RESEARCH NOTE

Congressional Seat Swings: Revisiting Exposure in House Elections

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Oppenheimer, Stimson, and Waterman's exposure thesis of partisan change contends that shifts in the partisan composition of Congress are related to the long-term stability of the electoral system. Applying their exposure model to elections from 1962-1994 produces seat change estimates that generally follow the actual data pattern, but these estimates produce large predictive errors. When the exposure model is reestimated using data from 1962-1994, exposure is not significantly related to partisan seat swings. This article advances a seat change model that relies on an alternate measure of exposure: the net exposure of the president's party in open seats. Open-seat exposure is significantly related to the partisan seat swing, and substantially improves on the economic evaluation/surge-and-decline/ exposure model of seat change. In an era of high incumbent security and strategic retirement from Congress, the balance of open seats is a better indicator of partisan vulnerability, and better reflects the nature of partisan exposure.

Aggregate seat swings in Congress are often related to economic trends and political shifts in the electorate. Changes in the partisan balance of Congress are often interpreted as referenda on presidential popularity or on policy.[1]

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[1] For example, the 53-seat GOP swing in 1994 was widely viewed as a personal rebuke of Bill Clinton and his policy initiatives. Other dramatic mid-term seat shifts have been similarly interpreted as no-confidence votes.

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The existing literature has clearly found that there is a presidential pulse to congressional elections: the president's party gains seats in accordance with the strength of the president's victory, and subsequently loses seats in the midterm "decline" (Campbell 1997). Research on this phenomenon goes back at least as far as the works of Bean (1950), and subsequent research indicates that the presidential pulse demonstrates historic persistence (Campbell 1997, 1991).

Among the more prominent theories to explain the shift in congressional seats is the exposure thesis (Waterman, Oppenheimer, and Stimson 1991; Oppenheimer, Stimson, and Waterman 1986). The advocates of the exposure thesis contend that, in addition to economic and political pulses that create a rhythm in congressional elections, the president's party gains or loses seats relative to its "surplus" of seats, compared to the party's equilibrium seat share. When the president's party has more seats than the equilibrium for the electoral system, it is overexposed and will lose seats; when that party has fewer seats than the equilibrium, it is underexposed and will gain seats.

Waterman, Oppenheimer, and Stimson's most recent demonstration of exposure (1991) covered elections since the 1870s, although their full model, which incorporates economic growth and presidential popularity data, analyzed elections from 1946 forward. A careful examination of congressional seat swings indicates that there is a problem with the application of exposure to aggregate seat swings after 1960. This brief article advances a modified seat swing model—the open-seat exposure model—that reflects the nature of congressional elections in the incumbency era. The predictive accuracy of the original exposure model is subjected to two tests for the 1962-1994 period. The underlying argument for using open seats to measure exposure is presented, and open-seat exposure is tested with other controls. The accuracy of the open-seat model is compared to the exposure models.

Congressional Seat Swings and the Failure of Exposure

Aggregate seat swings in Congress are related to national political and economic factors. Initial research in this area tied congressional election swings of the president's party to the magnitude of the winning party's plurality.[2] Strong presidential performances resulted in long coattails that pulled additional seats in for the winning party (Campbell 1997; A. Campbell 1960). Midterm elections followed with a corresponding drop-off in presidential party support, and a related falloff in seats (Bean 1950; A. Campbell 1960).

[2] See James E. Campbell (1997) for a comprehensive overview of the surge-and-decline debate.

Campbell's (1991) incorporation of the surge and decline of presidential support into a measure of the "presidential pulse" of congressional elections captured the strength of the president's party in the election year through the coattail effect, and then lagged the inverse of that strength at the midterm to indicate the vulnerability to midterm decline. Economic evaluations, which are also important to determining seat change, are included in the major forecasting models.

