

# *Presidential Influence on Congressional Appropriations Decisions\**

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We investigate the extent to which possession of the veto allows the president to influence congressional decisions regarding regular annual appropriations legislation. The most important implication of our analysis is that the influence the veto conveys is asymmetrical: it allows the president to restrain Congress when he prefers to appropriate less to an agency than Congress does; it does not provide him an effective means of extracting higher appropriations from Congress when he prefers to spend more than it does. This asymmetry derives from constitutional limitations on the veto, in combination with the presence of a de facto reversionary expenditure level contained in the appropriations process (Fenno, 1966). We find strong support for this proposition in a regression of presidential requests upon congressional appropriations decisions.

## **1. Introduction**

In seeking to influence policymaking within Congress, the president possesses impressive resources upon which to draw. There is the prominence and prestige of the office itself, which confers upon the holder a unique vantage point from which to persuade others (Neustadt, 1960). Popular presidents may translate their standing with the public into congressional support for their legislative program (Edwards, 1980; Rivers and Rose, 1985). Another, more tangible resource is the administrative machinery through which the president can pursue his interests on Capitol Hill—most notably the Office of Management and Budget (Berman, 1979; Hecl, 1975, 1984; Tompkins, 1985), but also the congressional liaison office and lobbying operations (Wayne, 1978; Sullivan, 1986). The ultimate source of presidential influence over congressional policymaking, though, is the power vested by the Constitution to veto bills passed by Congress.

The purpose of this study is to investigate the extent to which possession of the veto allows the president to influence congressional decisions regarding regular annual appropriations legislation. Although most entitlement programs and other major activities of the federal government are funded by means of “permanent” obligational authority, each year hundreds of billions of dollars continue to be allocated to the various departments, bureaus, agencies, and administrations of the federal government through the vehicle of annual appropriations.

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We proceed with this study by first developing a simple spatial model of preferences over appropriations and then incorporating into it the basic sequence of actions which constitute the annual funding process. The key implication of this model is that the influence over appropriations that the veto gives the president is asymmetrical. The president can use the veto to restrain Congress, to some extent, when he prefers to appropriate less to an agency than it does. In contrast, the veto provides the president with no means of extracting more appropriations from Congress when he prefers to spend more than its members do.

This asymmetry derives from inherent limitations in the veto power, in combination with a well-defined reversionary expenditure level in the appropriations process. The veto provides the president with only the power to reject acts of Congress; it does not provide him with the power to modify these acts. The veto is further limited by the ability of two-thirds majorities in both chambers of Congress to override it. The reversionary expenditure is the funding level for an agency which obtains if Congress and the president fail to enact regular appropriations legislation before the start of the new fiscal year (see Fenno, 1966).

These institutional features permit Congress to act as a monopoly proposer, submitting "take it or leave it" offers to the president. He is then faced with choosing between appropriation figures contained in the bill passed by Congress and the reversionary level. As in the case of local budget referenda analyzed by Romer and Rosenthal (1978, 1979), such agenda-setting ability gives the setter substantial influence over budgetary outcomes. Even under circumstances favorable to the president (i.e., when he desires a lower level of appropriations for an agency than does Congress), his influence over final spending figures will be limited. Under unfavorable circumstances (i.e., when he desires higher levels of appropriations), he will have no influence at all.

The existence of such an asymmetry should have important empirical consequences. Above all, we expect the president's requests to have much greater bearing upon agency budgets when he prefers to appropriate less than Congress than when he desires to appropriate more. We find strong support for this hypothesis in a regression analysis of data from 43 federal programs and agencies during the post-World War II period. Our analysis of these data also supports additional hypotheses concerning presidential influence that are derived from an "electoral connection" perspective on preferences over appropriations.

## **2. Presidential Influence on Congressional Decision Making**

### *A Spatial Model of the Appropriations Process*

In analyzing the impact of a veto player (the president) upon congressional appropriations decisions, we employ the well-known spatial framework (Black, 1958; Davis, Hinich, and Ordeshook, 1970; Enelow and Hinich, 1984). This approach is similar to that taken recently by several scholars in their analysis of

congressional procedures and institutional arrangements (Denzau and Mackay, 1983; Fiorina and Noll, 1977; Krehbiel, 1985a, 1985b; Shepsle, 1979; Shepsle and Weingast, 1981, 1985). As is the case with most of these previous efforts, the model we develop has elements that are highly stylized and abstract; it lacks much of the detail and complexity of the appropriations process that previous studies have revealed (Fenno, 1966; Schick, 1980; Wildavsky, 1974). We provide this abstract model in order to convey the basic logic of our analysis as simply and directly as possible. However, the assumptions we make derive from actual, concrete procedures and institutional arrangements governing the appropriations legislation. Therefore, we are able to derive propositions which can be subjected to empirical scrutiny.

For the most part our discussion will be based upon a single chamber legislature with legislators choosing funding levels for a single agency along a single dimension. We also assume that the president and members of Congress have complete information about each other's preferences and about the rules of the game and institutional structure. We further assume that the president and members of Congress are rational and self-interested. The set of feasible agency appropriations choices facing the president and members of Congress is  $X \subseteq \mathbf{R}$ . The preferences of the president and members of Congress over agency appropriations are assumed to be convex (single-peaked in one-dimensional issue space).

Let the president's ideal appropriation for an agency be  $P$  and a member of Congress's ideal be  $X_i$ . Let  $>_i$  represent member  $i$ 's preference relation; let  $>_p$  represent the president's preference relation. Member  $i$ 's preferred-to set is defined as  $P_i(x) = \{x' \in X \mid x' >_i x\}$ . Let  $P_p(x)$  be the president's preferred-to set, which is defined in similar fashion.

We need consider only the preferences of three key members of the legislature—the one-third quantile member, the median voter, and the two-thirds quantile member. We refer to them as members 1, 2, and 3. Without loss of generality, let their ideal appropriations be ordered  $X_1 < X_2 < X_3$ . A simple majority of members is required to pass a bill, and two-thirds to override a veto. A simple majority is equivalent to two of our three key members; two-thirds is equivalent to all three of our key members.

The sequence of actions is as follows. At the beginning of each session the president transmits his budget requests to Congress. Congress then constructs appropriations bills that contain its choices of funding for each agency. Let  $b \in X$  represent the funding level Congress adopts. If the president accepts this figure, then the congressional choice becomes law. If instead he casts a veto, then Congress faces another choice: it can override the president's veto with a vote of two-thirds of the membership, thus enacting its previous choice  $b$ ; or it can sustain the veto, in which case the bill returns to Congress and the sequence is repeated.

If no bill has passed before the beginning of the new fiscal year, funding for agencies provided via regular annual appropriations technically falls to zero.

