The Electoral Costs of Party Loyalty in Congress

Jamie L. Carson
Department of Political Science
The University of Georgia
104 Baldwin Hall
Athens, GA 30602-1615
carson@uga.edu

Gregory Koger
Department of Political Science
University of Miami
314 Jenkins Building
Coral Gables, FL 33124-6534
gregory.koger@gmail.com

Matthew Lebo
Department of Political Science
Stony Brook University
SBS S-749
Stony Brook, NY 11794-4392
mlebo@notes.cc.sunysb.edu

Abstract

To what extent is party loyalty a liability for incumbent legislators? Past research on legislative voting and elections suggests that voters punish members who are ideologically "out of step" with their districts. In seeking to move beyond the emphasis in the literature on the effects of ideological extremity on legislative vote share, we examine how partisan loyalty can adversely affect legislator's electoral fortunes. Specifically, we estimate the effects of each legislator's party unity—the tendency of a member to vote with his or her party on issues that divide the two major parties—on vote margin when running for reelection. Our results suggest that party loyalty can indeed be a liability for incumbent House members. In fact, we find that voters are not punishing elected representatives for being too *ideological*, they are punishing them for being too *partisan*.

A previous version of this paper was presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 20-23, 2006. We thank Stanley Feldman, Gary Jacobson, Philip Paolino, David Park and Doug Roscoe for helpful comments and suggestions and Andrew Sidman for research assistance and suggestions.

In 2004, Rob Simmons was reelected to his U.S. House district from eastern Connecticut with 54% of the vote even though his district favored Kerry over Bush by a 10% margin. Simmons won his Democratic-leaning district with a combination of personal appeal (he had served as an Army intelligence officer) and moderate voting record. During the 2006 election cycle, however, Simmons' challenger and the Democratic Congressional Campaign Committee criticized Simmons' voting record as too loyally Republican for his constituency. Although Simmons' 2005 party unity score of 74% was quite low among House Republicans, by the end of the campaign even a 74% Republican was too much for eastern Connecticut and Simmons lost by 83 votes.[1] In the end, the only Republican reelected from Connecticut was Chris Shays, whose 2005 party unity score of 67% helped him eke out a 51%-48% win.

Simmons' defeat illustrates how voting with one's party can have severe consequences for an incumbent seeking reelection. While it is rare for a single vote cast by a legislator to have such observable effects in the contemporary era, legislators often have to be concerned about their overall voting record as a pattern of controversial positions across individual roll calls may result in disastrous consequences during the upcoming election (Bovitz and Carson 2006). At the same time, legislators care about policy outcomes and may accept some electoral risk to pass a bill for the sake of their personal preferences or their party's overall goals. This is why, when studying factors influencing voting in Congress, it is important to recognize the effects of competing influences on legislative votes. To date, these effects have been examined in a limited setting or in the context of a

[1] This account of Simmons' defeat is drawn from "The Northeast: Some Prime Takeover Targets." *CQ Weekly Online* (April 24, 2006): 1088-1089. Accessed November 7, 2007 at http://iiiprxy.library.xxxxx.edu:2346/cqweekly/weeklyreport109-000002161511; and Kady II, Martin. "Party Unity: Learning to Stick Together." *CQ Weekly Online* (January 9, 2006): 92-95. Accessed November 7, 2007 at http://iiiprxy.library.xxxxx.edu:2346/cqweekly/weeklyreport109-000002027054. As of November 7, 2007, a DCCC ad against Simmons can be seen at http://www.youtube.com/watch?v=DMFOptPBB7k and a Joe Courtney ad against Simmons can be seen at http://www.youtube.com/watch?v=toyD3fnwG4I.

single election cycle, but we lack a systematic examination of the electoral consequences of loyalty to one's party for elected representatives.

To what extent do voters punish legislators for a record of voting against local, constituency preferences? Do voters penalize legislators for voting with their parties or for ideological extremity? In this paper, we seek to address these important questions by examining the electoral aftershocks of party unity on roll call votes in the U.S. House of Representatives. Previous work has emphasized the importance of ideological extremity in affecting vote share for incumbents and suggested that this relationship is constant across all districts (see, e.g., Canes-Wrone, Brady, and Cogan 2002). We contend, however, that ideological preferences are not the main indicator with which voters reward and punish incumbents seeking reelection. We do see a role for ideology (as revealed with NOMINATE scores) but see this role in the process as an antecedent to the more important factor of loyalty to one's party as reflected by party unity scores (voting with a majority of members of one's party on issues dividing the political parties). Thus, the extent to which legislators exhibit party loyalty is of greater—and more direct—importance than are their ideological beliefs. In other words, ideology is *indirectly* relevant as a predictor of party unity, whereas party unity is *directly* related to incumbents' electoral fortunes. Furthermore, instead of this effect being constant across congressional districts, we expect the partisan makeup of constituencies to play a part in determining these effects.

Further, we do not see the role of party loyalty as completely exogenous to the vote share received when representatives run for reelection. Party leaders on both sides of the aisle expend considerable effort to increase the unity of their party but simultaneously attempt to limit the electoral costs of doing so. Thus, while they may twist representatives' arms to win a key vote, they carefully choose which arms to twist. Party leaders will be more likely to ask legislators in "safe"

seats to take risks on behalf of the "team" since they can afford to lose a modest amount of support from their constituents. In this way, leaders are forward looking about future election outcomes to choose where they will apply pressure within their caucuses. This implies that we should observe reciprocal causality with voters responding to a legislator's unity when determining how to cast their ballots and party leaders anticipating voters' sanctions when they ask rank-and-file members to support the partisan cause. As such, it becomes necessary to empirically model this reciprocal causation to incorporate this strategic interaction into our analysis.

The organization of the paper is as follows. In the next section, we briefly review the relevant literature examining the relationship between roll call behavior and electoral effects to illustrate how our understanding of electoral accountability has evolved. From there, we turn our attention to the theoretical linkage between these factors and argue why increased party unity may have a conditional effect on legislators' probability of reelection. We then briefly discuss the data and present the main results from our analysis. Lastly, we conclude and review the implications of our findings for research on electoral accountability and representation in Congress.

Evidence from the Literature

In a democratic system of government, few issues are more important than accountability and representation. In his classic work examining the electoral connection in Congress, Mayhew (1974) maintains that incumbents are extremely sensitive to the potential electoral implications of their votes, and as a result, behave strategically when announcing a position on a roll call vote. When it becomes necessary to reveal a position on a controversial or highly contested vote, Mayhew argues that those members who are the "safest" will be more likely to vote with the party leadership, while those who are not will take the politically expedient position, all else equal. If legislators are

strategic and good at anticipating voter response, then we cannot expect legislators' voting behavior to have a substantial effect on their chances of reelection. However, "mistakes" on roll calls may occur or legislators may be pressured to vote with the party too often. As such, there is always the fear that legislators who are viewed as being "out of touch" by their constituents will be punished in an upcoming election.

