5 Macroeconomic Performance and Mass Political Support for the President

All political history shows that the standing of the government and its ability to hold the confidence of the electorate at a general election depend on the success of its economic policy.

—Harold Wilson, former prime minister of Great Britain

I think Dick's going to be elected President but I think he's going to be a one-term President. I think he's really going to fight inflation, and that will kill him politically.

—Dwight D. Eisenhower

Although Prime Minister Wilson's declaration is perhaps somewhat exaggerated and President Eisenhower's forecast turned out to be wrong (Nixon was defeated in 1960), empirical studies have firmly established that macroeconomic performance has an important, and frequently decisive, impact on mass political support for elected officials in the United States and other developed electoral democracies.[1] And, as I noted in the Introduction, the response of political support to economic conditions yields electorally relevant information about the public's relative economic priorities and preferences, which comprise the voters' demand for economic outcomes.

The analyses in this chapter are based on quarterly time series of the proportions of those surveyed responding "approve" to the well-known Gallup poll question "Do you approve or disapprove of the way [name of the incumbent] is handling his job as president?"[2] Of course Gallup approval ratings are not election outcomes, but they do have a strong correlation with the vote share received by incumbent presidents running for reelection as well as with the vote shares received by nonincumbent nominees of the president's party.[3] The Gallup ratings also have proven to be good predictors of the success of the president's party in midterm congressional elections.[4] But, more

important, the Gallup approval data provide the best available time-series index of presidents' mass political support between elections, when the policies are formulated and implemented and the real winners of elections are established.

Richard Neustadt observed twenty-five years ago that a president's standing in the approval polls greatly contributes to his public prestige, which in turn "is strategically important to his power."[5] This insight has been supported by events on many occasions before and since. To take a recent example, in the early summer of 1981 when President Reagan's approval rating was about 60 percent, his advisers, flush with the success of congressional passage of the Economic Recovery and Taxation Act, boasted that "some Democrats are getting the picture that by going with Reagan they are doing the popular thing." But what leverage with Congress the public may give to executives it also may take away. By the autumn of 1982, after the economy had undergone the worst contraction since the Great Depression and the president's Gallup approval rating had plummeted to 40 percent, Reagan's advisers were meekly conceding that "Congress is no longer dictated by a fear that Ronald Reagan can go to the country."[6]

Such anecdotal evidence is consistent with systematic, quantitative work showing that variations over time in congressional support for a president's legislative initiatives are systematically influenced by his Gallup poll approval ratings.[7] For these reasons the approval polls are widely viewed as the best regularly available index of the president's political stock with the mass public; consequently, they are watched closely by the administration, the opposition party, the bureaucracy, political journalists, and other political actors. Writing long after Neustadt, Donald Kinder summed up the importance of the president's approval rating this way: "Widespread support in the public augments a president's ability to bargain and to persuade. Confronted with a popular president, Congress, the private sector, the bureaucracy, the executive branch itself, all become more accommodating to presidential initiative."[8]

5.1 The Political Support Model

Most published time-series analyses of electoral outcomes and popular support for governing parties and chief executives registered by the polls have assumed, usually implicitly, that voters respond more or less homogeneously to economic and noneconomic events.[9] Vot-

ers' reactions to economic conditions and to other salient social and political issues are likely to vary significantly, however, because of differences in the objective, concrete interests at stake, and perhaps also because partisan attachments influence voters' perceptions and interpretations of politically relevant information. Hence, changes in political support generated, for example, by movements in unemployment or by the escalation of the Vietnam War and the unfolding of the Watergate scandal are unlikely to have been uniform within the electorate. Political elites of course realize that they do not face an undifferentiated mass public; they know that conscious policy shifts, as well as unanticipated events, yield political rewards and penalties that often vary sharply across electoral groups.

