

# Will the Republicans Retake the House in 2010?

## A Second Look Over the Horizon

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Original draft: September 15, 2010

Revised: September 25, 2010

An earlier, longer version was presented at the 2010 meeting of the American Political Science Association, Washington, D.C., September 4.

\*Many thanks to J. Scott Armstrong, Randall J. Jones, Jr., Ray Fair, and William B. Tankersley for their comments and suggestions on an earlier draft. Special thanks to Mike Bundrick for his help throughout. Needless to say, I bear sole responsibility for any errors.

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### **Abstract**

For the Republicans to regain control of the House of Representatives this year, the Democrats need to suffer a net loss of 40 members, or just under 16% of the 257 seats they took in 2008. With a model estimated with elections since 1870, here I evaluate the likelihood of such an eventuality.

### **Modeling the System**

For the Republicans to regain control of the House this year, the Democrats need to suffer a net loss of 40 members, or 15.6% of the 257 seats they took in 2008. With a model similar to one used previously (Cuzán and Bundrick 2006, Cuzán 2010), only estimated with elections since 1870, here I evaluate the likelihood of such an eventuality.

We begin with the well-known fact that historically the party of the president, the incumbents, almost always incurs a net loss of House seats in midterm elections. As shown in Figure 1, in 14 out of 35 midterm elections held since 1870, or 40 percent of the time, the president's party shrunk by more than 40 members, which is this year's party turnover point. In four exceptional cases (1902, 1934, 1998, and 2002), the incumbents actually gained a small number of seats. The first exception occurred scarcely a year after President McKinley's assassination, when sympathy for the incumbents must have been running high;

the second took place in the middle of the anti-Republican wave that began in 1930 and peaked in 1936; the third may have reflected a backlash against the impeachment of President Clinton; and the last one can be attributed to the 9/11/2001 rally.

Omitting these exceptions,<sup>1</sup> none of which has any similarity to this year's political environment, the odds of the Democrats' losses breaching what is this year's party turnover point rise to 14 out of 31 (45 percent). Consider, as well, that the mean incumbent seat loss across all midterm elections is 35 seats (the median loss is 28 seats), although there is considerable variation around that number (s.d.=32). Also, as a proportion of the seats won in the previous election, the average loss is 15% (median=13%; s.d.=15). Thus, a naïve forecast for 2010 would be that the Democrats will lose between 28 and 35 seats, or between 33 and 39 seats. This forecast calls for the Democrats to remain the majority party in the House, with but few seats to spare.

<Figure 1 about here>

Next, the general model used here for estimating the number of House seats won by the party of the president, the incumbents, is as follows:

$$\text{IncSeats} = A + \beta_1(\text{IncSeats}_{t-1}) + \beta_2(\text{PrezElect}) + \beta_3(\text{Midterm}) + \beta_4(\text{GROWTH}) + \beta_5(\text{PRICES}) + \varepsilon$$

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<sup>1</sup> Armstrong and Collopy (1998, 272) suggest that “domain knowledge can be used to define the variable of interest, to make revisions in the time series observations, or to adjust for unusual events . . . .”

That is, the number of seats going to the incumbents is a function of the number of seats won in the previous election, whether the incumbent party is (or is likely to be) returned to the White House if in a presidential election year (scored 1 if they are reelected, -1 if they are defeated, and 0 if it is a midterm election year), and whether it is a midterm election (1 if it is, 0 if it is not); and, following the referendum tradition pioneered by Kramer (1971) and Tufte (1975), the annual change in real gross domestic product per capita and the yearly absolute change in the consumer price index.<sup>2</sup>

Table 1 displays two pairs of estimates of this model. Model 1 is estimated with all 70 elections held since 1870, and Model 3 with the 35 midterm elections only. In Models 2 and 4, several outliers are excluded. As well as the four previously mentioned elections when the incumbent gained seats at midterm (those of 1902, 1934, 1998 and 2002), they include three more midterm elections and four presidential elections. The additional exclusions include the midterm elections of 1872, 1874, 1890 and 1894, and the 1892, 1932 and 1948 presidential elections. In percentage terms, the midterm losses of 1872, 1874, 1890, and 1894 are three times the size of the standard deviation for midterm elections; the 1932

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<sup>2</sup> In both his presidential and congressional election models, Fair (2009) uses the absolute value of a measure of price changes. In the APSA conference paper, I did not use the absolute value.

seat loss, as well as the 1892 and 1948 seat gains, are more than two times the size of the standard deviation among presidential elections only.<sup>3</sup>

<Table 1 about here>

These additional outliers are associated with specific political processes. The 19<sup>th</sup> century outliers were years when the two-party system was re-establishing itself after the interregnum of the Civil War and Reconstruction. The adjustment was not a smooth one, exhibiting large swings, even in successive elections, as in the three that took place between 1890 and 1894. The 1932 presidential election was a disaster for the Republicans, who experienced smaller, yet still significant additional losses in the next two elections during the New Deal party realignment. Finally, the 1948 Democratic gain was only the largest change in seats between the parties associated with changes in party control of the House that took place in the 1946-1954 period, following which the Democrats consolidated what turned out to be a four-decade long period of dominance.