In addition to these political and economic indicators, Oppenheimer, Stimson, and Waterman (1986) argued that there was an equilibrium in congressional elections that helped determine the partisan swing in a given election. Exposure worked effectively in explaining seat swings, according to their analysis, and the model improves over the explained variance of surge and decline models and economic responsibility models.

Throughout the 1980s and into the 1990s a variety of macromodels were frustrated in their ability to predict seat swings. The 1994 election was particularly galling, as a 53-seat Republican gain shattered the crystal balls of many forecasters, who predicted seat gains of between 4 and 26 seats by the GOP.[3] Exposure fared among the worst of these, predicting a shift of 16 seats to the GOP.[4] Why?

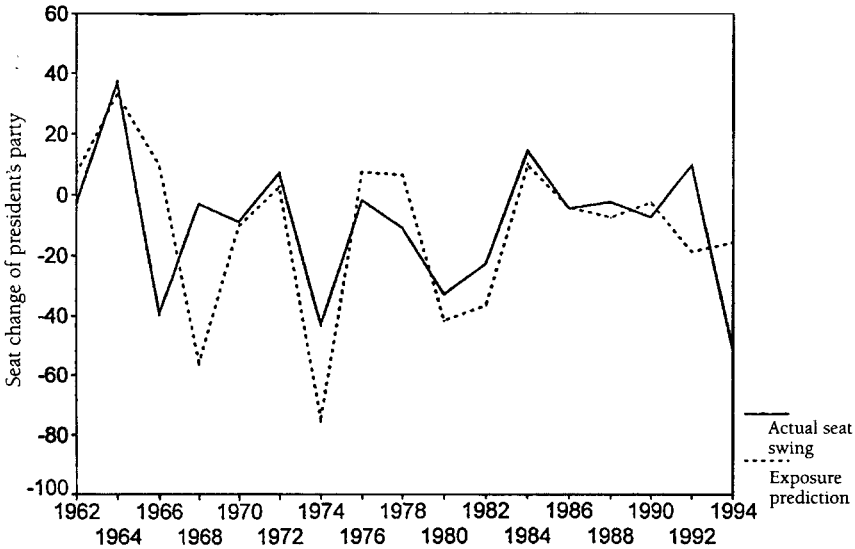
Political science has documented a variety of changes in the dynamic of congressional elections since the 1960s that are too numerous to document in this brief note. However, the period of increased incumbent security observed by Mayhew (1974) and others[5] coincided with the departure of exposure as a predictor of congressional seat swings. This result leaves questions regarding the appropriateness of exposure—as defined—as a predictor of seat swings. In Figure 1 the predicted seat swings for the president's party are graphically presented, based on the 1946-1988 exposure model. The actual seat change for the president's party is also presented. The estimated exposure prediction

[3] Interestingly, at a roundtable on forecasting at the 1994 Southern Political Science Association Meetings that immediately preceded the November 8 election, the forecasts of Lewis-Beck, Abramowitz, and Campbell, when summed together, indicated a 52-seat GOP gain. This was probably not the intended method of prediction by the college of forecasters.

[4] The exposure model prediction is estimated using coefficients from Waterman, Oppenheimer, and Stimson (1991), multiplied by the values for the independent variables in 1994. The coefficients and variable values (parentheses) are: constant, -67.85; exposure, -.73* (-1.14); surge and decline, .44*(-6.00); presidential approval, 1.02*(47); change in real disposable income, 3.30*(1.70).

[5] See Niemi and Weisberg (1993), Jacobson (1990), or Campbell (1997) for an overview of this literature.

FIGURE 1
EXPOSURE THESIS SEAT SWING PREDICTIONS, 1962-1994



from the 1946-1988 model generally moves with the actual seat swings, but sizable errors are evident between the expected and actual seat changes in several cases. The average error for the exposure model is 16.5 seats for elections since 1962 (14.6 seats if 1994 is excluded).

