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Bernard Grofman; Thomas L. Brunell; William Koetzle

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BERNARD GROFMAN
THOMAS L. BRUNELL
WILLIAM KOETZLE
University of California, Irvine

Why Gain in the Senate But Midterm Loss in the House? Evidence from a Natural Experiment

In this note we use the Senate's six-year election cycle to explain why the "iron law of midterm loss" that applies so consistently to the House works with less certainty in the Senate; in fact, since 1946 there have been three instances (1962, 1970, and 1982) where the Senate has experienced no midterm loss. To explain the differing nature of midterm seat change in the Senate, we employ a natural experiment in which Senate midterm elections (1946–1994) are categorized in the following way: (1) The same party controlled the White House two and six years prior to the midterm; or (2) a different party held the presidency six years as compared to two years before the midterm. We hypothesize that, in the first situation, midterm loss forces are mutually reinforcing; thus, the Senate experiences large and unidirectional seat changes against the party that holds the White House. In the later situation, however, the electoral cycle effects (t-2 and t-6) run counter to one another and, therefore, seat change is not unidirectional, midterm loss is lessened, and there is even the potential for midterm gain. In fact, all of the midterm gains in the Senate in the 20th century occur in this situation.

There are remarkably few phenomena in political science that happen with such regularity that scholars dare call them "laws." Midterm loss in the United States House of Representatives, however, is one such phenomenon. In every midterm election since the late 19th century save one (1934), the party that controls the White House, be it Democrat or Republican, consistently sustains a loss in the number of seats it holds in the House. Midterm loss in the Senate is very likely, but it is not as consistent a phenomenon as in the House. Since the late 19th century, there have been four occasions (1934, 1962, 1970, and 1982) when the party that holds the presidency has either gained or failed to lose seats midterm in the Senate.¹

These midterm regularities, especially the consistency of midterm loss in the House, have stimulated a great deal of scholarly interest and research. Midterm loss is an important phenomenon because it

directly impacts the governability of the nation. If a newly elected President can count on losing seats in the Congress two years into its term, time becomes increasingly important in the quest to enact a legislative agenda. As Lyndon Johnson noted: "You've got to give it all you can, that first year. . . . You've got just one year when they [Congress] treat you right, and before they start worrying about themselves" (Sundquist 1992, 145).

This so-called "window of opportunity" suggests that midterm elections, and the seemingly inevitable loss in strength for the President's party, severely hampers a President's ability to govern, as well as Congress' willingness to deal with controversial issues.

There have been numerous hypotheses proposed about the factors that underlie the phenomenon of midterm loss, yet there is still no consensus as to why it occurs (Abramowitz, Cover, and Norpoth 1986; A. Campbell 1966; J.E. Campbell 1985, 1993; Erikson 1988; Kernell 1977; Lewis-Beck and Rice 1984, 1992; Tufte 1975, 1978).

In this study we will focus on the phenomenon of midterm loss as it occurs in the Senate. Most research on midterm loss has dealt with the House; however, there is some research that has dealt with both chambers (e.g., Waterman 1990; Lewis-Beck and Rice 1992). Lewis-Beck and Rice's (1992) important synthesis proposes models of midterm loss for both House and Senate elections that use similar sets of variables for explaining the results in each chamber. Like these authors, we believe that similar factors can account for midterm loss in both House and Senate.² However, our efforts will differ from their work and from other previous research on midterm loss in several ways.

First, the focus of this study is unusual in that it will deal as much with the determinants of midterm gain as it does with the determinants of midterm loss.

Second, while our ultimate interest is in net midterm gain or loss for the president's party, we will not use *net* seat change as our dependent variable, per se. Rather we separate results by party so we can examine seat change, both in the direction of midterm loss (i.e., against the President's party), and in the opposite direction (i.e., midterm gain).

