

WILLIAM D. ANDERSON
The Ohio State University
JANET M. BOX-STEFFENSMEIER
The Ohio State University
VALERIA SINCLAIR-CHAPMAN
University of Rochester

The Keys to Legislative Success in the U.S. House of Representatives

Our research addresses how individual member behavior and institutional variables affect legislative success in the U.S. House of Representatives. Using new measures of activity from the 103d Congress (1993–94), a count dependent variable, and negative binomial regression, our analysis assesses member effectiveness. We find that a member's activity level encourages legislative success, but gains are limited when members speak or sponsor too frequently. Our results provide a clearer picture of the role of legislative context and the relevance of institutions in determining a member's legislative successes and failures.

A United States Congressman has two principal functions: to make laws and to keep laws from being made. The first of these [is achieved] with sweat, patience, and . . . remarkable skill . . . but the second they perform daily, with ease and infinite variety.

—Robert Bendiner (1964, 15)

On January 5, 1993, U.S. House Representative William D. Ford (D-MI) introduced the first bill of the 103d Congress. During the following days, weeks, and months, more than 5,000 additional bills were introduced in the House—nearly 20 each legislative day. When the 103d Congress came to a close, fewer than 10% of the bills sponsored in the House had become public law. What “remarkable skills” allow some legislators to guide their bills successfully out of committee and, perhaps, out of the House, while others are routinely met with legislative defeat? Can the individual actions a member undertakes improve her legislative outcomes? Further, how do these skills interact with the member's external environment? Are members able to overcome institutional impediments to still find legislative success in Congress?

We seek to answer these questions by examining legislative success in a novel manner. In doing so, we address two important normative issues. First, we assess the importance of individual member action in the face of established institutional barriers. We suggest that member behavior may overcome institutional impediments, a point of considerable value in assessing democratic lawmaking. Second, we reexamine a classic problem in legislative politics by collecting detailed data on bill sponsorship and member behavior, which enables us to specify and model correctly legislative success in an expanded, updated, and comprehensive manner. Using this data, we address the complex interaction of institutions, individuals, and legislative outcomes. Thus, we analyze how policy-making occurs and under what conditions citizens might see their elected representatives find success in committees, on the floor, and at the enactment stage of the legislative process.

Our work makes several important contributions to the literature on legislative success. We concur with Hibbing (1991) that members of Congress are not “mere automatons” whose legislative hopes are dictated solely by institutional factors beyond their control. Rather, “as politicians pursue different goals, consider institutional constraints, and take advantage of political opportunities” (Mouw and Mackuen 1992), they make assessments about the long-term chances of their proposals and set about choosing activities that might improve those chances. Our results show that selectively active legislators are able to overcome institutional impediments and see their legislative agendas to fruition.

Utilizing information for all members in the House of Representatives, which is the neglected institution in the existing literature on legislative effectiveness, we add new measures of member activity and test whether or not these measures are related to legislative success. We clarify the role that institutional arrangements play in tempering or boosting member effectiveness and, for the first time, do so across different legislative stages, i.e., committee, floor, and enactment. In contrast to extant literature, we demonstrate that, although established structural factors remain potent, members can enhance their own legislative effectiveness through a careful balance of pre- and post-bill-introduction activities.

An equally important contribution is our conceptualization of the dependent variable (legislative effectiveness) as a count of the number of bills by a member that move through the legislative process rather than the proportion of the bills enacted. This is an intuitively satisfying conceptualization because it reflects the way that most legislators and interested constituents are likely to measure success—namely, as a

function of the number of bills on which the member receives positive action. Finally, we provide methodological improvements with our discussion and application of negative binomial regression, which results in more reliable parameter estimates and provides us with statistical confidence in our conclusions.

The Pursuit of Legislation

In a classic study of the Senate during the 1950s, Donald Matthews (1960, 115) created an index of “legislative effectiveness” to measure “the ability to get one’s bills passed” and to reflect a member’s “efficiency as a legislator.” Since that early effort, a handful of scholars have directly addressed the question of legislative effectiveness in the modern House and Senate (Frantzich 1979; Hibbing 1991; Moore and Thomas 1990).¹ The extant literature emphasizes that membership in the majority party and seniority are the dominant explanations of legislative effectiveness.

The literature tells us that the relationship between majority party status, seniority, and effectiveness holds across legislative chambers at the national level as well as across time.² In a study of the Senate, Moore and Thomas (1990) also found that senior members of the majority party who specialized and sponsored only a few bills were most likely to see their legislative proposals meet with success. Similarly, in his study of congressional careers, Hibbing (1991) found that specialization and what he termed “legislative efficiency”³ increased with the number of years that members served in office. In the only study of effectiveness in the House, Frantzich (1979) used a sample of House members to conclude that the most effective legislators were senior, electorally safe members of the majority party. In contrast to the Senate findings, however, House members seemed to benefit from a “shotgun approach” to bill sponsorship—sponsoring many bills on a broad array of issues.⁴

Our work assumes that most members who initiate policy proposals tailor at least some of them to have a chance to win (see Mouw and Mackuen 1992).⁵ Nevertheless, we do not rule out the possibility that legislators may have a variety of goals when sponsoring bills. Members have reelection as their primary goal (Mayhew 1974), but many are also concerned with making good public policy, perceiving passage as a step toward their public policy goals (Fenno 1973, 1978). Power-seeking members likely see their bills winning on the floor as evidence of political power (Dodd 1977; Fenno 1973, 1978; Mouw and Mackuen 1992). In an instrumentally rational manner, members choose among

various activities, or legislative strategies, in an attempt to attain their goals as legislators. We suggest that the passage of a member's legislative proposals is one of his primary goals. As Frantzich (1979) suggests, "[members] would prefer to have more rather than less legislation bearing their name." Wawro (2000) is more specific and contends that majority party members act as legislative entrepreneurs because of the prospect of legislative leadership.⁶

We suggest that three sets of factors are instructive in our analysis of legislative success: institutional arrangements, which include rules and norms of the chamber (including leadership, apprenticeship, and the legislative advantages accrued by the majority party); political context, namely, the electoral safety of the district and the spatial preferences of the member; and finally, member activities, which are those actions individual members choose to undertake when crafting and advocating their legislative agendas. These activities may include bill scope and agenda size, legislative specialization, and the decision to speak on the floor of the House.

The next section discusses our data and methods and is followed by two sections discussing the covariates in our models and our expectations for these variables as they relate to a legislator's effectiveness. The discussion of member activities highlights our more expansive measures and is followed by a discussion of the institutional arrangements and district contexts that impede or enhance the achievement of legislative goals.

Data and Methods:

A Count Model of Legislative Success

We collected data by member on all public bills sponsored during the 103d session of the House of Representatives. Table 1 presents the descriptive statistics for our member dataset, which has 419 cases.⁷ Table 1 shows that legislative success is difficult to find. The average member of the 103d Congress had 1.3 bills reported by committee, 1.0 passed on the floor, and 0.5 signed into law. The median number of bills passed at each stage per member is 0.⁸ Members submitted locally targeted legislation 12% of the time, whereas 16% of their bills were considered "hot bills" (bills addressing salient topics). Members were also inclined to specialize, with bills being referred to the same committee approximately 40% of the time. The 103d was Democratic (59%), relatively senior (more than 9 years served), and mixed with a reasonable number of freshmen (26%).

TABLE 1
Descriptive Statistics for 419 Representatives
in the 103d Session

Variable	Mean	Median	Standard Deviation
# Bills Reported	1.272	0	2.496
# Bills Passing on Floor Vote	1.007	0	1.981
# Bills Signed into Law	0.475	0	1.050
Majority Party	0.589	1	0.493
$ DW-NOM_{member} - DW-NOM_{floor} $	0.367	0.361	0.236
$ DW-NOM_{member} - DW-NOM_{party} $	0.158	0.126	0.147
% National Bills	64.80	68.18	23.56
% Local Bills	12.08	6.250	17.39
% "Hot" Bills	15.94	10.00	19.52
% "Specialized" Bills	40.28	33.33	20.44
# Bills Sponsored	15.16	12.00	12.12
Floor Speeches	70.25	55.00	58.87
Seniority	9.067	7.000	8.382
Freshman	0.257	0	0.438
House Party Leader	0.091	0	0.288
Committee Leader	0.107	0	0.310
Subcommittee Leader	0.439	0	0.497
Electoral Margin % (t-1)	30.22	26.65	22.62

Member success, the dependent variable, is typically measured as a legislator's "hit rate," or the number of bills the member passed divided by the number of bills introduced (e.g., Matthews 1960). However, not all hit rates are substantively equal. Legislator A, who introduces only one bill and has it reported by committee, will have a 100% hit rate. Legislator B, who introduces 15 bills and has 10 reported, will receive a hit rate of 66%. Neither calculation accounts for the total bills introduced by each legislator, nor for the difficulty of having multiple bills clear committee.