Inasmuch as time-series observations of individuals are not available and we are particularly interested in party-related cleavages in the electorate, the empirical analyses that will be presented here are for partisan groups identified in the Gallup surveys—Democrats, Republicans, and Independents. Partisanship divides the electorate into as homogeneous a set of political groups as we are likely to obtain in the American setting with a single variable. If economic performance is as important to the electorate as the survey data on the relative salience of various issues indicate, cleavages among voters concerning economic priorities should be clearly revealed by analysis of data on partisan groups. (See the data graphed in Chapter 4.) Moreover, dividing the electorate along party identification lines is probably the dimension of disaggregation most relevant to the thinking of elected political officials, and political officials determine macroeconomic policy.

The empirical equations developed below for movements over time in partisan groups' political support for incumbent presidents are based on the theory of utility maximization and on standard approaches to modeling binary choices in a dynamic context. I begin with a discussion of utility maximization and qualitative choice, and then consider the dynamics of the electorate's performance evaluations.

BINARY POLITICAL CHOICES UNDER UTILITY MAXIMIZATION

At each time t, voters (or, more precisely, respondents in the Gallup surveys) must decide whether or not to support (express "approval" of) the incumbent president. Utility maximization implies that voters will support the president if the utility (satisfaction) associated with the president's administration exceeds the utility (satisfaction) associated with the opposition. If the reverse is true—that is, if the utility

anticipated under the opposition is perceived to be greater than that associated with the incumbent—voters will withdraw support from (express "disapproval" of) the president, which for theoretical purposes is taken to be a (relative and constrained) choice favoring the opposition.[10] In the simple case in which utilities are based solely on current performance, utility maximization means that voters will support the incumbent if observed (actual) contemporaneous outcomes are viewed as more favorable than hypothetical assessments of what the opposition's unobserved (shadow) performance would likely have been in current circumstances *if* the "out-party" held the presidency.

To formalize matters, let U^i denote the utility associated with the ith presidential administration, and let U^o be the utility associated with the opposition during the ith administration. If $Y = 1$ denotes supporting (approval) responses in the Gallup polls and $Y = 0$ denotes nonsupporting (disapproval, indifferent) responses, we have

$$Y = 1 \text{ if } U^i > U^o \text{ [that is, if } (U^i - U^o) > 0]; \qquad (5.1)$$
$$Y = 0 \text{ otherwise}^{11}$$

Further, we can write the utility that voters associate with the incumbent president, U^i, and the utility that voters associate with the current opposition, U^o, as stochastic functions of observed (x) and shadow ($\hat{x}$) performance with respect to a matrix of variables, x^*, relevant to political choices:

$$U^i = \beta' x^{*i} + \varepsilon^i, \qquad U^o = \beta' x^{*o} + \varepsilon^o \qquad (5.2)$$

where ε^i and ε^o denote errors stemming from imperfect perceptions of performance, omitted variables, and measurement error; β' denotes a vector of coefficients associated with the performance matrix x^*; and $x^* \equiv x, \hat{x}$ (actual and shadow performance outcomes).

It follows that the probability (P) of support for the incumbent, $P(Y = 1)$, is

$$\begin{aligned} P(Y = 1) = P = P(U^i > U^o) \qquad (5.3)\\ &= P[\beta'(x^{*i} + \varepsilon^i) > (\beta' x^{*o} + \varepsilon^o)] \\ &= P[\beta'(x^{*i} - x^{*o}) + (\varepsilon^i - \varepsilon^o) > 0] \\ &= P[\beta' x^* \text{diff} + \varepsilon > 0] \\ &= F[\beta'(x^* \text{diff})] \end{aligned}$$

where F is the cumulative distribution function for ε, $\varepsilon = (\varepsilon^i - \varepsilon^o)$, and $\beta' x^*\text{diff}$ denotes the difference between the incumbent and opposition performance; that is, $\beta' x^*\text{diff} \equiv \beta'(x^{*i} - x^{*o})$. The probability of nonsupport, $P(Y = 0)$, is simply $(1 - P)$.