The literature on electoral accountability in Congress is replete with studies examining the effects of ideological extremity on likelihood of reelection success. For instance, Erikson (1971) was among the first to systematically explore the relationship between roll call voting in the House and election returns. Using electoral and survey data from 1952 to 1968, Erikson found that conservatism among Republican legislators had a pronounced, negative effect on their vote margins. In a related analysis of the 1974 U.S. House elections, Burnham (1975) found that electoral losses among Republicans were greatest among the more conservative members of the party. In his study of voting behavior in Congress, Kingdon (1989) concludes that members act strategically when casting roll call votes and are careful to avoid expressing positions that may be viewed as too "extreme" by constituents. More recently, Ansolabehere, Snyder, and Stewart (2001) and Erikson and Wright (2001) have found evidence that candidates' vote share is inversely related to support for the party's ideological extreme.

In one of the most comprehensive and related analyses to date, Canes-Wrone, Brady, and Cogan (2002) examine the relationship between members' electoral margins and overall ideological support as reflected by ADA scores and demonstrate that legislators are indeed held accountable for their roll call behavior. Using data from the 1956-1996 elections, they find that incumbents receive smaller electoral margins on average the higher their ADA scores. Moreover, they illustrate that this effect is comparable to other determinants of electoral margins including challenger quality and

campaign spending. Finally, they contend that the distinction between "safe" and "marginal" representatives is tenuous at best, since this phenomenon affects all members equally, regardless of their previous electoral performance.[2]

In moving away from an exclusive emphasis on ideological extremity, recent work has begun to examine the relationship between electoral outcomes and party loyalty to determine if partisan cooperation can actually be a liability for individual legislators. Indeed, Carson (2005) examines the voting patterns of legislators on key votes taken in Congress since the early 1970s and finds that experienced candidates are more likely to run as an incumbent's party unity score increases on these votes. In proposing a model of "strategic party government," Lebo, McGlynn, and Koger (2007) examine the relationship between aggregate party behavior in Congress and electoral outcomes over time. They test their model on macro-level data from 1789 to 2000 and find that an increase in party unity on legislative voting has adverse electoral costs for both parties. This paper seeks to build upon this latter work by testing similar claims on micro-level data for members of the U.S. House during the contemporary era.

Theoretical Linkages: Roll Call Voting and Electoral Accountability

The literature on congressional elections suggests that members seeking reelection to the U.S. Congress often have a number of advantages over their opponents. They typically can raise greater amounts of money and outspend their opponents, they have greater name recognition, and they can run on their accomplishments as legislators (Jacobson 2004). Moreover, legislators have the ability to use their party affiliation as a "brand name," which can provide them with electoral benefits or liabilities as they seek reelection (Cox and McCubbins 2007). While challengers share

[2] See Bovitz and Carson (2006) for related evidence of electoral accountability in conjunction with legislative voting on individual roll calls in the U.S. House and Bonney, Canes-Wrone, and Minozzi (2007) for similar evidence with respect to crime policy in Congress.

the same party labels, this affiliation often does not translate into the same degree of electoral success as it does for incumbents, who may have the ability to emphasize that their accomplishments were a function of serving in Congress. More specifically, the benefits incumbents provide for their constituents stem from serving as a member of one of the two major parties, and the advantages that accrue to them are a function of the agenda-setting powers that majority status entails (Rohde 1991; Cox and McCubbins 2005).

Students of congressional politics continue to disagree over the extent to which party and constituency shape legislative voting behavior. While many agree that legislators are bound by an "electoral connection" (Mayhew 1974), it is less clear that constituents exert an independent influence over choices on roll calls since most voters are largely unaware of how representatives or senators vote while in office (Arnold 1990; Fiorina 1974). When legislators are forced to balance constituency and party interests coupled with their own personal preferences, it may be difficult to be responsive to constituency interests. Indeed, in an era of increasingly polarized politics, there may be little room for constituency influence when the political parties are pulling members in the opposite direction. Occasionally, parties may even have to discipline "rogue" members who have a record of voting against partisan interests (Bell and Roberts 2005).

Given the specific advantages accruing to incumbents in elections and the fact that voters are largely unaware of legislators' specific voting behavior, why then might legislators worry about the roll call positions they express on the floor? Chances are that most roll calls will remain outside of the electoral arena. However, studies of legislative behavior suggest that incumbents are risk averse and worry about the positions they take because they suspect some roll calls *may* become electorally salient (Arnold 1990; Bianco, Spence, and Wilkerson 1996; Carson 2005; Fiorina 1974; Mayhew

1974), and they can never be absolutely certain which roll call positions will figure prominently in the subsequent election.

Arnold (1990: 46) argues that legislators must be careful when casting roll calls because citizens may use any number of the incumbents' actions when engaging in retrospective voting. Incumbents must also establish voting records that seek to dissuade challengers from exposing inconsistencies in their position taking. "The fear is not simply that citizens will notice on their own when a legislator errs, but that challengers will investigate fully a legislator's voting record and then share their interpretations of how he or she has gone wrong" (Arnold 1990: 272-273). Indeed, "…a prominent position on the wrong side of a major issue [can]…galvanize potential opponents" (Jacobson 1987: 139).

Wright (1978: 446) explains that it is not necessary for issues to account for much of the variance in election outcomes since electorally insecure legislators only require token incentives to take note of the policy interests of their constituents. Moreover, he concludes that, "…since the candidate's issue stance is one of the few factors relevant to his reelection that is also within his control, the representative is well advised to bring his issue positions into line with those of his constituency. Not to do so could be the determining factor in electoral defeat" (459). In a related discussion, Mann and Wolfinger (1980) assert that

> It would be a mistake, however, to conclude that issues and roll-call voting have no importance for congressional elections. The low salience of issues may reflect in part the efforts of the incumbent to avoid being dramatically out of step with district sentiment. In order to preserve a favorable public image, incumbents may act to forestall vociferous criticism on policy grounds. Incumbents must state positions on issues to satisfy local groups that are important for endorsements, campaign contributions, and volunteers. House members realize that the best way of ensuring their continued reelection is to discourage serious opposition. This requires making peace with those in the district who might otherwise underwrite a vigorous challenge. Finally, most politicians operate at the margin, not at the base. A loss of two or three percent of the vote as a result of a vote or a position taken on an issue will give them pause (Mann and Wolfinger 1980: 629).

