The Marginal and Time-Varying Effect of Public Approval on Presidential Success in Congress

Jon R. Bond
Texas A&M University
Richard Fleisher
Fordham University
B. Dan Wood
Texas A&M University

We analyze the relationship between public approval and presidential success in Congress using time-varying parameter regression methods. Cues from constituency, ideology, and party dominate congressional vote choice, so the effect of public approval of the president is typically marginal. Because the strength of these primary cues varies through time, the effect of public approval on presidential success should also be time varying. Analysis of conflictual roll-call votes from 1953 through 2000 using the time-varying Kalman filter reveals that the effect of public approval on presidential success is marginal and changing through time. These models assume that the time variation is a stochastic process, and finding time-varying relationships may indicate model misspecification. Our theory, however, suggests that this time variation depends on a systematic factor—partisanship. A better specified model that allows systematic parameter variation confirms that the level of partisanship conditions the relationship between public approval and presidential success in Congress.

During the four decades since he first proposed it, Richard Neustadt's (1960) proposition that the president's standing with the public affects his ability to achieve legislative success has gained wide acceptance. Presidents, legislators, pundits, and a host of Washington insiders routinely report that the president's public approval provides leverage with Congress (see, e.g., Edwards 1997). Several studies testing the relationship with quantitative data also report evidence

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supporting this presidential popularity hypothesis (Brace and Hinckley 1992; Edwards 1980, 1997; Ostrom and Simon 1985; Rivers and Rose 1985).

Yet there are empirical and theoretical reasons to question whether there is a systematic and fixed relationship between the president's public standing and congressional support. At various times, the president has been unable to translate high popularity into legislative success. President George H. W. Bush's job approval, for example, surged to historic highs during and after the Gulf War, but this popularity did not lead to more victories in Congress. The Monica Lewinsky scandal leading to the impeachment trial of President Bill Clinton rendered the hypothesized connection between presidential popularity and how members of Congress vote even more dubious. After evidence of presidential sex, lies, and videotapes documenting them were made public, Clinton's opponents in Congress pressed to remove him from office, even though his job approval rating soared. The relationship between public opinion and congressional decision making over the 13 months from January 1998 to February 1999 seems opposite from what the presidential popularity hypothesis predicts. These examples raise the possibility that the connection between public approval of the president and success in Congress is more complex than suggested by pundits and tested in prior empirical work.

Indeed, a substantial body of research suggests that the influence of presidential popularity on roll-call support is marginal at best (Bond and Fleisher 1984, 1990; Bond, Fleisher, and Northrup 1988; Cohen et al. 2000; Collier and Sullivan 1995; Edwards 1989; Fleisher and Bond 2000b; Mouw and MacKuen 1992). These studies find little or no statistical evidence of a relationship between public approval and presidential success. Even studies that report a statistical relationship often find that the substantive effects are weak. There are, of course, cases and anecdotes suggesting that presidential popularity may *at times* translate into leverage with Congress. The critical question, however, is whether such cases can be generalized to all times and circumstances. Is the relationship between public approval of the president and congressional behavior fixed and invariant over time? If the relationship varies through time, under what conditions does public approval have a stronger or weaker effect on presidential success in Congress?

In this study, we analyze the relationship between public approval of the president and success on conflictual presidential roll-call votes in the House and Senate from 1953 through 2000. Using time-varying parameter estimation methods, we find that the effect of public approval on presidential success in Congress is not fixed but has varied substantially through time. In particular, presidents since Ronald Reagan have been far less able than earlier presidents to translate their public standing into legislative outcomes. We offer empirical evidence that this finding is not merely a result of random variation in the effect of approval on presidential success through time, but a function of increasing partisanship since the 1980s. The level of partisanship in Congress, therefore, is one condition that alters the effect of public approval: as partisanship increases, the effect of public approval on presidential success declines.

In the next section we offer a theory to explain why the effects of public approval should vary through time and why this relationship should be weaker during periods of strong partisanship. In subsequent sections, we report the findings of the statistical analysis and their implications for our theory of sporadic presidential influence on Congress. The concluding section discusses the implications of our study for presidential power in Congress and the American system generally.

A Theory of Sporadic Presidential Influence in Congress

We present our theory in four parts. The first part identifies the basic determinants of congressional behavior. The second part spells out why the basic determinants of congressional behavior lead to an expectation that public approval will typically have only marginal effects on presidential success in Congress. The third part establishes that the importance of various influences on congressional behavior fluctuate over time. The fourth part focuses on the conditions under which public approval will have stronger or weaker effects on success in Congress. In particular, we offer an explanation for why the strength of partisanship in Congress should systematically alter the relationship between public approval and presidential success.

