The Conditional Nature of Presidential Responsiveness to Public Opinion^{*}

Brandice Canes-Wrone^{\dagger} Kenneth W. Shotts^{\ddagger}

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5347. Fax: 847-491-8985.

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[†] Corresponding author. Associate Professor of Political Science, Northwestern University. Mailing

Address: Department of Political Science, 601 University Place, Evanston IL 60208. E-mail:

bcw@northwestern.edu. Phone: 847-467-1154. Fax: 847-491-8985.

[‡] Assistant Professor of Political Science, Northwestern University. Mailing Address: Department of

Political Science, 601 University Place, Evanston IL 60208. E-mail: k-shotts@nwu.edu. Phone: 847-491-

Abstract

How does public opinion affect the policymaking of reelection-seeking presidents? We address this question by examining presidential budgetary proposals on a set of major policy issues for which there exist recurring surveys measuring citizens' preferences on spending. We find that presidents are neither universally responsive nor universally non-responsive to public opinion. Rather, they are conditionally responsive, depending on two key political variables. First, presidents are more responsive to public opinion when the next election is imminent. Second, the effect of presidential popularity is non-monotonic. As predicted in recent theoretical work (Canes-Wrone, Herron, and Shotts 2001), presidents with average approval ratings are the ones most likely to adopt policy positions congruent with public opinion. Presidents with approval ratings that are significantly above average or significantly below average have the greatest propensity to take policy positions that diverge from public opinion.

Do presidents alter their policy decisions in response to public opinion? Recent research suggests a variety of answers. Jacobs and Shapiro (2000) argue that presidents, as well as other politicians, are not responsive but instead employ public relations to attempt to manipulate the electorate into supporting policies. Consistent with this assertion, Cohen (1999) finds that changes in public opinion cause presidents to take symbolic actions but not substantive ones such as adjusting policy positions. In contrast, Stimson, MacKuen, and Erikson (1995) uncover evidence that presidents are responsive to public opinion in their policy decisions. Analyzing presidents' positions on roll-call votes and Supreme Court cases, Stimson, MacKuen, and Erikson find that presidents become more liberal as the public mood becomes more liberal.¹

Here we examine the issue of presidential responsiveness with a previously untested theory and new data. The theory, developed by Canes-Wrone, Herron and Shotts (2001, hereafter referred to as CHS), predicts that presidential responsiveness is a function of a president's public standing and the electoral cycle. According to the theory, the president is most likely to propose a popular policy when the public views his capabilities as similar to those of his most likely replacement and he soon faces an election. In contrast, when voters' assessment of the president is relatively high or low, or when an election is distant, he is less likely to pursue a popular policy.

The data that we use to test this theory concern a set of budgetary issues for which there exist annual presidential proposals and recurring public opinion polls. To the best of our knowledge, our analysis is the first to examine presidential responsiveness using a panel of individual policies across time. Stimson, MacKuen and Erikson (1995) and Cohen (1999) focus on macro-level policy data such as the president's overall liberalism on roll call votes, and while macro-level studies have their own advantages, more micro-level analysis such as ours has a number of assets. First, we can examine whether

¹ Other research suggests that the policy system as a whole is responsive to public opinion (e.g., Erikson, MacKuen, Stimson 2002; Page and Shapiro 1983) but see Page (2002) for a critique of this literature.

presidential actions on an individual issue correspond to citizens' preferences on that same issue. It is possible, for example, that a president pursues more liberal policies as the public mood becomes more liberal, but that these particular policies are not the ones desired by the public. On the other hand, a macro-level analysis could fail to uncover substantial presidential responsiveness on certain types of policies. A second advantage of the policy-level data is that they allow one to control for factors that are specific to a policy issue at a particular point in time.

This paper is divided into four sections: a review of the CHS theory and a discussion of alternative hypotheses; a description of the data, empirical model, and methods; the presentation of the results; and a conclusion.

Theory and Hypotheses

CHS predicts patterns of variation in a reelection-seeking president's likelihood of enacting a popular policy. The authors develop a game-theoretic model in which the president has policy expertise, i.e., more accurate information than the public possesses about the expected consequences of policy choices (e.g., Gilligan and Krehbiel 1987). For instance, the president may have private information from the State Department about the likely effects of increasing foreign aid to a particular country. In the theory, the president chooses a policy and then faces reelection, at which time voters may or may not have learned whether the chosen policy was actually in their interests. Voters are aware that the president has some degree of policy expertise, but they also know that the quality of the president's expertise depends upon her competence, about which she has more information than they do. By observing a president's policy choice and its consequences, voters can make inferences about her competence. Thus the president's policy decision affects her probability of winning reelection.

In the basic CHS theory, the president's policy choice is congruent with public opinion whenever the president believes that a policy favored by voters is in their interest, and also under certain conditions when the she believes the popular policy is not in the public interest.² The formal model in CHS establishes conditions for this latter behavior of "pandering." Here we don't review the math or detailed assumptions, which can be readily obtained in the theoretical article. Instead, we simply summarize the conditions that explain variation in the likelihood of pandering. Given that a president's policy choice is always congruent with public opinion when she believes the popular policy is in voters' interests, the conditions that explain variation in pandering also fully characterize variation in policy congruence.