Media coverage surrounding prominent votes in Congress suggests that legislators have sufficient reason to worry about their roll calls being politicized. Media coverage of showdown votes in Congress can expose "attentive publics" (Arnold 1990: 64-65) to an incumbent's roll call choices. Thus, those most capable of using legislators' behavior for political advantage—prospective candidates, political activists, and social elites—have ample opportunities to become aware of roll call votes and transform them into electorally salient political issues. As a result, this can be sufficient for the roll call—the official articulation of the position—to have an impact on election day.[3]

Of course, electoral considerations represent only one of several possible determinants of congressional voting (Kingdon 1989). Legislators may have *personal policy views* that conflict with their constituents' preferences. As Bianco, Spence, and Wilkerson (1996: 151) note

> …to say that an electoral connection exists does not imply that a legislator will invariably comply with constituent demands. A legislator who has intense policy concerns may decide to risk reelection by voting against constituents in order to promote a preferred policy.

When a member's policy-driven votes reflect a general approach to policy issues, we can label that *ideology* and evaluate whether a member is too liberal or conservative for her district. Occasionally, party leaders may ask a representative to support the party's position on a controversial and tightly contested issue that might be difficult to explain in her home district. Thus, when a legislator is pulled in multiple directions by competing electoral and policy considerations, she must often make a tough choice on a roll call, especially since it remains to be seen whether that position will prove consequential in the subsequent election.

[3] As Fiorina (1974: 123) asserts, "an informed, issue conscious citizenry (in the best traditions of democratic theory) may not be crucially important for representative government. The entire district need not be watching, just some part of it—a potential challenger, newspaper editor, interest group, or lone, informed citizen. Nor need they be watching at the time of the vote; just so they dig up the dirt before the election."

What happens when legislators face conflicting pressure from their party, constituency, and personal preferences? When a representative is elected from a district that largely overlaps with the underlying preferences of the party, legislators have little need to worry that supporting the party on highly visible or closely contested votes will adversely affect their chances of reelection. When the preferences of their constituency do not overlap with those of their political party, however, then their electoral status becomes more uncertain. These *cross-pressured* members may be called upon to make tough choices on important votes in Congress. If they vote with the party on controversial or highly salient issues, they risk alienating their political base in the next election. Nevertheless, if they repeatedly vote in line with their district and against the party, then they may lose favor with the party leadership and risk one or more possible "sanctions." Regardless of the choice made under these circumstances, they put themselves at increased risk of isolating one of their two core bases of support.

Much of the extant literature focusing on the subject of party loyalty in Congress assumes that the party leadership gives cross-pressured members the benefit of the doubt when they face a tough roll call choice. Indeed, some argue that when legislators encounter this type of choice, it is preferable to "vote the district," than be constrained by party discipline (Cox and McCubbins 2007; Desposato and Petrocik 2003; Mayhew 1974).[4] Unfortunately, this characterization fails to consider that the political stakes may be too high to allow cross-pressured members to defect on important legislative issues. Additionally, party leaders may be more reluctant to allow a member to defect if it is on a procedural issue, as this is where we should expect to see parties attempting to structure the legislative agenda (Bell and Roberts 2005; Cox and McCubbins 2005; Jenkins, Crespin, and Carson 2005).

[4] Griffin (2006) finds that elected officials who represent competitive House districts tend to be more responsive to their constituents' preferences.

This paper seeks to provide a measure of balance to this body of knowledge by exploring the extent to which elected representatives are held accountable for loyalty to their political party. When the stakes are high, and policy outcomes are at stake, the party leadership has a lot riding on the final outcome. In such cases party leaders may place increased pressure on legislators to support the party's position. In other words, there is reason to suspect that the degree of party pressure placed on legislators may be *conditional* upon a variety of circumstances as well as the specific electoral prospects of the legislators asked to support the political party. Drawing upon aggregate legislative voting behavior since the early 1970s, we move beyond prior work in this vein and examine whether party unity directly affects incumbent success in the U.S. House of Representatives.

Our paper gives us the opportunity to test three distinct claims about the relationship between voting in Congress and election outcomes. First, an ideologically extreme voting pattern may cause incumbents' reelection margins to decrease as voters punish these politicians. Second, voters may simply punish legislators who are overly partisan in their voting. Finally, we may simply observe no discernible relationship between congressional voting and congressional elections. In the remainder of the paper, we systematically investigate each of these claims.

Data and Methods

Our models seek to explain electoral success for members of the House of Representatives running for reelection. Consistent with Jacobson (1996), the dependent variable is the percent of the incumbent *i*'s two-party vote share; following Canes-Wrone, *et al.* (2002) this varies by year *t*. Since there are many races in which incumbents run unopposed or face only token opposition, we examine only those races in which a major party challenger received at least 1,000 votes. The mean vote share for incumbents is 64.8% with a standard deviation of 9.8.

The independent variable we are most interested in for our analysis is the level of party unity for the incumbent legislator. *Party Unity* scores for individual representatives were collected from Congressional Quarterly Almanacs from 1955 to 2004.[5] CQ first identifies every "party" vote that pits a majority of one party's members against a majority of the opposing party, then calculates for each legislator the percentage of these party votes on which the member voted with his or her party. For some years, an absence counts against one's unity score, while for other years CQ did not. We recode the data so that absences do not count for or against one's score. As the proportion of times a member votes with her party, unity is scored from 0 to 1 with an actual minimum in the data of 0.039 for Representative Larry McDonald's voting in the 95th Congress.[6]

We see *Ideological Extremity* as a major determinant of party unity and measure it as the absolute value of each representative's first dimension DW-NOMINATE score (Poole and Rosenthal 1997) which assesses legislators' overall voting tendencies on the traditional liberal-conservative economic dimension. These scores are generally used as measures of ideology relative to other legislators serving in Congress. More specifically, they are derived using an item response model to estimate the number of substantive dimensions in legislative voting and each legislator's ideal point on this dimension. We recode these scores by multiplying Democratic scores by -1 so that high values of the resulting variable, Ideological Extremism**,** indicate that a member has an "extreme" voting record, while low values suggest that a member's preferences are at odds with the mainstream of his or her party.

[5] Party Unity scores from 1983 to 2004 were entered by the authors. Scores from 1955 to 1982 are from ICPSR 7645, which is simply a dataset of CQ voting scores.

[6] What kind of representative votes with his party less than 4% of the time? Serving as a Democrat from Georgia's 7th district from 1975-1983, McDonald once said "We have four boxes with which to defend our freedom: the soap box, the ballot box, the jury box, and the cartridge box." He also became the president of the John Birch Society while serving in the House. McDonald was aboard Korean Air Flight KAL-007, shot down by the Soviets in 1983, thus becoming the only U.S. member of Congress killed by the Soviet Union during the Cold War. Or, "knowingly" killed by the Soviet Union, as the John Birch Society might report.