Treating zero as a mandated reversion level, however, is misleading, for at this juncture Congress routinely passes stopgap funding bills of limited duration known as continuing resolutions. The funding level contained in a continuing resolution, which can be considered a reversionary level in the same sense as in the well-known model of Romer and Rosenthal (1978, 1979), we refer to as  $c \in X$ . Funding for an agency remains at  $c$  until agreement is reached and new appropriations legislation is enacted and signed.

As indicated earlier, we assume that there is no uncertainty hindering the choices of participants. Consequently, the outcome in the final round of play is known beforehand to everyone involved. Without loss of generality, then, the repeat-play appropriations process can be modeled as a single play. At this point Congress offers the president a “take it or leave it” appropriations bill,  $b$ . If he accepts the bill, the outcome will be  $b$ . If he vetoes the bill, the outcome will still be  $b$  if his veto is overridden. In the event his veto is sustained, he knows that Congress will enact a continuing resolution calling for a spending rate  $c$ . Barring other political considerations (more on that later), the president will veto the congressional bill  $b$  only if he prefers  $c$  to  $b$ , that is, only if  $b \notin P_p(c)$ . Moreover, the president cannot use the threat of a veto to induce a more favorable outcome unless  $b \notin P_p(c)$ , as he cannot credibly threaten to do something that will make him worse off (Schelling, 1960).

The president’s choice to accept or veto appropriations legislation is therefore conditioned on the nature of the continuing resolution. Since the appropriations level chosen by Congress is in turn conditioned on an assessment of the president’s actions and on whether or not a veto is sustainable, the bills passed by Congress are also conditioned on the nature of continuing resolutions.

### *Continuing Resolutions*

It is rare for all regular annual appropriations bills to have been enacted by the beginning of the fiscal year (Bach, 1985). This happens because the president and Congress have failed to reach agreement, or simply because Congress itself has not finished action on a bill.

The House Appropriations Committee, when drafting continuing resolutions, has followed a standard formula with a high degree of regularity for over a century. As summarized by Fenno (1966), “Agencies are allowed to spend at the previous year’s rate or, if only the House has passed the appropriation bill, at whichever rate is lower, or, if both Senate and House have passed the bill, at whichever of those two rates is lower” (p. 421).<sup>1</sup> Henceforth, we refer to this formula as the “Fenno Rule” and assume that it will be adhered to in the con-

<sup>1</sup>Technically, the standard continuing resolution formula calls for spending at the current rate or the rate specified in the Senate bill, whichever is lower, if only the Senate has passed the bill. This situation almost never occurs, however, as the Senate Appropriations Committee customarily uses the House bill to mark up and so waits for House passage before proceeding.

struction of continuing resolutions. In the context of our unicameral model, the spending resulting from a continuing resolution  $c$  is assumed to be the minimum of the congressional bill or of last year's appropriations.

The assumption that continuing resolutions are based on the Fenno Rule plays a key role in our model. At first glance, adherence to the Fenno Rule seems somewhat remarkable. That continuing resolutions take this form is not mandated by the Constitution, the Rules of the House, the bylaws of the Appropriations Committee, or anything else. They are simply acts of Congress, and in principle could, like any ordinary appropriations bill, specify spending at any level Congress and the president might agree upon. This adherence is especially surprising given that the *de jure* reversion of agency appropriations to zero potentially confers to the author of the appropriations legislation—the Appropriations Committee—a tremendous degree of agenda control. The committee could use its amendment restriction powers to present Congress and the president with a wide range of appropriations that both would find preferable to the wholesale closing down of agency activity.

This strategy works, however, only if the members of the Appropriations Committee are truly willing to live with zero, which would be the result if their bluff were called. But this is rarely the case. In general, the threat of allowing agency funding to lapse to zero possesses the same problem as other threats of drastic action: it is not credible, since carrying it out would make the threatener worse off. Conversely, if membership on the Appropriations Committee was skewed enough to make zero a credible threat, the other members of Congress would find this extortion intolerable. Severe sanctions can be applied (and indeed have been applied) against committees which too frequently abuse their powers (Brady and Morgan, 1986). The Fenno Rule is a solution to a game between the membership and its committees: it provides individual members (and the president) with an insurance policy *against* extortion by the committee. Strict adherence to the Fenno Rule can thus be seen as another manifestation of the universalism that characterizes allocative decisions made by Congress, a norm that is consistent with the long-term interests of individual members of Congress (Arnold, 1979; Weingast, 1979).

There are also strong organizational imperatives that dictate a commitment to the Fenno Rule, or at least to some automatic mechanism that performs the function of this rule. As was pointed out to us by a senior staff member on the House Appropriations Committee, choosing appropriations higher than the lowest level that might obtain in the upcoming fiscal year risks committing funds and hiring personnel for activities that might have to be terminated upon passage of a regular appropriations bill. This would not only waste money, but might also run afoul of civil service regulations that make it difficult for the federal government to lay off employees. Members of Congress do not want bureaucratic rigidities to lock them into programs that have not yet been funded in a regular bill. Continu-

ing resolutions of the form noted by Fenno thus win virtually automatic support and are in all likelihood veto proof.

In recent years Congress has occasionally departed from the Fenno Rule and has passed stopgap funding bills that allow certain agencies to spend at the current rate or at the rate specified in the House Appropriations Committee report (which was all the further the relevant appropriations bill had proceeded), whichever was lower. The first continuing resolution for fiscal 1982 permitted foreign aid programs to spend at the lower of the administration's budget request or the fiscal 1981 level, whichever was lower (Donnelly, 1981). Even in its deviations from the Fenno Rule, however, Congress has adhered to the logic of not appropriating at a higher rate in a stopgap continuing resolution than might later obtain in the final bill. Thus the deviations tend to be more conservative than the rule itself.