To give exposure another chance, the model of exposure was reestimated using data from 1962-1994 (Table 1). The dependent variable is the incumbent president's party's net seat change in the House of Representative. The four independent variables specified are the public evaluation of the president's performance (presidential approval rating); the change in real disposable income; the presidential surge and decline; and the exposure term for the president's party.[6] The results of the analysis in Table 1 indicate no relevance of exposure to contemporary House elections. The exposure term and the presidential approval rating failed to achieve statistical significance, and the slope coefficients for both are far less steep than in the analysis by Waterman,

[6] Data are drawn from congressional elections from 1962 to 1994. The dependent variable of interest is the net number of seats gained or lost by the president's party in U.S. House elections. Presidential responsibility is measured with the last Gallup support score for the incumbent president prior to the election. The change in real disposable income is measured as the net percent change in RDI over the last year, as of the third

Stimson, and Oppenheimer (1991). When the 1994 election is excluded from the analysis the fit of the model improves, but the exposure and presidential responsibility terms still fail significance.[7]

If we re-estimate the model using from 1962 forward, we obtain an improved fit for the model but lose significance in two variables of interest. The failure of exposure can seem disheartening, because the term "exposure thesis" and the theoretic rationale behind exposure—that a president's party performs well or poorly based on the vulnerability of its assets—have an intellectually attractive aesthetic quality. Why does exposure fail?

Exposure Reconsidered

Large seat swings usually depend on multiple marginal wins by the advantaged party. The relatively low variation in congressional seat changes, especially since 1974, reflects the increased incumbent security since the end

Table 1
The Exposure Thesis and Seat Change Since 1962

	1962-1994	1962-1992
Constant	-19.86	-17.85
Exposure	.11	.15
	(.22)	(.13)
Economic Growth	5.20	5.80
	(2.80)*	(1.70)**
Presidential Surge and Decline	.81	.72
	(.32)*	(.20)**
Presidential Approval	.07	.06
	(.24)	(.15)
Adjusted-R^2	.58	.81
N	17	16

Standard errors in parentheses.* $p < .05$, one-tailed test ** $p < .01$, one-tailed test

quarter. The direction and the size of the presidential surge and decline are measured as the net two-party plurality of the winning presidential party in presidential years, and the inverse of that plurality in the midterm (see Campbell 1997). This analysis uses the same measure of exposure as Waterman et al. (1991), the presidential party's seats held prior to the election minus the equilibrium value for that party (the average of House seats held by the party for the period examined).

[7] Campbell (1993) demonstrated that exposure did not contribute to explaining seat swings after World War II. Waterman and his colleagues concede that the applicability of the exposure equilibrium declines with the aging of the party system. The loss of significance for exposure after the second decade of the New Deal realignment conforms to this admission.

of the 1950s; there simply are fewer marginal seats.[8] It is reasonable to assume that the growth of incumbent security diminished the exposure effects in congressional elections. An oft-forgotten aspect of David Mayhew's classic article on vanishing marginals lends wisdom to understanding this problem. Mayhew noted (1974: 30) that "if fewer House members are winning elections narrowly, and if the proportion of 'open seats' per election [is] not rising, it ought to follow that congressional seat swings are declining in amplitude." The decline of Mayhew's marginals coincides directly with the beginning of the 1960s. If, at the end of the 1950s, incumbents were able to increase their electoral security and isolate themselves from partisan swings, it would stand to reason that the extent of partisan seat changes in that era would be confined to districts without incumbents.

Research on open seats finds latent partisan effects in those races. On average about 20 percent of open seats "flip" to the district out-party. The partisan switches in open seats are not evenly distributed across parties in a given election, but instead follow the same cyclical pattern demonstrated by all congressional elections. The proportion of open seats that change party is far greater than the proportion of incumbent seats.

One reason open seats are substantively important for explaining macro-level changes in Congress is the vulnerability of those elections to partisan tides. Mondak (1993) and Flemming (1995) found that presidential coattails were more pronounced in open-seat elections than in incumbent races.[9] While these authors disagree on the details of coattails in open-seat contests, both are in agreement that national political tides have an increased impact on congressional elections when incumbents are absent.