Two main factors explain the variation. The first is the likelihood that voters learn whether the president's policy choice succeeded, in the sense of producing an outcome in their interests. The second is the public's evaluation of the president's competence, or ability to perform her job, which affects her likelihood of winning reelection.

CHS argue that the first factor depends largely on the amount of time until the next election. If little time exists before the next election, voters observe only the president's policy choice. As a result, their evaluation of the president will be based on her initial policy decision rather than the outcome of the policy. In contrast, when the election is distant, voters will most likely learn before it whether a president's policy choice produced a favorable outcome, and they will base their electoral decisions accordingly.³ The president is thus more likely to pander to public opinion when the next election is imminent.

Other researchers (e.g., Kuklinski 1978; Elling 1982; Thomas 1985; Wright and Berkman 1986) have argued that this type of electoral cycle affects policymaking, so an empirical examination of temporal variation in the level of policy congruence is not sufficient to distinguish the CHS theory from other theories. Nonetheless, temporal variation is worth examining because the absence of such variation

 $^{^{2}}$ We focus on what CHS call their basic theory, which concerns situations in which the president's policy choice does not influence the likelihood that voters learn whether she acted in their best interest.

³ This result is consistent with Zaller (1998), who argues that presidents have electoral incentives to choose policies on the basis of expected outcomes.

would constitute strong evidence against the CHS theory, as well as the other theories. Such a test is especially worthwhile because some scholars, e.g., Cohen (1999), have found that presidential responsiveness does not vary over the course of the electoral cycle. We therefore analyze the following hypothesis:

Electoral Proximity Hypothesis

Policy congruence between presidential positions and public opinion is more likely the sooner is the next election.

A more unique prediction of the CHS theory concerns the second key factor that explains variation in policy congruence, the president's probability of winning reelection. Research suggests this likelihood is highly correlated with the president's approval ratings (e.g., Brody and Sigelman 1983; Sigelman 1979), which are available throughout a president's time in office. In contrast, polls that directly ask respondents whether they would vote for the president over a named challenger are not regularly available throughout the term. We consequently use the president's public approval to operationalize and test the CHS prediction, which suggests that the relationship between presidential popularity and the president's likelihood of choosing a popular policy should be non-monotonic. Specifically, the key hypothesis is:

CHS Popularity Hypothesis

- (i) When the next election is distant, the likelihood that the president chooses a popular policy is unrelated to her public approval.
- (ii) When the next election is soon and the president's popularity is below average, the likelihood of the president choosing a popular policy increases as the president's approval increases.
- (iii) When the next election is soon and the president's popularity is above average, the likelihood of the president choosing a popular policy decreases as the president's approval increases.

The theoretical logic behind this hypothesis stems from the fact that in the model, the president's

policy choice can affect her level of public support in two ways. In the short run, the president's decision has an immediate, though small, effect on her popularity depending on whether the chosen policy was in line with public opinion. In the long run, voters observe whether the policy succeeded or failed in terms of promoting their interests, and this outcome is the key factor that affects the evaluation of the president.

When the next election is distant, voters are likely to learn whether a policy choice produced a

good outcome before they cast their ballots. Consequently, regardless of the president's popularity, she

has an incentive to pursue the policy option she believes is in the public interest. The left hand panel of Figure 1 displays CHS's prediction that early in a president's term policy congruence is unrelated to popularity.

[Figure 1 about here]

When the next election is soon, one might think that the president will always have an electoral incentive to take the action favored by voters. However, if her public standing is sufficiently high, the only way the president can lose is by pursuing a policy that produces a bad outcome. Choosing an unpopular policy hurts her popularity a bit, but not enough to cost her the election. Therefore, she will choose the option she believes is likely to produce a good outcome, even if voters prefer a different policy. Likewise, if her public standing is sufficiently low, the only way she can win reelection is by achieving a major policy success. She therefore has an electoral incentive to choose the policy she believes is correct, even if it is unpopular.

When the president's public standing is neither high or low, she may enact the policy that voters want even if she believes it is not in their interests. Given that the election is soon, voters are unlikely to observe the policy's success or failure before they cast their ballots. By choosing the policy that voters prefer, the president can give herself a small boost in the polls and thereby increase her chances of winning. We thus expect a president who faces an electoral race in the near future to become more likely to pursue a popular policy when her approval ratings increase from low to average levels, but less likely when her approval ratings increase from average to high levels. The right hand panel of Figure 1 displays the pattern predicted by the CHS theory when the next election is soon, i.e., late in a president's term.⁴

Competing with the CHS Popularity Hypothesis are null and alternative predictions derived from existing research. For example, Cohen (1999) supports the null that neither presidential popularity nor the

⁴ The probability of policy congruence is generally lower in the left hand panel than in the right hand panel due to the theoretical expectation, embodied in the Electoral Proximity Hypothesis, that policy congruence becomes more likely as the next election approaches.

electoral cycle influences policy congruence; examining presidential responsiveness at different levels of presidential popularity and times during the electoral cycle, he consistently finds a negligible relationship. In research on the Senate, Elling (1982) finds that senators moderate their voting at the end of the term, but that this moderation is not linearly correlated with their electoral vulnerability. Although neither Cohen nor Elling test for the pattern predicted by the CHS Popularity Hypothesis, their results suggest that a null result might reasonably be expected.