The Basic Determinants of Congressional Behavior

We assume that members of Congress are rational actors motivated by two goals: policy and reelection (Aldrich 1995; Aldrich and Rohde 2000; Arnold 1990; Fenno 1973; Rohde 1991). Because members must make decisions with imperfect information and under severe time constraints, they rely heavily on cues, or shortcuts, to help them cast votes that advance their policy and reelection goals. Previous research clearly establishes that the most important determinants of roll-call votes in Congress are cues from party, ideology, and constituency, and only rarely does a member need to search more broadly for guidance (Jackson 1974; Kingdon 1981; Matthews and Stimson 1975). These cues tend to dominate congressional decision making in large part because there is substantial overlap among them. Elections tend to select representatives with partisan and policy preferences that are compatible with their constituents' interests, so most members seldom experience conflict between constituent preferences and their party and personal ideology (Fenno 1978; Mayhew 1974). For most members on most issues, pursuing policy goals by following their party and ideology contributes to reelection—or at least does not threaten it.

If there is no conflict among these primary cues, then members vote with the consensus. Only when there is conflict among these primary cues do members expand their search to other cues both in and out of government (Kingdon 1981). This expanded search may include inputs from staff, interest groups, bureaucrats, experts, the news media, and mass public opinion, as well as the president.

Note that the president is only one of many competing outside influences, and seldom is he dominant in members' calculus. Because the primary cues are strong and rarely in conflict, the effect of presidential preferences and approval on members' voting behavior is usually marginal. But during periods when many members experience conflicts among party, ideology, and constituency, outside considerations such as the president's popularity have a greater chance to influence congressional decisions.

The Marginal Effect of Public Approval

Neustadt (1960) proposes electoral self-interest as a theoretical rationale for why we should expect a relationship between public approval and presidential success in Congress. The president's public approval affects calculations of electoral self-interest because members fear electoral retribution if they oppose a popular president or support an unpopular one. As Neustadt (1960, 86) explains, members of Congress "must take account of popular reactions to their actions. What their publics think of them becomes a factor, therefore, in deciding how to deal with the desires of a president. His prestige enters into that decision; their publics are part of his."

Although electoral self-interest provides a theoretical connection between public approval and roll-call voting in Congress, the primary cues—party, ideology, and constituency—have the strongest and most direct effects. The president's approval rating is not likely to cause members of Congress to systematically alter their behavior, because presidential popularity has only a marginal effect on their electoral fortunes. With frequent split-ticket voting and the decline of presidential coattails (Jacobson 2001), members of Congress have less incentive to pay much attention to the president's popularity. The public's evaluation of the president plays only a small role in deciding the outcome of most congressional races. Few voters have sufficient knowledge of their representative's level of presidential support to make a connection between their evaluation of the president and their decision of which congressional candidate to support. If presidential popularity influences voters' decisions in congressional elections, it most likely works indirectly through the parties' candidate recruitment process, helping or hurting members of the president's party without regard to their specific levels of presidential support (Jacobson 1990; Jacobson and Kernell 1983). Furthermore, because presidential popularity is fluid, using it as a guide in casting roll-call votes is risky. The president's popularity on election day is more important than his popularity months or even years earlier when members must cast votes supporting or opposing the president. Members cannot predict with any certainty presidential popularity on election day.

For these reasons, the effect of public approval on members' electoral self-interest is limited and uncertain. Since public approval has only a limited effect on members' electoral self-interest, its effect on their roll-call voting decisions will also be marginal. While public approval of the president may influence the

behavior of some individuals and alter the outcome of votes on some occasions, it is not likely to systematically alter the behavior of those already in Congress (Bond and Fleisher 1990).

Time-Varying Relationships

Cues from the president must always compete with the stronger influences of party, ideology, and constituency on members' decision making. When these cues are in conflict, presidential approval has the greatest potential to affect presidential success in Congress. There is evidence that the relative strength of these primary cues varies over time, so the effect of presidential approval on presidential success should also vary over time.

Several studies show that party cohesion in Congress varied significantly from the 1950s through the 1990s (Aldrich 1995; Brady, Cooper, and Hurley 1979; Fleisher and Bond 1996, 2000a; Hurley and Wilson 1989; Rohde 1991). The level of partisanship in Congress depends on the degree of ideological diversity across partisan constituencies. Each party in Congress has a mainstream faction (liberal Democrats, conservative Republicans) and a cross-pressured faction (conservative Democrats, liberal Republicans). Cross-pressured members frequently face a conflict between party and ideology because these members represent a local constituency with policy preferences different from their party's mainstream. In the 1960s and 1970s, partisanship in Congress was low because diverse policy preferences across constituencies in each party resulted in the election of large numbers of cross-pressured members (Bond and Fleisher 1990).