[8] Jacobson (1987) argued that the marginals did not decline, but rather that the band of vulnerability which encompasses marginal seats expanded from 55 to 60 percent of the vote. Bauer and Hibbing (1989) disputed Jacobson, contending that the incumbent defeats that support Jacobson's argument were the product of idiosyncratic electoral factors such as incumbent scandals.

[9] There is a pulse to the net partisan swings in open seat and incumbent elections. Net swings are far more pronounced in the open seats. The proportional incumbent and open-seat swings of the same magnitude in only two years (1964 and 1982). Generally, the proportional swing in open seats has been to the detriment of the GOP, which also goes far in explaining its inability to capture the House before 1994 (see Gilmour and Rothstein 1993). The largest proportional GOP gains in open seats occurred recently (1980, 1984, and 1994), and were in years where partisan or economic trends (or both) favored the GOP. The GOP only made net proportional gains through open seats on two other occasions (1966 and 1972), again under conditions favoring Republican pickups. Large Democratic gains through open seats similarly occurred during Republican midterms.

How does one translate the vulnerability of open seats at the district level into a relevant measure of seat change at the national level? Lockerbie (1995) made such an initial translation in his effort to improve the anemic showing of the Lewis-Beck and Wrighton (1994) forecast model for the 1994 election. In his model, the number of open seats was multiplied by a nominal term indicating whether 60 percent of the electorate correctly predicted a gain by the president's party or the out-party. This model produced an average predictive error of 9.3 seats, which is substantially better than the 16.5 seat error of the original exposure model. Evidence of strong relationships between open seats and national political trends at the district and aggregate levels indicates that the creation of more open seats should increase the influence of national trends in determining the composition of Congress.

Lockerbie's study is a step in the right direction, but comes up short on two dimensions: (1) it cannot produce a pre-election forecast, because the critical open-seat term requires a post-election assessment of the electorate's prognosticating ability; and (2) the interacted open-seat term does not account for the *balance of exposure* of open seats, that is, which party has more seats exposed to the greater partisan tides in open-seat elections.

Open-seat exposure is a product of incumbent retirement, and the distribution of retirements is rarely proportionally distributed. Gilmour and Rothstein (1993) observed that Republican incumbents retired at a greater rate than Democrats from 1970 to 1990. They ascribed the lingering GOP congressional minority to the impact of greater Republican exposure through open seats (see also Abramowitz 1991). Democrats have retired in disproportionate numbers in the 1990s, and the GOP has taken advantage of those retirements: since 1992, Republicans have gained a net of 33 seats vacated by Democrats. If one party has a disproportionate number of retirements, or simply has more retirements than the other party, they will have fewer opportunities for seat gains, due to the position of running defensively in more seats that are at risk. In an era where open seats are by far the normal avenue for advancement to Congress, the exposure of a political party should be considered in the context of the potentially high-risk seats that a party has exposed.

The impact of open-seat exposure on the seat should be greater than the potential seats to be lost by the overexposed party. One reason for increased incumbent security has been the increase in strategic incumbent retirements. The surfeit of political information available to incumbents allows them to read the electoral tea leaves, and then determine when to leave Congress without the embarrassment of electoral defeat. Moore and Hibbing (1992: 827) noted in their overview of retirements in the 1970s and 1980s that "retirements generally occur on the basis of rational calculations concerning advancement potential, chances of securing reelection, and perhaps financial

considerations." In other words, legislators consider the potential benefits of remaining where they are, the cost and effort required to stay there, and then act strategically in their own best interests. If incumbents of one party perceive a potentially difficult reelection due to the vulnerability of their party in national elections, they should be more prone to retire. The disproportionate flight of incumbents from one party may signal a general vulnerability that is not reflected in the general exposure measure. Such vulnerability will enhance the relationship between open-seat exposure and the partisan seat swing.