Other studies suggest an alternative hypothesis, which is that a president's responsiveness to public opinion is negatively correlated with his popularity. Research shows that more popular presidents take an increased number of roll-call positions, and scholars have interpreted this finding as indicating that a president will attempt to capitalize on high public approval (Rivers and Rose 1985; Brace and Hinckley 1992). Following this logic, a very popular president may feel that he has the latitude to take unpopular positions while a president with low popularity, in contrast, may feel he needs to pursue policies that are congruent with public opinion in order to boost his chances of reelection. This prediction is consistent with research on legislators' "shirking," or willingness to vote against public opinion in their districts. For example, Figlio (2000) finds that a senator's previous margin of victory is negatively correlated with the electoral punishment she receives for shirking, indicating that popularity should be positively correlated with the likelihood that a politician subsequently takes an unpopular policy position.

We test this alternative hypothesis, which can be stated as:

Monotonic Popularity Hypothesis

The likelihood of the president choosing a popular policy decreases as the president's approval increases.

[Figure 2 about here]

Figure 2 displays the prediction. In contrast with the CHS Popularity Hypothesis, the relationship does not depend upon the electoral cycle. Also in contrast, the Monotonic Popularity Hypothesis predicts that when the president's popularity is below average, an increase in popularity will *decrease* the likelihood of policy congruence.

As suggested by the above discussion, the CHS Popularity Hypothesis is not simply an extension of existing findings but actually contradicts much of the literature. Moreover, even the Electoral Proximity Hypothesis is not universally supported by prior research. However, most of the countervailing evidence on these predictions is either indirect or concerns legislators, who often face incentives and situations substantially different from those of presidents. Thus it is important to conduct a direct test based on presidential behavior.

Data, Specification and Measurement

We examine the hypotheses with data on presidents' proposals and public opinion over a set of 11 budgetary issues for 1971-1997. For each issue, we have an annual observation of the president's requested budgetary authority and the budgetary authority enacted the previous year.⁵ Also for each issue, the National Opinion Research Center (NORC) and Roper Organization regularly conducted surveys that asked respondents the following question: "We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of the problems, and for each one I'd like you tell me whether you think we're spending too much money, too little money, or about the right amount on [the particular problem]."⁶ Thus we have recurring observations on the relationship between presidents' proposals and citizens' policy preferences for a set of individual policies.

The budgetary issues include crime, defense, education, the environment, foreign aid, ground transportation, health, the national park service, social security, space, and welfare. Consistent with the CHS theory, in which variation in congruence between presidential proposals and public opinion depends

⁵ We collected the data from the annual table that describes budget authority by function in the US Budget.

⁶ The National Opinion Research Center data are from the General Social Survey (GSS). Appendix A describes the question wording concerning each budgetary issue and the years in which the issue was addressed in either a Roper survey or the GSS.

upon presidents having policy expertise the public lacks, the budgetary issues are ones on which presidents have expertise. For example, a majority of voters could prefer a decrease in foreign aid while the president's information from the State Department, National Security Council, and Office of Management and Budget could suggest that he should seek an increase in foreign aid. Similarly, the public could desire a decrease in spending on welfare, while the president could have information that suggests such a decrease is not advisable because it would cause a dramatic increase in crime.⁷ Thus if the CHS theory is correct, it should receive support from these data.

The data have several additional assets. One benefit derives from the fact that the Budget and Accounting Act of 1921 requires presidents to submit an annual budget to Congress. For many other types of policy decisions, for example roll call votes, a president can avoid publicly stating his positions. Because presidents have the incentive to "stay private" when a stance is likely to be unpopular (Covington 1987), data based on noncompulsory positions may be biased toward a finding of responsiveness. Budgetary data avoid this problem. Another asset is that the panel format facilitates comparisons within and across presidencies as a function of political conditions; the policy issue and president can remain constant while factors such as the president's popularity and the imminence of the next election change. Finally, the data encompass many of the significant policy matters of the past thirty years, including military spending, the protection of the environment, and government services for the poor.

The panel we examine is unbalanced due to two data limitations. First, for some issues and years, neither the Roper Organization nor the National Opinion Research Center conducted the recurring survey. Second, because the CHS hypotheses pertain to reelection-seeking presidents, the data concern only presidents' first terms.

⁷ As these examples suggest, the respondents did not uniformly support higher spending. In fact, for 38 percent of the observations, more respondents preferred a decrease than preferred an increase in spending.

Specifications

We test the hypotheses with two specifications. The first, main specification analyzes the CHS Popularity and Electoral Proximity predictions. The purpose of the second model is to examine the Monotonic Popularity Hypothesis.