Using the hit rate measure as our dependent variable creates modeling obstacles, risks producing biased or inefficient parameter estimates, and relies on distributions and assumptions that do not fit legislator success data adequately.⁹ Instead, we use the number of bills each member passed during the 103d Congress as the dependent variable in a count model.

Using a count rather than a proportional measure makes sense intuitively and theoretically. Schiller (1995a) found that constituents gain a general feel for the legislative agendas of their senators but can rarely spontaneously name a particular initiative. This finding is consistent with literature that suggests members can individually take credit for legislative accomplishments while deflecting the responsibility for failure (Cook 1979; Kimball and Patterson 1995; Parker and Davidson 1979; Patterson, Ripley, and Quinlan 1992). Consequently, constituents seem more likely to be concerned with the legislator's overall productivity and level of accomplishment than with the percentage of the legislator's agenda that passed.

Our count data suffers from an excess number of zeros, or cases where members failed to have one bill passed during the 103d Congress. These high failure rates cause our data to be overdispersed, where the dependent variable's conditional variance is greater than its mean. To account for overdispersion, we employ the negative binomial regression model (NBRM).¹⁰ The NBRM is an extension of the Poisson regression model (PRM) that allows the conditional variance of the dependent variable to exceed the conditional mean. In the PRM, the conditional mean of y , given x , is known:

$$\mu = \exp(x\beta).$$

In the NBRM, the mean μ is replaced with the random variable μ_r :

$$\mu_r = \exp(x_i\beta + \varepsilon_i),$$

where ε is a random error assumed to be uncorrelated with x and is thought of as either the combined effects of unobserved variables omitted from the model or another source of pure randomness (Gourieroux,

Monfort, and Trognon 1984; Hausman, Hall, and Griliches 1984 via Long 1997).¹¹ The NBRM allows us to model the heterogeneity in our data while not eliminating the possibility that the data have a Poisson distribution. Our models of the number of bills enacted reduce to Poisson models because the dependent variable is not overdispersed.¹² For all other dependent variables, the NBRM is a better fit.

In sum, the handful of previous attempts to model member success encounters several statistical roadblocks. We employ count models, specifically the negative binomial regression model, to avoid these problems and produce reliable parameter estimates. Using counts of the bills each member reported, had passed by the House, and enacted, we can impose more accurate distributional assumptions on the data. Count models also allow for nonlinear covariate relationships and produce estimates within the bounds of the data. Finally, count models let us include the number of bills the legislator introduced as a control variable, thus eliminating the weighting inaccuracies of hit rate measures. Our modeling strategy provides more accurate results and gives additional analytic leverage on the question of legislative success. Appropriate methods also give us confidence in our results and extend the available approaches for studying the factors that contribute to or hinder legislative success.

Member's Activities and Legislative Success

How are a member's activities related to the success of her bills at various points in the legislative process? The previous literature has done relatively little to examine this important question. As a result, there have been no systematic tests of the relevance of floor speaking, targeting of bills to local concerns, or selection of timely issues on legislative effectiveness. Members have a variety of tools available to them that may enhance their pursuit of legislative success. In this section, we focus on four such tools: sponsorship, floor speaking, specialization, and timing.

Sponsoring Legislation

Bill sponsorship and lawmaking acumen are important for distinct but complementary reasons. Most members take their roles as policy-makers seriously and give careful attention to building their legislative agendas. Legislators are somewhat limited, however, by time, constituency pressures, shifting political moods, and the difficulty of mapping legislative remedies onto specific issues (Schiller 1995a; Schneier and Gross 1993). The costs and benefits of bill sponsorship (particularly in

terms of staff resources, time, and the reputational costs associated with consistently introducing losing bills) must also be considered when analyzing a legislator's pursuit of public policy initiatives (Schiller 1995a).

In the 103d Congress, the average member sponsored 15 bills.¹³ Five members did not sponsor any legislation; Representative Solomon (R-NY) sponsored the most, a total of 80 bills.¹⁴ If legislators in the 103d were major league baseball hitters, then they would have struck out swinging many times over: 54% (n = 226) of the 103d Congress struck out completely at the committee level and did not have a single bill reported; 59% (n = 246) failed to have a bill pass the House floor; and 70% (n = 293) did not have a bill enacted into law.

The literature is not conclusive regarding the relationship between increased bill sponsorship and legislative success. Frantzich's (1979, 419) sample of House members suggests that a broad legislative approach results in a "double payoff" for members, whereas less prolific (and more focused) legislators succeeded less frequently. In contrast, a study of the modern Senate found that increasing sponsorship activity significantly decreased legislative effectiveness for senators, especially those of the majority party (Moore and Thomas 1990). To address this empirical question, we include both a raw sponsorship term, measured as the number of bills sponsored, and a squared sponsorship term to capture potential nonlinear covariate effects. Including these variables allows us to investigate whether or not members sponsoring the fewest bills fail to achieve much legislative success. By the same token, overly prolific legislators may find a decreasing return from the additional time and staff effort spent legislating, or they may find other legislators wary of a flood of bills from a single member.

Floor Speaking

Does choosing to be a vocal member of the assembly harm or help a member's chances for legislative success? Moore and Thomas (1990) found that, despite their expectations to the contrary, floor speaking was positively related to senators' legislative successes. Langbein and Sigelman (1989) suggest that some members may be both workhorses and showhorses, only one of the two, or neither, which implies floor speaking may not be useful for our study of effectiveness.¹⁵

A raw count of floor speeches in the 103d Congress suggests that member verbosity varies considerably. Pete Geren (D-TX) did not take to the floor even once, but James A. Traficant (D-OH) spoke on policy proposals 431 times—nearly twice each legislative day. Legislators spoke an average of 70 times on policy issues.

We test whether or not the variation in floor speeches serve as a cue about a bill's importance.¹⁶ By speaking, a member has the opportunity to make a rousing speech on behalf of a bill under consideration. Conversely, delivering too many speeches might result in a member being perceived as difficult or obstructionist, thus putting off other members. Not speaking at all, however, leaves the member no opportunity to provide cues for his bills or those of his colleagues.

We create two terms to address the relationship between member speeches and legislative success. The first variable is a count of policy-related floor speeches given by each member.¹⁷ The second term, the squared number of policy speeches, captures the potential penalty of speaking too frequently. We test if members find decreasing returns for being overly verbose. It is likely that legislators with a middle-of-the-road strategy, speaking neither too much nor too little, will find more success than will members who adopt extreme speaking strategies. We attribute this success to members having an opportunity to advocate their own bills.

Legislating in a Timely Manner: The "Hot Bill"

It behooves members to be aware of the ebb and flow of public and congressional moods. Bills that "catch the political tide" may be able to ride a wave of political interest into legislative success (Kingdon 1995; Schneier and Gross 1993). "Hot bills," a term we use to define these timely pieces of legislation, conform to Kingdon's (1995) discussion of the "policy window." During periods of high constituency demand and increased issue salience, windows of opportunity open up for legislators to address pressing policy concerns. The confluence of public demand and pressing policy needs may encourage the passage of timely legislation.¹⁸

We developed a hot bills measure to test this hypothesis using cover stories from 1993–94 issues of *Congressional Quarterly Weekly Report*. Bills introduced in the 103d session were labeled "hot" or "not," and a "hot bills" value was calculated for each legislator by dividing the number of hot bills introduced by the member's total legislative output. We test whether or not members who introduce a higher percentage of hot bills have a higher probability of getting their bills passed.

Hot bills are also "hot-button bills," which implies that these pieces of legislation might be more controversial than other bills and that more bills will be introduced on this specific topic. We suspect this to be especially true of hot bills introduced by members of the minority party. In the standard model, we believe that the hot bills coefficient will be

positive but may be statistically insignificant because of the controversial nature of the legislation. In separate models, however, we expect the majority party to be more successful than the minority in passing hot bills.