Third, whereas the usual approach takes the relative power of different explanatory factors to be the amount of variance each explains when entered into a multivariate regression (e.g., Alesina, Londregan, and Rosenthal 1996; Brunell, Grofman, and Koetzle 1996; Lewis-Beck and Rice 1992), we make use of a simple natural experiment. For the Senate, most of the factors that have been proposed in the literature as key determinants of midterm loss may be distinguished in terms of whether they depend upon who is president at the time the Senate

class was last elected (t-6), or upon who was elected president in the last presidential election (t-2). For example, factors such as exposure³ (Waterman 1990; Waterman, Oppenheimer, and Stimson 1991), surge and decline,⁴ and the loss of presidential coattails⁵ depend upon which party controlled the presidency at time t-6; on the other hand, Erikson's (1988) presidential penalty model,⁶ and Kernell's (1977) negative voting model both depend upon who is president at time t-2.⁷ We take advantage of a natural experiment by analyzing data from the Senate in a fashion that incorporates the Senate's six year election cycle, and also by distinguishing (1) midterm years (t) in which the *same* party controlled the presidency at t-2 and at t-6 from (2) midterm years for which that was not true. For example, the midterm held in 1990 falls into the first category because a Republican was elected President in 1984 (t-6) and 1988 (t-2); in contrast, 1994 falls into the second category, since Clinton was elected in 1992, while Bush won the presidency in 1988.

Under these two categories, there are four cases of interest, identified below as A through D:

The same party holds the Presidency at t-6 and t-2

(A) If *either t-6 and t-2 effects (or both)* help explain midterm loss in the Senate, when the *same* party controls the presidency at time t-6 as at t-2, the t-6 effects (e.g., loss of presidential coattails, regression to the mean) and the t-2 effects (e.g., presidential penalty) are mutually reinforcing. In this situation, we expect strong midterm loss effects. Indeed, with the same party controlling the presidency at time t-6 as at t-2, we should **never see midterm gain**.

Different party holds the presidency at t-6 and at t-2

If a *different* party controls the presidency at time t-6 than at time t-2, there are three possible cases of interest.

(B) If *only t-2 effects* are operative, then we expect midterm loss for the party that controlled the presidency at time t-2 rather than for the party that controlled the presidency at time t-6, i.e., we again expect the usual midterm loss. Moreover, as in case (A), we should **never see midterm gain**.

(C) If *only the t-6 effects* are operative, then we expect midterm loss for the party that controlled the presidency at time t-6 rather than for the party that controlled the presidency at time t-2. Thus, since we normally are looking at which party controls the presidency at time

t-2, in this situation, with a *different* party controlling the presidency at time t-6 than at time t-2, in the Senate, we obtain the interesting prediction that we should **never see midterm loss**.

(D) If *both t-2 and t-6 effects* are operative, and if a *different* party controls the presidency at time t-6 than at time t-2, then we expect these effects to push results in opposite directions. If the relative magnitude of t-2 and t-6 effects differs somewhat from election to election, we would expect that **some**, but not necessarily all, of the Senate elections that fall into this category will exhibit **midterm gain** rather than midterm loss. **And**, perhaps most importantly, under this assumption of canceling out effects, we expect that, **when a different party controls the presidency at time t-6 as at time t-2, the overall midterm loss for the president's (t-2) party will average less—probably considerably less—than when the same party controls the presidency at both t-6 and t-2.**⁸

By examining these hypotheses about midterm losses and gains in the light of data on Senate electoral outcomes, looking in terms of partisan changes for a given senatorial cohort, we will (a) be able to determine whether both t-2 and t-6 effects are present, and (b) see whether the same factors can account for both midterm loss and midterm gain as a function of whether the same party does or does not control the presidency at both t-6 and t-2.

Data Analysis

While it is true that, since 1934, the party that holds the White House always experiences seat loss in the House, the exact nature of this loss is quite variable. From 1946 to 1994, for the House, a mean of 27.5 seats is lost by the party holding the presidency at t-2, with a standard deviation of about 19 seats. For this same period, midterm seat loss for the president's party in the House varies from a high of 55 in 1946 to a low of four seats in 1962. For the Senate, since 1946, a mean of 4 seats is lost by the presidential party, with a standard deviation of nearly 5 seats. Midterm seat loss in the Senate varies from a high of 13 seats in 1958 to a low of no seats lost in 1982, not to mention the seat gain that occurs in 1962 and 1970 during this time period.⁹

We show in Table 1 the observed patterns of midterm seat change in the Senate over the period 1946–1994 for each of two types of elections: (a) those with a Democratic president at both t-6 and t-2 or those with a Republican president at both t-6 and t-2; and (b) those with either a Democratic president at t-6 and a Republican president at t-2, or a Democratic president at t-2 and a Republican president at t-6.