The CHS Popularity Hypothesis predicts a non-monotonic relationship between a reelectionseeking president's popularity and the likelihood of policy congruence between his proposals and public opinion. An important component of this non-monotonicity is whether the president's popularity is above or below average. Thus to analyze the hypothesis, we need an empirical specification that allows for the possibility that the relationship between popularity and policy congruence depends upon the initial level of popularity. However, the specification should not force the estimated relationship to depend upon this factor.

In addition, because the CHS Popularity Hypothesis predicts that the relationship between policy congruence and popularity depends on the temporal proximity of the next election, we need to estimate this relationship separately according to whether the next election will occur soon. To operationalize the definition of "soon" we use the two halves of a president's term. This classification follows the literature on the US Senate, which shows that senators modify their roll call voting towards their constituency in the final two years in office.⁸ We use the same separation of the term to analyze the Electoral Proximity Hypothesis, which suggests that policy congruence will be more likely in general when the president soon faces a race for reelection.

To test the CHS Popularity and Electoral Proximity predictions, we estimate the following model for each issue i and year t. The abbreviation *Pop* represents the president's popularity, *Mean Pop* is the mean of popularity across all observations, *Above Avg Pop* is an

⁸ E.g., Elling 1982; Kuklinski 1978; Thomas 1985; Wright and Berkman 1986. This finding is consistent with former Senator Hubert H. Humphrey's assessment "The first four years are for God and country. The last two are for the folks back home" (cited in Elling 1982, 75).

indicator for whether the president's popularity is above the mean, and α_i represents timeinvariant effects for the individual policy issues:

[1] Policy Congruence_{it} = $f \{\beta_0 + \beta_1 2^{nd} \text{ Half}_{it} + 2^{nd} \text{ Half}_{it} (\beta_2(\text{Pop}_{it} - \text{Mean Pop})(1 - \text{Above Avg Pop}_{it}) + \beta_3(\text{Pop}_{it} - \text{Mean Pop})(\text{Above Avg Pop}_{it}) + \gamma_1 \text{ President's Ideological Congruence}_{it} + \gamma_2 Congress' Ideological Congruence}_{it} + \gamma_3 \text{ Public Concern}_{it}) + 1^{st} \text{ Half}_{it} (\beta_4(\text{Pop}_{it} - \text{Mean Pop})(1 - \text{Above Avg Pop}_{it}) + \beta_5 (\text{Pop}_{it} - \text{Mean Pop})(\text{Above Avg Pop}_{it}) + \gamma_4 \text{ President's Ideological Congruence}_{it} + \gamma_5 \text{ Congress' Ideological Congruence}_{it} + \gamma_6 \text{ Public Concern}_{it}) + \kappa \text{ President's Ideological Congruence}_{it} + \alpha_i \}$

A description of the measurement of each variable is given in the next section.

The coefficient β_1 addresses the Electoral Proximity Hypothesis by capturing the difference in the mean levels of policy congruence between the first and second halves of the president's term. The relevant parameters for the CHS Popularity Hypothesis are β_2 , β_3 , β_4 , and β_5 . The coefficient β_2 estimates the impact of an increase in presidential popularity when the initial level is below the mean and the president is in the second half of the term. The difference (*Pop-Mean Pop*) captures the increase in presidential popularity relative to the mean and the dummy variable (*1- Above Avg Pop*) indicates that the initial level is below the mean. Similarly, β_3 estimates the impact of an increase in presidential popularity when the initial level is above the mean during the second half of the term, and β_5 estimates the impact of an increase when the initial level is below the mean during the first half of the term, and β_5 estimates the impact of an increase when the initial level is above the mean during the first half of the term.

A set of control variables (*President's Ideological Congruence, Congress' Ideological Congruence,* and *Public Concern*) is also separated by the half of the term. From a theoretical standpoint, one might expect the impact of these factors to depend upon electoral proximity because if popularity has a smaller effect when the election is far away, other factors may then have greater effects. Empirically, specification analysis confirms this expectation.⁹ The president indicators are not analyzed separately by the half of the term because the Electoral Proximity Hypothesis makes us interested in estimating a single temporal effect for all presidents rather than different temporal effects for different presidents. We have estimated the model with the president dummies separated by the half of the term, however, and found results substantively similar to those presented.¹⁰

The empirical model that we use to test the Monotonic Popularity Hypothesis is similar to our main specification. The key exception is that the probability of policy congruence is assumed to be a monotonic function of the president's popularity. In addition, because this alternative hypothesis does not suggest that the impact of popularity will differ between the halves of the term, we specify the model accordingly. Formally, the specification is:

[2] Policy Congruence_{it} = $f \{\beta_0 + \beta_1 2^{nd} \text{ Half}_{it} + \beta_2 \text{ Pop}_{it} + \gamma_1 \text{ President's Ideological Congruence}_{it}\}$

+ γ_2 Congress' Ideological Congruence_{it} + γ_3 Public Concern_{it} + κ President Indicators_{it} + α_i } The Monotonic Popularity Hypothesis is captured by the coefficient β_2 , which estimates the monotonic effect of a president's job approval on the probability of policy congruence. The specification also provides an examination of the Electoral Proximity Hypothesis given that the coefficient β_1 estimates whether the likelihood of policy congruence differs between the halves of a president's term. However, if the CHS Popularity Hypothesis receives support and the Monotonic Popularity Hypothesis does not, then Equation [1] is theoretically superior to Equation [2] for purposes of testing the Electoral Proximity Hypothesis.