The Scope of Legislation

Members may also find variable success according to the scope of the bills they introduce. The committee system encourages legislative specialization, rewarding members who become policy experts with deference and vote trades (Krehbiel 1991). We measure specialization as the number of referrals to a legislator's top committee (that is, the committee that received the most referrals of a member's bills) divided by the total number of referrals.¹⁹

Our look at specialization goes beyond committee referrals. Members are also able to narrow the legislation's scope by varying its geographic focus. Legislation providing state or local remedies may be less controversial and more prone to receive a logroll than legislation with national implications. Further, local legislation benefits the district directly and provides electoral benefits for the legislator (Fiorina 1989; Stein and Bickers 1994). We measure the percentage of local legislation introduced by each member as the percentage of policy bills sponsored by a member that relate directly to his or her district, state, or region. We test whether or not members choosing to focus their legislation locally, rather than nationally, are more successful than their colleagues.

Institutional Arrangements and Legislative Success

Institutions—the rules and norms that govern behavior—may serve to constrain or enhance legislative success in the House. Beginning with the norm of apprenticeship, we consider several additional institutional arrangements that might affect a legislator's effectiveness. These include the agenda-setting power associated with committee and party leadership, majority party membership, and the multiple veto points generated by the lawmaking process.

Research on norms and folkways in Congress is useful for understanding some of the underlying factors that influence a legislator's effectiveness. "Congressional norms," Matthews (1960, 92) wrote of the Senate, are the "unwritten rules of the game, norms of conduct, [and] approved manner of behavior." Norms and folkways, like apprenticeship, may impede a legislator's lawmaking efforts.²⁰ Even if

the system of norms and folkways is only evidence of the steep learning curve that younger members face (Hall 1996), our expectation is still that the system may impede a legislator's effectiveness. We test to see if the decision of sponsoring legislation, knowing when to speak at appropriate times, or having floor savvy without basic experience in House politics is important, given the dramatic decline in the norms of apprenticeship and reciprocity and increase in broad participation that have been documented (e.g., B. Sinclair 1989; Smith 1989). We represent these unwritten rules with two variables. The first variable is a measure of member seniority, which the literature leads us to believe is a strong determinant of legislative success. This conclusion follows from the general belief that senior members are well steeped in the norms and folkways of Congress (Hibbing 1991; Moore and Thomas 1990). Our second measure is a dummy variable representing freshman status in the 103d Congress. We test whether or not freshman legislators must struggle to achieve their policy goals.

The committee system demands particular attention because it rewards specialization (Krehbiel 1991) and provides spoils and prestige for committee leaders (Fenno 1973). Leadership positions in the House committee system allow members to secure benefits effectively for their districts and, ultimately, for themselves (Adler 2000; Fenno 1973; Hall 1996; Mayhew 1974). We attempt to determine if committee and subcommittee leaders are more successful legislators than are rank-and-file committee members. Leaders understand their committees and are able to author legislation tailored to their committee and reflective of their expertise. Committee chairs are twice-blessed because they are also members of the majority. Ranking minority members, however, face an uphill battle because of their party label. To measure the relationship between committee leadership and legislative effectiveness, we include a dummy variable representing committee and subcommittee chairs and ranking members. Additionally, we include an interaction term to capture party-specific advantages conferred to leaders of the majority party.

We also consider the effectiveness of party leaders.²¹ Majority party leaders are primarily concerned with scheduling, referral, and the maintenance of coalitions (Bach and Smith 1988; Cox and McCubbins 1993; Froman and Ripley 1965). The increased demands on their time leads to a decreased likelihood of introducing bills. Because bill introduction is a precondition for success, we might expect party leaders to be less successful as lawmakers. House leaders, however, are also the locus of power in the House. This power may translate into broad legislative success. Minority party leaders seem less likely to find success

as legislators. Dummy variables and interaction terms are included to capture leadership and party-specific effects.

Members of the majority party possess advantages beyond the powers conferred upon committee and party leadership. The legislative politics literature makes extensive reference to the power of the majority party as an agenda setter. Agenda setting includes ensuring that majority party members achieve higher success rates than do minority party members (Bach and Smith 1988; Cox 2001; Cox and McCubbins 1993; B. Sinclair 1997). The rule-making power of the majority dictates who succeeds and who fails as legislators (Bach and Smith 1988; Binder 1997; Oleszek 1996, chap. 5; B. Sinclair 1997). We view the majority party advantage as an institutional "given" designed to advantage some legislators at the expense of others. We measure the majority party's institutional advantage as a dummy variable representing the legislator's membership in the majority. Republicans, as the minority party, are coded 0, and Democrats are coded 1.

To account for ideologues who stand at the outer margins of their parties, we included two measures of legislator ideology. First, we include the absolute value of the difference of the legislator's NOMINATE score from the 103d's median member. This value allows us to examine whether or not extreme members of either party find ideology a hindrance when attempting to pass legislation. Second, we include the absolute value of the difference between the legislator's NOMINATE score and the party median. With this measure, we hope to capture whether or not legislators with extreme preferences are more or less likely than their fellow party members to be successful. We believe that the coefficients for both variables will be negative since more ideologically polar members seem less likely to find success as frequently as their more moderate peers.

Finally, the federal system of checks and balances may condition a House member's legislative effectiveness. Taking a cue from recent literature on "veto points" (Krehbiel 1998; Tsebelis 1994), we suggest that the multistage lawmaking process provides a number of obstacles for a member's bills. We gain additional insight by breaking down our study of legislative effectiveness into the committee, floor, and enactment stages. Using separate models, we are able to compare and contrast our results across the three stages. We expect the parameter estimates and coefficients to be similar across the committee and floor stages because House committees are relatively representative of the median member of the House floor (Cox and McCubbins 1993, 78–79; Krehbiel 1990, 1991). The enactment stage is more complex. In this last model, we expect considerable change in both the direction and

significance of our parameter estimates. Because the enactment stage is further removed from the House's power, it is likely that 1) the model of enactment success will less accurately predict actual effectiveness at this stage, and 2) the relationship between our covariates and our measure of legislative effectiveness will be less certain.

Electoral Context and Legislative Success

Members may be constrained by their electoral fortunes. Large electoral margins allow members more legislative flexibility and autonomy over their legislative agendas (Fenno 1978; Fiorina 1974). Legislators with large electoral margins are granted trusteeship, or the ability to legislate beyond the district's preferences (Bianco 1994). These members thus have more freedom to take risks and expand the scope of their legislative agendas. Slim electoral margins may force members to legislate in a visible and allocative manner. Stein and Bickers (1995) argue that members elected by small margins are more likely to increase the number of grants allocated to their district during the subsequent House session. Marginal members may be more tightly tied to the preferences and interests of their district. Fenno's (1978) concept of "wobble room" supports this assertion.

Marginal members tied closely to the district are constrained, but because district-focused legislation is easier to pass, they may be more effective legislators (Arnold 1979; Krutz 2000; Mayhew 1974). Our models include a measure of the legislator's electoral margin in the previous congressional election. We examine whether or not members with higher electoral margins, because of their freedom to take risks, will dampen the chances of getting their bills passed. We also include a measure of spatial preferences. We include the absolute distance between each legislator's ideological location [using Poole and Rosenthal's (1997) DW-NOMINATE scores] and the floor median, as well as their party's median, which allows us to assess the influence of preferences as determinants of legislative effectiveness.

Results

We begin by comparing a fully specified model of member success with models excluding member activity measures. Two things are readily apparent. First, a simple chi-square log-likelihood test between the models across all three legislative stages (committee, floor, and enactment) suggests that member activities have important statistical weight. For each stage, a model including the legislative activity variables

(also referred to as the unconstrained model) provides a significantly better statistical fit than the model without these variables (referred to as the constrained model because the activity parameters are constrained to zero). Second, variables representing the legislative context have signs that are robust across the constrained and unconstrained models.²²

Table 2 provides the estimation results for the full NBRM of legislator success. For the sake of brevity, we discuss the “committee reported” results and then highlight comparisons and contrasts for the floor and enactment stages.