Partisanship increases when fewer cross-pressured members are elected to Congress. As electoral forces produced more homogeneous party constituencies across the nation in the 1980s and 1990s, the number of cross-pressured members in both parties declined (Fleisher and Bond 2000b, 2001; Jacobson 2000; Rohde 1991). With fewer cross-pressured members, partisanship in Congress increased resulting in what Rohde (1991) calls conditional party government.[1] According to this theory, homogeneous preferences within parties and disagreement between parties provides a necessary "condition" for strong party leadership. When the condition is met, the homogenous party majority empowers party leaders to foster greater party discipline, and the proportion of party line votes increases.

Neustadt's original conception also suggests that the effect of the president's public prestige varies over time. According to Neustadt, "*Rarely* is there any one-to-one relationship between appraisals of the president's popularity in general and responses in particular" (Neustadt 1960, 87, emphasis added). That is, there may be a strong direct relationship at some times on some issues, but such occurrences are unusual. The importance of the president's public prestige is likely to vary over time because it is defined by the perceptions of Washingtonians rather

[1] Others view party leadership in similar terms. See Aldrich (1995); Aldrich and Rohde (2000); Dodd and Oppenheimer (1997); and Sinclair (1995).

than something measured precisely in public opinion polls: "Like reputation, prestige is a matter to be judged, not 'known'" (93). Not only does the president's public approval rise and fall over time, the interpretation that members of Congress place on a given level or change in approval also is likely to vary over time. Washingtonians "judge" the president's public prestige in a number of ways, including looking at public opinion polls. Although Neustadt himself utilizes the Gallup poll to gauge the president's public prestige, he cautions that the percentage approving of the president's job performance at any given point does not necessarily reflect congressional perceptions of his public prestige. Consequently, one should ignore small, month-to-month variations, focusing instead on sharp shifts in range (Neustadt 1960, 89–96).

Neustadt (1960, 87) focused on presidential "skill and energy" as the condition necessary to establish a strong link between presidential prestige and legislative success. Our theory suggests that the level of partisanship in Congress is another condition that affects the strength of the relationship.

Partisanship Moderates the Effect of Public Approval

The level of partisanship in Congress should systematically alter the effect of public approval on presidential success because members search more or less broadly when primary cues change. Partisan behavior is a function of the consistency among the cues of party, ideology, and constituency. During times of low partisanship in Congress, there are more cross-pressured members who experience conflicts among these primary cues. When many members experience conflict among the primary cues, public approval should become more important as members expand their search to other factors. During periods of high partisanship, there are fewer cross-pressured members and the primary cues are reinforcing. When members do not experience conflict among the primary cues, they tend to follow the consensus, and the effect of public approval on presidential success should decline.

These theoretical considerations lead to two empirical expectations:

1. The effect of both party and public approval on presidential success in Congress is not fixed, but time varying.
2. The relationship between public approval and presidential success in Congress is strongest when partisanship is weak, and weakest when partisanship is strong.

In the next section we describe a research design to test these expectations.

Research Design

All past empirical research exploring the relationship between public approval and presidential success in Congress has assumed a time-invariant relationship between variables. In the preceding section, we provided a theoretical rationale

for why relationships should be time varying. Accordingly, we use time-varying parameter regression methods to show that relationships do indeed vary over time. These methods assume that the time-varying relationships are stochastic. As observed by Wood (2000, 616), stochastic parameter variation can also be viewed as evidence of model misspecification. Therefore, based on our theoretical expectations, we re-specify the model using fixed parameter methods to show that these time-varying relationships are systematically related to variation in the level of partisanship through time.

Dependent Variable

The dependent variable is the president's annual percentage success on conflictual presidential roll-call votes in the House and Senate from 1953 through 2000.[2] A conflictual presidential roll call is defined as one on which less than 80% vote in agreement with the president's position. The reason for excluding consensual presidential victories in Congress is to limit the analysis to relatively important issues on which there is at least some minimal controversy. A check of the issues that passed by nearly unanimous margins with the president's support reveals that with rare exceptions, these are minor and routine issues. Votes that the president lost with more than 80% voting against him remain in the analysis. These relatively unusual cases, when the president stands alone against a united Congress, represent instances of important institutional conflict. Such cases are neither trivial nor routine and belong in the analysis.

Independent Variables

The independent variable of primary interest is public approval of the president's job performance. We use the standard Gallup presidential job approval question (Edwards with Gallup 1990, with updates from Gallup), "Do you approve or disapprove of the way [the incumbent] is doing his job as president?" Our measure is the average annual percentage approving of the president's job performance.