TABLE 1
Seat Change in Senate Midterm Elections: 1946–1994

(a) Party of President same at both t-2 and t-6

Midterm Year	Seat Change			Percent of Change Compatible with:
	Midterm Loss	Midterm Gain	Total Change	Midterm Loss t-2 and t-6
1946	10	0	10	100.0%
1950	6	1	7	85.7
1958	12	0	12	100.0
1966	4	0	4	100.0
1974	5	1	6	83.3
1986	9	1	10	90.0
1990	1	1	2	50.0
Total	47	4	51	92.2

(b) Party of President differs t-2 and t-6

Midterm Year	Seat Change			Percent of Change Compatible with:	
	Midterm Loss (t-2 effect)	Midterm Gain (t-6 effect)	Total Change	Midterm Loss (t-2 effect)	Midterm Gain (t-6 effect)
1954	3	2	5	60.0%	40.0%
1962	1	5	6	16.7	83.3
1970	1	5	6	16.7	83.3
1978	7	6	13	53.8	46.2
1982	1	1	2	50.0	50.0
1994	6	0	6	100.0	0.0
Total	19	19	38	50.0	50.0

Note: All data are from CQ's *Guide to Elections*, Third Edition 1994. Washington, DC: CQ Press. For both sections of the table Seat Change is determined by counting the number of respective seats that change party from one election to the next. Special elections are omitted. Percent of change compatible with t-2 and t-6 midterm loss (part (a) of table) is calculated by dividing the number of seats lost by the sitting president's party by all seats that changed party that year. Percent of change compatible with t-2 midterm loss (part (b) of table) is calculated by dividing the number of seats lost by the sitting president's party by all seats that changed party that year. Percent of change compatible with t-6 midterm gain is calculated by dividing the number of seats lost by the party of the president six years previous by the total number of seats that changed party that year.

We see from Table 1(a) that, when there was a Democratic President at both t-2 and t-6 or a Republican President at both t-6 and t-2, the t-2 and t-6 effects are mutually reinforcing. Midterm elections under these circumstances result in a high proportion of seat change in the direction of midterm loss. For example, in the three instances where a Democrat was president at t-2 and t-6 (1946, 1950, and 1966), of the 21 Senate seats that changed party, 20 went in the expected direction (Democratic to Republican). Likewise in the four elections with Republican control in both time periods (1958, 1974, 1986, 1990) fully 27 of the 30 seats that changed went from Republican to Democratic.

Thus, as expected by hypothesis (A) of the previous section, when the same party controls the presidency at t-2 and at t-6, the Senate *always* experienced net midterm loss. This situation of consistent party control of the presidency in the Senate over the course of a six-year election cycle is analogous to that which necessarily obtains in the House, where the various factors we have identified such as presidential penalty and loss of presidential coattails, all operate on a two-year cycle and mutually reinforce each other to foster midterm loss.

In contrast, we find midterm loss wanes when different parties control the presidency at t-6 and t-2 (b of Table 1). In three of the six such elections, there was either no net loss at the midterm (1982) or there was net midterm gain (1962 and 1970).¹⁰ Furthermore, the pattern of seat change is much different than in the case of unified party control of the presidency for both time periods. Whereas in part (a) of Table 1, the trend was uniformly against the President's party, when control is divided at t-2 and t-6, the pattern of seat change is mixed. For example, when there was a Democrat at t-6 and a Republican at t-2 (1954, 1970, and 1982), of the 13 seat changes only 5 (38.5%) changed from Republican to Democrat as the phenomenon of midterm loss would suggest (i.e., in this case, against the Republicans). Likewise when there was a Republican t-6 and a Democrat t-2 (1962, 1978, and 1994) only 14 of the 25 (56%) seats that changed went in the direction of t-2 midterm loss. Across these six midterm elections, only half (19 of 38) of the seat changes are consistent with t-2 midterm loss.