At any given difference between the performance of the incumbent and that of the opposition, $\beta' x^*\text{diff}$, the choice probabilities, $P(Y = 1, Y = 0)$, hinge on the distribution of the random error term, $\varepsilon = (\varepsilon^i - \varepsilon^o)$. Therefore, the probabilities, P, are defined by a cumulative distribution function, F. Figure 5.1, in which the β-weighted sum $\beta' x^*\text{diff}$ is graphed on the plane, illustrates the point. The greater the gap between voters' valuations of incumbent and opposition (actual and shadow) performances, which are scaled along the horizontal axis of the figure, the more certain the choice $Y = 1$ or $Y = 0$. For example, at $\beta' x^*\text{diff}_3$ in Figure 5.1, the incumbent's performance is viewed as superior to the opposition's by a large margin; that is, $\beta' x^*\text{diff}$ is large and positive. In this case it would take a very big

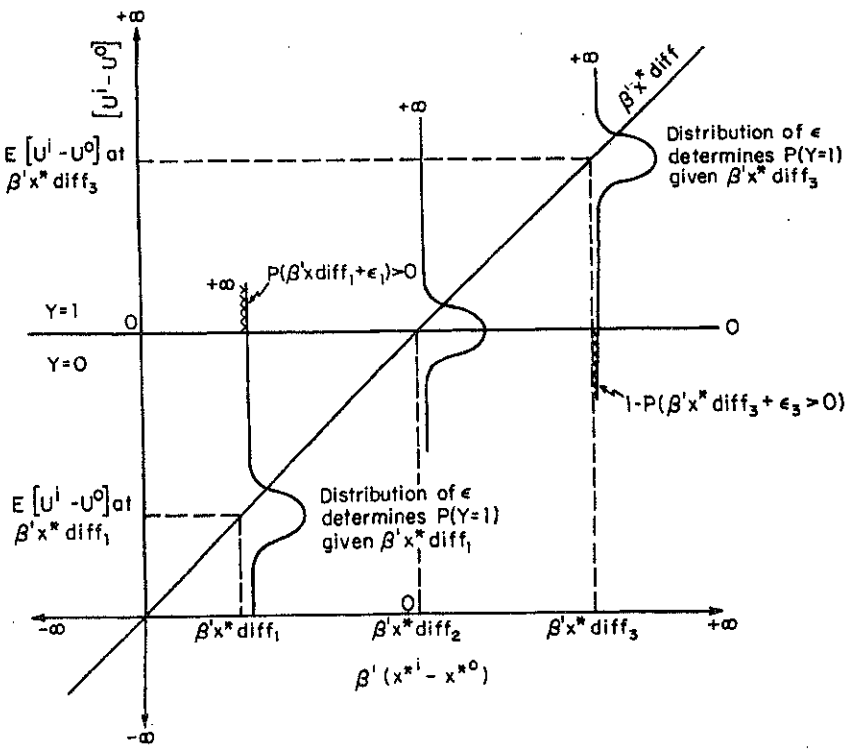

Figure 5.1 Binary political choices ($Y = 1$, $Y = 0$) under utility maximization.

random shock (ε)—more specifically, an idiosyncratic event of extraordinary and, therefore, unlikely dimensions, unfavorable to the incumbent—to produce the choice $Y = 0$ (a nonsupport or "disapproval" response in the Gallup poll). The probability of such an event is represented by the shaded region in the negative tail of the error distribution associated with $\beta' x^*\text{diff}_3$. Assuming a standard distribution, the area in the shaded tail therefore defines $P(Y = 0)$, and 1 minus the shaded area gives $P(Y = 1)$. By contrast, at $\beta' x^*\text{diff}_1$, the opposition's (shadow) performance is rated much more highly than the incumbent's (actual) performance, and it would take an equally large and improbable idiosyncratic event favoring the incumbent president to produce the choice $Y = 1$ (a supporting response in the poll). The probability of such an event is represented by the shaded area in the positive tail of the error distribution associated with $\beta' x^*\text{diff}_1$. At locations on the horizontal axis in the vicinity of $\beta' x^*\text{diff}_2$, on the other hand, voters perceive little or no systematic difference between the performance of the incumbent and that of the opposition ($\beta' x^*\text{diff}$ approaches 0), and so political choices depend critically on the direction (sign) of idiosyncratic factors (ε).