⁹ The likelihood ratio test rejects the null that the control variables should be constrained between the halves of term at p<0.05 ($\chi^2(3) = 10.429$).

¹⁰ Specifically, β_2 and β_3 are in the expected direction and significant at p<0.05 and β_4 and β_5 are insignificant as expected. In this alternative specification, the estimate and significance of β_1 depends upon which presidential indicator is the omitted dummy variable, making the result incomparable to that of the main specification.

Measurement

Policy Congruence. The dependent variable is a function of the relationship between the president's proposed budgetary authority and the surveys regarding citizens' preferences over spending on that policy. If both Roper and the NORC conducted a survey on the issue in the year prior the president's proposal, we average the results of the two surveys. If only one poll was conducted, we use these responses. The variable is coded dichotomously. It equals 1, representing policy congruence, when the president proposes an increase in budgetary authority from the previous year and more respondents prefer an increase than prefer a decrease in spending. Similarly, *Policy Congruence* equals 1 when the president proposes a decrease in spending and more respondents prefer a decrease than prefer an increase. In all other circumstances, the variable equals 0.¹¹ The factor has a mean of 0.51.

Popularity. The three variables that measure presidential popularity are all based on the longstanding Gallup poll that asks "Do you approve or disapprove of the way [the current president] is handling his job as president?" For each variable, we use the poll that was conducted most immediately prior to the submission of the president's budgetary proposal.¹² *Popularity* simply equals the percentage of

¹¹ To account for the possibility of measurement error in the surveys, we have also conducted the analysis under the assumption that *Policy Congruence* equals 1 if and only if the percentage of respondents that prefer the direction of the president's proposal is at least 10 points higher than the percentage that prefer that spending move in the opposite direction. Under this assumption, all substantive results still hold. ¹² Even though the approval ratings are from surveys conducted *prior* to the president's budget proposal, we nonetheless tested for an endogenous relationship between the likelihood of policy congruence and presidential popularity. Specifically, we conducted a Rivers and Vuong (1988) endogeneity test, which is designed for contexts in which the main equation has a binary dependent variable. As the test requires, the 2nd-stage equation consisted of a simple probit model. Specifically, policy congruence was regressed on all of the independent variables of equation [2]. In the 1st-stage equation, presidential approval was regressed on all other independent variables of the main equation and the instrument *War*. For our 1971respondents that approve of the president's performance. *Mean Popularity* equals the mean of this approval for the dataset, 54.6 percent. *Above Average Popularity* therefore equals 1 if the president's approval is at least 55 percent and 0 otherwise.¹³

President's Ideological Congruence. Previous research suggests that the president's ideology influences his policy choices (e.g., Stimson, MacKuen and Erikson 1995; Cohen 1999), and we expect the president to be more likely to enact a policy congruent with public opinion when that policy is also consistent with his ideology. To measure ideological congruence, we use the Poole (1998) common space (CS) scores, which estimate each president's ideology on the basis of the liberalism of his positions over roll call votes.¹⁴ CS scores range from -1 to +1, with higher scores representing more conservative preferences. Krehbiel (1998) suggests that liberals tend to prefer higher domestic spending, and conservatives higher defense spending. Our coding of *President's Ideological Congruence* follows this categorization. Specifically, the variable equals:

-1► (CS Score)	if the issue is domestic and more respondents prefer an increase than prefer a
	decrease in spending;
CS Score	if the issue is domestic and more respondents prefer a spending decrease;
CS Score	if the issue is foreign or defense and more respondents prefer a spending
	increase; and

1997 dataset the instrument equaled 1 during the Gulf and Vietnam Wars and 0 otherwise. The results suggest that approval is not endogenous to policy congruence (the null of exogeneity cannot be rejected, p=0.235).

¹³ We have also conducted the analysis with the cutpoint for "average" popularity based on the average popularity of the two previous presidents and, alternatively, based on the average popularity of presidents serving in the latter half of the twentieth century (Presidents Eisenhower through Clinton). In each case, the substantive results hold.

¹⁴ See McCarty and Poole (1995) for a discussion of the roll call votes included in this ideological rating.

-1 (CS Score) if the issue is foreign or defense and more respondents prefer a spending decrease.

Thus, for example, for domestic issues on which the public supports an increase in spending, the variable will assume a high value for liberal presidents and a low value for conservative ones. Likewise, for domestic issues on which the public supports a decrease in spending, the variable will assume a low value for liberal presidents and a high value for conservative ones.

Congress' Ideological Congruence. We also control for the possibility that congruence between congressional ideology and public opinion may affect the president's policy choice. For instance, a president might be more apt to propose a popular policy when Congress is likely to support that policy. Alternatively, research on "blame-game" politics (e.g., Groseclose and McCarty 2001) suggests that a president can increase his popularity by signaling that his policy preferences are more in line with public opinion than are those of Congress. Accordingly, a president may be more likely to propose a popular policy when congressional preferences are out of step with public opinion.