Observe in Models 1 and 2 that winning another term in the White House on average yields around 15 to 20 new members from the president's party. (Since the variable ranges from -1 to 1, the coefficient has to be multiplied by two to compute its impact on seats.) This reflects the familiar "coattails effect" (Jacobson 1987, 150).<sup>4</sup> On the other hand, a midterm election typically costs the incumbents

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<sup>3</sup> The changes are calculated in percent because the size of congress varied until it was settled at 435 for the 1912 election.

<sup>4</sup> By contrast, Fair (2009) found "no evidence of any presidential coattail effect" (2009: 55).

about 30 seats. Note, as well, that across all four models a one percent point change in GROWTH is associated with between one and two additional House seats, while PRICES is associated with a loss of one to two seats. As would be expected, excluding the outliers in Models 2 and 4 improves model fit considerably.

Table 2 displays the performance of Model 2 in one-step-ahead forecasts, starting with the 1986 midterm election. The Mean Absolute Error (MAE) of the forecasts is 12 seats (s.d.=7). The absolute error, on average, amounts to about 6% of the prediction.

<Table 2 about here>

For the purpose of generating a forecast for 2010 with these models, it is assumed that (1) real per capita GDP grows 2% and (2) PRICES is limited to 1%. I arrived at these assumptions by surveying collections of economic forecasts (see, e.g., Pearson 2010 and Izzo 2010). The bottom row of table 1 displays the number of seats won by the Democrats that is obtained by injecting these economic inputs into all models. The point forecasts range between 221 seats (Model 4) and 226 seats (Model 2), or a loss of between 31 and 36 seats. These are not much different from the naïve forecast with which we began. As shown in the bottom row of Table 1, across all models the probability that the Democrats will emerge in control of the House after the November elections ranges from 0.59 in Model 4 to 0.67 with Model 2. In other words, according to these models, in the race to win a majority of the seats the Democrats have the edge. However, the chances for a Republican victory are by no means trivial—between one in three and two in five.

Furthermore, like all forecasts, this one is subject to error. Generally, a model built exclusively on fundamentals will incur a larger error than those that include poll data or district-level information.<sup>5</sup> In a test of the forecasting accuracy of the model, it was found that over the most recent ten elections (excluding the 1998 and 2002 midterms) the average error was about 6% of the prediction. Since, as of mid-September, the generic congressional ballot is showing the Republicans with a healthy lead, the error incurred this year is most likely to be one of overshooting rather than undershooting the actual number of seats the Democrats will end up with on Election Day. If that is the case, assuming that this year's forecast is overshooting the mark by the aforementioned 6% would mean that the actual Democratic net loss would fall somewhere in the 43 to 48 seats range, enough for a Republican takeover.

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<sup>5</sup> Of course, the gains in forecasting accuracy offered by polls come at the expense of explanatory value. As Hibbs (2010, 8) puts it, “poll measurements of political sentiments are driven by one or more . . . fundamental variables. Although equations dedicated to forecasting ought to yield pretty good predictions, they contribute little or nothing to understanding the underlying causes of election outcomes”

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Table 1. Estimating the Number of House Seats Won by the President's Party,  
1914–2008

Predictor	All Elections		Midterm Elections	
	Model 1	Model 2	Model 3	Model 4
	<i>N</i> =70	<i>N</i> =59	<i>N</i> =35	<i>N</i> =28
Constant	44.35 (3.21)	45.62 (4.49)	-5.68 (-0.22)	23.03 (1.43)
IncSeats <sub>t-1</sub>	0.82 (11.93)	0.81 (16.47)	0.88 (8.11)	0.77 (11.60)
PrezElect	9.95 (1.96)	7.69 (2.16)		
Midterm	-31.65 (-4.47)	-27.78 (-5.47)		
GROWTH (GDP per Capita)	1.74 (2.85)	0.85 (1.88)	1.96 (2.19)	1.24 (2.25)
PRICES	-2.33 (-2.48)	-2.02 (-3.05)	-1.25 (-0.88)	-0.89 (-1.07)
SEE	27.6	18.11	30.50	17.03
Adj. <i>R</i> <sup>2</sup>	0.73	0.85	0.67	0.84
Durbin-Watson	2.11	1.91	1.76	2.77
Point forecast for 2010 (GROWTH = 2%, CPI = 1%)	225	226	223	221
Net loss of seats	-32	-31	-34	-36
Probability IncSeats>217	0.60	0.67	0.60	0.59

*Sources:* For seats: Office of the Clerk, U.S. House of Representatives; for GDP GROWTH: Johnston and Williamson (2008); for CPI: Bureau of Labor Statistics. Values in parentheses are *t*-statistics.

Table 2. One-Step-Ahead Forecasts, 1986–2008  
(1998 and 2002 outliers omitted—se text.)

Year	Prediction	Actual	AE	AE as % of prediction
1986	162	177	15	9.3%
1988	193	175	18	9.3
1990	149	167	18	12.1
1992	169	176	7	4.1
1994	225	204	21	9.3
1996	216	206	10	4.6
2000	206	212	6	2.9
2004	236	232	4	1.7
2006	201	202	1	0.5
2008	195	178	17	8.7
MEAN			11.7	6.3%
SD			6.9	3.9
MEDIAN			12.5	6.7

**Figure 1. Midterm Incumbent Net Seat Loss or Gain  
1870-2006  
(n=35)**