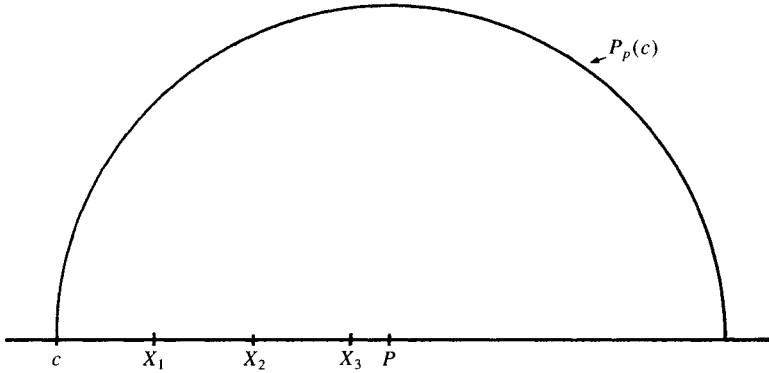
Since 1980 Congress has also adopted the practice of bundling all outstanding appropriations bills at the end of the term and enacting them as a single package (Schick, 1980). Although enacted under the rubric of "continuing resolutions," these omnibus appropriations bills should not be confused with the temporary reversionary measures we are concerned about here. Such bills grant funding authority for the duration of the fiscal year at whatever levels Congress ultimately decides upon. These bills also suffer the fate of being one of the last legislative trains out of the station. Representatives and senators attempt, with frequent success, to load them with as much unfinished legislative business as possible, for example, crime bills, housing and water project authorization bills, bans on cop-killer bullets, and emergency jobs programs. Not surprisingly, these omnibus appropriations bills do not enjoy the routine success of stopgap funding bills based upon the Fenno Rule. They are the subject of long and rancorous debate, are frequently threatened with filibusters, are occasionally defeated, and, in at least one instance, such a bill has been successfully vetoed. Notably, the omnibus bill Reagan vetoed in November 1981 was preceded by and was quickly followed by continuing resolutions that adhered to the Fenno Rule. These Reagan signed into law.

#### *Presidential Influence and the Veto*

In analyzing the influence conferred upon the president through the threat or use of his veto, there are only two cases that need to be considered: (1) the president's ideal appropriation is greater than the ideal of the median member of Congress, that is,  $P > X_2$ ; and (2) the president's ideal appropriation is less than the median in Congress, that is,  $P < X_2$ .

CASE 1: Since  $P > X_2$ , the president prefers the congressional median to a continuing resolution, that is, if  $P > X_2$ , then  $X_2 \in P_p(c)$ . When  $P > X_2$ , as in Figure 1, a proposal of  $X_2$  is unbeatable and becomes the legislative choice, that is,  $b = X_2$ . The president will be faced with a choice of accept-

FIGURE 1

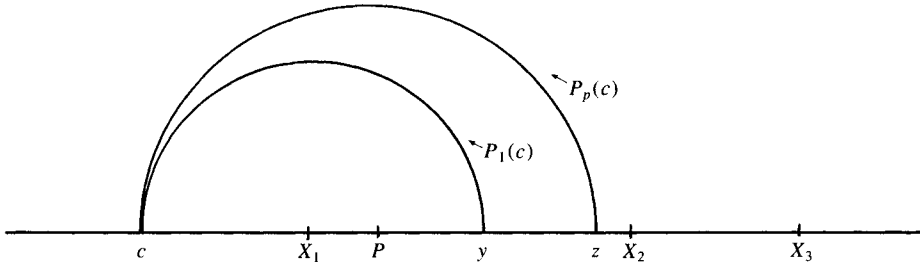


ing  $b$ , or vetoing the bill and getting either  $b$  (if his veto is overridden) or  $c$  (if the veto is sustained). Since he prefers  $X_2$  to  $c$ , he cannot make himself better off by vetoing, so he would never veto a bill that proposes  $b = X_2$  if he prefers at least as much as  $X_2$ . Thus, Congress adopts  $b = X_2$  without regard to the president's veto authority. The president cannot affect the appropriations outcome with the use of his veto when he prefers to spend at least as much as the median in Congress.<sup>2</sup>

CASE 2:  $P < X_2$ . The president may still prefer  $X_2$  to  $c$  (especially if  $P$  is close to  $X_2$ ). Here, as in Case 1, he cannot affect the congressional choice. If, on the other hand, the president prefers a continuing resolution to the congressional median, that is,  $X_2 \notin P_p(c)$ , then he may have some leverage. If Congress passes  $b = X_2$ , the president will veto it. If member 1 prefers  $X_2$  to  $c$ , then the president's veto will be overridden, and the final outcome is  $b = X_2$ , and again the president will have no influence (through the use of his veto) on the appropriations decision. If, on the other hand,  $X_2 \notin P_1(c)$ , as in Figure 2, then the president's veto will be sustained. Knowing this, a bill  $b = z$ , such that  $z < X_2$ , will be proposed that makes the president indifferent between  $z$  and  $c$  (i.e.,  $z \in P_p(c)$ ). The choice of  $b = z$  is preferred by members 2 and 3 to any other alternative in  $P_p(c)$ . Thus  $b = z$  is a structure-induced Condorcet winner (Shepsle, 1979). The president is

<sup>2</sup>One might argue that the president has a credible veto threat even when  $P > X_2$  if his utility for  $c$  is greater than member 2's utility for  $c$  and if Congress and the president are engaged in a repeated threat game. A key feature of the appropriations process, however, is that it is Congress who presents the president with a final "take it or leave it" choice between its bill  $b$  and the continuing resolution  $c$ . As long as  $P > X_2$ , he will prefer  $X_2$  to  $c$  at the end of the fiscal year. When given the choice between  $b = X_2$  and  $c$ , the president will choose  $b$ . Knowing this, the president's threat to veto  $b = X_2$  will not be credible.

FIGURE 2



able, through possession of the veto, to cause Congress to reduce its spending from  $X_2$  to  $z$ .

It is also apparent from Figure 2 that the president's ability to cause a reduction in spending is limited, since no bill calling for spending less than  $y$  will be proposed, as  $y$  is the point of indifference with respect to  $c$  for member 1. If  $z < y$ , then  $y$  is a structure-induced Condorcet winner that is unanimously preferred by the members of Congress to the result of a continuing resolution  $c$ . Thus any veto of a bill  $b = y$  will be overridden. Knowing this, the president does not veto  $b = y$  (though he vetoes any bill with spending greater than  $y$ ). In this situation the threat of a veto causes Congress to adopt appropriations  $y$  lower than it would otherwise have adopted (i.e.,  $X_2$ ).

Although the reversionary point in this model is defined by the Fenno Rule, our analysis does not require adherence to this particular formula. As long as  $c < X_2$ , influence conveyed to the president by the veto is confined to instances when  $P < X_2$ .<sup>3</sup> What is important, however, is that the Fenno Rule imparts predictability; everyone knows what the outcome is if a regular appropriations bill is not enacted.

