NBI score = 11. This says that in 2012 (spring), 51 percent saw business conditions as "better," while only 40 percent saw business conditions as "worse." On balance, the public saw the economy as improving. Plugging this NBI estimate into the Proxy Model yields the 2012 forecast:

$$\begin{aligned} \text{Obama Vote}_t &= 51.67 + .09\ \text{NBI}_{t-6} + e \\ &= 51.67 + .09\ (11) \\ &= 52.7\%. \end{aligned} \quad (4)$$

The Proxy Model and the Economy

The proxy variable, based on consumer sentiments, has substantive implications. As a naïve model of economic voting, it is suggestive. Our recent work shows voter perceptions link to the real US economy, with perception of economic change counting heavily (Lewis-Beck, Martini, and Kiewiet 2012). The Proxy Model implies that if the public sees economic improvement, they strongly reward the incumbent.

The Proxy Model as a Forecasting Instrument

We have offered four characteristics for forecasting model evaluation: accuracy, lead, parsimony, and replication (Lewis-Beck 2005). Examining the model by these criteria, it scores high. With respect to accuracy, the Proxy Model is off by less than one and one-half percentage points. With respect to lead, the forecast comes from a measure taken six months before the election. Its parsimony is absolute, with only one independent variable. Finally, its replication is simple. These favorable

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forecasting characteristics contrast starkly to those of certain state-level, sharply poll-driven models much in vogue.

Forecasting the Electoral College Vote

What finally matters is the Electoral College vote. We have used popular vote share to predict electoral vote share (Lewis-Beck and Tien 2012b):

$$\underset{}{\text{Electoral Vote}} = \underset{(-11.88)}{-200.15} + \underset{(15.27)}{4.91}\text{* Popular Vote} \qquad (5)$$

$$\text{R-sq.} = .94, \text{ Adj. R-sq} = .94, \text{ SEE} = 6.96,$$

$$\text{D-W} = 1.44, \text{ N} = 16 \text{ (1948–2008)},$$

* = statistical significant at .05, two tails, figures in parentheses are t-ratios.

Using this regression equation, the Proxy Model forecast of 52.7 predicts an electoral vote share of 58.61% or 315 Electoral College votes, which misses the 2012 Electoral College Obama vote of 332 by only 17 votes.

Conclusions

The proxy approach to US presidential election forecasting offers something new. Our Proxy Model appears to work well. Moreover, it has the favorable traits of a good forecasting instrument (accuracy, lead, parsimony, replication). Viewed substantively, it suggests the importance of economic voting in the Obama victory. Moreover, the fact that the model errors in the positive direction (that is, it is 0.9 points too high), also comports with our argument that Obama could expect to pay a "racial cost" from his expected vote total (Tien, Nadeau, and Lewis-Beck 2012). The Proxy Model also has familiarity value, following the tradition of national-level forecasting models. Further, it has ready transparency. The proxy approach may pose a path through the forecasting thicket.

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CLOSENESS COUNTS IN HORSE SHOES, DANCING, AND FORECASTING

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On September 10, 2012, immediately following the close of the Democratic Party's national nominating convention and 57 days before Election Day on November 6, my Convention Bump and Economy Model predicted that Barack Obama was likely to receive 51.3% of the national two-party popular vote. The Convention Bump and Economy Model consists of Gallup's preconvention preference poll, the net convention bump in the polls, and an adjusted second quarter GDP growth rate. The forecast pegged the certainty of an Obama plurality at 67%. No sure thing, but more likely than not. The traditional Trial-Heat and Economy Model predicted Obama's vote at 52.0%. The Convention Bump and Economy Model's prediction was the preferred forecast in 2012 because of the lateness of the parties' nominating conventions. Democrats did not even begin their convention until after Labor Day.

President Obama's actual share of the two-party vote was 51.8 percentage points. The Convention Bump and Economy Model's forecast error was a mere half of a percentage point. This is about as accurate as it gets. Of course, some portion of the forecast's accuracy is the result of an omitted variable: luck. No mix of the fundamentals can be reasonably expected to produce a forecast with anything approaching this accuracy, and there were at least the normal number of unanticipated twists and turns in this campaign that could not possibly have been predicted. Among these were the release of the "47 percent" video of Romney that offended some voters, President Obama's poor performance in the first debate, the odd handling by all involved (including the third debate's moderator) of the issue regarding the administration's response to the terrorist attack in Libya and, perhaps most notably, President Obama's response to Hurricane Sandy about a week before the election accompanied by New Jersey's Republican governor Chris Christie's effusive praise for the president. There were certainly many other events as well. Beyond the public arena, the forecast also would not take into account in any way the superior "get out the vote" efforts of the Obama campaign.

Although many important events and developments took place during this campaign that the forecast could not have anticipated, many of these offset one another. The "47 percent video" and hurricane events helped President Obama, but the first debate helped Governor Romney. But beyond the simple cancelling effects of campaign events, this campaign sheds some light on the interesting interactions of the fundamentals and unanticipated campaign events. The pro-Romney effect of the first debate was a mix of the contrast between Romney's masterful and Obama's sleepwalking performance, but also President Obama's weak economic record—a fundamental context of the election. Obama's weak economic record was the ammunition for Romney's strong debate showing and would not have been possible without it. The pro-Obama effect of Hurricane Sandy could not have been anticipated because the hurricane itself could not have been anticipated, but when it happened it reflected the impact of presidential incumbency, another fundamental context undergirding the election forecast.

In reviewing the Convention Bump and Economy forecast of the 2012 election, the forecast model appears to have captured successfully the precampaign fundamentals that largely shape presidential elections. The 2012 experience is only one election, but it should reinforce confidence in the model.

One final note: Democratic Party seat gains in the House of seven or eight seats were almost perfectly predicted between

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