To isolate the effects of representatives' roll call behavior on their electoral fortunes, we control for a variety of factors that have previously been shown to affect incumbents' electoral performance including prior electoral success, the partisanship of the district, challenger quality, incumbent and challenger spending (in years where available), freshman status, presidential approval, the change in real disposable personal income, and in-party versus out-party status. We briefly explain our operationalization of each in turn.

Incumbent Vote, our measure of electoral security, is the incumbent's percentage share of the vote in the previous election. Since we are only interested in incumbents running for reelection there is no loss of cases by including a lagged variable.[7]

District partisanship is measured as the share of the two-party vote that the presidential candidate of the incumbent's party received in the congressional district in the most recent presidential election. Presidential vote at the district-level is typically employed as a measure of district preferences and can be a useful proxy for evaluating the degree to which legislators who support the party on controversial votes are cross-pressured by their constituents (Jacobson 2004).

Challenger quality is coded 1 if the candidate previously held elected office, 0 otherwise. This coding also follows Jacobson's classic study that views having run a successful elective campaign as a proxy for candidate quality.[8]

Spending Gap is included to control for the effects of incumbent and challenger spending, following Jacobson's work on money in elections. It is calculated as the difference in the natural logarithm of both dollar amounts in the model (Jacobson 1980: 40).[9] Since spending data are not

[7] Given concerns about the consequences to inference of including a lagged endogenous variable (Achen 2000), this variable does not appear in all of our models.
[8] See Gary C. Jacobson, *Money in Congressional Elections* (1980): 106-107. For an alternative view on how to measure challenger quality, see Green and Krasno (1988).
[9] As Jacobson (1980) argues, the advantage of using the natural logarithm of campaign expenditures for analyses of elections is that doing so avoids the assumption of a linear relationship between money and votes, thus accounting for

available prior to 1978, using this variable requires leaving out elections from 1956 to 1976. Thus, the variable is including in only some of our analyses so that we can test hypotheses using at some times our full data set and at others our full compliment of explanatory variables.

Freshman is a dummy variable controlling for freshman status among incumbent legislators. *In Party* is a dummy variable that measures whether legislators are members of the president's party. *Midterm* accounts for the effects of midterm elections and is scored "1" for midterm elections with a president of the legislator's party, "-1" with a president of the opposite party, and "0" in presidential election years. *Presidential Approval* and *Change in Personal Income* are also coded for in-party status so that a popular president and a growth in income are expected to help members of the president's party and hurt those in the other party.[10]

To examine our expectations systematically, we use a generalized two-stage least-squares panel data estimator with random effects and instrumental variables (Baltagi 2005). The use of pooled regression models is common in the congressional elections literature (see, e.g., Jacobson 1993; Canes-Wrone, Brady, and Cogan 2002), yet may pose one or more statistical problems with our ability to systematically evaluate the effects of various covariates on the dependent variable of interest. Indeed, we believe that a two-stage modeling strategy has two distinct advantages over other estimation techniques. First, party unity is itself an endogenous variable that is affected by, and affects, a legislator's electoral vote margin. Party leaders use their expectations about upcoming elections to decide which legislators' arms will be twisted in terms of higher levels of unity. Since

---

diminishing marginal returns from campaign spending. These two variables are based on data generously provided by Gary Jacobson.

[10] Presidential approval is scored as the raw approval number minus 50% and multiplied by -1 for members not of the president's party. Change in real disposable income is taken from the third quarter of the election year and is multiplied by -1 for members not of the president's party.

we also expect constituents to react to levels of party unity, this results in reciprocal causality and makes a two-stage approach to modeling appropriate for estimation purposes.[11]

A second advantage of our estimation strategy is that it gives us the opportunity to evaluate whether legislator preferences are an antecedent variable in the relationships between members' actions and their electoral fortunes. That is, we expect that preferences are a good predictor of unity but are not by themselves a predictor of vote share – constituents punish legislators for being too partisan, not for being too ideological. When we use party unity as an endogenous variable and preferences as an instrument in a first stage equation, our instrument tests can tell us if preferences predict unity, but not incumbent vote share. If preferences are not a good instrument, they belong in the second stage equation as a direct predictor of incumbent vote share. This is one of the major differences between our analyses and those of Canes-Wrone *et al*. (2002) who omit what we view as the proximate predictor from their equations – party unity – and use revealed preferences instead.

In sum, then, we have the following basic model of representatives' electoral vote margins estimated as the second stage of our simultaneous equations model:

$$\begin{aligned} IncumbentVote_{it} = {} & \beta_0 + \gamma_1 \widehat{Unity}_{it} + \beta_1 District_{it} + \beta_2 Challenger_{it} + \beta_3 SpendGap_{it} + \\ & \beta_4 Freshman_{it} + \beta_5 InParty_{it} + \beta_6 Midterm_{it} + \beta_7 Approval_{it} + \beta_8 \Delta Income_{it} + \\ & \beta_9 IncumbentVote_{it-1} + \mu_i + \nu_{it} \end{aligned}$$

where μ_i is the random error component, ν_{it} is the overall error component, β_0 is the estimated constant, β_1 - β_9 are regression coefficients, and γ_1 estimates the effect of predicted values of the endogenous variable $\widehat{Unity}_{it}$ which is estimated in a first stage equation:

[11] Our study is the first to apply a two-stage approach to electoral outcomes but Canes-Wrone, Rabinovich, and Volden (2007) use a two-stage model while seeking to explain ideological extremity in legislative voting.

$$\widehat{Unity_{it}} = \delta_0 + \delta_1 District_{it} + \delta_2 Challenger_{it} + \delta_3 SpendGap_{it} + \delta_4 Freshman_{it} + \delta_5 InParty_{it} + \delta_6 Midterm_{it} + \delta_7 Approval_{it} + \delta_8 \Delta Income_{it} + \delta_9 IncumbentVote_{it-1} + \theta_1 Extremism_{it} + \theta_1 Unity_{it-1}$$

In this equation, θ_1 and θ_2 estimate the effects of instrumental variables excluded from the second stage above and $Unity_{it-1}$ is the lagged value of party unity for legislator *i* which serves as a useful instrument.[12] To investigate our questions fully, we estimate several models that vary slightly from the above equations, but all maintain the same basic structure.[13]

Results

Table 1 estimates four slightly different versions of our basic model. Models 1 and 2 use our entire sample period but exclude the spending gap variable and Models 1 and 3 exclude our control variable tapping electoral safety. All our independent variables perform as expected.