In Figures 1 and 2 the level of spending contained in a continuing resolution is less than the ideal appropriation preferred by the president and by members of the legislature (i.e.,  $c < P$  and  $c < X_1 < X_2 < X_3$ ). In no way, however, do our results hinge upon the location of the continuing resolution relative to the president's or members' ideals. To show this we examine two extreme cases: (1) when the ideal of the median in Congress is zero and (2) when the ideal of the president is zero. If  $X_2 = 0$ , then  $P \geq X_2$ , and  $b = 0$ . In such circumstances, as in case 1,

<sup>3</sup>Presidential influence will still be asymmetric when  $c > X_2$ . This is sometimes the case. Farm commodity price supports, for example, revert to levels specified in the 1938 Agricultural Adjustment Act, which are much higher than existing levels. In such instances, however, the president derives influence from the veto only when  $P > X_2$ .



the president has no influence on the appropriations choice. On the other hand, if  $P = 0$  (and  $X_1 > 0$ ), the president may possess some influence. As in case 2, member 1 is the pivotal player. A bill,  $b = y > 0$ , is preferred by member 1 to zero. Since  $b = y$  will then be enacted irrespective of presidential action (any veto will be overridden), the president will go along with  $b = y$ . Thus we again derive our asymmetric influence hypothesis.

A straightforward implication of our model is that the president vetoes appropriations bills only when he prefers lower spending than that adopted by Congress. If he prefers more, the veto cannot make him better off, and so we do not expect him to use it. This expectation is strongly borne out in the historical record. Of the 18 appropriations bills vetoed from 1948 to 1979, the president never vetoed one because it called for too little spending. All contained either appropriations greater than the president requested, or other measures that he found objectionable, for example, the rider to a 1973 supplemental appropriation that prohibited bombing of Laos and Cambodia. An apparent exception was Carter's veto of the 1978 public works bill, which specified lower overall expenditures than he had requested. In his veto message, however, Carter asserted that new starts on dozens of wasteful projects would commit the federal government to more spending in the long run than he was willing to countenance.

### *Presidential Requests*

It is important for our empirical analysis to consider whether the president has an incentive to misrepresent his preferences in the requests he submits to Congress. For this purpose we relax momentarily our full information assumption and assume that members of Congress do not know the president's ideal. If he prefers higher spending than Congress, as in Figure 1, misrepresentation of his ideal upward gains him nothing, as they still choose  $X_2$ . Misrepresentation of his ideal downward to a point below the congressional median, on the other hand, might affect the congressional choice. But this would yield spending that is even lower than the congressional median  $X_2$ , thus making the president even worse off.

If the president prefers less than Congress, on the other hand, there is a region wherein misrepresentation may benefit the president. If he is indifferent between  $z$  and  $c$ , as in Figure 2, and the members of Congress know this, they choose  $b = z$  (as this makes members 2 and 3 better off than any other choice). If  $z$  is less than  $y$ , where member 1 is indifferent between  $c$  and  $y$ , then  $b = y$  is chosen. Getting Congress to believe that he prefers more than  $P$  by misrepresenting his preferences upward causes them to adopt an even higher amount, again making the president worse off. But if he can make Congress believe he prefers less than  $P$  (and thus that his point of indifference  $z$  is also lower), he can induce them to choose  $b = y$ . Since  $y$  is closer than  $z$  to  $P$ , he would be better off. In this

situation the president therefore has an incentive to misrepresent his preferences to Congress.

Two additional considerations, however, strongly discourage a nonsincere strategy. First, the only situation in which the president has an incentive to misrepresent his ideal is that in which he prefers less than Congress, and then only in a downward direction. Knowing this, Congress may learn over time exactly how to invert presidential requests to discover his ideal. Second, as Denzau, Riker, and Shepsle (1985) have argued, the ability to misrepresent in the legislative process is limited by electoral considerations. Voters are not likely to appreciate complicated strategies that entail misrepresentations. In misrepresenting, the president must weigh the loss in votes due to misunderstanding against the gain in votes brought about by achieving a better outcome. For these reasons we expect that the president's budget requests to Congress truthfully reveal his preferences.

#### *Limitations and Possible Extensions*

While the simplicity of our model may be a virtue, it is also a vice in that we cannot incorporate the full richness of appropriations politics into our analysis. As acknowledged earlier, the president possesses resources other than the veto with which to affect appropriations decisions: his ability to move public opinion, his access to national party resources, his campaigning ability, and his ability to grant (or withhold) favors are only some of the most important. These resources may provide him leverage even in cases where the veto per se confers him none. But, we expect an asymmetry of influence to persist in the face of these other factors; holding all else constant, the president still has more influence when he prefers to spend less than Congress rather than more.

Our simplified unicameral model of Congress does not limit our results. It can be easily shown that incorporating two chambers and committees into our framework does not affect the basic asymmetry of influence. A simplifying assumption that does matter is the restriction of our model to one dimension. Appropriations bills contain dozens to hundreds of individual line items, and Congress will surely use this ability to bundle legislation in this manner to serve its own purposes. This may provide the president with additional leverage, but only if it serves congressional purposes as well.

Furthermore, it may be possible for the president to effect trades, for example, agreeing not to veto spending favored by Congress in one policy area in return for appropriations higher than the congressional median in another. Such trades, however, are likely to be difficult to enforce and limited to the extent his preferences give him the leverage he needs to bargain with. His influence, all else constant, is still asymmetric. These additional considerations, then, might compromise our ability to detect the asymmetry in appropriations outcomes, but they do not undermine the basic hypothesis of asymmetric influence.

### 3. Congressional Appropriations and the Electoral Connection

The most important proposition derived from our model is that the president is able to exert substantially more influence upon congressional decisions when he prefers to appropriate less, rather than more, to an agency than Congress does. So far, however, our theory has been couched in terms of ideal points. Even though we have argued that the president will not misrepresent his preferences, the problem of not observing members' ideal points still remains. Fortunately, we are able to infer, from the president's requests and final agency appropriations passed by Congress and signed by the president, which branch truly prefers lower spending, and thus which enjoys a strategic advantage. First, if the president's request (as submitted by the Office of Management and Budget) for agency  $i$  in year  $t$ ,  $EST_{it}$ , is greater than the final agency appropriations,  $APP_{it}$ , we conclude that the president did not influence the choice of  $APP_{it}$ . That is,  $EST_{it} > APP_{it}$  implies  $P > X_2$ .

The easiest way to see that this is true is to first suppose that it is false, that is, that  $EST_{it} > APP_{it}$ , but  $P < X_2$ . As we have shown, the bill passed by Congress,  $b$ , must always be greater than or equal to  $P$  when  $P < X_2$  ( $b$  equals  $X_2$ ,  $z$ , or  $y$  in Figure 2). This implies that  $b \geq P$ , thus  $APP_{it} = b \geq EST_{it} = P$ . This is a contradiction, so it must be the case that  $P > X_2$  if  $EST_{it} > APP_{it}$ .

On the other hand, if  $EST_{it} < APP_{it}$  then  $P < X_2$ , meaning that the president may have exercised some influence on the final appropriations  $APP_{it}$ . As before, first suppose that this is false, that is,  $EST_{it} < APP_{it}$ , but  $P > X_2$ . If  $P > X_2$ , then  $b = X_2$  (as in case 1). This implies that  $EST_{it} = P > b = APP_{it}$ . This is also a contradiction, so it must be the case that  $P < X_2$  if  $EST_{it} < APP_{it}$ . This proves that we can use observed data,  $EST_{it}$  and  $APP_{it}$ , to determine if the president has some influence through possession of the veto.