As Figure 5.1 suggests, it is sensible to assume that the random error terms have a bell-shaped distribution. The logistic and normal distributions are the obvious leading candidates. These differ only trivially, but for empirical analysis it is somewhat more convenient to assume that ε is distributed as the standard logistic. Substitution of the cumulative logistic function for F on the right side of the last line of equation (5.3) gives

$$P(Y = 1) = P = \frac{\exp(\beta' x^*\text{diff})}{1 + \exp(\beta' x^*\text{diff})} \tag{5.4}$$

It should be clear from equation (5.4) that the response probabilities (P) monotonically approach 1 as $\beta' x^*\text{diff}$ (the difference between the performance of the incumbent and that of the opposition, as weighted by voters) gets large, and monotonically approach 0 as $\beta' x^*\text{diff}$ gets small. But the response of P to movements in $\beta' x^*\text{diff}$ is not linear: the derivative (slope) of P with respect to $\beta' x^*\text{diff}$ is

$$dP/d(\beta' x^*\text{diff}) = P(1 - P) \tag{5.5}$$

The choice probabilities implied by equation (5.4) for values of the (multivariate, weighted) performance difference, $\beta' x^*\text{diff}$, are shown

in Figure 5.2. This figure illustrates from another point of view the same basic story depicted in Figure 5.1. The slopes or tangents to the probability function graphed in Figure 5.2, which are defined by the derivative in equation (5.5), show the marginal increases (decreases) in political support brought about by marginal increases (decreases) in $\beta' x^*$diff. At the extremes of $\beta' x^*$diff the slopes are relatively flat, which means it is difficult for the incumbent to win or to lose additional political support by marginally changing performance. Among the incumbent's intense supporters, for whom $\beta' x^*$diff is large and positive, a sort of satiation point has been reached; efforts to improve relative performance will yield little in the form of increased support. The same is true of intense opponents, for whom $\beta' x^*$diff is large and negative. Only heroic efforts producing a very large improvement in $\beta' x^*$diff are likely to yield much of an increase in political support among those voters who are already alienated from the incumbent and strongly attached to the opposition. As $\beta' x^*$diff approaches 0, however, the slope of the probability response function becomes greater, reaching its maximum value at $\beta' x^*$diff = 0, which corre-

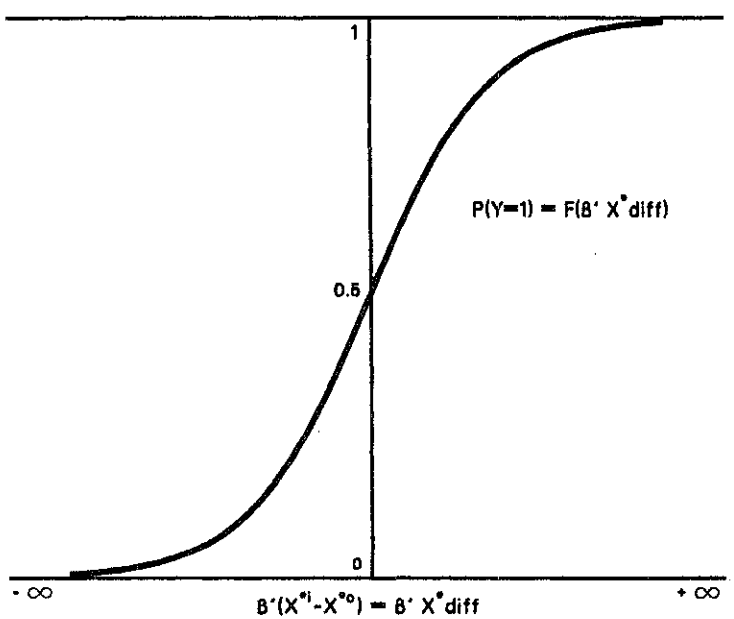

Figure 5.2 Choice probabilities $P(Y = 1)$ from the cumulative logistic function.

sponds to $P = 0.5$. The point at which $\beta' x^*$diff = 0, $P = 0.5$, is the "threshold of opinion change," and here the incumbent has the best prospects for increasing support with relatively small improvements in performance.[12] This implies that support-maximizing incumbents have more to gain, at least in the short run, from gearing policies to Independents, "floating voters," marginal supporters, and marginal opponents than from attempting to appeal to strong sympathizers or committed opponents.[13] And it is the reason that many theories of political competition predict that the policies advocated and pursued by competing parties and candidates tend to converge to the preferences of the median voter. (See Chapter 7 for more discussion of this point.)