We are also interested in the effects of party. As discussed above, party is a primary cue guiding legislative behavior, and when cues are consistent, party also stands as a surrogate for constituent and ideological effects. Furthermore, there is strong and consistent empirical evidence that party affects success in Congress:

[2] This variable is based on presidential roll calls reported in *Congressional Quarterly* (various years) adjusted for nonconflictual presidential victories (Bond and Fleisher 1990; Fleisher and Bond 2000b). Other studies analyzed the effects of public approval on other dependent variables, including Box Scores (Rivers and Rose 1985) and individual support scores (Edwards 1980, 1989). Although these dependent variables are appropriate, a systematic consideration of the various measures concludes that presidential success measured by wins and losses on roll-call votes offers several advantages while overcoming some limitations (see Bond and Fleisher 1990, chap. 3).

presidential support is higher among members of his own party than among the opposition, and the president wins a higher percentage of votes if his party controls Congress (Bond and Fleisher 1990; Edwards 1989).

We use two variables to analyze the effect of party. First, we include an indicator for periods when the president's party controls the chamber. This variable is a dichotomy, coded 1 when the president's party controls the chamber and 0 otherwise. Second, we include the percentage of the president's partisans in the chamber, which reflects the strength of the president's party independent of whether the president's party is in control. Conceptually, the two variables reflect distinct dimensions of the potential effect of the president's party on presidential success.[3] When the president's party is in the majority, we expect the president to be more successful because his partisans control committees and the floor agenda. Additionally, the larger the president's majority, the more successful the president should become due to larger coalitions.[4]

Because the House and Senate have different rules and traditions, we analyze each chamber separately. We expect similar but not identical relationships in both chambers. Two features of the Senate tend to insulate senators from popular influences and might mute the effects of both party and public approval. First, senators serve six-year terms and only one-third must face the voters in any given election. The president's popularity is less likely to affect the reelection chances of the two-thirds of senators whose next election is two to four years away. Second, Senate rules protect the power of individuals and the minority party. In particular, the requirement of 60 votes to stop a filibuster allows a minority to block legislation favored by the majority. Consequently, the benefits of majority-party control are less in the Senate than in the House. For these reasons, we expect the relationships and their variation over time to be more muted in the Senate.

Time-Varying Parameter Estimation Methods

Previous work searching for a relationship between public approval and various measures of congressional voting has used regression analysis or one of its fixed parameter variants. Because our theory suggests that relationships vary over time, we employ the time-varying Kalman (1960) filter to produce vectors of time-varying coefficients. As suggested by Wood (2000), we initially tested for the

[3] There is a degree of collinearity between the two variables. The simple correlation between the two variables for the House is 0.88 and 0.84 in the Senate. We include both to err on the side of caution in controlling for the effects of party. Dropping the percentage measure, however, makes almost no difference to the results that follow.

[4] One study included another independent variable, a measure of risk taking by the president measured by the number of positions taken by the president (Brace and Hinckley 1992). A problem with this measure is that it is nonstationary in time-series terms and will often produce a spurious regression relationship (Granger and Newbold 1974). In addition, the dependent variable in our analysis contains the total number of votes on which the president took a position. This means that the number of presidential positions would be endogenous for our analysis.

presence of time-varying parameters using the tools of Flexible Least Squares (FLS).[5] Finding conclusive evidence of time variation, we initialized the Kalman filter using values from FLS estimates.[6] The Kalman filter approach allows us to estimate time-varying confidence intervals on each of the T time-varying coefficients for each variable.

Findings

Evidence of Time Variation

Figure 1 reports the estimates from the time-varying Kalman filter with 90% confidence intervals around each of the T point estimates.[7] Consider first the effects of party on presidential success in Congress. The top panel of Figure 1 shows a fixed and time-invariant relationship between party control and the rate of presidential success on roll-call votes. This panel also shows that the most important determinant of presidential success in Congress is whether the president's party is in the majority. If the president's party controls the House, the president wins almost 26% more roll-call votes. In the Senate, the benefits of majority party control are somewhat smaller but still substantial. The president wins about 21% more Senate votes when his party has a majority. Thus, the party cue is a strong determinant of presidential success in Congress.

The second panel of Figure 1 shows that the relative size of the president's majority is less important, but this effect may have changed over time and differed between chambers. We must be cautious in interpreting this change because the confidence intervals for both the House and Senate generally encompass zero, suggesting that we cannot have much confidence that any of these