A direct test of our hypothesis would be very simple. If the president preferred more appropriations for an agency than Congress did, the bill passed would be identical to the congressional median, that is,  $|X_2 - b| = 0$ . If he preferred less, however, he might be able to pull appropriations downward, and so  $|X_2 - b| > 0$ . Such a test, however, is precluded by our inability to observe the median member's ideal point  $X_2$ . Nevertheless, the observable data do allow an alternative method of testing the asymmetric influence hypothesis. First, when the president is in a strategically advantageous position ( $EST_{it} \leq APP_{it}$ ), the requests for appropriations he submits to Congress should have much greater bearing upon the amount of appropriations an agency ultimately receives than when his position is weak. Assuming some estimation problems can be solved (more on that shortly), regressing final appropriations figures upon the president's requests in the two strategic situations allows us to test this hypothesis by comparing the two coefficients that are thereby estimated.

Second, we also know from previous analyses of federal budgetary data that members' preferences are determined, at the margin, by several political and economic variables. Because congressional preferences have less influence on the final appropriations  $APP_n$  when the president holds a strategic advantage, we hypothesize that these political and economic variables should also have less influence upon agency appropriations.

### *Political and Economic Determinants of Congressional Preferences*

Adopting the "electoral connection" perspective of Mayhew (1974), we assume that the decisions members of Congress (and the president) make concerning appropriations result from their desire for reelection. Funds appropriated to agencies of the federal government serve this goal by buying goods and services that benefit congressional and presidential constituents. Constituents in turn condition their support for members and the president, at least in part, upon their degree of satisfaction with these benefits and the costs of providing them. We expect appropriations for any given program to yield declining marginal returns in electoral support. To maximize their reelection prospects, then, members seek spending levels that equate marginal returns in electoral support from spending on programs to the marginal losses in support resulting from higher budgets.

Employing this electoral calculus, one would predict, in light of the strong evidence that members' electoral fates depend upon the state of the economy (Kramer, 1971; Jacobson and Kernell, 1981), that appropriations decisions respond to major economic variables such as inflation and unemployment. Additionally, if voters discount past benefits and future costs, Congress could be expected to "heap" policy benefits late in the electoral calendar (Tufté, 1978).

We would also expect appropriations decisions to reflect the propensity of Democrats to prefer higher spending in the domestic realm than Republicans; the larger the percentage of Democrats in Congress, the faster agency budgets should grow. Although it might seem to some that party differences run contrary to an electoral connection model—"party" and "constituency" have traditionally been viewed as alternative, often contradictory sources of influence upon legislators—party and constituency pressures coincide far more often than not. Even though the congressional districts represented by Democrats often resemble other districts that have Republican representatives, the *reelection* constituencies of Democratic and Republican members of Congress do reliably differ (Fiorina, 1974; Fenno, 1978; Poole and Rosenthal, 1983). The tendency for Democrats to support more spending for domestic programs can be attributed, at least in part, to differences between Democratic and Republican constituencies.

As we indicated earlier, these hypotheses have garnered considerable support in previous analyses of federal budgetary data. Congress does appear to act in accord with the Keynesian prescription of increased spending as a remedy for unemployment and decreased spending for inflation (Kiewiet and McCubbins,

1985a, 1985b; Kamlet and Mowery, 1985). Previous studies have also found that the rate of domestic spending increases with the Democratic share of the membership and that Congress treats agency requests more generously in election years than in nonelection years (Kiewiet and McCubbins, 1985a, 1985b; Lowery, Bookheimer, and Malachowski, 1985).

The hypothesis that we intend to test here, however, is that these various political and economic determinants of congressional preferences have a significantly larger effect upon final appropriations figures when Congress is in a strategically favorable position. It is to this effort that we now turn.

#### 4. Data and Estimation

The data we compiled in order to test the asymmetric influence hypothesis were the presidential funding requests (submitted to Congress in the form of OMB budget estimates) and the final appropriations figures for 43 federal agencies from fiscal 1948 to 1979 (see Appendix A for data sources). Most of these agencies were in Fenno's (1966) sample. The additional agencies were either public works agencies, which we have examined in some detail elsewhere (Kiewiet and McCubbins, 1985a), or regulatory agencies. These 43 represent a large sample of important domestic agencies that are funded through regular appropriations acts.

The regression framework we adopted was the "switching regime" model (Madalla, 1977). This technique enables us to estimate separate coefficients for our variables in the two different strategic situations. The basic form of the equation to be estimated is as follows:

$$\text{APP}_{it} = \gamma_1 [c_1 + \beta_{11} \text{EST}_{it} + \beta_{12} \text{DEM}_t + \beta_{13} E_t + \beta_{14} U_t + \beta_{15} I_t] \quad (1) \\ + \gamma_2 [c_2 + \beta_{21} \text{EST}_{it} + \beta_{22} \text{DEM}_t + \beta_{23} E_t + \beta_{24} U_t + \beta_{25} I_t] + \varepsilon_{it}$$

$c_1$  and  $c_2$  = constant terms.

$\gamma_1$  = a dummy variable which takes on the value of 1 when  $\text{EST}_{it} \leq \text{APP}_{it}$ , thus indexing the regime in which the president is in a strategically favorable position.<sup>4</sup>

$\gamma_2$  = a dummy variable which takes on the value of 1 when  $\text{EST}_{it} > \text{APP}_{it}$ , thus indexing the regime in which the president is in a strategically weak position.

<sup>4</sup>In 6 percent of the cases in our sample,  $\text{EST}_{it} = \text{APP}_{it}$ . We assigned these cases to the regime in which the president was in a strategically favorable position. Our model implies that if Congress actually preferred to appropriate less than the president, there would be no reason for them to come up to the figure the president requested. In contrast, the president could potentially pull congressional appropriations down to the figure he requested. This decision also turned out not to matter much, in that our findings survived intact when we reestimated the equation after omitting the cases where  $\text{EST}_{it} = \text{APP}_{it}$ .

$APP_{it}$  = the appropriations awarded by Congress to agency  $i$  in fiscal year  $t$ .

$EST_{it}$  = the appropriations requested by the president (in the form of the OMB estimate) for agency  $i$  in fiscal year  $t$ .

$DEM_t$  = the percentage of seats on the House Appropriations Committee held by Democrats.

$E_t$  = 1 during election years (the second session of each Congress), 0 otherwise. Appropriations decisions concern the upcoming fiscal year, so appropriations considered by Congress during election years are for odd-numbered fiscal years.