Empirically, we do not observe time series of the binary responses of individuals n, $Y_{nt} = 1$, $Y_{nt} = 0$; instead, we have time-series data on the proportions of survey respondents in j partisan groups (Democrats, Independents, and Republicans) supporting the incumbent, P'_{jt}:

$$P'_{jt} = \sum_{n=1}^{N_j} Y_{njt}/N_{jt}$$

where P' denotes survey estimates of the true (population) proportions P.

It is therefore possible to take the inverse of the cumulative logistic operator, F, and write equation (5.4) (and the last line of equation 5.3) as

$$\begin{aligned} F^{-1}P'_{jt} &= \beta'_j x^*\text{diff}_t + e_{jt} \\ \ln[P'_{jt}/(1 - P'_{jt})] &= \beta'_j x^*\text{diff}_t + e_{jt} \end{aligned} \tag{5.6}$$

where $e_t = (F^{-1}P'_{jt} - F^{-1}P_{jt})$.

Equation (5.6) expresses the natural logarithm of the observed group sample proportions, P'_{jt}, divided by $1 - P'_{jt}$ (the so-called logits) as a linear function of $\beta'_j x^*\text{diff}_t$.[14] The error term e_{jt} in the equation arises because we have substituted the survey proportions observed empirically for the true proportions (group probabilities) in the theoretical model (equations 5.3 through 5.5). Assuming independent samples from a binomial population, it can be shown that the error has mean zero and (heteroscedastic) variance approximated by $1/N_{jt} \cdot P'_{jt}(1 - P'_{jt})$, where N_{jt} is the number of respondents used to calculate P'_{jt}.[15] The appropriate estimating equation is therefore a weighted

least-squares model with weights equal to the square root of the inverse of the variance of the error:

$$WT_{jt} \cdot \ln[P'_{jt}/(1 - P'_{jt})] = WT \cdot [\beta'_j x^* \text{diff}_t + e_{jt}] \tag{5.7}$$

where $WT_{jt} = [N_{jt} \cdot P'_{jt}(1 - P'_{jt})]^{1/2}$.

DYNAMIC PERFORMANCE EVALUATIONS

Equations (5.1) through (5.7) showed how the latent probabilities underlying the observed binary choices ($Y = 1$, $Y = 0$) can be modeled from time-series data on partisan groups using a utility maximization theory of political support. The equations presented thus far to lay out the modeling strategy are static, however, in the sense that time plays no essential role in the way voters evaluate performance. Yet past, current, and, perhaps, anticipated future performance is likely to influence voters' current political choices, so it is important to introduce dynamics into the system. For ease of presentation, I drop the group subscript j in most of the equations that follow, but it should be understood that left-side variables and all right-side parameters and disturbances are implicitly indexed for j partisan groups.

In American electoral politics individual politicians matter more and political parties matter less than in most Western democracies. The performance and personalities of particular presidents and presidential contenders weigh heavily on political behavior in the United States. The political support model accommodates this feature of American political life by writing the utility functions associated with the incumbent president and current opposition, which appeared in simplified form in equations (5.1) and (5.2), as the weighted sum of a president-specific or administration-specific component, Admin, and a party component, Party:

$$\begin{aligned} U_t^i &= w \cdot \text{Party}_t^i + (1 - w) \cdot \text{Admin}_t^i + \varepsilon_t^i \\ U_t^o &= w \cdot \text{Party}_t^o + (1 - w) \cdot \text{Admin}_t^o + \varepsilon_t^o \end{aligned} \tag{5.8}$$

where $0 \leq w \leq 1$ and, therefore, $w + (1 - w) = 1$. Hence, the difference in the utilities associated with the incumbent and the opposition during the ith presidential administration is

$$\begin{aligned} (U_t^i - U_t^o) = {} & w \cdot (\text{Party}_t^i - \text{Party}_t^o) \\ & + (1 - w) \cdot (\text{Admin}_t^i - \text{Admin}_t^o) + \varepsilon_t \end{aligned} \tag{5.9}$$

where $\varepsilon_t = (\varepsilon_t^i - \varepsilon_t^o)$.