The Open Seat Exposure Model

To test the relationship between open seats and partisan seat swings, a measure of open-seat exposure is developed. Open-seat exposure is calculated as the net number of open seats the president's party has exposed (Open $Seats_{pres}$ - Open $Seats_{out}$).[10] A positive value indicates the president's party has more open seats at risk, and is overexposed. A negative value indicates the president's party is underexposed, and has the potential for substantial seat gains via open seats.

The equation from Table 1 is reestimated with the control for open-seat exposure included in the model. The results of that analysis appear in Table 2.[11] Open-seat exposure is a significant predictor of the House seat swing in elections since 1962. When compared to the exposure models in Table 1, the explained variance increased by 17 points for the analysis of elections from 1962 to 1994, and increased by 8 points when 1994 is excluded from the analysis. The fit is better than that of Waterman et al.'s exposure model, and 12 points better than Lockerbie's (1995) economic seat change model. The estimated seat swings generated by the open-seat exposure model are displayed along with the actual seat swings from 1962-1994 in Figure 2. The average error is 6.33 seats (4.94 seats when 1994 is excluded), a one-seat improvement over the model in Table 1 and two orders of magnitude improved over the estimates generated by the original exposure model. Even with the inclusion of the 1994 election the model generated predictions that are a snug fit to the actual seat swing ($r = .91$). The predicted change for 1994 is 23 seats, which improves over the Waterman et al. exposure model estimates by 7 seats, and over the model estimates based on the analysis in Table 1 by 14 seats. [12]

[10] Open-seat exposure data are obtained from issues of *Congressional Quarterly Weekly Report.*

[11] A partisan-seats model that estimated Republican seat changes and included controls for presidential party produced similarly robust results that are consistent with the analysis below. Those results are available on request from the author.

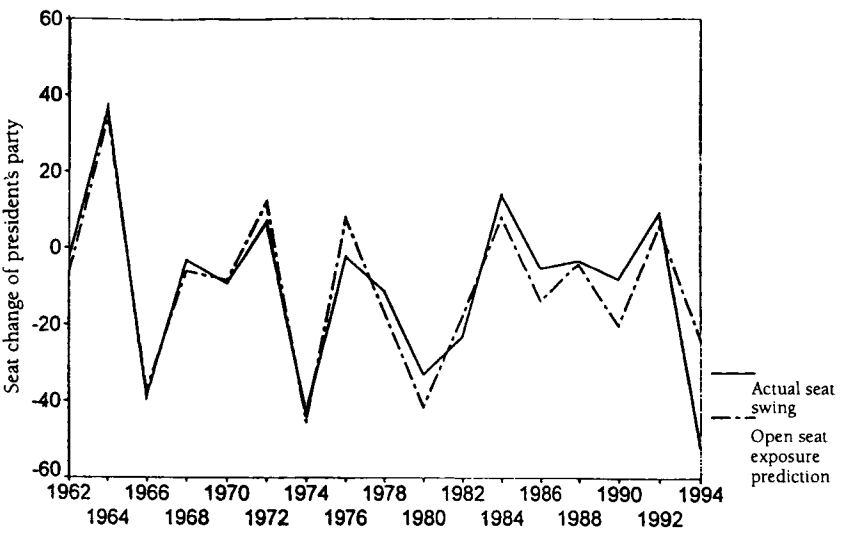
[12] Personal correspondence from James Campbell indicates that his model predicted a 26-seat swing in 1994, and finds a 53-seat swing with a realigning dummy variable for 1994. The inclusion of such a realigning dummy variable in the model presented here produces the same prediction (adjusted-$R^2 = .92$).