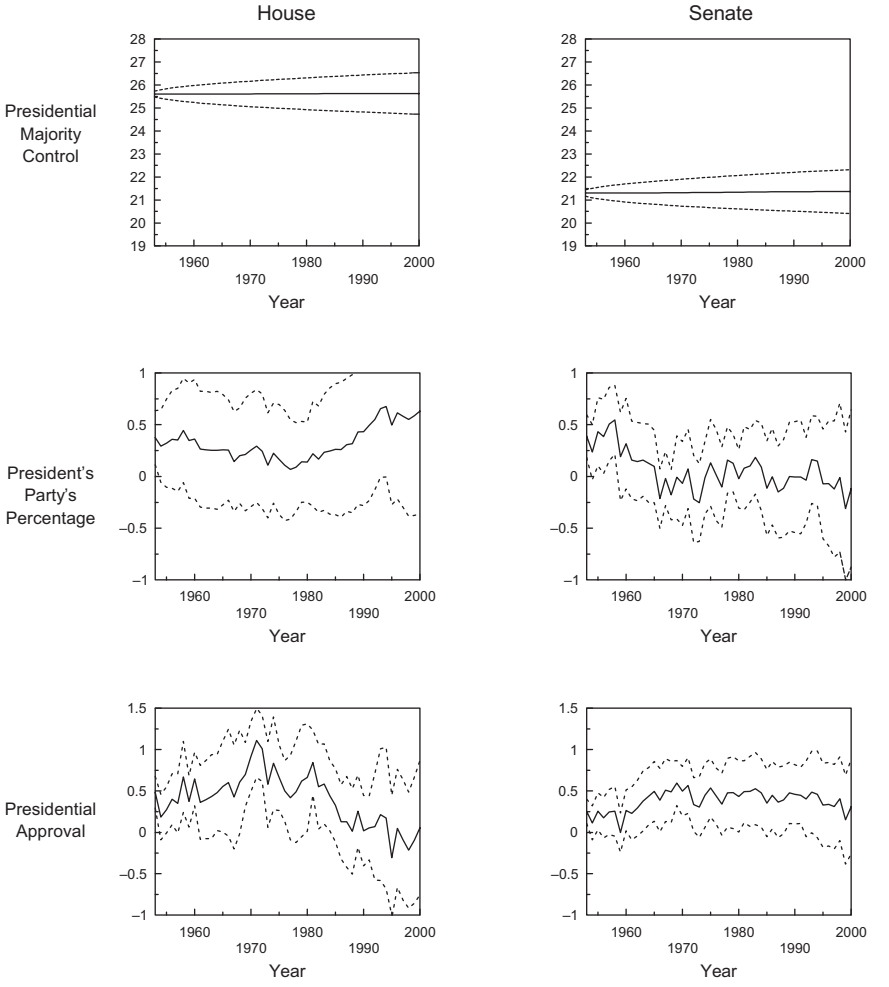
[5] Flexible Least Squares provides three tools for exploring the nature of time variation. First, a residual efficiency frontier is plotted to test for the presence of global parameter variation. Second, average parameter values at multiple points along the residual efficiency frontier are calculated to determine which particular parameters vary and by how much. Third, estimates of the vectors of time-varying parameters are produced to determine the precise nature of parameter variations (Kalaba and Tesfatsion 1989). Wood (2000) provides an explanation of this method, as well as several empirical applications. We used all three tools to test for parameter variation. The tests uniformly show that there is time variation in the relationship between presidential approval and presidential success in Congress. This analysis is omitted because of space limitations but is available on request from the authors.

[6] Estimates using FLS produced remarkably similar results. We report the Kalman filter results so that readers can gain a sense of the confidence we can have in each of the T point estimates for each parameter.

[7] Reporting 90% rather than 95% confidence intervals is common for time-varying parameter results because time-varying standard errors naturally tend to be large. We are in effect estimating T quantities, β_t, from a data set containing only T observations. In a sense we are stretching the information in our data set to the limit, so wide confidence intervals are the norm for time-varying coefficient estimation. Furthermore, the confidence intervals reported in Figure 1 do not allow hypothesis tests about effect parameters in the conventional sense because they are T-point estimates rather than a single-point estimate. They do, however, provide a sense of the possible sampling error that *could* be associated with *each* of the T point estimates.

FIGURE 1

Time-Varying Kalman Filter Coefficients for the Effect of Party Control, Party Percentage, and Presidential Approval on Presidential Success in Congress



Note: The dependent variable is the president's annual percentage success on conflictual presidential roll-call votes in the House and Senate from 1953 through 2000. The graphs are plots of the estimated coefficients for each variable using time-varying Kalman filter estimation. The dashed lines are 90% time-varying confidence intervals.

effects are statistically different than zero. Nonetheless, in the House the importance of the president's party's percentage to presidential success appeared to decline through 1977 and then increased through the 1980s and 1990s. In the Senate, the effect of the president's party's percentage was near zero after the mid-1960s.

The results reported in the third panel of Figure 1 are the most important. These graphs show definitively that the effect of public approval on presidential success has changed through time. In the House, the effect of public approval increased from the 1950s to the 1970s. At the peak effect in 1971, each 10% increase in public approval was associated with 11.1% more presidential victories. The effect of public approval in the House declined somewhat during the 1970s and then dropped precipitously after 1981. By the late 1980s when President Reagan left office, the effect of public approval on presidential success was near zero, and it remained small throughout the Bush administration. The coefficients turned negative during the Clinton administration when an increasingly partisan House of Representatives emerged. These results are consistent with the anecdotal evidence that presidents Bush and Clinton received little legislative bonus from their high approval ratings through this period.