Members who introduce more local legislation are more successful in committee. The first difference estimates clarify this point: a 60% increase in local bill sponsorship resulted in a 0.4 bill increase in a member’s committee success.²³

Legislative specialists (members who target their bills to one committee) are more likely to encounter favorable committee results. These legislators have 0.1 more bills reported than more generalist members. Members who sponsor more bills have one more bill reported. Members who speak more frequently have 0.2 more bills reported than colleagues who remain silent a majority of the time. The bills-squared and speeches-squared terms indicate that overly active members are less likely to meet with legislative success, as expected. More specifically, we find that the negative squared effect crosses the positive effect of the original variables at just over the sixtieth percentile for bill sponsorship and at the seventieth percentile for speeches.²⁴

The hot bills coefficient is positive for the majority and negative for the minority, but neither reaches conventional levels of statistical significance. Hot bills, although timely, are often contentious, and there are likely to be numerous bills introduced on a single hot topic—recall that a full 16% of the bills in our dataset were hot bills. The fact that hot bills are sometimes hot-button issues is illustrated within parties as well as between them and likely explains an insignificant coefficient for the majority party hot bills measure.²⁵

Majority party members have 0.4 more bills reported than their minority counterparts. House majority leaders, committee leaders, and subcommittee leaders reaped the benefits of their privileged positions with 0.4, 0.2, and 1.1 more bills reported than other House members receive.²⁶ Senior members have slightly fewer bills reported than do their junior colleagues, and freshmen have 0.3 bills fewer reported than other, more experienced members. Spatial preferences do not have a statistically significant effect: middle-of-the-road members were no more likely to get their bills passed, but extreme members were not penalized either. This finding strengthens the argument for party versus preferences.

TABLE 2
The Strategic and Institutional Determinants of Member Success in Congress^{a,b}
(standard errors in parentheses)

Variable	Committee Reported		Floor Vote		Signed into Law	
	Coefficient	1st Differences	Coefficient	1st Differences	Coefficient	1st Differences
<i>Members' Activities</i>						
% Local	2.588** (0.384)	0.374	2.423** (0.436)	0.281	1.789** (0.539)	0.111
% "Hot"	0.101 (0.400)	0.017	0.095 (0.437)	0.014	-0.376 (0.561)	-0.034
% Specialized	0.475 (0.377)	0.096	0.171 (0.421)	0.028	0.168 (0.494)	0.015
# Bills Sponsored	0.072** (0.009)	0.930	0.064** (0.010)	0.665	0.049** (0.012)	0.260
Bills Squared	-0.001** (0.000)	-0.129	-0.001** (0.000)	-0.092	-0.001* (0.000)	-0.026
Floor Speeches	0.004* (0.002)	0.225	0.005* (0.002)	0.198	0.002 (0.002)	0.052
Speeches Squared	-0.000+ (0.000)	-0.025	-0.000+ (0.000)	-0.023	-0.000 (0.000)	-0.007
<i>Structural Factors</i>						
Majority Party	0.755** (0.309)	0.393	0.938** (0.361)	0.367	0.710 (0.461)	0.150
Floor DW-NOM Difference	-0.275 (0.462)	-0.084	-0.292 (0.507)	-0.069	-0.028 (0.639)	-0.005
Party DW-NOM Difference	-0.142 (0.515)	-0.019	-0.128 (0.565)	-0.020	-1.042 (0.539)	-0.058
Seniority	-0.001 (0.012)	-0.007	0.002 (0.012)	0.022	0.020 (0.014)	0.089

(continued on next page)

TABLE 2 (continued)

Variable	Committee Reported		Floor Vote		Signed into Law	
	Coefficient	1st Differences	Coefficient	1st Differences	Coefficient	1st Differences
Freshman	-0.449 (0.243)	-0.269	-0.450+ (0.272)	-0.220	-0.318 (0.355)	-0.087
House Leader	-2.004+ (1.033)	-0.566	-1.719+ (1.038)	-0.420	-1.372 (1.055)	-0.180
PID*House Leader	1.712+ (1.051)	0.379	1.514+ (1.060)	0.324	1.700 (1.075)	0.309
Committee Leader	0.481 (0.418)	0.138	0.437 (0.460)	0.130	0.423 (0.541)	0.111
PID*Committee Leader	0.222 (0.457)	0.224	0.259 (0.502)	0.195	0.240 (0.588)	0.033
Subcommittee Leader	-0.289 (0.344)	-0.317	-0.017 (0.390)	0.005	-0.038 (0.481)	-0.017
PID*Subcommittee Leader	1.102** (0.360)	1.099	0.862* (0.407)	0.773	0.661 (0.501)	0.254
Electoral Margin (t-1)	-0.479 (0.312)	-0.133	-0.585+ (0.347)	-0.136	-0.735 (0.427)	-0.086
Constant	-0.717* (0.349)		-1.124** (0.405)		-1.630** (0.517)	
Alpha	0.322** (0.084)		0.364** (0.108)		0.265+ (0.142)	
Number of Observations	419		419		419	
-2 log-likelihood (d.f. = 19)	361.976**		310.306**		176.662**	

^a Negative binomial regression coefficients reported.

^b Non-categorical variables are mean-centered to mitigate potential collinearity problems.
+*p* < 0.10; **p* < 0.05; ***p* < 0.01.

Last, we see that electorally "safe" members, who are presumably more risk-acceptant, have 0.1 bills fewer reported than do their more vulnerable colleagues.

A number of null results produced in earlier rounds of our analysis are also of interest. Our data show that the type of committee assignment (Smith and Deering 1997) is not a factor predicting House members' legislative effectiveness (also see Shipan 1992 and 1995). A normatively positive finding, and informative for a segment of the congressional representation literature, is that women and blacks do not appear to have any less success in having their bills passed than other legislators have. Finally, and in comport with Wilson and Young (1996), we find that cosponsorship levels have little to do with whether or not legislators get their bills passed.²⁷

Comparing the models across legislative stages, we see that similarities exist between the reported and floor-approval models, with coefficients generally in the same direction and nearly identical levels of statistical significance. These results are not entirely surprising if we consider that most members meeting with success at the committee level also do so on the floor (see Table 1). Small differences exist, but we find that the floor-approval and committee-report models have similar explanatory power.

The enactment model is more distinct and thus warrants some specific discussion. The overall fit is worse and there is higher variance in coefficient direction and significance compared to the reported and floor-approval models. In the enactment model, numerous coefficients lose their significance (percent specialized, speeches squared, freshman, House leader). Not surprisingly, we also find that the legislative process itself serves as an additional barrier, with members finding the going more difficult and less systematic as bills vie for Senate and ultimately presidential approval.²⁸ As their bills progress from the committee to the enactment stage, members have less influence over their legislation's outcome. We also see a concurrent increase in the importance of the institutional context variables as predictors of a legislator's effectiveness.

Figure 1 compares Republican and Democratic bill passage during the committee, floor, and enactment stages of the legislative process. Most striking is the obvious difference in member success between each of the legislative stages. The results echo those previously presented: members are more likely to meet with success in the committee stage than the floor stage and least likely to reach a positive outcome during the enactment stage. Further, majority party members are more than twice as likely to have bills passed than are minority party members.

FIGURE 1
Legislative Stages, Partnership,
and Member Success in the House

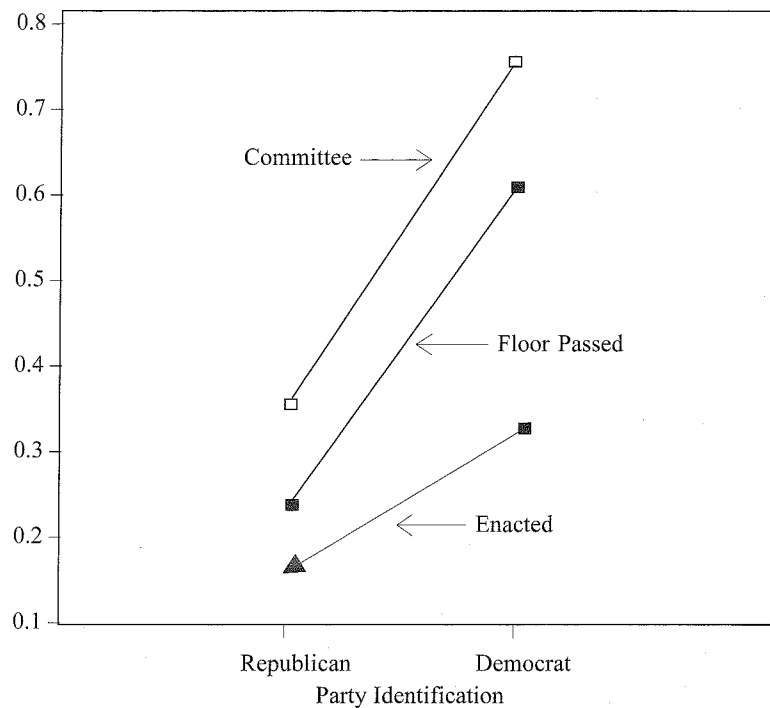
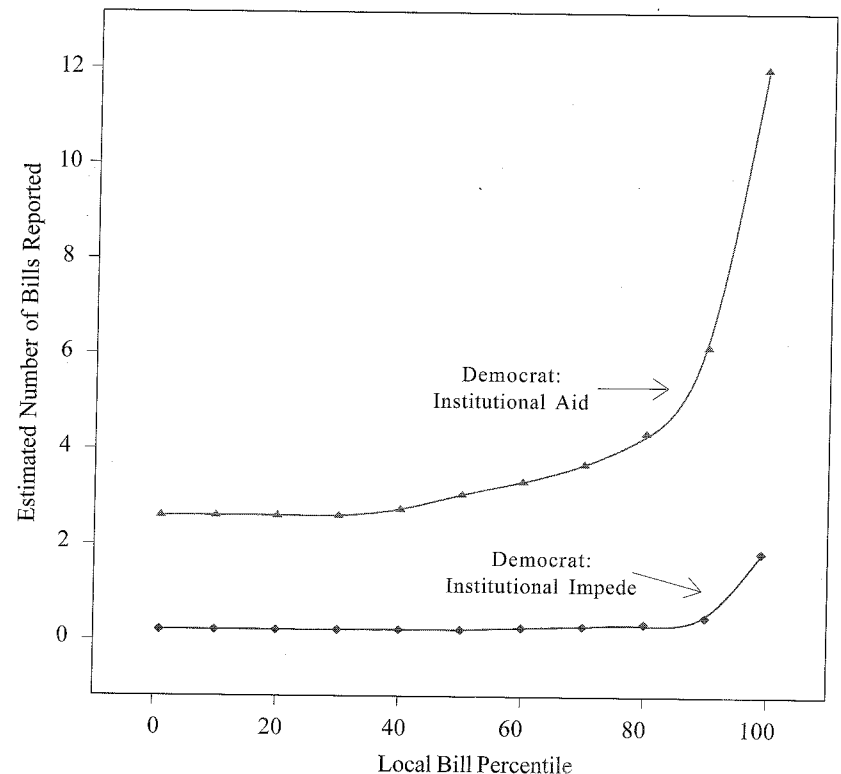