– Table 1 about here –

To begin, the character of the district is very important in predicting incumbent vote share. As a district becomes more supportive of presidential candidates from the legislator's party, the incumbent does better. Aspects of the contest matter too, of course. Facing a quality challenger makes reelection more difficult, costing a legislator just over 5% vote share in Model 1 but less in the shorter period of data. This difference could well be due to the introduction of a spending gap in the later period (see Jacobson 2004). Indeed, the difference in the natural logs of incumbent and challenger spending is a powerful predictor of incumbent vote. Also, getting reelected as a freshman

[12] However, including it in models costs us cases, including all of 1956 when we use our entire time period.
[13] To use data beginning in 1956, *SpendGap* is left out of both equations for the first two models of Table 1 and Table 3. To compare our models when not accounting for electoral security, *Incumbent Vote* is left out of both equations in models 1 and 3 of Table 1. Also, excluded instruments vary slightly but *Extremism* is always excluded from the second state equation. Throughout, we aid identification problems by having at least two instrumental variables that are not correlated with the errors of the second stage equation (Wooldridge 2002, p. 90).

appears to have a significant impact on vote share, but this depends upon whether electoral security is included in the model.

National level conditions are also important in determining outcomes in congressional races. As others have found, higher levels of presidential approval help legislators of the president's party and hurt members of the opposite party. Incumbents also benefit from sharing the president's party affiliation as personal income is growing as well. Consistent with regularized patterns of surge-and-decline in House races, midterm elections reduce vote share for members of the president's party, all else equal.

The key result from the four models is that party unity has a significant negative impact on incumbent's vote share. Over the 1956-2004 period, and holding all other variables constant, voters consistently punish legislators for voting too often with their party. In Model 1, a 50-point increase in a member's party unity score will cost an incumbent nearly 5% of the vote share in the subsequent election – a loss equal to that of a quality challenger entering the race. When we also factor in the effect of electoral security in Model 2, the size of the party unity effect is diminished but it is still statistically significant. Over the shorter period from 1978-2004, the variable is again significant and negative with or without the control for electoral security. On the whole, the models do quite well with Model 2 (1956-2004) explaining 53% of the variance and Model 4 (1978-2004) explaining 62% of the variance in incumbent vote share.

The finer points of our modeling strategy provide us with some additional insights regarding incumbent electoral performance. First, ideological extremity does not belong in a model predicting incumbent vote share. It does, however, prove to be a useful instrumental variable as a predictor of party unity with *z* statistics of 78.27, 41.18, 67.43, and 33.21 in the first stage of the four respective models. A Hansen-Sargan χ^2 test indicates that extremity is properly excluded from the second

stage equation with *p* values all above .6. As an additional test, as shown in the last row of Table 1, when we move extremity from the first stage to the second stage in each of these four models – thus allowing it to predict vote share side-by-side with predicted values of party unity – extremity fails to approach statistical significance. Thus, ideological extremity is an *indirect* predictor of incumbent vote share – voters penalize a voting pattern of partisan loyalty by representatives, not the underlying ideology that may predict their voting record.[14]

– Table 2 about here –

Secondly, our analysis finds reciprocal causality between incumbent vote and party unity. Like Lebo, McGlynn, and Koger (2007), we expect that parties attempt to win legislative contests while minimizing electoral costs. To do this, party leaders will be careful about whom they pressure to vote with the party, choosing legislators who are expected to do well in upcoming elections. In this way, predictions about future election outcomes condition levels of party unity. In Table 2 we show that this is indeed the case by switching the causal ordering of our earlier models. Here, party unity is the dependent variable of the second stage, and predicted values of incumbent vote share generated from a first stage, prove to be fine predictor ($z = -6.67$) of levels of party unity.[15] In addition, we can see some of the causal factors predicting levels of party unity. Certainly legislator's preferences are the most important variable here but other factors are valuable as well. For instance, representing a district with a large proportion of sympathetic constituents leads to higher levels of party unity while being a member of the president's party with a midterm election approaching leads to lower levels of unity.

[14] This is also evident when we forgo our two-stage models and simply estimate the effects of ideological extremity and party unity together in a one-stage pooled regression model. In such cases, party unity is the superior predictor, with extremity failing to achieve statistical significance on its own. Note, however, that these models may suffer from the endogeneity bias that partially motivates our two-stage approach.

[15] Challenger quality, lagged values of incumbent vote share, and presidential approval are used as instruments excluded from the second stage of the estimation.

Returning to our predictions regarding vote share for incumbent legislators, we do not expect these relationships to stay the same regardless of the partisan landscape incumbents represent. The punishment constituents dole out for partisan behavior should be greatly reduced to the extent that the district leans toward the same party. For example, we do not expect two districts – one heavily Democratic and one heavily Republican – to react in the same way to a member of Congress with a record of supporting the Democrats on a large percentage of votes. Table 3 shows the results when we split our 1978-2004 sample into two groups – cases where the most recent presidential candidate of the incumbent's party received more than 60% of the vote and cases where they won less than 60% of the vote. As expected, the electoral effect of unity does vary significantly across districts. In the left-hand-side model, the coefficient for unity is –4.15, roughly half that of the right-hand-side model. Thus, in more competitive districts, party unity is of far more importance to voters looking at the records of their incumbents.[16]

– Table 3 about here –

Table 4 examines this relationship over our entire data period using an interaction term. This variable, District Partisanship * Party Unity, is positive and significant indicating that the negative effects of unity are attenuated by higher partisan support in a legislator's district. To be sure, in districts with extremely high levels of partisan support, higher levels of unity can help considerably, given that constituents expect higher degrees of partisan loyalty.

– Table 4 about here –

The first model of Table 5 examines the interactive nature of this relationship in the modern era, this time using the spending gap variables and the shortened time period. Here the interactive relationship gets even stronger. Looking at the extreme cases, going from the lowest level of unity

[16] When an incumbent represents a safer district, party unity still matters, but it matters much less compared to legislators representing moderate and competitive districts.

to the highest in a district with no partisans would cost a legislator 59.39% of the vote; however, doing the same in a district with 100% partisans would increase a legislator's vote share by 42.54% (101.93-59.39).

– Table 5 about here –

To this conditional effect, we add two more in Table 5 to account for the varying effects of unity according to national-level conditions. The coefficient on Party Unity * Change in Personal Income tests the extent to which partisanship is harmful contingent upon the state of the economy. This interaction does not achieve statistical significance, but interacting unity with presidential approval does yield a significant result. This in turn tells us that higher levels of unity are more harmful as either the president of one's own party declines in popularity (e.g. Nancy Johnson, R-CT, in 2006) or as the president of the opposition party increases in popularity. While these effects are of modest interest, they do not change the essential results reported in the earlier models.