In the Senate, the effects of approval are also time varying but much less volatile. Similar to the pattern for the House, the effects of approval increased from the 1950s through 1971 and then declined. Relative to the House, however, the decline in the Senate was much more gradual. Indeed, the sharpest declines in the importance of approval in the Senate did not occur until after 1994 when the Senate reverted to Republican control. The sharp decline in 1999 during the impeachment scandal again suggests the importance of partisanship in moderating the effects of public approval on presidential success in Congress.

Evidence That Partisanship Conditions the Effect of Approval on Success in Congress

The results in the preceding section provide clear evidence that the effects of public approval on presidential success in Congress are not fixed but time varying. These models assume that the time variation is a stochastic process. Our theory, however, suggests that this time variation depends on a systematic factor, partisanship.

If variation in the relationship over time is systematic, then we should be able to model these effects by including an appropriate variable to explain the parameter variation. In other words, as suggested by Wood (2000, 616) the parameter variation may be evidence of model under-specification. Judge et al. (1988, 435–436; see also Kennedy 1998, 100) describe this precise situation and discuss methods for modeling systematic parameter variation. The basic fixed parameter model is the following.

$$\text{Success}_t = \beta_0 + \beta_1 \text{Control}_t + \beta_2 \text{Percent}_t + \beta_3 \text{Approval}_t + \varepsilon_t \qquad (1)$$

Success_t is presidential success on conflictual roll-call votes, Control_t is an indicator for a presidential majority, Percent_t is the percentage of presidential partisans in the chamber, Approval_t is the president's job approval rating, and ε_t is a stochastic disturbance.

Now, we showed in the previous section that the coefficient for approval, β_3, is time varying,[8] which yields the following.

$$\text{Success}_t = \beta_0 + \beta_1\text{Control}_t + \beta_2\text{Percent}_t + \gamma_t\text{Approval}_t + \varepsilon_t \quad (2)$$

If γ_t depends systematically on another variable, say, partisanship, as suggested in our earlier theoretical discussion, then we can express the time-varying effect as follows (e.g., see Judge et al. 1988, equation 10.4.4).

$$\gamma_t = \alpha_0 + \alpha_1\text{Partisanship} \quad (3)$$

Then, substituting equation 3 into equation 2 we have the following.

$$\text{Success}_t = \beta_0 + \beta_1\text{Control}_t + \beta_2\text{Percent}_t + (\alpha_0 + \alpha_1\text{Partisanship})\text{Approval}_t + \varepsilon_t \quad (4)$$

This can be further simplified to produce an equation for estimation.

$$\text{Success}_t = \beta_0 + \beta_1\text{Control}_t + \beta_2\text{Percent}_t + \alpha_0\text{Approval}_t + \alpha_1\text{Partisanship} * \text{Approval}_t + \varepsilon_t \quad (5)$$

We can estimate equation 5 using standard fixed parameter methods such as OLS. To estimate this model, we need a measure of partisanship to operationalize the partisanship-approval interaction. We measure partisanship as the annual percentage of all recorded votes on which a majority of voting Democrats opposed a majority of voting Republicans (as reported in Bettelheim 2001; Ornstein, Mann, and Malbin 1998). Conceptually, this measure reflects the frequency of party-line voting in each chamber during each year. The greater the percentage of party-line votes, the more members are following partisan cues in deciding their votes. According to our theory, more party-line voting implies that members search less broadly in their voting decisions and thus give lower priority to cues from the presidency and other sources.

Figure 2 plots the measure of partisanship for the House and Senate, along with the time-varying coefficients for approval reported in Figure 1 for comparison purposes. In the House, the trends in partisanship mirror the time-varying coefficients for public approval. Party voting was at a minimum during the years 1970–1972 when only around 30% of all votes were along party lines. This period of low partisanship is precisely the period when the public approval coefficients

[8] Although the analysis in Figure 1 might also indicate that β_2 is time varying, the wide confidence intervals make this uncertain. A better rationale for not treating β_2 as time varying is that when we again test for time-varying parameters using the model specification discussed below, the parameter fluctuation in β_2 disappears. Thus, we do not treat the coefficient for the president's party's percentage as time varying.

FIGURE 2

A Comparison of the Partisanship Measure and Approval Coefficients

Note: The upper panel contains graphs of the House and Senate measures of partisanship. The bottom panel contains graphs of the time-varying presidential approval coefficients reported in Figure 1.

were the largest. Party voting in the House was at a maximum in 1995 when around 70% of all votes were along party lines. This period of elevated partisanship is precisely the time when the public approval coefficients were at a minimum.