$U_{t-1}$  = the average rate of unemployment during the first six months of the session of Congress in which appropriations for a given fiscal year are considered.<sup>5</sup>

$I_t - 1$  = the (annualized) percentage of change in the Consumer Price Index during the first six months of the session of Congress in which appropriations for a given fiscal year are considered.

$\varepsilon_{it}$  = an error term subsuming all unmeasured factors.

Equation 1 specifies congressional appropriations decisions as a function of presidential requests and several other variables. We expected the errors produced in predicting congressional decisions to be correlated with the president's requests. It was therefore necessary to model  $EST_{it}$  as an endogenous variable and to employ an instrumental variables technique.<sup>6</sup>

Our most serious estimation problem, however, stems from specification of the regime dummies,  $\gamma_1$  and  $\gamma_2$ . The value of the regime dummies, of course, depends upon whether  $EST_{it} < APP_{it}$ . The problem is that  $EST_{it}$  and  $APP_{it}$  are endogenous, which implies in turn that the regime dummies are endogenous (Madalla, 1977). Consequently, an initial instrumental variables procedure

<sup>5</sup> Although previous research in this area provides no suggestions as to what time frame on the economic variables is appropriate, research on economic conditions and voting behavior has yielded considerable evidence that (a) voters respond retrospectively to past conditions and (b) their memories tend to be quite short (Fair, 1978). If members of Congress are like voters, the previous six months time frame dominates plausible alternatives. Whatever the case, considerable variation in the specification of the time frame of the economic variables had little effect upon the estimation results.

<sup>6</sup> The instrumental variables estimate of  $EST_{it}$  was created by imposing exclusionary restrictions, that is, regressing them on the same exogenous variables that  $APP_{it}$  was regressed on plus at least one additional variable, and using the fitted values in the equation. In this instance we actually specified several additional variables—dummy variables for the party of the president, for presidential election years, for war years (Korean War, FY 1952–54, and Vietnam, FY 1967–74), and the unemployment and inflation rates during the six months prior to the president's submission of the budget. This model was thus strictly overidentified. Coefficients derived from estimating an equation very similar to this first-stage equation are reported in Kiewiet and McCubbins (1985a). The instrument we constructed for the OMB request in equation 1 was only adequate, in that the correlation between our estimate and the actual value was only about 0.4. Estimation of equation 1 with ordinary least squares, however, yielded results that are substantively equivalent to the instrumental results we report.

on the regime dummies is required if consistent and asymptotically efficient estimates are to be obtained. In the procedure we adopted,  $\gamma_1$  and  $\gamma_2$  were replaced by probability estimates derived from an instrumental logit regression of  $\gamma_1$  ( $\gamma_2 = 1 - \gamma_1$ ) on all the exogenous variables in our equation (see Appendix B for details).

An unfortunate feature of our data is the small number of observations for each agency: the full time series is only 32 years long, and some agencies existed for a far shorter period. Pooling data across the 43 agencies in the sample is thus an attractive option. Besides offering a gain in statistical leverage, it simplifies the test of our hypothesis: only a single test statistic need be calculated in order to test our hypothesis of asymmetric influence.

One risk associated with pooling is the possibility of cross-sectional correlation, which may downwardly bias our estimates of the standard errors. However, an examination of the covariances of the error terms generated in estimation of equation 1 between all pairs of agencies showed only a few were significant. There was some suggestion that the errors were correlated, to a mild extent, across programs in the Department of Interior bill and across independent regulatory agencies. By not taking account of the covariation across programs in these bills, our estimates are likely to be somewhat inefficient, though only mildly so. Corrections, however, are made complicated by the endogenous switching model we employed.

Pooling cross-sections can also introduce heteroscedastic error variances, again resulting in inefficient estimates. A battery of test statistics on the residuals produced in estimating equation 1 suggested that there was indeed a significant degree of heteroscedasticity resulting primarily from large differences in the magnitudes of agency appropriations figures.

We chose to correct this problem by dividing OMB estimates and final appropriations figures by the appropriations figures for the preceding fiscal year and then taking the log of this ratio. This transformation results in figures that are similar to percentage changes, but that are more symmetric about 1.00. This is important, given the distortions that are present with percentage changes; moving from 100 to 300, for example, is a 300 percent increase, while moving from 300 to 100 is only a 66 percent decrease. The same battery of tests showed that the heteroscedasticity problem was dramatically reduced, but not entirely eliminated. No other technique—generalized least squares, deflators, a standard logistic transformation—did better in reducing heteroscedasticity than did the transformation we employed. We suspect that the remaining heteroscedasticity is a result of our endogenous switching, and therefore no common transformation would solve the problem. Further, the degree of heteroscedasticity is very minor and should not produce too much inefficiency in our estimates. Whatever the case, our substantive results were robust to the transformation used.

Last, additional tests on the errors produced in estimating equation 1 show

that our results were not compromised by implicit linear restrictions resulting from pooling, serial correlation, or omitted variables collinear with our included variables. Results of these tests are available upon request.

### 5. Results

We have hypothesized that the president has much greater influence on congressional appropriations decisions when he prefers to spend less than Congress rather than more. In estimating equation 1, we thus predict  $\beta_{11} > \beta_{21}$ . We also expect the political and economic determinants of congressional preferences to have a much larger influence upon agency appropriations when Congress is in a strategically favorable position. Thus, we expect  $\beta_{22} > \beta_{12}$ ,  $\beta_{23} > \beta_{13}$ ,  $\beta_{24} > \beta_{14}$ , and  $\beta_{25} > \beta_{15}$ . We test these hypotheses jointly.

In order to facilitate interpretation of the other coefficients, the unemployment, inflation, and partisan composition variables entered the equations as deviations from their mean values during this period. Results are reported in Table 1, Superscripts 1 and 2 denote the regime: 1 if  $EST_{it} \leq APP_{it}$ ; 2 if  $EST_{it} > APP_{it}$ .

The results reported in Table 2 provide strong support for our hypotheses. The estimated effect of the president's (OMB) request upon the final appropriations figure was much larger when the president was in a strategically favorable position than when he was not. The large difference between the two EST coeffi-

TABLE 1  
Presidential Influence in the  
Congressional Appropriations Process, FY 1948-79  
(Instrumental Variables Estimates)

Variable	Estimate	Standard Error	t Ratio
$c_1$	.058	.025	2.31
$c_2$	-.011	.014	-0.83
$EST_{it}^{1\ddagger}$	1.01	.210	4.81
$EST_{it}^{2\ddagger}$	.461	.091	5.10
$DEM_t^1$	.008	.169	0.05
$DEM_t^2$	.197	.071	2.78
$E_t^1$	-.016	.016	0.97
$E_t^2$	.034	.009	3.51
$I_{t-1}^1$	.003	.003	0.98
$I_{t-1}^2$	.001	.002	0.55
$U_{t-1}^1$	-.004	.006	0.69
$U_{t-1}^2$	.017	.005	3.70

NOTE:  $n = 1,230$ .