– Table 6 about here –

Lastly, we use a dynamic approach to test our expectations and present the results in Table 6. In this model, all the variables are differenced so that we are explaining changes in vote share using changes in the independent variables. This allows us to hold a great many things constant – such as unmeasurable personality or district characteristics.[17] The Party Unity coefficient tells us how much better (or worse) a House member will do compared to their last reelection based on how much more (or less) partisan they were in the present Congress compared to the previous Congress. The coefficient of -9.37 indicates a considerable loss when so many other effects are held constant. Even though this model estimates effects on legislators who have been elected at least twice before, voters

[17] This is one way to ensure that ideology is accounted for in the model since it is likely unchanging between successive Congresses. Nominate scores can change slightly between Congresses and still perform as a useful instrument here.

can still dole out a hefty punishment for increases in the level of partisan voting regardless of how "safe" legislators perceive themselves to be.

Conclusion

This paper began with a simple, yet important premise—evaluating whether or not members of Congress are likely to be punished by their constituents for voting with their respective parties. While past research has focused almost exclusively on the relationship between legislative ideology and electoral outcomes, we argue that such an approach misses an important linkage in evaluating legislative-constituency dynamics. In many districts, voters may prefer an ideologically "extreme" legislator as their representative to more closely mirror their own preferences. That being said, elected representatives may be more likely to be punished if they are perceived as being too partisan in their voting behavior in Congress, especially in an era when extreme partisanship or polarization has a strong negative undercurrent (Jacobson 2000).

In seeking to improve upon prior work in this area, we extend previous research by treating legislators' voting behavior and electoral success as endogenous; in effect, we show that legislative voting is influenced by electoral security and vice versa. This is done through a dynamic analysis that allows for reciprocal causation and recognizes that legislative ideology may yield more of an indirect effect on incumbent vote share. Moreover, our analysis includes a measure of legislators' prior electoral success, which is important in an era of high incumbency reelection rates. We also examine the interactive effects of district partisanship to illustrate how the effects of party unity may be conditional upon the underlying partisan tendencies of the congressional district.

By focusing explicitly on the effects of party unity in Congress, we find that incumbent House members' vote share declines the more they vote with their own party on issues that divide

the two major parties. While ideological extremity—as measured in DW-NOMINATE scores—is correlated with party unity, we find that it has little direct effect on vote share. Moreover, party unity is almost twice as costly for members from moderate districts compared to lopsided districts, as defined by presidential vote share. Taken together, our work suggests that many legislators face electoral penalties for voting too often with their parties. Legislators nonetheless support their party positions (and pay the penalties) out of some combination of personal conviction and support for the collective interests of their parties. Thus, in contrast to what others previously have found when investigating the relationship between legislative behavior and electoral outcomes, constituents do not appear to be punishing their representatives for being too ideological, they are punishing them for being too partisan.

References

Achen, Christopher H. 2000. "Why Lagged Dependent Variables Can Suppress the Explanatory Power of Other Independent Variables." Paper presented at the annual meeting of the American Political Science Association.

Ansolabehere, Stephen, James M. Snyder, Jr., and Charles Stewart, III. 2001. "Candidate Positioning in U.S. House Elections." *American Journal of Political Science* 45: 136-159.

Arnold, R. Douglas. 1990. *The Logic of Congressional Action*. New Haven: Yale University Press.

Baltagi, Badi H. 2005. *Econometric Analysis of Panel Data 3rd Edition*. West Sussex, UK: John Wiley and Sons.

Bell, Lauren Cohen and Jason M. Roberts. 2005. "Keeping Score: Parties, Interest Groups, and Roll-Call Voting in the U.S. House of Representatives." Paper Presented at the Annual Meeting of the American Political Science Association.

Bianco, William T., David B. Spence, and John D. Wilkerson. 1996. "The Electoral Connection in the Early Congress: The Case of the Compensation Act of 1816." *American Journal of Political Science* 40(February): 145-171.

Bonney, Jessica, Brandice Canes-Wrone, and William Minozzi. 2007. "Issue Accountability and the Mass Public: The Electoral Consequences of Legislative Voting on Crime Policy." Working Paper.

Bovitz, Gregory L. and Jamie L. Carson. 2006. "Position Taking and Electoral Accountability in the U.S. House of Representatives." *Political Research Quarterly* 59(June): 297-312.

Burnham, Walter Dean. 1975. "Insulation and Responsiveness in Congressional Elections." *Political Science Quarterly* 90: 411-435.

Canes-Wrone, Brandice, David W. Brady, and John F. Cogan. 2002. "Out of Step, Out of Office: Electoral Accountability and House Members' Voting." *American Political Science Review* 96(March): 127-140.

Canes-Wrone, Brandice, Julia Rabinovich, and Craig Volden. 2007. "Who Parties? Floor Voting, District Ideology, and Electoral Margins." *Party, Process, and Political Change in Congress, Volume 2: Further New Perspectives on the History of Congress*, 113-125, edited by David Brady and Mathew McCubbins. Stanford: Stanford University Press.

Carson, Jamie L. 2005. "Strategy, Selection, and Candidate Competition in U.S. House and Senate Elections." *The Journal of Politics* 67(February): 1-28.

Cox, Gary W. and Mathew D. McCubbins. 2005. *Setting the Agenda: Responsible Party Government in the U.S. House of Representatives*. New York: Cambridge University Press.

Cox, Gary W. and Mathew D. McCubbins. 2007. *Legislative Leviathan: Party Government in the House*, 2nd edition. New York: Cambridge University Press.

Desposato, Scott W. and John R. Petrocik. 2003. "The Variable Incumbency Advantage: New Voters, Redistricting, and the Personal Vote." *American Journal of Political Science* 47(January): 18-32.

Erikson, Robert S. 1971. "The Electoral Impact of Congressional Roll Call Voting." *American Political Science Review* 65(July): 1018-1032.

Erikson, Robert S. and Gerald C. Wright. 2001. "Voters, Candidates, and Issues in Congressional Elections." In *Congress Reconsidered, 7th edition.* Lawrence C. Dodd and Bruce I. Oppenheimer, editors. Washington, D.C.: CQ Press.

Fiorina, Morris P. 1974. *Representatives, Roll Calls, and Constituencies*. Lexington: Lexington Books.

Griffin, John D. 2006. "Electoral Competition and Democratic Responsiveness: A Defense of the Marginality Hypothesis." *The Journal of Politics* 68(August): Forthcoming.

Jacobson, Gary C. 1987. "The Marginals Never Vanished: Incumbency and Competition in Elections to the U.S. House of Representatives, 1952-1982. *American Journal of Political Science* 31(February): 126-41.

Jacobson, Gary C. 1996. "The 1994 House Elections in Perspective." *Political Science Quarterly* 111:202-23.

Jacobson, Gary C. 2000. "Party Polarization in National Politics: The Electoral Connection." In *Polarized Politics: Congress and the President in a Partisan Era*. Jon R. Bond and Richard Fleisher, editors. Washington, DC: CQ Press, 9-30.