TABLE 2
OPEN SEAT EXPOSURE AND SEAT CHANGE

	1962-1994		
	Full Model	Reduced Model	1962-1992 (Reduced)
Constant	-21.27	-15.52	-14.69
Open Seat Exposure	-.98	-.94	-.64
	(.32)**	(.31)**	(.20)**
Presidential Surge and Decline	.81	.84	.77
	(.25)**	(.24)**	(. 15)*
Economic Change	4.74	5.13	.-5.56
	(2.17)*	(1.89)*	(1.16)*
Exposure	.12	—	—
	(.17)		
Presidential Approval	.14	—	—
	(.19)		
Adjusted-R^2	.75	.76	.91
N	17	17	16

Standard errors in parentheses. * $p < .05$, one-tailed test ** $p < .01$, one-tailed test

FIGURE 2
OPEN SEAT EXPOSURE THESIS SEAT SWING PREDICTIONS, 1962–1994



The open-seat exposure model (reduced) fared well in estimating the 1996 elections. The Waterman et al. model indicated an approximate Democratic gain in the 1996 election of approximately 46 seats, which would have resulted in a Democratic majority. The open-seat exposure model forecast a far more modest seat change—a gain of 5.76 seats by the Democrats. In 1996 the Democrats gained a net of 10 seats, which falls just within the margin of error for the open-seat exposure model.

Conclusions

The exposure thesis was an insignificant predictor of congressional seat swings after 1962 because the nature of congressional elections changed during the postwar era. Incumbent safety reached unprecedented levels that stifled the immediacy of partisan change and constrained the number of vulnerable seats that could conceivably switch. Turnover in Congress has come to rely largely on the voluntary retirement of incumbents and the subsequent creation of open seats (Gilmour and Rothstein 1993). An empirical test that attempts to explain seat change needs to consider the rationale behind retirements, and what retirement communicates about the balance in the electoral system.

When incumbent safety increases and turnover shifts to retirement, the vulnerability of a party will be reflected in the decision of incumbents to forego reelection. The disproportionate retirement of Republicans in the 1970s and 1980s had been ascribed to the limited rewards of minority party service and—especially in the South—to the beckon of senatorial or executive posts that offered more latitude to actively pursue a conservative agenda (Stanley 1992). The recent exodus of House Democrats indicates that minority status and the threat of losing can prompt retirement, as can the existence of cash incentives such as campaign war chest conversion. Democrats continue to retire in greater numbers than Republicans in the 1990s, and Republicans made substantial gains in districts where Democrats departed, especially in the South.

Incumbents cultivate substantial electoral advantages, and they are prone to anticipate departure rather than having it thrust upon them. The established forecasting models, especially the exposure model, do not capture the degree to which a party is electorally exposed in the era of incumbent safety. The model advanced in this article can generate forecasts in advance of elections, increasing its utility. By measuring exposure to take into account this differential between the two parties, the open-seat exposure thesis finds more support empirically and is more theoretically pleasing. Even though the original exposure thesis failed an empirical test, the underlying theory—the president's party strength in Congress depends on its vulnerable seats—is theoretically important to the interpretation and forecast of congressional elections.

Appendix

Actual and Predicted Seat Changes, 1962-1994

YEAR	Actual Change	Exposure Model 1*	Exposure Model 2**	Open Seat Exposure***
1962	-3	6.90	-3.88	-6.88
1964	37	33.05	29.90	34.26
1966	-39	9.83	-28.97	-36.90
1968	-3	-55.53	1.98	-5.92
1970	-9	-10.45	.11	-8.16
1972	7	2.33	12.71	12.14
1974	-43	-74.65	-47.38	-44.66
1976	-2	7.33	-9.64	7.80
1978	-11	6.41	-2.51	-16.42
1980	-33	-41.75	-33.82	-41.44
1982	-23	-36.87	-18.12	-17.69
1984	14	9.32	12.20	8.11
1986	-5	-4.73	-6.72	-13.39
1988	-3	-8.11	-.31	-3.91
1990	-8	-3.15	-14.62	-20.10
1992	9	-19.15	-9.14	5.55
1994	-53	-16.11	-9.66	-23.39

* Waterman, Stimson, and Oppenheimer (1991: 388).

** Table 1.

*** Table 2.

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