



Accuracy of Forecasts for the 2008 General Election in South Dakota

November 17, 2008

Summary

In September, 2008, Interdisciplinary Scientific Research (ISR) conducted a survey of expert observers of South Dakota politics. In the survey, the experts predicted the outcomes for statewide races and ballot questions in the November 4th, 2008 general election. ISR produced two sets of election forecasts based on experts' predictions. One set of forecasts showed modest accuracy, although the other set of forecasts performed fairly well. The ISR forecasts were more accurate than projections from the two polls conducted in September for the presidential race, but were generally less accurate than projections from polls conducted in late October for that race and five other contests. The ISR forecasting strategy may be a useful and cost-effective approach for projecting election outcomes, especially early in general election campaigns.

ISR election forecasts

Between September 3 and September 9, 2008, 14 expert observers of South Dakota state politics predicted the winners of four statewide races and seven ballot questions and corresponding margins of victory in an online survey. Three participating experts were professors, one was a lobbyist, and ten were state legislators. Seven experts identified as Republicans, six identified as Democrats, and one was unaffiliated.

The election forecasts reflected collective expert judgments that were derived, in part, from weighting each expert's predictions by an objective estimate of his or her likely prediction accuracy and combining these weighted predictions. The forecasts also accounted for experts' own voting preferences, eliminating that potential source of bias.

With one exception, all winner forecasts were very highly reliable representations of expert opinion in South Dakota. That is, each forecast was estimated to reflect the aggregated opinion of similar expert political observers who did not participate in the survey with a confidence level of greater than 99%. The share-of-vote forecasts do not have formal reliability classifications.

Eleven of the expert respondents were invited to participate in a second round of the survey between October 15 and October 21. Three experts responded. Their second round predictions were very similar to their first round predictions. After incorporating these revised predictions, none of the forecasted winners changed, and the forecasted margins of victory changed negligibly for only three ballot measures and one race. The original publicly released election forecasts are available in the full forecast [report](#)¹.

An alternate set of forecasts was also produced before the election but not released publicly. These forecasts were based on different procedures but similar analytic principles as the publicly released forecasts (details will be presented in a future publication). In this report, the publicly released forecasts will be referred to as the ISR 1 forecasts and the alternate forecasts will be referred to as the ISR 2 forecasts.

Accuracy results

Accuracy results are reported here separately for a) the projected winners of the 11 contests and b) the corresponding margins of victory.

Forecasted winners

Table 1 shows the winners of statewide races and ballot measures as reported by the [South Dakota Secretary of State](#)², as well as the ISR forecasts and projections based on scientific polls and prediction markets. The scientific polls included in this summary were conducted in September or October of 2008 for media organizations, or meet criteria for inclusion established by [FiveThirtyEight.com](#)³. The included polls, identified by the polling firm and date, are: Rasmussen, September 9; ARG, September 20; Mason Dixon, October 14; Research 2000, October 23; and Rasmussen, October 30. Note that all polls except one were conducted after the ISR expert survey. For each race covered by more than one poll, the different polls gave unanimous projections of winners.

The prediction markets included in the summary are Intrade.com and its play-money offshoots (branded by particular web sites, such as Rasmussen Markets and National Journal Political Stock Exchange, that seem to comprise a single, common marketplace). The projected winners (as determined by trading prices above 50.0) in these markets did not change at all between September 1 and November 4.

The ISR 1 and 2 forecasts were accurate in predicting winners in 8 and 9 contests, respectively (out of 11 total contests) (Table 1). Only 6 contests were polled. In head-to-head comparisons, the polls outperformed the ISR 1 forecasts and equaled the ISR 2 forecasts overall (5/6 accurately forecasted winners for polls, 4/6 for ISR 1, and 5/6 for ISR 2). For the two races with projections from prediction markets, the prediction markets, polls, and ISR forecasts all accurately predicted the winners.

Forecasted margins of victory

The margin of victory is the most commonly used indicator of the status of a political contest. In table 2, margin of victory is defined as the difference in the percentage of votes (actual or projected) for the winner and runner-up candidate. The summary measure of accuracy here is the average (mean and median) unsigned difference in margin of victory (accounting for any differences in actual and projected winners). This measure is also known as the [Mosteller 5 measure of poll accuracy](#)⁴ and has been used to assess the [accuracy of different polling firms](#)⁵ for the 2008 Democratic presidential primary elections.

For the presidential and US Senate races in South Dakota, the FiveThirtyEight.com election forecasting effort produced regularly updated projections during the several months before the general election. These [projections](#)³ are based on polling information (poll results, sample size, recency, polling firm track record, trends in current election polling cycle), historical trends, and estimates based on South Dakotans' demographic characteristics.