The Party components of the utility functions represent the stock of mass support of the parties. The concept bears some similarity to that of "party identification" in the political science voting literature, especially if party identification (ID) is viewed as a "running balance sheet of the two parties"[16] rather than as a "durable attachment, not readily disturbed by passing events and personalities."[17] In other words, my notion of a party's political stock gives less emphasis to affective content and more weight to objective performance than one usually associates with the traditional meaning of party identification. Party stocks are based on cumulative, discounted performance records with respect to actual outcomes (x) during periods when a party controlled the presidency and shadow outcomes ($\hat{x}$) during periods when the party did not hold the presidency. The difference between incumbent[18] and opposition party political stocks is therefore written

$$(\text{Party}_t^i - \text{Party}_t^o) = D_t \cdot \sum_{k=0}^{\infty} g^k \beta'(x_{t-k} - \hat{x}_{t-k}) \cdot D_{t-k} \tag{5.10}$$

where g is a lag-weight decay rate, or discount rate parameter, lying between 0 and 1, $g = 1/(1 + \rho)$; x denotes actual performance and $\hat{x}$ denotes shadow performance; and $D_{t(t-k} = +1$ during Democratic administrations and -1 during Republican administrations.

Notice that the product of the switching terms D_t and D_{t-k} equals $+1$ during all (current and past) periods when the present incumbent party held the White House and -1 during (past) periods when the current opposition party held the White House. This ensures that at each time t the right side of equation (5.10) generates a cumulative, discounted interparty contrast between current and past performance outcomes.

The administration-specific components of voters' utility functions resemble the Party components except that evaluations contributing to Admin are formed with respect to individual presidential administrations. Hence, only actual outcomes (x) during the ith administration contribute to Admin_t^i. Events prior to the ith president's tenure in office influence Admin_t^i only to the extent that voters form shadow assessments of how the current president might have performed during periods before he entered the White House. Conversely, the administration-specific component of the opposition's utility, Admin_t^o, is based on shadow performance assessments during the ith administration and on actual performance outcomes in prior periods. The difference between Admin_t^i and Admin_t^o is therefore

$$(\text{Admin}_t^i - \text{Admin}_t^o) = \sum_{k=0}^{\infty} g^k \beta'(x_{t-k} - \hat{x}_{t-k}) \cdot I_{t-k} \tag{5.11}$$

where $I_t = +1$ during the ith presidential administration and -1 during previous administrations. In equation (5.11) the switching term I_{t-k} ensures that the right side of the equation gives the intended cumulative, discounted interadministration performance comparisons.

Neither the Party nor the Admin components of voters' utility functions can be tied to data without specification of the unobserved shadow performances. In the absence of time-series survey data on the performance voters imagine the opposition might have achieved each period had the out-party controlled the White House, the only feasible alternative is to set the weighted sums of unobserved shadow performances in equations (5.10) and (5.11) equal to a sequence of time-varying constants. For empirical purposes, these shadow constants will be updated for each presidential administration. Inasmuch as Party and Admin are weighted w and $(1 - w)$, respectively, in equation (5.9), the shadow performance constants, denoted $S(t)$, are proxies for the $\hat{x}_{t-k}$ sums:

$$S_{(t)} = -\beta' \sum_{k=0}^{\infty} g^k \left[w(D_t \cdot D_{t-k}) + (1 - w) \cdot I_{t-k}\right] \cdot \hat{x}_{t-k} \tag{5.12}$$

where the (t) notation signifies the fact that S varies over administrations.