<sup>†</sup>Endogenous variable.



cients was significant at the .01 level. Similarly, the percentage of Democrats appeared to matter only when it was the Congress who held the upper hand; the .197 coefficient indicates that a 10 percent increase in the number of Democrats would produce about a 2 percent gain, *ceteris paribus*, in appropriations for the agencies in our sample. The coefficient for the  $DEM_t^1$  term, in contrast, was virtually zero.<sup>7</sup> Election years followed the same pattern; while election year “spending moods” appeared to have garnered these agencies about 3 percent more than they received in off years when the strategic situation favored Congress, they benefited very little when congressional action was constrained by the preferences of the president. Unemployment appears to have mattered little in determining congressional preferences in situations when the president possesses some influence over the budget choice, though it was a significant factor when Congress was in a strategically advantageous position. By contrast, the coefficients for inflation were insignificant in both regimes. Our results thus support our joint hypothesis on these coefficients.

Strictly speaking, our model implies that  $\beta_{21} = 0$ , that is, the president has no influence at all when in a strategically weak position. The estimated coefficient, however, was .461 and significant, indicating that the president possesses some influence even in cases when he prefers more than the congressional choice. As discussed earlier, there are many potential sources of influence over and above that provided by the veto. Influence may arise through the exercise of informal powers, or may reflect the fact that appropriations are passed not as line items, but as a small number of appropriations bills. Our results, however, allow us only to speculate as to the mix of factors involved.

## 6. Discussion

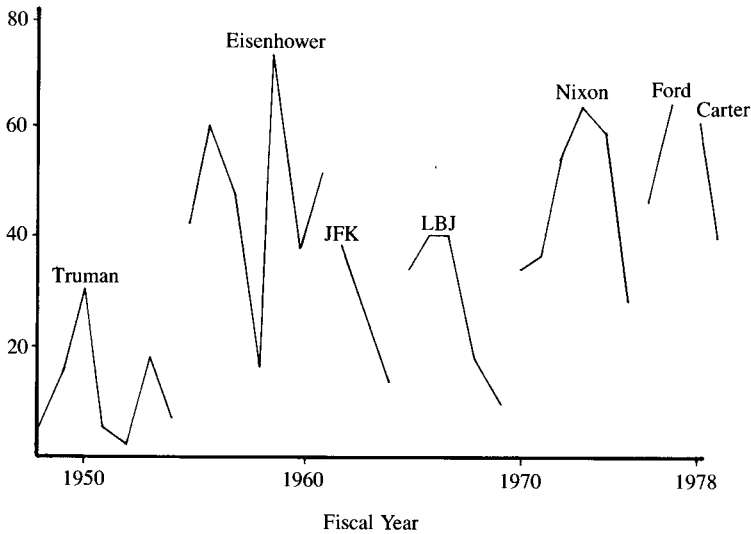
### *Partisan Implications: Are Republicans Stronger Presidents?*

The results reported in Table 2 reveal that presidential requests have much more influence upon final appropriations figures when the president desires to spend less than Congress than when he would rather spend more. The general tendency for Democratic presidents to favor higher levels of domestic spending than Republicans favor implies that, in this arena at least, Republicans tend to be “stronger” presidents. Figure 3, which for each fiscal year plots the percentage of cases from our sample in which the president was favored by his proximity to the reversionary expenditure, supports this suggestion.

Although our time series ends a few years prior to the beginning of the Reagan administration, budgetary trends since 1981 are entirely consistent with the implications of our model. Armed with a credible veto threat, President

<sup>7</sup>In previous analyses we used the percentage of Democrats in the House of Representatives. When floor figures were substituted for committee figures, however, the estimated coefficients were nearly identical.

FIGURE 3  
 Percentage of Cases in Which the President's  
 Position Was Strategically Favorable ( $EST_{it} \leq APP_{it}$ )



Reagan has enjoyed a large measure of success in restraining expenditures for nonentitlement domestic programs. Our model also implies, however, that his desire for large increases in defense spending grants Congress the strategic advantage in this area. If so, the rate of defense spending growth over the past four years has been more a function of congressional preferences than of the preferences of Ronald Reagan or Caspar Weinberger. This would seem to be the case. After granting almost all of the 26 percent increase the administration sought for fiscal 1982, Congress has appropriated amounts that are farther and farther below the administration's requests. In response to the request for a 17 percent increase in defense spending for fiscal 1986, Congress enacted an increase of 1 percent.

#### *Implications for the Study of Presidential Vetoes*

In recent years several time series analyses have attempted to account for the frequency with which different presidents cast vetoes, as well as for the frequency of successful and unsuccessful override attempts (Copeland, 1983; Rohde and Simon, 1985; Hoff, 1985). These variables have been modeled as depending upon the major parties' shares in Congress, stages of the electoral cycle, the state of the economy, and other exogenous variables. The evidence yielded by these studies is valuable but limited, for it is not necessary for the president actually to

exercise the veto in order to influence legislation. As indicated above, the threat of a veto, if credible, will induce Congress to incorporate the president's preferences into legislation as it is pending. Indeed, in this study the influence wielded by the president, by virtue of the veto option, was measured in appropriations legislation that the president did *not* veto, but rather signed into law.

Furthermore, to the extent that the president and Congress have full information about the rules of the game and each other's preferences, vetoes should never occur. Again, the absence of vetoes does not imply a lack of presidential influence over appropriations, or, as is frequently alleged, that Congress has abdicated its spending responsibilities to the president. Rather, it means that the president has anticipated congressional preferences and that Congress has accommodated his wishes (Davis, Dempster, and Wildavsky, 1966; Kiewiet and McCubbins, 1985a).

This line of reasoning also suggests that vetoes which do occur are exercises in position taking. Congress may pass legislation knowing beforehand that the president will veto it in order to take a position on some issue. In legislation concerning appropriations vetoes rarely come as a surprise; presidents almost always warn Congress that a veto is forthcoming. Similarly, the presidents may veto a bill in the face of a congressional override in order to take a position. In any event, the reasons we expect a veto or an override are different from those generally studied in the literature. Analyzing presidential influence as a function of the credibility of a veto threat yields a richer, more comprehensive view of what possession of the veto means to the president.