The accuracy of the ISR margin of victory forecasts and projections from polls ranged from very good to poor. In nearly every contest, both the ISR forecasts and polls underestimated the ultimate winner's margin of victory. The ISR 1 forecasts had moderately large errors (mean = 17.1), although the ISR 2 forecasts were more accurate overall and for 10 of the 11 contests (mean error = 12.8). In a head-to-head

Table 1. Summary of election outcomes and projections: winners

Race/ballot question	Election result	ISR forecast 1	ISR forecast 2	Polls	Prediciton markets
US President/Vice President (in SD)	McCain/Palin	McCain/Palin	McCain/Palin	McCain/Palin	McCain/Palin
US Senator	Johnson	Johnson	Johnson	Johnson	Johnson
US Representative	Herseth Sandlin	Herseth Sandlin	Herseth Sandlin	Herseth Sandlin	---
Public Utilities Commissioner	Hanson	Hanson	Hanson	---	---
Amendment G (legislator travel reimbursement)	No	Yes	Yes	No	---
Amendment H (corporations)	No	No	No	---	---
Amendment I (legislative days)	Yes	No	No	---	---
Amendment J (term limits)	No	No	No	No	---
Measure 9 (securities)	No	No	No	---	---
Measure 10 (lobbying, government contracts)	No	No	No	---	---
Measure 11 (abortion)	No	Yes	No	Tie	---
Fraction accurately predicted	---	8/11	9/11	5/6	2/2

Table 2. Summary of election outcomes and projections: margins of victory

Race/ballot question	Election result	September ISR forecast 1	September ISR forecast 2	September polls	October polls
US President/Vice President (in SD)	McCain/Palin +8.4	McCain/Palin +7	McCain/Palin +10.1	McCain/Palin +16 to +17 ^{a,b}	McCain/Palin +7 to +9 ^{c-e}
US Senator	Johnson +25.0	Johnson +10	Johnson +16.8	---	Johnson +22 to +23 ^{c,d}
US Representative	Herseth Sandlin +35.1	Herseth Sandlin +18	Herseth Sandlin +21.2	---	Herseth Sandlin +33 ^c
Public Utilities Commissioner	Hanson +33.4	Hanson +15	Hanson +19.7	---	---
Amendment G (legislator travel reimbursement)	No +17.7	Yes +4	Yes +0.9	---	No +13 ^c
Amendment H (corporations)	No +38.0	No +5	No +8.6	---	---
Amendment I (legislative days)	Yes +4.8	No +6	No +7.6	---	---
Amendment J (term limits)	No +51.5	No +14	No +20.0	---	No +25 ^c
Measure 9 (securities)	No +13.2	No +4	No +10.0	---	---
Measure 10 (lobbying, government contracts)	No +29.4	No +18	No +29.2	---	---
Measure 11 (abortion)	No +10.4	Yes +2	No +2.7	---	Tie ^c
Mean/median error	---	17.1/15	12.8/12.4	8.6/8.6 ^f	7.6/3.9 ^g

^aRasmussen, September 9 ^bARG September 20 ^cMason Dixon, October 14 ^dResearch 2000, October 23 ^eRasmussen, October 30

^fBased on the earliest poll in the month (poll ^a for president)

^gWhen multiple polls were conducted in October for a race, error based on the latest poll in the month (poll ^e for president, poll ^d for senator)

comparison between the early September ISR forecasts and the earliest and temporally most comparable September poll for the presidential race, the ISR forecasts were more accurate (error = 1.4 for ISR 1 and 1.7 for ISR 2 vs. 8.6 for the poll). However, the October polls outperformed the ISR forecasts for the 6 contests with polling estimates (mean error = 7.6 for polls vs. 17.6 for ISR 1 and 13.6 for ISR 2). The FiveThirtyEight.com projection for the US Senate race on September 20th was Johnson +30 (error = 5.0 vs. 15.0 for ISR 1 and 8.2 for ISR 2) and the projection for the presidential race on September 30 was McCain +11 (error = 2.6 vs. 1.4 for ISR 1 and 1.7 for ISR 2). FiveThirtyEight.com's final projections on November 4 were McCain +8.7 for president (error = 0.3 vs. 1.4-1.7 for September ISR forecasts) and Johnson +26.3 for US Senate (error = 1.3 vs. 8.2-15.0 for September ISR forecasts).

Although the ISR 2 margin of victory forecasts had larger errors on average than those for the October polls, the ISR 2 forecasts did discriminate the relative values of the actual margins of victory reasonably well. Figure 1 shows the scatterplot between the actual margins of victory and the forecasted margins of victory (negative forecasted margins of victory indicate contests in which the forecasted winner lost). Contests with relatively large forecasted margins of victory had relatively large actual margins of victory; similarly, contests with relatively small forecasted margins of victory had relatively small actual margins of victory. The Pearson correlation between the forecasted and actual margins of victory is .68 ($p < .05$). In all contests where the forecasted margin of victory was 8 percentage points or greater (for either candidate or position), the forecasted winner actually won the contest. (The ISR 1 margin of victory forecasts produced very similar results as those reported here.)