Figure 1 suggests that bill enactment was difficult for all members, regardless of the legislator's partisan stripe.²⁹ The slope for bills enacted is less pronounced, indicating substantial variation in member success across legislative stages. This result suggests that the difficulty of having a bill enacted into law, which requires Senate and presidential approval, supersedes the power of majority party status. This finding is particularly striking because our data come from a Congress with unified party control.

Figure 2 plots the estimated number of bills reported against the percentile of local bills a member introduced, demonstrating the impact that member activity can have on effectiveness. We calculated the fitted values for the "Institution Aid" graph by setting all institutional variables at the most-favorable values for bill passage; we calculated the "Institution Impede" graph by setting all institutional variables at the least-favorable values for bill passage. Specifically, using Table 2,

FIGURE 2
Local Bill Sponsorship and Institutional Context
as Determinants of Legislative Success



we coded Democrats with seniority; house, committee, and subcommittee leadership; and low electoral margins as possessing the greatest contextual advantage. The favorable institutional variables were coded at their maximum levels and all activity variables were set at their mean values to show that even in the most unrealistically advantageous situation, speaking and sponsorship made a difference in the level of success.

If we look at the top line in Figure 2, we see the institutionally favorable environment. Here, the mix of local bills initially results in modest legislative success (approximately two bills), and members sponsoring more local legislation (at or above the eightieth percentile) meet with significantly better outcomes (more than four bills). If we turn to the bottom line in Figure 2, we see the most difficult institutional

TABLE 3
Estimated Legislative Success by Specific House Members^a

Member	PID-State	Committee Reported			Passed Floor Vote			Enacted					
		Est.	95% Conf. Int.	(2) Actual	(3) Diff. ^b	Est.	95% Conf. Int.	(2) Actual	(3) Diff.	Est.	95% Conf. Int.	(2) Actual	(3) Diff.
Bishop	D-GA	0	±1	0	0	0	±0	0	0	±0	0	0	0
Brooks	D-TX	10	+4/-3	17	-3	9	±6	13	0	5	+3/-2	7	0
Castle	R-DE	0	±0	0	0	0	±1	0	0	0	±0	0	0
Fish	R-NY	0	±0	1	-1	0	±0	1	-1	0	±0	1	-1
Harman	D-CA	0	±0	0	0	0	±0	0	0	0	±0	0	0
Kaptur	D-OH	1	±0	1	0	1	±0	1	0	0	±0	0	0
Kopetski	D-OR	4	+2/-2	1	+1	2	±1	1	0	1	+1/-0	0	+1
Leach	R-IA	0	±0	0	0	0	±0	0	0	0	±0	0	0
Lewis	R-FL	0	±0	0	0	0	±0	0	0	0	±0	0	0
Mann	D-OH	0	±0	0	0	0	±0	0	0	0	±0	0	0
Mica	R-FL	0	±0	0	0	0	±0	0	0	0	±0	0	0
Michel	R-IL	0	±1	0	0	0	±1	0	0	0	+1/-0	0	0
Rangel	D-NY	1	±1	0	0	1	±1	0	+1	1	±1	0	0
Rohrbacher	R-CA	0	±0	0	0	0	±0	0	0	0	±0	0	0
Roth	R-WI	0	±0	0	0	0	±0	0	0	0	±0	0	0
Stark	D-CA	9	+8/-6	3	0	7	+7/-5	2	0	4	+5/-3	2	0
Stenholm	D-TX	1	+1/-1	2	0	1	±1	2	0	1	+1/-0	1	0
Studds	D-MA	16	+6/-4	17	0	13	+7/-5	10	0	4	+3/-2	1	+1
Synar	D-OK	1	±0	2	-1	1	+1/-0	1	0	1	±0	1	0
Taylor	D-MS	1	±1	3	-1	1	±1	3	-1	0	±0	0	0

^aMembers were selected using the "RAND" random number generator command in Microsoft Excel. Each member received a number from 1 to 420, and each randomly generated number represented one of the members in the dataset; 20 were selected for the purpose of this illustration. Of those members chosen, 60% were Democrats (versus 59% in the dataset), 55% had no bills reported from committee (versus 54%), 55% had no bills approved on the floor (versus 59%), and 70% had no bills signed into law (versus 70%).

^bDifferences determined by subtracting the actual total from the estimated value ± the upper and lower bounds of the 95% confidence interval.

environment as a fixed constraint where only the percent of local bills varies. Here, members have a difficult time getting even one bill passed. "Democrat" is a constant in the figure, which illustrates that party is not the sole, overarching factor. Figure 2 also clearly shows the nonlinear relationship between local bill percentages and the number of bills reported, which is allowed in our count model.³⁰

We find similar institutional and variable-specific results (not shown) when plotting the estimated number of bills reported against the effects of legislative specialization and bill sponsorship activity. That is, a shift to higher levels of sponsorship provides members with a greater return on their investment. This trend manifests even in cases in which the institutional context is not as favorable.³¹ Further disaggregation of the figures by party (using the party-specific NBRM models) underscores the importance of the institutions and norms of the House, particularly as they relate to a legislator's membership in the majority party.

Finally, to highlight our model's predictive power, we randomly drew 20 members from the 103d House and calculated in the expected number of bills they reported, passed, and enacted by multiplying the coefficients from Table 2 times each member's covariate values. The results are reported in Table 3.

The first column under each legislative stage reports our model estimates of each member's success. The second column lists the actual number of bills the member had reported, passed, or enacted into law. The third column reports the difference between the two (Column 1 - Column 2). Overall, our model does a remarkable job of predicting most of the member's actual bill totals, which lends further validity to our approach and the results culled from our analysis.³²

Discussion and Conclusion

The factors that contribute to or inhibit legislative effectiveness continue to galvanize new research forays by legislative scholars. Building on Matthew's (1960) seminal work on the Senate, we transfer his insights into an analysis of legislative success in the U.S. House of Representatives at three stages of the legislative process: committee, floor, and enactment. Four of our results stand out as particularly important. Substantively, we find that legislators who balance their activities, i.e., sponsor bills, but not too many, and who speak on the floor, but not too often, find more success than do their colleagues falling at either end of the behavioral spectrum. This finding coincides quite nicely with our intuition that legislators, despite being in an environment that encourages strong leadership and general forthrightness, are rewarded

for tempering their behavior. Thus, legislators are able to affect the success of their legislative agendas by acting not as automatons, but as calculating actors.