The trends in the Senate do not mirror as obviously as those in the House. Party-line voting fluctuated substantially from 1953 through 2000, from a minimum of 30% in 1955 to a maximum of 69% in 1995. Overall partisanship in the Senate was generally low in the late 1960s, increased gradually through the 1970s and 1980s, and accelerated sharply during the 1990s to average around 60% throughout the Clinton administration. Party-line voting exceeded 60% in only one year prior to 1993. The period after 1993 was also characterized by declining public approval coefficients, though the sharpest declines did not occur until 1995. While this ocular view suggests that the effect of public approval on legislative success is related to the level of partisanship in Congress, a more rigorous approach is required to confirm our theory.

TABLE 1

Regression of Presidential Success in Congress on Measures of Party, Approval, and Partisanship, 1953–2000

Independent Variable	House	Senate
Presidential Majority	34.69**	27.02**
Control	(8.31)	(5.83)
President's Party's	–.23	–.02
Percentage	(.39)	(.33)
Public Approval	.80**	.66**
	(.26)	(.16)
Approval*Partisanship	–.01**	–.01**
	(.004)	(.003)
Constant	39.08*	28.33*
	(17.88)	(13.15)
R^2	.63	.67
σ	12.98	10.21
N	48	48

Note: The dependent variable is the president's annual percentage success on conflictual presidential roll-call votes in the House and Senate from 1953 through 2000. The numbers in parentheses for the least squares estimates are Newey-West (1987) autocorrelation and heteroscedasticity consistent standard errors. Statistical significance at the .05 level is indicated by *; significance at the .01 level is indicated by **.

Using this partisanship measure, we estimated the relationships shown in equation 5 with OLS. Table 1 reports the estimated coefficients along with their associated robust standard errors. The results support the theory that the level of partisanship in Congress affects the ability of the president to translate public approval into legislative success.

The coefficient for public approval in Table 1 represents the hypothetical effect of approval on presidential success *when partisanship is zero*. If there were no party-line votes, each 10% rise in public approval would produce about an 8% increase in presidential success in the House, and a 6.6% increase in the Senate. This relationship implies that if public approval goes up 10%, the president would win about five additional roll-call votes in both the House (i.e., .08 * 66 = 5.28) and the Senate (i.e., .066 * 76 = 5.02).[9] Although this effect is substantial, the condition is unrealistic since there has never been a time when partisanship was zero in either chamber.

The significant interaction between public approval and partisanship in Congress indicates that the relationship between public approval and legislative

[9] There were an average of 66 and 76 conflictual votes, respectively, in the House and Senate over the period of our analysis.

success depends on the level of partisanship. The interaction effect is similar in both the House and Senate: each 1% change in partisanship reduces the effect of public approval on presidential success by about −.01.

Consider now the other extreme condition of *total partisanship*. If all congressional votes were party-line votes, the effect of public approval on presidential success would be about −.20 in the House (i.e., .80 + [100 * −.01] = −.20) and −.34 in the Senate (i.e., .66 + [100 * −.01] = −.34). In other words, higher public approval would be associated with fewer presidential victories in a totally partisan Congress. Although party voting in the U.S. Congress does not approach 100% as in highly disciplined parliamentary systems, this analysis suggests that the president does not begin to receive an approval bonus until the level of partisanship is less than .80 in the House and .66 in the Senate.

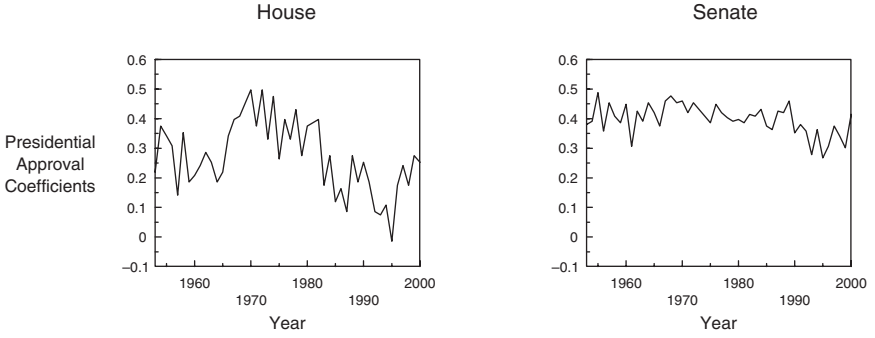
At *average levels of party voting* in Congress, the effect of public approval is positive but marginal. The average percentage of party votes from 1953 through 2000 was about 47.29 in the House and about 45.83 in the Senate. Over the entire time period, the average effect of public approval on presidential success in the House was about .33 (i.e., .80 + [47.29 * −.01] = .33), and about .20 (i.e., .66 + [45.89 * −.01] = .20) in the Senate. In other words, a 10% increase in public approval produced about a 3.3% increase in presidential success in the House and a 2.0% increase in the Senate. This result means that a relatively large 10% rise in presidential approval translates into about two additional victories in each chamber (i.e., 66 * .033 = 2.2 in the House; 76 * .020 = 1.5 in the Senate). These effects are small, especially compared to the effect for the president's party controlling the chamber.