Thus, in a situation of divided party control of the presidency at t-6 and t-2, the electoral forces at work, rather than being mutually reinforcing, now counteract one another as suggested by hypothesis (D) above. This leads to (1) dampened midterm loss and (2) the potential for midterm gain in the Senate.¹¹

Discussion

We have considered two situations: (1) where the same party has won the presidency in the last two elections preceding a midterm election and (2) when different parties control the White House at $t-6$ and $t-2$. In the first situation, the $t-2$ and the $t-6$ factors reinforce each other leading to a strong expectation of midterm loss in the Senate. In fact, we find near unidirectional seat change in these instances. In the other situation, the $t-2$ and $t-6$ effects work in opposition to one another. Here we find that (a) midterm loss is muted compared to the first situation and (b) sometimes we actually observe midterm gain rather than midterm loss. Thus, all of our expectations described above are confirmed.¹²

The findings presented above have specific political consequences. The specter of losing seats midterm significantly impacts the ability of a president to enact a legislative agenda. However, this inevitability is not uniform across all presidents. First-term presidents following someone of another party (like Reagan in 1982) are likely to face only modest seat loss in the Senate (they may even gain seats), while a second-term president (like Clinton in 1998) faces a legislative nightmare: almost certain midterm loss in both the House and Senate. Furthermore, this phenomenon increases the likelihood of divided government; there are two instances when the same party held the White House $t-2$ and $t-6$ when the result of the midterm election was that the party that held the presidency lost control of the Senate (1946 and 1986).

The type of data analysis provided in Table 1 demonstrates, we believe, the usefulness of taking advantage of natural experiments; here, situations with and without same-party control of the presidency at time $t-6$ as at time $t-2$.¹³ Of course, any given natural experiment is limited in what it can tell us. Here we have been able to demonstrate conclusively that both $t-2$ and $t-6$ effects are present in the Senate, but the research design we have used does not permit us to assign weight to the various hypotheses (e.g., surge and decline effects, loss of presidential coattails, presidential penalty, etc.) compatible with each of these two types of effects. Nonetheless, we are no worse off than in the common multivariate modeling situation. In multivariate models, multicollinearity among explanatory factors can make reliably parsing out explanatory power among independent variables quite problematic. And, because we have set up our test so that the predictions in the two situations are mutually exclusive, the causal inferences we draw from our findings seem both more intuitive and more robust than the results

of most regression analyses. Moreover, and most importantly, we have provided a simple and elegant explanation of why midterm gain is more common in the Senate than in the House, and identified a *necessary* condition (different party control of the presidency at time t-6 as at time t-2) for such midterm gain to occur.

Bernard Grofman is a Professor in the Department of Politics and Society, 3151 SSP, University of California, Irvine, California 92697. Thomas L. Brunell is a Visiting Lecturer in the Department of Politics and Society, University of California, Irvine, California 92697. William Koetzle is a Congressional Fellow of the American Political Science Association.

NOTES

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1. The difference between 15 of 16 midterm losses (House) and 12 of 16 midterm losses (Senate) may seem insignificant; however, with 16 trials, 4 successes, and the probability of success at .0625 (1/16) the binomial probability of such an occurrence is .015.

2. Of course, there are various potentially important differences between elections in the two chambers, most notably election cycle effects caused by the difference in term lengths in the two chambers. In addition, arguably, the types of campaigns and candidates differ in the two chambers of Congress as well. By their very nature, candidates for the Senate tend to be more visible, usually have more experience, and usually have much more campaign money to spend (Mann and Ornstein 1981; Mann and Wolfinger 1980). Similarly, Senate campaigns attract a great deal more media coverage than House elections (Fenno 1982). Thus, competitors for Senate seats have higher name recognition, more "positive" ratings, and greater contact with voters than their House counterparts (Mann and Wolfinger 1980). Also, the constituencies that Senators represent are larger and (generally) more diverse than the smaller House districts (Mann and Ornstein 1981). Nonetheless, such differences do not preclude similar factors operating to impact election outcomes in the two chambers. While some scholars "conclude that House and Senate elections are fundamentally different phenomena—that differing forces are influencing House and Senate elections" (Waterman 1990, 101), we believe that it is better to focus on explanations in which "the same forces affect each institution differently" (Waterman 1990, 101).

3. Waterman (1990, 104) states: "Thus, when a party controls a large number of seats that have traditionally been held by the other party, that party is overexposed and is expected to lose seats in the next election."