Second, we find evidence that legislators are able to succeed even in adverse institutional environments. By controlling for legislative norms and institutional fixtures, we see that an enterprising legislator can find a measure of success given a proper balance of pre- and post-bill behaviors. This finding lends a strong hand to the normative question posed in the introduction: legislators need not bow under the weight of their legislative realities. Instead, legislators are able to influence the fate of their legislation by behaving in a manner that encourages its passage. While not entirely surprising, these results are certainly stronger than those in the extant literature because they rely on precise modeling, justified distributional assumptions, and careful operationalization.

That is not to say that institutions recede quietly into the background—it is clear that a legislator's institutional reality is boom or bust. The most obvious constraint (or aid) to the legislator's success is his or her partisan stripe. Despite a strong debate in the literature to the contrary (e.g., Krehbiel 1998), it is apparent that party does matter in establishing who is more likely to succeed or fail. Indeed, spatial preferences did not have a statistically significant effect. Member effectiveness also relies to a lesser degree on the legislator's place within the norms and folkways of the legislative body and on their previous electoral fortunes. And, without question, the legislative process, with multiple stages and potential stopping points, leaves some legislators "going down swinging." In general, however, we conclude that the member's institutional reality and chosen behaviors within that context serve as strong correlates of legislative fortunes.

The road to legislative effectiveness is certainly one of structures, struggles, and strategies. Legislative success is an elusive and hard-won objective, fraught with institutional barriers and demanding of thoughtful legislative choices. We add further insight into which legislators are more productive in these efforts. Our work contributes to the understanding of legislator behavior "beyond the roll-call vote" and provides an important step in addressing this undertilled, but compelling and essential segment of the literature.

William D. Anderson is a Ph.D. candidate in political science and Janet M. Box-Steffensmeier is Associate Professor of Political Science, The Ohio State University, 2140 Derby Hall, 154 N. Oval Mall, Columbus, Ohio 43235. Valeria Sinclair-Chapman is Assistant Professor of Political Science, University of Rochester, Rochester, New York 14627-0146.

NOTES

We thank Laura Arnold, Stanley Bach, Kathleen Bratton, Andy Farrell, Richard Fenno, Wayne Francis, Tobin Grant, Ed Hasecke, Dean Lacy, Roger Larocca, Scott Meinke, Michael Moore, Irwin Morris, Richard Niemi, Wendy Schiller, Kevin Scott, Edward Schneider, Chuck Shipan, Kenneth Strickland, Katherine Tate, Sue Thomas, Rich Timpone, Herb Weisberg, Chris Zorn, and anonymous reviewers and editors for helpful comments, discussion, or both. We also thank Laura Arnold, Lori Hausseger, and Roy Wolf for their assistance in data collection. All data will be made available through ICPSR and the authors' websites upon publication. All analyses were performed with Stata 6.0 and the log files will be archived. Authors are listed alphabetically.

1. For our purposes, success is measured as how well individual members do in getting their bills passed through successive stages of the legislative process (committee vote, floor vote, and enactment). We acknowledge, however, that there are other forms of legislative success, including exceptional committee work or policy expertise and the like. The terms "legislative effectiveness," coined by Matthews (1960), and "legislative success," preferred by Moore and Thomas (1990), are used interchangeably here. Barbara Sinclair (2001) advances the literature by restructuring the question to focus on bills, rather than members, and asks what affects the likelihood that a bill will become law. Her logistic analysis finds that "the more similar the preferences across chambers and branches, the less of an obstacle structural barriers are" (2001, 1).

2. For a recent state-level analysis, see Ellickson 1992.

3. Hibbing's measure accounted for the percentage of a member's bills that were reported from committee as well as the percentage of the bills that passed the House.

4. Frantzych's conclusions about the pros and cons of the shotgun approach to bill sponsorship must be qualified. His measure of specialization relied largely on inferences drawn from the number of bills sponsored by each member. He assumed that the most active members were also likely to have the most diverse legislative portfolios.

5. Krutz's (2000, 7) claim—that most bills are pushed by members rather than being only symbolic legislation tools—supports our assumption. Still, we recognize that legislators may have other competing motives, such as placing new issues on the agenda or claiming credit (Fenno 1978; Gross 1953; Matthews 1960; Mayhew 1974). In some instances, bill sponsorship may function symbolically to give a voice to issues rather than to implement new public policy (Edelman 1985; Elder and Cobb 1983; V. Sinclair 1996).

6. Our concern is not so much how members use legislation to meet their other goals as it is how members meet the goals for their legislation. Wawro's innovative work on member motivation is useful, even though he focuses on a different empirical question. Specifically, Wawro's (2000) entrepreneurship-activity measure captures bill drafting, coalition building, and acquiring policy knowledge (not effectiveness). He tests whether or not his new entrepreneurship variable helps to explain member goals, which include constituency support, campaign contributions, and advancement within the institution. In contrast, effectiveness is the dependent variable in our study, as well as in Frantzych 1979, Hibbing 1991, Matthews 1960, and Moore and Thomas 1990.

7. We excluded 16 members from the analysis. All seven members from Louisiana were excluded because of that state's unique primary system. Lambert (AZ) and Foley

(WA) were also excluded, because of an absent DW-NOMINATE score, which is a variable included in our analysis and described later. Finally, seven representatives were excluded because they served partial terms (due to death or co-optation by the Clinton administration): CA-17, KY-2, OH-2, MI-3, MS-2, OK-6, WI-1.

8. The bills legislators originally sponsored that were subsequently included in omnibus legislation were counted in the legislator's totals of success when the omnibus bill passed legislative hurdles. A member may occasionally find that the provisions of his or her bill are incorporated into a complex megabill with a different title, bill number, and sponsor (usually a committee chair). Tracking down the ultimate fate of these bills requires some sleuthing and persistence, but not counting them would systematically bias downward the number of bills that legislators saw to fruition. For instance, if we count only the bills passed outside an omnibus bill, then we attribute to Representative Major Owens only one bill passed at each stage of the legislative process. But if we follow his legislation through an aggregate omnibus bill, then we attribute to Owens four bills reported and passing the House floor and two bills signed into law (see also Stewart 2001). Barbara Sinclair (1997) reports that omnibus bills have accounted for about 12% of major legislation in recent years.

9. Models of member legislative success often rely on ordinary least squares (OLS), which is likely to misspecify the relationship between the covariates and legislative effectiveness because of three problems. First, OLS may generate impossible negative estimates for legislative success. Second, as shown in Table 1, the data are overdispersed, i.e., the variance is greater than the mean, with a mass of observations at zero. TOBIT is often used with overdispersed data (Long 1997; Tobin 1958), but proper use of TOBIT requires that the inflation point at zero be due to negative values truncated to zero as well as true zero values (Sigelman and Zeng 2000). Thus, TOBIT is not appropriate for an analysis of the effectiveness data. Third, OLS assumes linear relationships between the covariates and the dependent variable. In our data, it is likely that the linearity assumption will miss the increased difficulty of getting even one bill passed and the ease with which additional bills might be passed after crossing the critical 0% threshold.

10. There are many classes of count models that are intended to provide leverage over problems of over- and underdispersion. Zero-inflated Poisson (ZIP) models (Greene 1994, 1999; Lambert 1992; Zorn 1998) and hurdle Poisson models (King 1989) figure prominently among the classes. We attempted ZIP models and found that the degrees of freedom afforded by our model produced inconsistent parameter estimates and that the ZIP models did not appear to provide any additional leverage above the Poisson and negative binomial models. Greene (1994) suggests why this might be the case: because only five members in our dataset failed to introduce a bill, the zeros in our data are not a result of heterogeneity but only of legislators sponsoring and failing (what Greene terms "try and fail" versus "never try at all" processes).

11. The NBRM accounts for variation in μ , as a function of variation in x among individuals and unobserved heterogeneity introduced by the error term.

12. Tests for overdispersion use the α (dispersion) parameter, in which a one-tailed z -test of $H_0: \alpha = 0$ indicates whether the NBRM or the PRM is most appropriate. When α is zero, the NBRM reduces to the PRM (Long 1997, 237).

13. We count the bills that the House Clerk attributed to the member as introduced by that individual. That is, our count is the number of bills on which a member is

listed as the primary author. Cosponsorship is not included in this measure. We recognize that an interest group may draft some bills sponsored by a member and some of the costs of sponsoring a bill, such as staff resources and time, may therefore be lower for some bills than for others. Nevertheless, the measure of bill sponsorship that we use is the best available, even if not an exhaustive measure of the many background contributors to drafting bills. See Wawro 2000, 26–29, for a discussion of the merits and problems of using primary sponsorship data.

14. The House members who did not sponsor legislation during the 103d session were Representatives Young (R-FL), Linder (R-GA), Watt (D-NC), and Ford (D-TN) and Speaker Foley (D-WA).