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#### APPENDIX A Data Sources

Presidential budget requests (in the form of OMB estimates) and final appropriations figures are reported in the Annual Senate Document *Appropriations, Budget Estimates, Etc.*, the section entitled "Itemized Comparisons of Budget Estimates and Appropriations Arranged by Senate Acts." Both sets of figures were reported in various regular annual appropriations acts. In a few instances several line items that customarily appeared under an agency in the regular annual appropriations act did not, but appeared instead in a subsequent supplemental act. In these cases these appropriations were counted toward the agency's funding for that year. In all other cases the funds appropriated in deficiency and supplemental acts were for line items already covered in the regular annual act. These figures were almost always very small, and were not included in the following analyses.

Unemployment and Consumer Price Index figures were taken from issues of the *Monthly Labor Review*, Bureau of Labor Statistics, U.S. Department of Labor.

Information on presidential vetoes of appropriation bills was taken from *Presidential Vetoes, 1789-1976*, Office of the Secretary of the Senate, and from the 1977-79 issues of the *Congressional Quarterly Almanac*.

## Sample of Federal Agencies, FY 1948–79

Extension Service	Bureau of Standards (1948–73)
Farmers Home Administration	Patent Office
Rural Electrification Admin.	Weather Bureau (1948–66)
Soil Conservation Service	Bureau of Labor Statistics
Forest Service	Bureau of Labor Standards (1948–68)
Bureau of Land Management	Census Bureau
National Park Service	Federal Bureau of Investigation
Bureau of Indian Affairs	Imm. and Naturalization Service
Fish & Wildlife Service (1948–71)	Federal Prison System
Bureau of Mines (1948–74)	Bureau of Narcotics (1948–69)
Bonneville Power Admin. (1949–75)	Bureau of Customs
Office of Education	Bureau of the Public Debt
Public Health Service (1948–69)	Secret Service
Office of Voc. Rehab. (1948–68)	Internal Revenue Service
Bureau of Reclamation	Bureau of the Mint
Corps of Engineers	Food and Drug Administration
Military Construction (1960–79)	Civil Aeronautics Board
Economic Dev. Admin. (1966–79)	Federal Power Commission
Securities and Exchange Commission	Interstate Commerce Commission
Federal Trade Commission	Federal Communications Commission
Geological Survey	Coast & Geodetic Survey (1948–66)
NASA (1960–79)	

NOTE: Most agencies in this sample existed continuously from FY 1948 through FY 1979. If they did not, the years in which they were in existence are reported.

## APPENDIX B

### Nonlinear First-Stage Estimation of Regimes

In equation 1 the coefficients of the righthand-side variables are allowed to vary across the two strategic “regimes”:  $\gamma_1 = 1$  when  $EST_{it} \leq APP_{it}$ ;  $\gamma_2 = 1 - \gamma_1 = 1$  when  $EST_{it} > APP_{it}$ . The exogenous variables in equation 1 affect the regime probabilities as well as the value of  $APP_{it}$ . If more Democrats on the House Appropriations Committee cause higher appropriations, for example, they will also increase the probability that Congress prefers to appropriate more than the president, and thus that  $\gamma_1 = 1$ . This can lead to biased and inefficient estimates.

Dubin (1985) shows that one solution to this problem is to replace the regime dummies (which take on values of only 1 or 0), with unbiased probability estimates of their values. These can be derived from a nonlinear regression of  $\gamma_1$  on all the exogenous variables in equation 1, including those in the instrumental variables list for  $EST_{it}$ . These additional variables, as mentioned in footnote 4, were as follows:

$U_{t-1}^p$  = the unemployment rate during the previous six months prior to the president’s submission of budget requests to Congress.

$I_{t-1}^p$  = the inflation rate during the previous six months prior to the president’s submission of budget requests to Congress.

$DEM_t^p$  = a dummy variable which takes on the value of 1 if the president is a Democrat, 0 otherwise.

$E_t^p$  = a dummy variable which takes on the value 1 in presidential election years, 0 otherwise.

TABLE B.1  
 Nonlinear (Logit) Estimates  
 of Endogenous Switching Regime Dummies  
 (Maximum Likelihood Estimates)

Variable <sup>‡</sup>	Estimate	Std. Error	t Ratio
<i>c</i>	5.54	0.94	5.91
$U_{t-1}^c$	-0.42	0.10	4.10
$I_{t-1}^c$	0.05	0.05	1.15
$DEM_t^c$	-5.21	1.67	3.12
$E_t^c$	-0.14	0.22	0.66
$U_{t-1}^p$	0.04	0.10	0.45
$I_{t-1}^p$	0.05	0.03	1.46
$DEM_t^p$	1.20	0.18	6.76
$E_t^p$	-0.25	0.26	0.96
K	0.51	0.45	1.12
VN	-0.45	0.21	2.20

NOTE: <sup>‡</sup>This equation also specified several dummy variables which registered the particular appropriations bill in which the agency was included. Maximum likelihood estimates associated with these dummies are not reported.

$n = 1,230$

<i>Auxiliary statistics</i>	<i>at convergence</i>	<i>at zero</i>
Log likelihood	-556.9	-852.6
Percentage correctly predicted	78.7	50.0
<i>Goodness-of-fit statistics</i>	<i>about zero</i>	
Likelihood ratio index	0.3468	
Likelihood ratio statistic	591.4	

K = a dummy variable for appropriations considered during the Korean War years (fiscal 1952-54).

VN = a dummy variable for appropriations considered during the American combat presence in the Vietnam War (fiscal 1967-74).

The logit equation also specified several dummy variables to reflect the particular appropriations bill in which the agency was included. This was done primarily to improve goodness of fit.

Results of this logit estimation are reported in Table B.1. The strongest effects are those associated with partisanship. Compared to Republicans, Democratic presidents were likely to prefer more spending than Congress, putting them at a strategic disadvantage. Conversely, more Democrats on the House Appropriations Committee made Congress more likely to prefer higher appropriations than the president, thus putting him at a strategic advantage.

The replacement of  $\gamma_1$  and  $\gamma_2$  with unbiased probability estimates also alleviates censoring problems in our data (Maddala, 1977). Censoring arises from a data partition created by our regime dummies: in regime 1, all observations of  $EST_{it}$  are less than or equal to the dependent variable  $APP_{it}$ , while all observations of  $EST_{it}$  in regime 2 are greater than the corresponding value of  $APP_{it}$ .

Our hypothesis that  $\beta_{11} > \beta_{21}$  would thus appear to be guaranteed (artificially) by this partition. We do not partition the data, however, since we use an unbiased likelihood estimate of the probability that the president holds some influence to weight all observations. Our logit estimation (described above) yields the probability (between 0 and 1) that an observation falls into one partition (regime) or the other. Further, this inequality would not necessarily hold as long as constant terms are specified in the equation.

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