

two-party vote that the model underperformed. The point estimate was off by just under five percentage points. While not terrible, the model did not perform as well as it did in earlier years.

The results from previous years show no readily discernable pattern to the model's mis-estimates. There are some comparatively large misses in recent years, but there are some similarly sized misses in the early years. Looking at whether the incumbent is running for reelection does not seem to help in explaining the errors in the model.

The forecast for the House elections lends additional support for the model. The equation forecast a 25-seat loss for the Republican Party. As of this writing, the Republicans have lost 21 seats. Moreover, the Democratic candidates are ahead in a few of the remaining uncalled races. If their leads hold, then the Republican Party's losses will track even closer to the forecast. Here, both the economy and the number of open seats appear to be of great consequence.

The presidential and House forecasts show that a relatively simple model estimated more than four months before the election (before either of the conventions and before the financial panic) does a reasonable job of forecasting the election outcomes. We should note that including the outcomes for 2008 does not alter the coefficients in a substantively important manner. Elections are comprehensible and predictable.

#### FORECASTING THE 2008 PRESIDENTIAL ELECTION WITH THE FISCAL MODEL: THE CHALLENGE MET

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The presidential election forecast made with the Fiscal Model three months before Election Day put the incumbents' share of the two-party vote (VOTE<sub>2</sub>) at 48% (Cuzán and Bundrick 2008). As of the time of this writing, it appears the incumbent-party ticket of John McCain and Sarah Palin took a little less than that (around 46.5%). At 1.5%, the error is less than 2.3%, which is Campbell's (2008, 680) "benchmark" for a "quite accurate" forecast. This is the second time in a row that the Fiscal Model ranks among the best performers (Campbell 2005, 23).

Five predictors of VOTE<sub>2</sub> make up the Fiscal Model: the PARTY of the incumbents (Republicans do better than Democrats); DURATION, an index of their time in the White House (borrowed from Fair 2006), which reduces VOTE<sub>2</sub> with every additional term beyond the first; GROWTH in *per capita* gross domestic product in the third quarter of the election year and ALLNEWS, the number of quarters during which GROWTH exceeds 3.2%, both variables (also borrowed from Fair 2006) enhancing the in-party's prospects at the polls; and changes in the ratio of federal outlays to GDP, measured by a binary variable, FISCAL or FPRIME. Generally, incumbents that restrain budget expansion retain control of the White House and those who do not are defeated in their bid for reelection. Almost always, FISCAL and FPRIME agree in their rating of fiscal policy and hence in their forecasts. As explained in the

October issue (Cuzán and Bundrick 2008), on account of the unprecedented fiscal policy of George W. Bush's presidency, this year these variables did not agree: FISCAL forecast incumbent party reelection and FPRIME forecast defeat. We had to decide which one better fit the case. For the reasons we gave in the October issue, we concluded that FPRIME did. The election outcome suggests that our choice of spending measure was correct. The challenge to the Fiscal Model posed by the 2008 election was met.

Incidentally, the original forecast relied on Ray Fair's July 31 projections of GROWTH and ALLNEWS. On October 31, Fair updated both variables with the latest BEA data. ALLNEWS did not change but GROWTH dropped from 1% to 0.22%. Entering the revised value into the Fiscal Model with FPRIME brings the forecast even closer to the actual result, at 47.6% for the incumbents, only 1.1% off.

#### REFERENCES

- Campbell, James E. 2008. "Editor's Introduction: Forecasting the 2008 National Elections." *PS: Political Science and Politics* 41 (October): 679–81.
- . 2005. "Introduction—Assessments of the 2004 Presidential Vote Forecasts." *PS: Political Science and Politics* 38 (January): 23.
- Cuzán, Alfred G., and Charles M. Bundrick. 2008. "Forecasting the 2008 Presidential Election: A Challenge for the Fiscal Model." *PS: Political Science and Politics* 41 (October): 717–22.
- Fair, Ray. 2006. "The Effect of Economic Events on Votes for President: 2004 Update." <http://fairmodel.econ.yale.edu/RAYFAIR/PDF/2006CHTM.HTM>.

#### ASSESSING THE ACCURACY OF THE 2008 STATE AND DISTRICT FORECAST MODELS

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Ninety-nine days before the elections I utilized national- and district- or state-level information to forecast the 2008 U.S. presidential, House, and Senate elections (Klarner 2008). Overall, the presidential model performed very well, while the House and Senate models understated the extent of the Democratic wave.

The presidential forecasts were extremely accurate. The model predicted that Barack Obama would attain 53.0% of the two-party popular vote, and, as of November 11, 2008, he had received 53.5% (see Table 1), although the vote tallies are as of this writing still being updated hourly. The model also predicted that he would obtain 346 electoral votes, while in reality he obtained 365. The state and district forecasts of the three models were not published in *PS* (Klarner 2008) due to space constraints, but were posted on the Pollyvote Web site well before the election.<sup>1</sup> The presidential model also did well at calling individual states, forecasting 48 out of 51 correctly, missing only Arkansas, Indiana, and West Virginia. On average, the state-level forecasts were 0.05% off, indicating a lack of bias in the model. The median absolute value of the state-forecast error was 3.3%, indicating that half of the time the state forecast was within 3.3% of the actual vote (the mean error was 4.2%). More importantly, states that were won by 5% of the vote or less saw only an average error of 1.02%