15. The effect of floor speaking on legislative effectiveness is far from transparent. In an analysis of the early twentieth-century Senate, Gamm and Smith (2001) find a strong relationship between floor speaking and formal leadership positions. They further outline the evolution of party leaders into floor managers and agenda setters to whom rank-and-file senators look for cues. Although we control for leadership positions in the modern House, our analysis may not fully account for the added influence that leaders bring to floor debates and the potential lack of influence that average members may have over outcomes. Floor speaking may be a proxy measure of a legislator's general activism rather than a strategic tool used to increase effectiveness. It is quite plausible, however, that legislators, aware of the slightest potential that their own words might sway fellow members in their favor, take to the floor on their own behalf even though party leaders play the primary role in floor management.

16. Following Hall (1996), we use floor speeches as a general measure of the member's floor activity. It is conceivable, although unlikely, that members devote more speeches to gloating over successes than to promoting the bills they sponsor. As coded, our data do not allow us to identify how often members use speeches to "gloat" rather than "promote." Nevertheless, we feel confident in asserting that the latter occurs more frequently than the former. The number of floor speeches given by each member is the best measure of floor activity available in our dataset, although the potential endogeneity between floor speeches and bill passage leaves the precise nature of the relationship between the two variables unclear. The unpacking of this relationship must be left to future research using timing data to track if and when members speak on their own legislative initiatives.

17. A limitation of our dataset is that it does not allow us to include only speeches on topics that relate to legislation sponsored by that member.

18. The behavior of Representative Maxine Waters (D-CA), a then-junior member of the 103d Congress from a predominately urban district, illustrates this point. In 1992, her district received national attention when riots erupted following the not-guilty verdicts in the Rodney King trial. In response to that incident and to the pressing needs of her district, Waters introduced several bills calling for \$1 billion in aid for cities. She was able to capitalize on the groundswell of public concern about the plight of the nation's cities and got several of her proposals included in an omnibus community development bill (H.R. 5334) that ultimately was signed into law.

19. This method contrasts with that used in the previous literature; typically, the divisor has been the total number of bills. Given the prevalence of multiple referrals in the 103d Congress and the general tendency of multiple referrals to slow down the process because of the requirement that all jointly referred legislation be reported (see

Davidson and Oleszek 2000 for discussion of how this default can be circumvented), we decided that dividing by the total number of referrals is more appropriate.

20. There is currently a debate in the literature as to whether or not these folkways, or norms, continue to persist, or ever existed. Several scholars examining the postreform Congress have concluded that the norms of apprenticeship and specialization are declining in the Senate and are perhaps nonexistent (Asher 1973; Hall 1996; Polsby 1975; Rohde 1988; Rohde, Ornstein, and Peabody 1985; B. Sinclair 1982, 1989; Smith 1989; but see also Hibbing 1991, Schiller 1995b, and Schneier 1988).

21. The House party leadership variable was coded 1 if the member was the Speaker, a majority leader, minority leader, majority whip, minority whip, floor whip, ex-officio whip, the chief deputy whip, or an associate deputy whip. All other members were coded 0.

22. Readers should note that in each of the models discussed in Table 2, the α parameter is statistically significant. The NBRM null hypothesis is that $\alpha = 0$; accepting the null indicates that the data is distributed Poisson and the NBRM provides no better fit than the simpler PRM. Our results indicate that the negative binomial distribution provides a statistically significant better fit than the Poisson distribution and that the NBRM is a more appropriate modeling choice for the data employed in this analysis.

23. We calculated the first differences by holding continuous variables at their mean values and dichotomous variables at their modal values. The estimates varied the value of the covariate of interest from the twentieth to the eightieth percentile.

24. Another compelling question is whether or not a relationship exists between a member's status as a party leader and his or her willingness to speak or sponsor more often. Basic crosstabs suggest that this is the case—party leaders were more likely both to sponsor and speak than rank-and-file partisans were (see also Gamm and Smith 2001). But the NBRM model including an interaction term between party leadership both sponsoring and speaking revealed no significant relationship to the legislator's success at any stage in the legislative process. Readers should also remember that members sponsor legislation for reasons other than legislative goals, i.e., symbolic reasons. This complicated motivation may contribute to the relatively low crossover point for bill sponsorship.

25. Our investigation into the effect of outliers on the NBRM supports this contention. When using the ninety-seventh and ninety-eighth percentiles of the data only, we find robust results with some predictable significance changes, except for hot bills. The hot bills measure, after being insignificant but positive in all of our other models, is negative with a p-value of 0.

The members excluded in the percentile analysis are prominent senior members—Gephardt (D-MO) among them—who are driving the hot bills coefficient mildly positive because they are heavyweights who can get the controversial hot bill passed.

26. The coefficient size for each independent variable is admittedly small. When we consider, however, the sum of the covariates—those representing the institution and individual member effects—we find that members operating in a constraining environment are able, through strategic action, to affect the fate of their legislation. Figures 1 and 2 illustrate this point by describing how individual member action,

when coupled with favorable or unfavorable institutional conditions, enable members to legislate effectively.

27. For brevity, we do not report these results in this paper. Their removal did not affect the strength or direction of the results reported in this analysis.

28. We are interested in the effect of member activities and structural factors on the likelihood that a member gets a bill passed at various stages. One can also ask a related conditional question, i.e., investigate the effects on whether a member gets a bill passed conditional on passage at any prior stages. The question is interesting, but our focus is more general and more directly related to the question of member effectiveness in the literature. To pursue a conditional model would require a different data structure since the level of analysis focuses on the bill rather than on the member.

29. Forty-one Republicans had bills passed out of committee, 35 had bills passed on the floor, and 24 had bills enacted.

30. The pattern further validates our belief that a proper model specification assumes some nonlinear relationships between the independent and dependent variables.

31. We do note, however, that the squared-sponsorship and speaking terms suggest an additional finding: members may get away with speaking and sponsoring at high levels, but too much of either may actually harm the legislator's chances for success.

32. Successful predictions and "misses" were generally similar across models, suggesting that some members were generally more difficult to predict than others. This fact, coupled with both over- and underestimates, suggests that the errors made across the models are likely random (not systematic) and lends further validity to our modeling approach. One feature that stands out in this table is the lack of success among Republicans, but Republicans still managed some success with a sizable number having one or more bills reported at each legislative stage.

REFERENCES

- Adler, E. Scott. 2000. "Constituency Characteristics and the 'Guardian' Model of Appropriations Subcommittees." *American Journal of Political Science* 44:104–14.
- Arnold, R. Douglas. 1979. *Congress and the Bureaucracy: A Theory of Influence*. New Haven, CT: Yale University Press.
- Asher, Herbert B. 1973. "The Learning of Legislative Norms." *American Political Science Review* 67:499–513.
- Bach, Stanley, and Steven Smith. 1988. *Managing Uncertainty in the House of Representatives: Adaptation and Innovation in Special Rules*. Washington, DC: Brookings.
- Bendiner, Robert. 1964. *Obstacle Course on the Hill*. NY: McGraw-Hill.
- Bianco, William T. 1994. *Trust: Representatives and Constituents*. Ann Arbor: University of Michigan Press.
- Binder, Sarah A. 1997. *Minority Rights, Majority Rule*. New York: Cambridge University Press.
- Cook, Timothy E. 1979. "Legislature vs. Legislator: A Note on the Paradox of Congressional Support." *Legislative Studies Quarterly* 4:43–52.