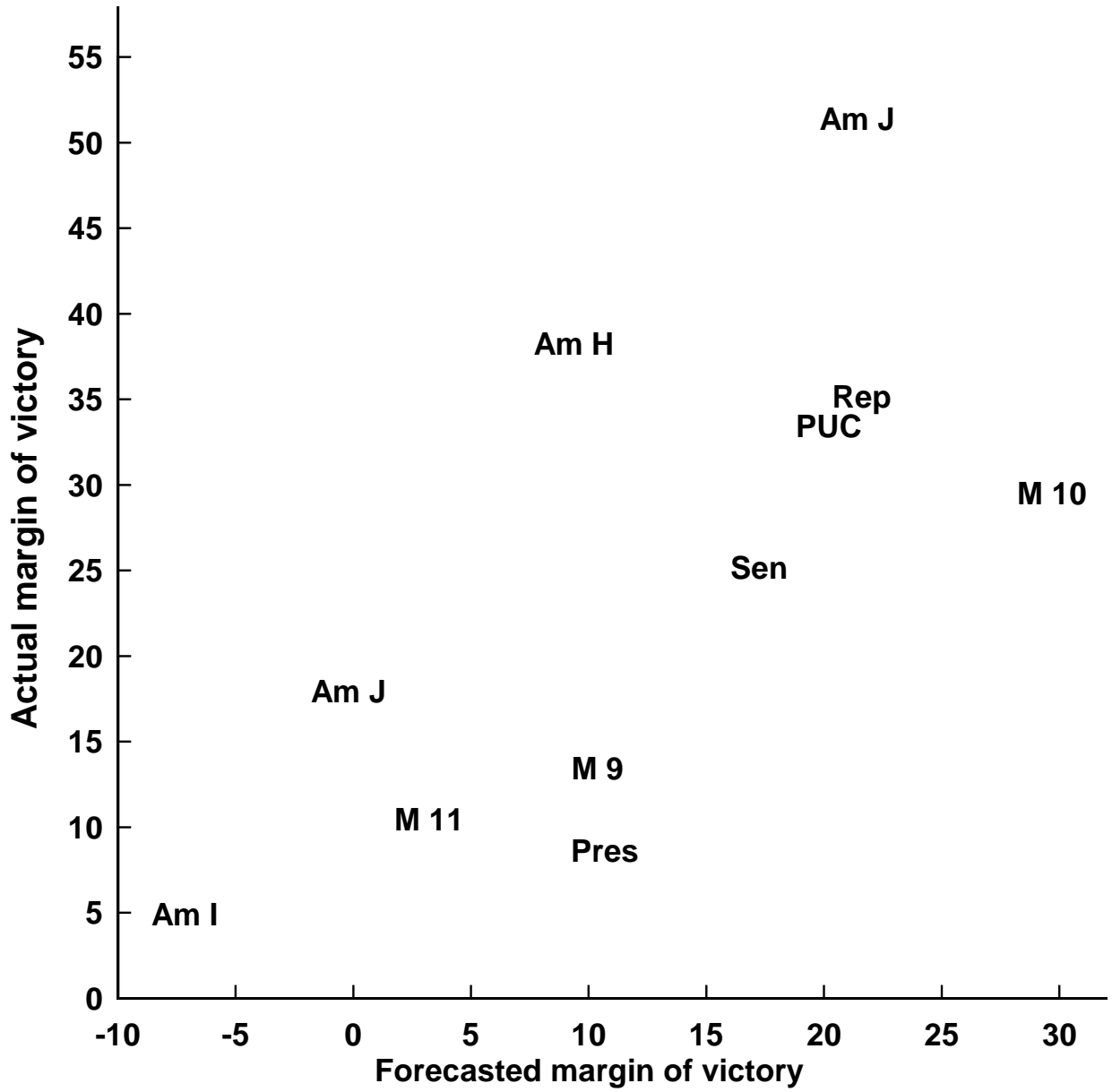


Figure 1. Scatterplot of forecasted margin of victory and actual margin of victory

Resources cited

1. <http://electionforecasting.interscientific.net/SD2008Forecast.html>
2. <http://www.sdsos.gov/>
3. <http://www.fivethirtyeight.com/2008/03/frequently-asked-questions-last-revised.html>
4. <http://www.surveyusa.com/ShipmanElectionPollAccuracy.html>
5. <http://www.surveyusa.com/index.php/surveyusa-report-cards/>

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<http://electionforecasting.interscientific.net/SD2008AccuracyReport.html>