Jacobson, Gary C. 2004. *The Politics of Congressional Elections*. 6th ed. New York: Longman.

Jenkins, Jeffery A., Michael A. Crespin, and Jamie L. Carson. 2005. "Parties as Procedural Coalitions in Congress: An Examination of Differing Career Tracks." *Legislative Studies Quarterly* 30(August): 365-389.

King, David C., and Richard J. Zeckhauser. 2003. "Congressional Vote Options." *Legislative Studies Quarterly* 28(3):387-411.

Kingdon, John W. 1989. *Congressmen's Voting Decisions*. Ann Arbor: Univ. of Michigan Press.

Lebo, Matthew, Adam J. McGlynn, and Greg Koger. 2007. "Strategic Party Government: Party Influence in Congress, 1789-2000." *American Journal of Political Science* 51(July): 464-481.

Mann, Thomas E. and Raymond E. Wolfinger. 1980. "Candidates and Parties in Congressional Elections." *American Political Science Review* 74(September): 617-632.

Mayhew, David R. 1974. *Congress: The Electoral Connection*. New Haven: Yale University Press.

Rohde, David W. 1991. *Parties and Leaders in the Postreform House*. Chicago: University of Chicago Press.

Wooldridge, Jeffrey M. 2002. *Econometric Analysis of Cross Section and Panel Data*. Cambridge, MA: The MIT Press.

Wright, Gerald C., Jr. 1978. "Candidates' Policy Positions and Voting in U.S. Congressional Elections." *Legislative Studies Quarterly* 3: 445-464.

Table 1: Explaining House Incumbents' Share of the Two-Party Vote, 1956-2004†

	1956-2004				*1978-2004*			
	Model 1		Model 2		Model 3		Model 4	
	Coef. (s.e.)	*z*	Coef. (s.e.)	*z*	Coef. (s.e.)	*z*	Coef. (s.e.)	*z*
Constant	50.07 (0.93)	53.78***	24.74 (0.85)	29.07***	48.31 (0.99)	48.74***	30.04 (1.07)	28.06***
$Voteshare_{t-1}$			0.49 (0.01)	45.24***			0.36 (0.01)	29.45***
District Partisanship	44.08 (0.96)	46.01***	23.07 (0.99)	23.27***	36.97 (1.08)	34.12***	23.23 (1.13)	20.60***
Quality Challenger	-5.24 (0.21)	-24.74***	-3.26 (0.21)	-15.58***	-2.94 (0.26)	-11.47***	-2.08 (0.26)	-8.09***
Spendgap					-2.88 (0.07)	-39.94***	-2.23 (0.07)	-29.91***
Freshman	-2.08 (0.24)	-8.83***	1.77 (0.30)	5.85***	-0.97 (0.27)	-3.63***	0.93 (0.33)	2.80**
Presidential Approval (coded by in-party)	0.03 (0.01)	3.48***	0.15 (0.01)	14.56***	0.07 (0.01)	5.88***	0.11 (0.01)	9.35***
Midterm Election (coded by in-party)	-3.70 (0.15)	-24.48***	-5.00 (0.18)	-28.04***	-2.72 (0.16)	-17.30***	-3.33 (0.26)	-12.86***
Δ Personal Income (coded by in-party)	-0.35 (0.03)	-13.50***	-0.42 (0.04)	-11.57***	-0.02 (0.03)	-0.73	-0.11 (0.06)	-1.75*
In-party			2.02 (0.19)	10.91***			1.03 (0.29)	3.52***
Party Unity††	-9.90 (0.96)	-10.26***	-4.09 (0.75)	-5.46***	-9.44 (1.12)	-8.39***	-5.96 (0.92)	-6.46***
R^2 within/between/all	0.35 / 0.05 / 0.34		0.52 / 0.60 / 0.53		0.54 / 0.11 / 0.52		0.64 / 0.24 / 0.62	
Observations	7939		6031		4526		3519	
Groups	25		24		14		14	
Obs. per Group min/avg/max	138 / 317.6 / 358		104 / 251.3 / 293		300 / 323.3 / 358		228 / 251.4 /272	
Instruments excluded from second stage	Extremity, In-party		Extremity, $Party\ Unity_{t-1}$		Extremity, In-party		Extremity, $Party\ Unity_{t-1}$	
Anderson LR test	4639		7125		3265		4666	
(*p*)	(0.00)		(0.00)		(0.00)		(0.00)	
Sargan χ^2 statistic	0.19		0.18		0.15		0.28	
(*p*)	(0.66)		(0.67)		(0.70)		(0.60)	
Effect of Extremity on Unity – 1st Stage	*z*= 78.27 ***		*z*=41.18***		*z*=67.43***		*z*=33.21***	
Effect of Extremity when moved to 2nd stage	*z*=-0.47		*z*=-0.08		*z*=-0.79		*z*=-0.46	

† These are random effects panel-data models with instrumental variables and two-stage least squares. †† Instrumented variable.
* *p*,.05, ** *p*<.01, *** *p*<.001, one-tailed tests.

Table 2: Explaining Party Unity Using Future Incumbent Share, 1956-2004†

	Coefficient (s.e.)	*Z*
Constant	0.665 (0.01)	49.20***
Ideological Extremity	0.65 (0.01)	71.18***
District Partisanship	0.11 (0.02)	5.84***
Freshman	0.01 (0.004)	2.47**
Midterm Election (coded by in-party)	-0.010 (0.003)	-3.65***
Δ Personal Income (coded by in-party)	-0.000 (0.000)	-0.10
In Party	-0.010 (0.003)	-3.49***
$Voteshare_t$ ††	-0.002 (0.0003)	-6.67***
R^2 within/between/all	0.53 / 0.66 / 0.53	
Observations	6031	
Groups	24	
Obs. per Group min/avg/max	104 / 251.3 / 293	
Instruments excluded from second stage	Quality Challenger, Presidential Approval (coded by in-party), $Voteshare_{t-1}$	
Anderson LR test (p)	2429 (0.00)	
Sargan χ^2 statistic (p)	0.203 (0.90)	

† These are random effects panel-data models with instrumental variables and two-stage least squares. †† Instrumented variable.
* p,.05, ** p<.01, *** p<.001, one-tailed tests.