We measure *Congress' Ideological Congruence* analogously to *President's Ideological Congruence*. Specifically, for domestic spending the variable equals the median CS score of the House if more survey respondents prefer a decrease than prefer an increase in spending, and -1 multiplied by this median score if more respondents prefer an increase in spending.¹⁵ Defense and foreign spending are coded similarly except that members are assumed to prefer more spending the more conservative they are. *Public Concern*. This variable is based on the recurring Gallup Organization Most Important Problem survey, which asks respondents "What do you think is the most important problem facing this country today?" Specifically, the variable equals the percentage of respondents that cited the policy issue in the poll conducted most immediately prior to the president's submission of his budgetary proposal. Public

¹⁵ We use the median preference of the House because collinearity prevents including a variable on the House and another on the Senate, and for House budgetary politics Brady and Volden (1998) and Krehbiel (1998) suggest that the median preference determines legislative decisions.

concern over an issue could affect the congruence between the president's proposal and public opinion if, for instance, presidents were more likely to respond to public opinion when an issue were salient. Cohen (1999) finds no evidence of such a relationship in his examination of presidents' substantive policy statements in State of the Union addresses. However, because public concern could affect certain types of presidential policy actions but not others, we still control for the factor.

President Indicators. We include a set of presidential indicators because we wish to control for the possibility that presidents may differ in their general propensity to cater to the public's wishes. Greenstein (2000), among others, suggests that the personal qualities of presidents affect their policymaking.

Estimation and Results

Because the dependent variable *Policy Congruence* is dichotomous, we employ logit specifications to analyze Equations [1] and [2]. Specifically, we estimate each equation using a random effects logit model. Random effects models are employed for panel data analysis of cross-sectional units that are drawn from a wider population, as is the case with our policy issues. Technically, we assume that the policy issue effects α_i are random disturbances that are distributed normally and independently in the wider population (Greene 1993, 469-79). We have also estimated the specification as a fixed effects logit model and received support for the CHS hypotheses. Because three of the policy issues perfectly predict the dependent variable, the fixed effects model can be estimated for only 131 of the 160 observations. For this reason, we prefer the random effects specification, and present these findings.¹⁶

Table 1 presents the results.

[Table 1 about here]

The first two columns involve Equation [1], which analyzes the predictions of the CHS theory. Our first result concerns the Electoral Proximity Hypothesis, which predicts that policy congruence is more likely when the next election is imminent. The data provide strong support for this hypothesis: the

¹⁶ The detailed results of the fixed effect model are available upon request.

coefficient on the indicator for the second half of the term is positive and achieves statistical significance at conventional levels (p<0.05).¹⁷

The results for the CHS Popularity Hypothesis are similarly compelling. The effect of popularity is non-monotonic in the manner predicted. Consider a president who is in the second half of his term, when the theory predicts that presidents with average popularity are more likely to exhibit policy congruence than are those with high or low levels of popularity. The coefficient on (*Popularity – Mean Popularity*) $\times (1 - Above Average Popularity)$ suggests that as popularity decreases from an average level, the probability of policy congruence decreases significantly. Also as expected, the coefficient on (*Popularity – Mean Popularity – Mean Popularity – Mean Popularity – Mean Popularity*) $\times (Above Average Popularity)$ indicates that when a president is relatively popular, the probability of policy congruence decreases as his popularity increases.

Interpreting the magnitudes of these effects is even less straightforward than for a basic logit model because we are concerned with four mutually exclusive contexts that depend upon the half of the term and whether the president's popularity is below or above average. Thus we assume that 2^{nd} *Half* equals 1 when the observation concerns the latter half of the president's term and 0 when the observation regards the first two years, and that *Above Average Popularity* equals 1 if the president's approval ratings are higher than average and 0 if they are below average. In addition, we assume that the control variables are at their means. At these parameter values, when a president's initial popularity is 5 points below average in the second half of the term, a 10 point decline in popularity would decrease the likelihood of policy congruence by 26 percent. Assuming the analogous parameter values with initial popularity that is 5 points above average, a 10 point increase in popularity would decrease the likelihood of policy congruence by 11 percent. In the first scenario, the overall probability of policy congruence is 35 percent

¹⁷ All reported p-values are for two-tailed tests.

higher in the latter half of the term while in the second scenario the marginal effect of electoral proximity is 26 percent.¹⁸

Now consider a president in the first half of his term. Here, the CHS Popularity Hypothesis predicts that there will be no relationship between presidential popularity and policy congruence. As shown in the second column of Table 1, the coefficients on the variables concerning popularity, (*Popularity – Mean Popularity*) \times (1–*Above Average Popularity*) and (*Popularity – Mean Popularity*) \times (*Above Average Popularity*), are clearly insignificant in the first half of the president's term.¹⁹ Thus overall, the data provide strong support for the CHS Popularity Hypothesis.