The analysis also allows us to calculate the time-varying effects for approval implied by the coefficient estimates in Table 1. These estimates are plotted in Figure 3. The coefficient magnitudes in Figure 3 are somewhat different from those reported in Figure 1, perhaps because of the specification error implied by the omission of the partisanship-approval interaction from the Kalman filter estimations. Indeed, if we estimate equation 5 using Flexible Least Squares or the time-varying Kalman filter, then we obtain fixed coefficient estimates for all variables. This is evidence of model under-specification for the results reported in Figure 1. The coefficients in Figure 3 also lack the smoothing that results from the time-varying Kalman filter. Nonetheless, the overall patterns of Figures 1 and 3 are similar. Public approval had the maximum effect on presidential success in Congress in the early 1970s when partisanship was weakest. The minimum effect of approval occurred in 1995 when partisanship was strongest. Presidents since Ronald Reagan have generally received less benefit in Congress from strong approval ratings, and the analysis in Table 1 indicates that elevated partisanship is the reason.

Variation in the level of partisanship results in part from ideological diversity within the political parties (Aldrich and Rohde 2000; Fleisher and Bond 1996, 2000a; Rohde 1991). Cross-pressured members experience conflicts among cues from party, ideology, and constituency. As suggested by our theoretical frame-

FIGURE 3

Time-Varying Effects of Approval Implied by Estimates in Table 1



Note: The dependent variable is the president's annual percentage success on conflictual presidential roll-call votes in the House and Senate from 1953 through 2000. The graphs are plots of the estimated time-varying coefficients for presidential approval implied by the interaction analysis in Table 1.

work, members of Congress are inclined to look elsewhere for guidance when these primary cues are in conflict. Thus, weak partisanship resulting from large numbers of cross-pressured members allows such external influences as presidential approval to have a greater impact. Partisanship in Congress began to rise in the 1980s (Rohde 1991). The newfound party unity increased the effect of party on presidential success, thereby diminishing the importance of public approval. All of the results reported above are consistent with this interpretation.

Conclusions

Researchers have spent considerable effort testing the hypothesis that the president's standing with the public affects his ability to achieve legislative success. Results from previous research have been decidedly mixed: some studies report statistically significant effects, while others fail to find support for the hypothesis. Yet, *all* past research has assumed that the effect of public approval on presidential success in Congress is fixed and invariant with respect to time. This assumption has been implicit in the choice of methods, as well as in earlier applications of theory. Yet, the dominant theory underlying most work on congressional voting (Jackson 1974; Kingdon 1981; Matthews and Stimson 1975; Neustadt 1960) suggests that the relationship should be marginal and changing through time.

In this study, we reexamined the relationship between public approval and presidential success in Congress using time-varying coefficient methods. Estimation

with the time-varying Kalman filter produced strong evidence that the effect of public approval on presidential success in Congress changed substantially from 1953 through 2000 and also demonstrated the qualitative nature of these changes. The estimated coefficient vectors gave some descriptive evidence that partisanship moderates the effect of public approval on presidential success in Congress.

Time-varying estimation methods treat the parameter variation as stochastic. However, we offered theoretical reasons to expect that the parameter variation should be a systematic function of partisanship. To test this theory, we estimated a model that allowed parameters for approval to vary as a function of changing partisanship. The results were consistent with our theory that partisanship conditions the effect of public approval on presidential success in Congress. As partisanship increases, the president is less able to translate popularity into legislative success.

These findings are important because they contribute to our understanding of the conditions under which presidents can be successful. Neustadt (1960) was right: rarely is there a strong, one-to-one relationship between public approval and success in Congress. Where previous tests have erred is in trying to build a general theory on something that has effects only under certain conditions. Our analysis shows that in most years, the substantive effects of approval are quite limited. Therefore, scholars should reconsider the theory underlying the presidential popularity hypothesis and the conditions under which public approval might affect members' decisions. The findings of this analysis suggest that the strength of partisanship is one condition. Future theorizing should consider others.

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Jon R. Bond is professor of political science, Texas A&M University, College Station, TX 77843-4348.

Richard Fleisher is professor of political science, Fordham University, Bronx NY 10458.

B. Dan Wood is professor of political science, Texas A&M University, College Station, TX 77843-4348.