- Cox, Gary W. 2001. "Agenda Setting in the U.S. House: A Majority-Party Monopoly?" *Legislative Studies Quarterly* 26:185-210.
- Cox, Gary W. and Mathew D. McCubbins. 1993. *Legislative Leviathan: Party Government in the U.S. House of Representatives*. Berkeley: University of California Press.
- Davidson, Roger H., and Walter J. Oleszek. 2000. *Congress and Its Members*, 7th ed. Washington, DC: CQ Press.
- Dodd, Lawrence C. 1977. "Congress and the Quest for Power." In *Congress Reconsidered*, ed. Lawrence C. Dodd and Bruce I. Oppenheimer. New York: Praeger.
- Edelman, Murray. 1985. *Symbolic Uses of Politics, with a New Afterward*. Champaign-Urbana: University of Illinois Press.
- Elder, Charles D., and Roger W. Cobb. 1983. *The Political Uses of Symbols*. New York: Longman.
- Ellickson, Mark C. 1992. "Pathways to Legislative Success: A Path Analytic Study of the Missouri House of Representatives." *Legislative Studies Quarterly* 17:285-302.
- Fenno, Richard F., Jr. 1973. *Congressmen in Committees*. Boston: Little, Brown.
- Fenno, Richard F., Jr. 1978. *Home Style: House Members in Their Districts*. Boston: Little, Brown.
- Fiorina, Morris P. 1974. *Representatives, Roll Calls, and Constituencies*. Lexington, MA: DC Heath.
- Fiorina, Morris P. 1989. *Congress, Keystone of the Washington Establishment*. New Haven, CT: Yale University Press.
- Frantzich, Stephen. 1979. "Who Makes Our Laws? The Legislative Effectiveness of Members of the U.S. Congress." *Legislative Studies Quarterly* 4:409-28.
- Froman, Lewis A., Jr., and Randall B. Ripley. 1965. "Conditions for Party Leadership: The Case of the House Democrats." *American Political Science Review* 85:371-92.
- Gamm, Gerald, and Steven S. Smith. 2001. "Policy Leadership and the Development of the Modern Senate." Presented at the annual meeting of the Midwest Political Science Association, Chicago.
- Gourieroux, C., A. Monfort, and A. Trognon. 1984. "Pseudo Maximum Likelihood Methods: Applications to Poisson Models." *Econometrica* 52:701-20.
- Greene, William H. 1994. "Accounting for Excess Zeros and Sample Selection in Poisson and Negative Binomial Regression Models." Working paper EC-94-10, Department of Economics, New York University.
- Greene, William H. 1999. *Econometric Analysis*, 4th ed. Englewood Cliffs, NJ: Prentice Hall.
- Gross, Bertram. 1953. *The Legislative Struggle*. New York: McGraw-Hill.
- Hall, Richard L. 1996. *Participation in Congress*. New Haven, CT: Yale University Press.
- Hausman, J.A., B.H. Hall, and Z. Griliches. 1984. "Econometric Models for Count Data with an Application to the Patents-R&D Relationship." *Econometrica* 52:909-38.
- Hibbing, John. 1991. *Congressional Careers: Contours of Life in the U.S. House of Representatives*. Chapel Hill: University of North Carolina Press.
- Kimball, David C., and Samuel C. Patterson. 1995. "Living up to Expectations: Public Attitudes toward Congress." Presented at the annual meeting of the American Political Science Association, Chicago.

- King, Gary. 1989. "Event Count Models for International Relations: Generalizations and Applications." *International Studies Quarterly* 33:123-47.
- Kingdon, John W. 1995. *Agendas, Alternatives, and Public Policies*, 2d ed. New York: HarperCollins.
- Krehbiel, Keith. 1990. "Are Congressional Committees Composed of Preference Outliers?" *American Political Science Review* 84:149-63.
- Krehbiel, Keith. 1991. *Information and Legislative Organization*. Ann Arbor: University of Michigan Press.
- Krehbiel, Keith. 1998. *Pivotal Politics: A Theory of U.S. Lawmaking*. Chicago, IL: University of Chicago Press.
- Krutz, Glen S. 2000. "Congressional Leaders and the Winnowing of Legislation." Presented at the annual meeting of the American Political Science Association, Washington, DC.
- Lambert, Diane. 1992. "Zero-Inflated Poisson Regression, with an Application to Defects in Manufacturing." *Technometrics* 34:1-14.
- Langbein, Laura I., and Lee Sigelman. 1989. "Show Horses, Work Horses, and Dead Horses." *American Politics Quarterly* 17:80-95.
- Long, J. Scott. 1997. *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks, CA: Sage.
- Matthews, Donald R. 1960. *U.S. Senators and Their World*. NY: Random House.
- Mayhew, David. 1974. *Congress: The Electoral Connection*. New Haven, CT: Yale University Press.
- Moore, Michael K., and Sue Thomas. 1990. "Explaining Legislative Success in the U.S. Senate: The Role of the Majority and Minority Parties." *Western Political Quarterly* 44:959-70.
- Mouw, Calvin J., and Michael B. Mackuen. 1992. "The Strategic Agenda in Legislative Politics." *American Political Science Review* 86:87-105.
- Oleszek, Walter J. 1996. *Congressional Procedures and the Policy Process*. Washington: CQ Press.
- Parker, Glenn R., and Roger H. Davidson. 1979. "Why Do Americans Love Their Congressmen So Much More than Their Congress?" *Legislative Studies Quarterly* 4:53-60.
- Patterson, Samuel C., Randall B. Ripley, and Stephen V. Quinlan. 1992. "Citizens' Orientations toward Legislatures: Congress and the State Legislature." *Western Political Quarterly* 45:315-38.
- Polsby, Nelson. 1975. "Goodbye to the Senate's Inner Club." In *Congress in Change*, ed. Norman J. Ornstein. New York: Praeger.
- Poole, Keith, and Howard Rosenthal. 1997. *Congress: A Political-Economic History of Roll-Call Voting*. Oxford: Oxford University Press.
- Rohde, David W. 1988. "Studying Congressional Norms: Concepts and Evidence." *Congress and the Presidency* 15:139-45.
- Rohde, David W., Norman J. Ornstein, and Robert J. Peabody. 1985. "Political Change and Legislative Norms in the U.S. Senate, 1957-74." In *Studies of Congress*, ed. Glenn Parker. Washington, DC: CQ Press.
- Schiller, Wendy J. 1995a. "Constituent Expectations and Agenda Formation in the United States Senate." Presented at the 1994 annual meeting of the Midwest Political Science Association, Chicago.

- Schiller, Wendy J. 1995b. "Senators as Political Entrepreneurs: Using Bill Sponsorship to Shape Legislative Agendas." *American Journal of Political Science* 39:186–203.
- Schneider, Edward V. 1988. "Norms and Folkways in Congress: How Much Has Actually Changed." *Congress and the Presidency* 15:117–38.
- Schneider, Edward V., and Bertram Gross. 1993. *Legislative Strategy: Shaping Public Policy*. New York: St. Martin's.
- Shipan, Charles. 1992. "Individual Incentives and Institutional Imperatives." *American Journal of Political Science* 36:877–95.
- Shipan, Charles. 1995. "Looking for a Smoking Gun: Committee Jurisdictions and Congressional Voting Decisions." *Public Choice* 83:65–79.
- Sigelman, Lee, and Langche Zeng. 2000. "Analyzing Censored and Sample-Selected Data with Tobit and Heckit Models." *Political Analysis* 8:167–82.
- Sinclair, Barbara. 1982. *Congressional Realignment*. Austin: University of Texas Press.
- Sinclair, Barbara. 1989. *The Transformation of the U.S. Senate*. Baltimore, MD: Johns Hopkins University Press.
- Sinclair, Barbara. 1997. *Unorthodox Lawmaking*. Washington: CQ Books.
- Sinclair, Barbara. 2001. "Structure, Preferences, and Outcomes: Explaining When Bills Do—and Don't—Become Law." Presented at the annual meeting of the American Political Science Association, San Francisco.
- Sinclair, Valeria. 1996. "Symbols and Substance: Constituents, Legislators, and Legislative Work." Presented at the annual meeting of the American Political Science Association, San Francisco.
- Smith, Steven. 1989. *Call to Order: Floor Politics in the House and Senate*. Washington, DC: Brookings Institution.
- Smith, Steven, and Christopher Deering. 1997. *Committees in Congress*, 3d ed. Washington, DC: CQ Press.
- Stein, Robert, and Kenneth Bickers. 1994. "Congressional Elections and the Pork Barrel." *Journal of Politics* 56:377–99.
- Stein, Robert, and Kenneth Bickers. 1995. *Perpetuating the Pork Barrel*. Cambridge, MA: Cambridge University Press.
- Stewart, Charles III. 2001. *Analyzing Congress*. New York: W.W. Norton.
- Tobin, James. 1958. "Estimation of Relationships for Limited Dependent Variables." *Econometrica* January:24–36.
- Tsebelis, George. 1994. *Nested Games: Rational Choice in Comparative Politics*. Berkeley: University of California Press.
- Wawro, Gregory. 2000. *Legislative Entrepreneurship in the U.S. House of Representatives*. Ann Arbor: University of Michigan Press.
- Wilson, Rick K., and Cheryl D. Young. 1996. "Cosponsorship in the U.S. Congress." *Legislative Studies Quarterly* 22:25–43.
- Zorn, Christopher J.W. 1998. "An Analytic and Empirical Examination of Zero-Inflated and Hurdle Poisson Specifications." *Sociological Methods and Research* 26:369–400.