In contrast, the Monotonic Popularity Hypothesis receives no support. The rightmost column of Table 1 presents results for Equation [2], in which the effect of popularity on policy congruence is

¹⁹ As a check on the robustness of the results, we conducted the analysis with each year constituting one observation. Specifically, the dependent variable equaled the percentage of issues on which the president's proposal was congruent with public opinion in that year. The independent variables consisted of the variables concerning presidential popularity in Equation [1], the set of president indicators, and a dummy variable for whether at least one of the chambers had a majority of members who were not in the president's party. (Our control variables for ideological congruence and public concern were not included since they vary by issue within a year. The divided government variable was included to capture potential effects of ideology.) Here again we received support for the Electoral Proximity and CHS Popularity hypotheses. The coefficients on 2^{nd} *Half* and the popularity factors for this half of the term were significant and in the expected direction, while the coefficients on the popularity terms for the first half were insignificant as expected.

¹⁸ If instead we simply interpret the coefficients at the means of the independent variables the magnitudes are much higher than those we report. For example, the magnitude on 2^{nd} Half would suggest that policy congruence is 64 percent more likely during the latter half of the president's term.

constrained to be monotonic.²⁰ The coefficient on popularity is small and statistically insignificant. This result is consistent with Cohen's (1999) null finding in his test for a monotonic relationship between popularity and macro-level policy congruence. In other words, our data do not contradict Cohen's result that a president's popularity and responsiveness lack a significant monotonic relationship. Rather, we find that popularity influences responsiveness in the non-monotonic manner proposed by the CHS Popularity Hypothesis.

The results of Equation [2] provide further substantiation of the CHS theory by offering additional support for the Electoral Proximity Hypothesis. Even though the findings regarding presidential popularity indicate that Equation [2] is mis-specified, the coefficient on 2^{nd} Half is still at least marginally significant (p=0.08, two-tailed) and the magnitude of the impact is similar to that in Equation [1]. Specifically, at the means of the independent variables the estimates suggest that policy congruence is 22 percent more likely in the second half of a president's term.

Overall these results demonstrate that presidential responsiveness to public opinion is mediated by political conditions. In particular, a reelection-seeking president has the greatest incentive to be responsive when the election will occur within the next two years and his popularity is average, so that the electoral race is likely to be tight. To some extent, this result is consistent with findings of responsiveness (e.g., Stimson, MacKuen and Erikson 1995) in that we find public opinion to be a relevant factor in presidents' substantive policy decisions. However, our findings also identify conditions under which a president is unlikely to be responsive to public opinion. When the election is distant or when the president is either highly popular or highly unpopular, he is less inclined to cater to public opinion. In this

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²⁰It is also worth noting that if the Monotonic Popularity Hypothesis were true, then the specification we used to test the CHS Popularity Hypothesis (a specification which allows for either a monotonic relationship or a non-monotonic relationship) would produce a monotonic pattern; instead we observe a strongly non-monotonic pattern.

way, our analysis partially comports with studies that find presidents are non-responsive in terms of substantive policy positions (e.g., Jacobs and Shapiro 2000, Cohen 1999).

The results for our control variables also indicate that presidential responsiveness depends upon political conditions. While the findings are relatively consistent across the two specifications, we focus on the estimates of Equation [1] given that it received more support from the data. The estimates for the first control variable, *President's Ideological Congruence*, provide further evidence that presidential responsiveness depends upon the time to the election. Specifically, the results indicate that the president's ideology significantly influences his likelihood of choosing a popular policy in the first half but not the second half of the term. These findings are consistent with the argument that reelection-seeking presidents are more concerned with pursuing an ideological agenda in their first two years in office and more concerned with reelection in the last two years.

The coefficient on the second control variable, *Congress' Ideological Congruence*, is insignificant for both halves of the president's term. As discussed previously, this result is not surprising given that there exist different factors, i.e., blame game politics and the need for support from Congress, that would reasonably be expected to have opposite effects on the parameter estimate. Also insignificant according to our analysis is the effect of public concern, a result consistent with Cohen's (1999) finding that this factor does not influence the ideological direction of presidential statements in State of the Union addresses. One possible explanation for the insignificance in our study is that all of the issues examined—e.g., defense, the environment, welfare, and health—are already quite salient. Variation in public concern about these already salient issues may not have much effect on presidential behavior even if variation between non-salient and salient issues does matter.

The parameter estimates on our final set of controls, the indicators for the individual presidents, suggest that most of these men did not significantly differ from one another in their responsiveness to public opinion. A few personal differences are implied by the results however. Specifically, they suggest that Nixon was less responsive to public opinion than was Ford or Bush Sr., and that Clinton was less responsive than Bush Sr. This last finding is consistent with Jacobs and Shapiro's (2000) claim that

Clinton often tried to induce the citizenry to support his policy proposals rather than design them to reflect public opinion.