## Forecasting Recap

Table 1

### Forecasts of Democratic Margin of Vote or Gains Versus Reality

	PRESIDENTIAL MODEL	HOUSE MODEL	SENATE MODEL
Klarner forecast	53.0% of popular vote/346 electoral votes	247 total seats/gain of 11	54 total seats/gain of 3
Actual	53.5% of popular vote/365 electoral votes	255 to 259 total seats	58 to 59 total seats
States/districts called accurately	48 of 51	351 of 375	29 of 34
State/district level, average ABSV error	4.15	3.87	6.55
State/district level, median ABSV error	3.30	2.92	6.19

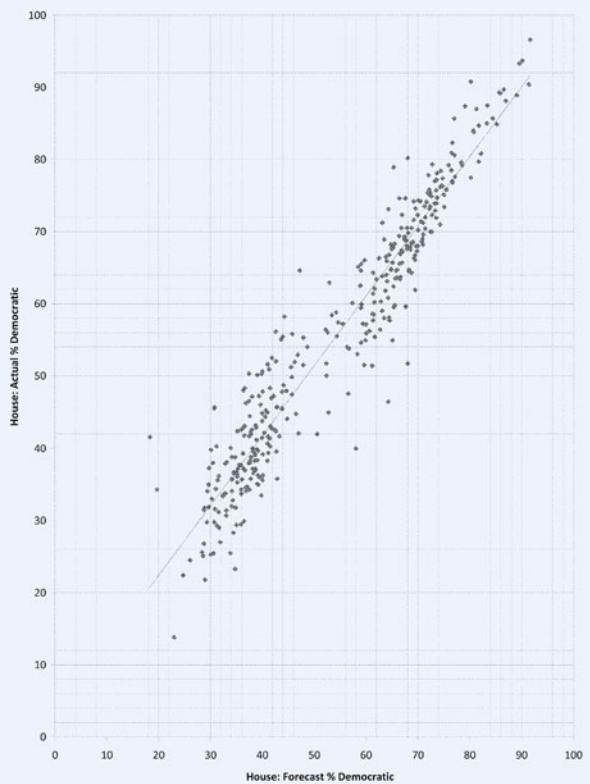
(1.49% on average for those states won by 10% of the vote or less), which in particular explains why the model called states so accurately.

The House and Senate models understated the number of seats that the Democrats picked up, as did Klarner and Buchanans' (2006a; 2006b) models of the 2006 elections. The House model forecast that the Democrats would have a total of 247 seats in the House of Representatives after the 2008 election, implying a gain of 11 seats. Although as of December 4, some seats had not been called, the Democrats had at least 255 seats in the House after the election, and may have as many as 259, meaning the model underestimated Democratic gains by at least eight seats, and perhaps as many as 12. At the district level, the model called 351 out of 375 (93.6%) races correctly (many were uncontested, bringing the total down from 435). The median absolute value of error between the forecasts and actual results was 2.92% (the mean was 3.87%), which appears to be a fairly accurate track record. What these data do not reveal, however, is that the model did poorly at calling races won by narrow margins. If races won by 10% or less are examined, the median absolute value of error goes up substantially to 6.34% (mean = 7.28).

This pattern of errors reveals something very interesting about how elections work. Figure 1 shows a scatterplot of the forecast Democratic percent of the two-party vote on the horizontal axis, and the actual vote on the vertical axis. It is evident that the model did a good job overall except in those districts in which it forecast a narrow Republican win (aside from a few errant elections in the southeast quadrant). Those are districts the Democrats often won. It can be argued that the forecasts are representations of how elections would go based on the normal causes of election outcomes unrelated to campaigns (incumbency, etc.). In an election year that favors one party, that party focuses its resources on the districts of the disadvantaged party that are closest to swinging, and these areas therefore appear more responsive to the national wave (in this case going toward the Democrats). Or perhaps it is because the voters there are more middle-of-the-road and thus more subject to the national wave. Whatever the case, the scatterplot draws attention to a major shortcoming of district-level models. Aggregate models only forecast the net change in seats, and so if massive and consequential campaign activity occurs in these battleground districts it is implicitly modeled. District-level forecasting models will have to take this into account in the future to fully live up to their potential.

Figure 1

### Democratic Percent of the Two-Party Vote in House Districts: Forecasts versus Actual



The Senate model forecast that the Democrats would win 15 of this year's 35 races, a party gain of three to hold a total of 54 seats after the election (including Democratic-caucusing independents Bernie Sanders and Joseph Lieberman). The Democrats have picked up at least seven seats in the Senate and may pick up as many as eight total, depending on how the Minnesota election is resolved. State-level forecasts called 29 out of 34 elections correctly (85.3%), missing the Senate races in Alaska, New Hampshire, North Carolina, Oregon, and Virginia, a proportion that may worsen when the Minnesota race is resolved. The median of the absolute values of error in predictions for individual seats was 6.19% (mean =

6.55). Overall, the Senate model was not effective at forecasting the number of seats Democrats picked up or how the vote would go in individual states. As in 2006, the Senate model performed worse than the House model. ■

#### NOTE

1. See [www.forecastingprinciples.com/PollyVote/index.php/pollyblog/3/85-new-model-forecast.html](http://www.forecastingprinciples.com/PollyVote/index.php/pollyblog/3/85-new-model-forecast.html).

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#### REFERENCES

- Klarner, Carl. 2008. "Forecasting the 2008 U.S. House, Senate, and Presidential Elections at the District and State Level." *PS: Political Science and Politics* 41 (October): 723–8.
- Klarner, Carl E., and Stan Buchanan. 2006a. "Forecasting the 2006 Elections for the United States Senate." *PS: Political Science and Politics* 39 (October): 849–55.
- . 2006b. "Forecasting the 2006 Elections for the U.S. House of Representatives." *PS: Political Science and Politics* 39 (October): 857–61.

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