Table 3: House Incumbent Share – Close Districts vs. Lopsided Districts, 1978-2004

	Presidential Vote > 60% in District		Presidential Vote < 60% in District	
	Coefficient (s.e.)	*z*	Coefficient (s.e.)	*z*
Constant	12.97 (1.92)	6.76***	39.25 (1.70)	23.05***
Voteshare$_{t-1}$	0.37 (0.02)	18.49***	0.30 (0.16)	19.31***
District Partisanship	47.03 (2.79)	16.83***	15.17 (1.90)	7.96***
Quality Challenger	-2.01 (0.51)	-3.96***	-1.97 (0.29)	-6.84***
Spending Gap	-1.78 (0.12)	-14.85***	-2.48 (0.09)	-27.50***
Freshman			1.00 (0.39)	2.57**
Presidential Approval (coded by in-party)	0.13 (0.02)	6.26***	0.13 (.02)	8.59***
Midterm Election (coded by in-party)	-3.31 (0.49)	-6.76***	-3.17 (0.31)	-10.30***
Δ Personal Income (coded by in-party)	-0.26 (0.11)	-2.45**	-0.16 (0.08)	-2.09*
In Party	1.86 (0.51)	3.66***	1.42 (0.37)	3.87***
Party Unity ††	-4.15 (1.85)	-2.24*	-7.95 (1.02)	-7.78***
R^2 within/between/all	0.68 / 0.33 / 0.67		0.53 / 0.10 / 0.50	
Observations	1182		2337	
Groups	14		14	
Obs. per Group min/avg/max	47 / 84.4 122		139 / 166.9 / 206	
Instruments excluded from second stage	Extremity, Party Unity$_{t-1}$, Freshman		Extremity, Party Unity$_{t-1}$	
Anderson LR test	1362		3272	
(*p*)	(0.00)		(0.00)	
Sargan χ^2 statistic	5.23		1.45	
(*p*)	(0.07)		(0.23)	

† These are random effects panel-data models with instrumental variables and two-stage least squares. The results of multi-level random coefficient models are very similar. †† Instrumented variable.

* *p*,.05, ** *p*<.01, *** *p*<.001, one-tailed tests.

Table 4: House Incumbent Share – Interacting District Partisanship and Unity, 1956-2004†

	Coefficient (s.e.)	*Z*
Constant	49.14 (6.12)	8.03***
Voteshare$_{t-1}$	0.46 (0.01)	38.25***
District Partisanship	-22.40 (10.60)	-2.11*
Quality Challenger	-3.19 (0.21)	-15.32***
Freshman	1.62 (0.30)	5.32***
Presidential Approval (coded by in-party)	0.15 (0.01)	14.87***
Midterm Election (coded by in-party)	-4.84 (0.18)	-26.82***
Δ Personal Income (coded by in-party)	-0.39 (0.04)	-10.92***
In Party	1.94 (0.19)	10.44***
Party Unity ††	-31.87 (7.06)	-4.51***
District Partisanship* Party Unity	54.32 (12.89)	4.21***
R^2 within/between/all	0.53 /0.60 / 0.53	
Observations	6031	
Groups	24	
Obs. per Group min/avg/max	104 / 251.3 / 293	
Instruments excluded from second stage	Extremity, Party Unity$_{t-1}$	
Anderson LR test	737	
(*p*)	(0.00)	
Sargan χ^2 statistic	1.95	
(*p*)	(0.16)	

† These are random effects panel-data models with instrumental variables and two-stage least squares. †† Instrumented variable.
* *p*,.05, ** *p*<.01, *** *p*<.001, one-tailed tests.

Table 5: House Voteshare - Interactive Effects, 1978-2004†

	Coefficient (s.e.)	*Z*	Coefficient (s.e.)	*z*
Constant	77.63 (9.25)	8.39***	80.40 (10.25)	7.84***
Voteshare$_{t-1}$	0.32 (0.01)	22.52***	0.34 (0.01)	22.91***
District Partisanship	-63.85 (16.05)	-3.98***	-67.72 (17.96)	-3.77***
Quality Challenger	-2.10 (0.26)	-8.18***	-2.25 (0.27)	-8.47***
Spending Gap	-2.27 (0.08)	-30.32***	-1.98 (0.07)	-26.66***
Freshman	0.72 (0.33)	2.18*	0.78 (0.30)	2.57**
Presidential Approval (coded by in-party)	0.12 (0.01)	9.85***	0.23 (0.08)	2.91**
Midterm Election (coded by in-party)	-3.34 (0.26)	-12.91***	-3.37 (0.27)	-12.54***
Δ Personal Income (coded by in-party)	-0.16 (0.06)	-2.56**	0.71 (0.22)	3.29***
In Party	1.27 (0.29)	4.31***	1.50 (0.31)	4.88***
Party Unity ††	-59.39 (10.47)	-5.67***	-63.20 (11.65)	-5.43***
District Partisanship* Party Unity	101.93 (18.99)	5.37***	106.62 (21.21)	5.03***
Approval*Unity			-0.15 (0.09)	-1.59
Δ Personal Income*Unity			-1.10 (0.25)	-4.31***
R^2 within/between/all	0.64 / 0.21 / 0.61		0.64 / 0.24 / 0.61	
Observations	3519		3519	
Groups	14		14	
Obs. per Group min/avg/max	228 / 251.4 / 272		228 / 251.4 / 272	
Instruments excluded from second stage	Extremity, Party Unity$_{t-1}$		Extremity, Party Unity$_{t-1}$	
Anderson LR test	402		366	
(*p*)	(0.00)		(0.00)	
Sargan χ^2 statistic	1.45		3.91	
(*p*)	(0.23)		(0.05)	

† These are random effects panel-data models with instrumental variables and two-stage least squares. †† Instrumented variable.
* *p*,.05, ** *p*<.01, *** *p*<.001, one-tailed tests.

Table 6: Dynamic Model of House Incumbent Share – 1980-2004†

	Coefficient (s.e.)	*z*
Constant	-2.05 (1.52)	-1.35
Δ District Partisanship	23.10 (2.60)	8.87***
Δ Quality Challenger	-1.81 (0.33)	-5.48***
Δ Spending Gap	-2.86 (0.10)	-27.80***
Δ Presidential Approval (coded by in-party)	0.18 (0.01)	12.76***
Δ Midterm Election (coded by in-party)	-3.75 (0.30)	-12.40***
Δ Δ Personal Income (coded by in-party)	-0.34 (0..09)	-3.77***
Δ In Party	2.20 (0.40)	5.44***
Δ Party Unity ††	-9.37 (3.67)	-2.55**
R^2 within/between/all	0.28 /0.08 / 0.27	
Observations	3518	
Groups	13	
Obs. per Group min/avg/max	244 / 270.6 / 306	
Instruments excluded from second stage	Δ Extremity, Δ Freshman	
Anderson LR test	1330	
(*p*)	(0.00)	
Sargan χ^2 statistic	0.86	
(*p*)	(0.35)	

† These are random effects panel-data models with instrumental variables and two-stage least squares. †† Instrumented variable.
* *p*,.05, ** *p*<.01, *** *p*<.001, one-tailed tests.