Conclusion

In this paper we have analyzed the question of presidential responsiveness with previously untested theory and new data. The theoretical predictions had two main components. First, we examined whether the likelihood of policy congruence between presidential proposals and public opinion increased as the election neared. This prediction is shared by prior research on legislative behavior as well as a new theory of presidential policymaking, what we call the CHS theory. Second, we examined a prediction unique to the CHS theory, that the relationship between presidential popularity and policy congruence is non-monotonic, with the highest likelihood of policy congruence occurring when the president's approval ratings are average. The data, which revolved around a panel of eleven budgetary issues over three decades, had the advantage of comparing presidential proposals and public opinion at the level of individual policies.

Our results strongly support the theoretical predictions. Reelection-seeking presidents are found to be more likely to propose a popular policy in the second half of their term. In addition, the probability of policy congruence increases as the president's popularity shifts from low to average, but decreases as popularity shifts from average to high. Moreover, the alternative hypothesis that policy congruence decreases monotonically with popularity receives no support.

What are the normative implications of our findings? For issue areas on which the president possesses little private information about how best to promote the public interest, policy congruence is clearly desirable because it indicates that the political system is responding to voter preferences. However, on many issues the president possesses expertise that grants him better information than voters have regarding the expected effects of policies. The CHS theory focuses on such informational issues. In that theory policy congruence can be normatively undesirable if it implies that a president "panders" to the public by disregarding information that suggests a popular policy is not in the long-term interest of the

country. The fact that the data are consistent with the CHS theory, and inconsistent with the major alternative theory of responsiveness, suggests that presidents sometimes engage in such pandering. Fortunately, however, the results also indicate that the president will not engage in this behavior when he is sufficiently popular, when he is sufficiently unpopular, or when it is early in his term.

What factors, then, drive some presidents to pander to public opinion and others to provide policy leadership by promoting the policy they believe is optimal even if it is unpopular? Conventional wisdom suggests that this decision is primarily a function of the quality of the man in office (e.g., Kennedy 1956). Our analysis, while providing some evidence that personal differences matter, suggests that contextual factors are critical. In particular, the significant effects of presidential popularity and electoral proximity indicate that many sources of policy leadership are institutional.

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	CHS Hyp	potheses	Monotonic Popularity Hypothesis
2 nd Half	2.663 (1.288)		0.915 (0.528)
	Second Half	First Half	
(Popularity – Mean Popularity) × (1 – Above Average Popularity)	0.196 (0.085)	0.092 (0.173)	
(Popularity – Mean Popularity) × (Above Average Popularity)	-0.116 (0.054)	0.009 (0.061)	
Popularity			0.003 (0.025)
President's Ideological Congruence	0.072 (0.790)	3.541 (1.017)	1.470 (0.577)
Congress' Ideological Congruence	-2.766 (4.033)	-7.827 (7.042)	0.051 (3.252)
Public Concern	-0.119 (0.074)	-0.027 (0.061)	-0.015 (0.041)
Nixon	-2.808 (1.508)		-1.348 (1.206)
Carter	-0.646 (0.984)		-0.181 (0.861)
Reagan	-0.865 (1.148)		-0.608 (0.953)
Bush Sr.	0.778 (1.065)		0.555 (0.954)
Clinton	-1.730 (1.095)		-0.931 (0.944)
Constant	1.059 (1.245)		0.051 (1.528)
Number of Observations	16	0	160
Log Likelihood	-73.2	250	-80.424
LR Test for Random Effects Estimator	$\chi^2(1)=51.400$	0 (p=0.000)	$\chi^2(1)=41.806 (p=0.000)$

Table 1. Probability of Policy Congruence Between the President's Proposal and Citizens' Preferences

Standard errors given below parentheses. Ford is the omitted presidential dummy.

Appendix A

This appendix lists for each budgetary issue the years in which either a Roper survey or the General Social Survey (GSS) addressed the issue, and the associated question. As noted in the text, for all issues and surveys the question begins "We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount. Are we spending too much money, too little money, or about the right amount on..."

- 1. Crime: "...halting the rising crime rate?" 1971, 1973-91, 1993, 1994, 1996, 1998
- 2. Defense: "...the military, armaments and defense?" 1971, 1973-91, 1993, 1994, 1996, 1998
- Education: "...improving the nation's education system?" 1971, 1973-91, 1993, 1994, 1996, 1998
- Environment: "improving and protecting the environment?" 1971, 1973-91, 1993, 1994, 1996, 1998
- 5. Foreign Aid: "...foreign aid?" 1971, 1973-91, 1993, 1994, 1996, 1998
- 6. Ground Transportation: "...highways and bridges?" 1984-91, 1993, 1994, 1996, 1998
- Health: "...improving and protecting the nation's health?" 1971, 1973-91, 1993, 1994, 1996, 1998
- 8. Parks: "...parks and recreation?" 1984-91, 1993, 1994, 1996, 1998
- 9. Social Security: "...social security?" 1984-91, 1993, 1994, 1996, 1998
- 10. Space: "...the space exploration program?" 1971, 1973-91, 1993, 1994, 1996, 1998
- 11. Welfare: "...welfare?" 1971, 1973-91, 1993, 1994, 1996, 1998

Figure 1: CHS Popularity Hypothesis



Figure 2: Monotonic Popularity Hypothesis



President's Approval