After indexing relevant terms for j partisan subgroups, we find that the difference between the utilities associated with the incumbent and those associated with the opposition during the ith administration may now, following equation (5.9), be written

$$\begin{aligned}(U_{jt}^i - U_{jt}^o) = \beta_j' \sum_{k=0}^{\infty} g_j^k [w_j \cdot (D_t \cdot D_{t-k}) \\ + (1 - w_j) \cdot I_{t-k}] \cdot x_{t-k} + S_{j(t)} + \varepsilon_{jt}\end{aligned} \tag{5.13}$$

According to equation (5.3), the probability of political support for the incumbent in the jth partisan group, P_{jt}, is

$$P_{jt} = \text{Prob}(U_{jt}^i - U_{jt}^o) > 0$$

Remember, however, that we observe group proportions, P_{jt}', rather than true probabilities, P_{jt}, in the survey data. Hence, given equations (5.6) and (5.7), the estimating equations take the form

$$\begin{aligned}WT_{jt} \cdot F^{-1}P_{jt}' &= WT_{jt} \cdot \ln[P_{jt}'/(1 - P_{jt}')] \\ &= WT_{jt} \cdot \Big(\sum_{k=0}^{\infty} g_j^k \beta_j' [w_j \cdot (D_t \cdot D_{t-k}) \\ &\quad + (1 - w_j) \cdot I_{t-k}] \cdot x_{t-k} + S_{j(t)} + e_t\Big) + \alpha_j\end{aligned} \tag{5.14}$$

where α is a constant that "centers" the weighted regression and other terms are as defined earlier.

Although the lag functions in equations (5.10)–(5.14) run from 0 to infinity, the upper bound of the lag is merely a convenient fiction which should be taken to mean that performance may be evaluated back to the beginning of the relevant political era. It is assumed implicitly that knowledge of past performance is transmitted from generation to generation via political socialization.

IMPORTANT ANALYTICAL FEATURES OF THE MODEL

Several analytical features of the political support model should be fully understood and therefore are worth discussing at greater length. First, voters are assumed to evaluate an administration's performance *relatively* rather than *absolutely*. Ignoring for the moment shadow performances, which are approximated by the time-varying $S_{(t)}$ constants, voter approval of the president is modeled as a weighted average of two relative performance comparisons: (1) the cumulative performance of the current incumbent party in relation to the cumulative past performance of the present opposition party, and (2) the cumulative performance of the current administration in relation to the cumulative performance of *all* previous administrations of either partisan stripe.

The contributions of interparty and interadministration performance comparisons to a president's political support are weighted w and $(1 - w)$, respectively. So for $0 < w < 1$, the weights sum to 1. Insofar as observed performance outcomes are concerned, $w = 0$ implies that presidents are judged only by how they are doing in comparison to previous administrations, including previous administrations of their own party. On the other hand, $0 < w < 1$ means that there is a significant Party component to the electorate's current polit-

ical choices. For this reason poor (good) performance by prior administrations of the incumbent president's party will to some degree adversely (favorably) affect voters' estimation of the incumbent's cumulative performance. Finally, $w = 1$ defines a purely party-based political evaluation process in which only interparty performance comparisons matter. In this case the performance of previous administrations is either added to or contrasted with the incumbent's record, depending on whether the White House was held by the president's party or by the current opposition party during earlier periods.

The parameter w has meaning only if past performance outcomes significantly affect current political support. Because the present relevance of the information conveyed by past performance (x_{t-k}) decays over time, the (lag) weights voters give to past outcomes are assumed to decline at rate g^k, where g is a backward-looking discount rate parameter $[1/(1 + \rho)]$ taking a value between 0 and 1. Hence, if x_{t-k} is a matrix of performance outcomes experienced k periods ago ($k = 0, 1, 2, 3, \ldots$), the outcomes are weighted

$$g^0x_t = x_t,\ gx_{t-1},\ g^2x_{t-2},\ g^3x_{t-3}, \ldots$$

Voters need not weight current and past performance outcomes in exactly this way. As long as recent outcomes are weighted more heavily than past outcomes when voters make current political choices, the geometrically decaying weight (discount rate) sequence $g^k[1/(1 + \rho)^k]$ will yield a good approximation of the electorate's actual evaluation process.