4. The fact that a given party won the presidency suggests that there was an electoral tide running in that party's favor that year that probably also helped carry other candidates of the party to victory, especially to the extent that politics is

nationalized so that the effect of the electoral tide extends beyond just the presidential election (Campbell 1986). In a midterm year, it is unlikely that the previous tide in favor of the president's party will be as strong. Thus, some congressional seats previously won by the party will now be lost, resulting in a midterm loss effect. In the Senate, that presidential electoral tide was at t-6.

5. The *withdrawal of presidential coattails model* is closely related to the surge and decline effect. Here, the basic idea is that a strong presidential candidate on the ballot leads to success of some candidates of the president's party lower on the ballot who might not have won without the president on the ticket, e.g., without an increase in the number of straight ticket votes that are cast. In an off-year election without a winning president's coattails to help them, members of the presidential party who won by narrow margins, especially those who ran behind the president in their districts, should be vulnerable. In contrast, incumbents of the opposing party, should, *ceteris paribus*, be better able to hold onto their seats.

6. In the *presidential penalty model* proposed by Erikson (1988), while the exact logic is not completely clear, the basic idea is that some voters become unhappy with the president, either because he does not deliver on his promises or because his policies turn out to be different from those the voter expected. In this approach, voters dissatisfied with the president are posited to desert his party's candidates for Congress, thus giving rise to midterm loss.

7. Similarly, the *policy balancing model* (Fiorina 1992; Alesina and Rosenthal 1995), which has achieved prominence in recent research on split-ticket voting and midterm loss would presumably be characterized as a t-2 variable, since it is the incumbent president who determines the incentives for voter's engaging in policy balancing. As the reader is no doubt aware, the basic idea in the policy-balancing model is that voters choose not a single candidate but a set of candidates (e.g., a member of the House and a President) whose policies, in toto, will be expected to come closest to those preferred for the voter. Thus, if, say, a liberal Democrat is president, then a moderate voter may wish to support a conservative Republican candidate for House even if the voter is actually closer to the more liberal policies offered by that candidate's Democratic opponent. The voter's rationale would be to use his vote for the House to provide a counterbalance to the liberal policies that will be advocated by the president.

8. Waterman (1990, 100) suggests a similar argument: "it is possible that the same cohort could benefit from the election of a President of their own party (Carter in 1976, for example) and then benefit again at midterm from the unpopularity of the President of the opposing party (i.e., Reagan in 1982)."

9. When we recalculate changes in the Senate in terms of the percentage of the 33 or 34 seats that are up for election, we find the *percentage* of average loss is 12% of the seats. Thus, the magnitude of midterm loss is arguably greater in the Senate than in the House over this time period despite the fact that three of the thirteen midterm elections resulted in midterm gains or no midterm loss.

10. The only other example of midterm gain in the Senate in this century, 1934, also falls into the pattern of a different party winning the presidency at t-2 (1932) than at t-6 (1928).

11. Another method by which to test the importance of the t-2 and t-6 effects is using regression analysis. Work-in-progress (Brunell and Koetzle 1997) demonstrates that a categorical variable (midterm tide) accounting for these different midterm

situations (i.e., unified or divided t-2 and t-6) is a statistically significant predictor of aggregate seat change. In a multivariate model of seat change in the Senate including the number of open seats, exposure, and the number of special elections, the effect of the midterm tide variable remains statistically significant; thus, the explanatory power of this variable appears to be independent of other commonly used predictors of seat change.

12. The notion of paying attention to whether the same party controls the presidency at t-6 as at t-2 is certainly not original to the present authors. For example, Waterman (1990) compares House and Senate elections using exposure as a midterm loss determinant for both chambers. Yet, as far as we are aware, the breakdown of Senate midterm electoral outcomes into the four categories shown in Table 1 has not previously been done.

13. Recent work has illustrated how natural experiments such as ones involving House and Senate comparisons (Glazer and Grofman 1987; Grofman, Griffin, and Berry 1995), or comparison of elections within a given state for a given office under different types of election systems (Davidson and Grofman 1994), or comparisons of the voting behavior of Senators elected from the same state of the same and opposite parties (Grofman, Griffin, and Glazer 1990) may be used to devise relatively simple and relatively elegant tests of competing models. In such natural experiments, ideally, the most important statistical test becomes the inter-ocular test. (The *inter-ocular test* requires that the results be so clear that they jump up and hit you between the eyes—one of the leading proponents of this test in political science is A Wuffle (see e.g., Wuffle 1992).

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