Moreover, this feature of the model is testable. If, on average, voters in a particular partisan group discount the past entirely and consider only the current situation when evaluating performance, then the estimated value of g should be about 0. (If $g = 0$, w is of course irrelevant; w has no meaning independent of g.) Small positive(nonzero) values of g mean that voters discount past outcomes heavily, but not completely. The best guide to future performance is likely to be performance during the recent past, so a small value of g would be consistent with an electorate that is forward looking rather than retrospective in its political behavior.[19] Large values of g (approaching 1) imply that past performance outcomes play a very important role in explaining the president's current political support. Clearly, then, g is an interesting parameter from a political point of view; it summarizes how much the past performance record contributes to current political choices, which in turn has important implications for the timing of electorally motivated policy plans. (See Chapter 8, Political Business Cycles.)

INITIAL LEVELS AND TRENDS IN POLITICAL SUPPORT FROM PRESIDENT TO PRESIDENT: TWO STYLIZED CASES

Understanding of the g and w parameters and related features of the model can be deepened by considering a couple of stylized, hypothetical situations. First, consider a case in which a new president assumed office in the current period and administrations of the out-party held the presidency during all relevant prior periods. ("All relevant prior periods" may be taken to mean that the out-party was in the White House far enough back in time so that g^k is essentially 0.) The transition from Nixon-Ford to Carter would be an example of this case if g^{32} were approximately 0 (where $k = 32$ denotes quarters). The transition from Carter to Reagan would be another example if g^{16} were approximately 0. In these cases equation (5.14) implies that, prior to the current period (lag $k > 0$), D_tD_{t-k} and I_{t-k} were both -1, and so we have lag sums of the form

$$-w \cdot \sum_k g^k x_{t-k} - (1 - w) \cdot \sum_k g^k x_{t-k} = -\sum_k g^k x_{t-k}$$

Hence, in the new president's first period, the logit of political support, $\ln[P'/(1 - P')]$, would depend on

$$\ln[P_t'/(1 - P_t')] = \beta(x_t - gx_{t-1} - g^2x_{t-2} - g^3x_{t-3} - g^4x_{t-4} - \ldots) \tag{5.15}$$

where for expositional purposes I have dropped the subscript j and the heteroscedasticity weight WT and have set $S_{(t)}$ and α to 0.

Equation (5.15) makes apparent the precise way in which a president's political support depends on cumulated, discounted relative performance. Other things being equal, the worse (better) the performance of the prior administration(s), the higher (lower) the initial approval rating of the new president tends to be. For example, suppose that the matrix of performance variables, x, includes only the rate of unemployment, which has been constant at 10 percent under the new and old administrations. If we assume further[20] that the coefficient of unemployment (β) is -0.02 and that $g = 0.8$, then by equation (5.15) $\ln[P_t'/(1 - P_t')]$ will equal $+0.60$. In terms of percentage points in the polls, a logit of 0.60 corresponds to a 65 percent

approval rating.[21] By contrast, had the new president inherited a more favorable 5 percent unemployment rate record from the preceding out-party administrations, his initial support would have been lower—on the order of $[P_t'/(1 - P_t')] = 0.30$, which corresponds to a 57 percent approval rating:

$$-0.02 \cdot 5[(1 - 0.8)/(1 - 0.8) - 0.8/(1 - 0.8)] = 0.30$$
$$\exp 0.30/(1 + \exp 0.30) = 0.57, \text{ or 57 percent}$$

A new president's support then, is proportional to the (mal) performance of the prior (out-party) administrations. In other words, new-party presidents following "bad acts" are likely to enjoy greater initial support than new-party presidents following "good acts."

As time passes, however, the incumbent's political support will gradually be determined more and more heavily by his own performance record. Just how quickly, as noted earlier, depends on the rate at which voters discount prior performance—that is, on voters' effective political memory represented by the decay rate parameter g. If the new administration in this hypothetical example had been in office for $k^* + 1$ periods, from lag $k = 0$ back to lag $k = k^*$, then the logit of political support would be

$$\ln[P_t/(1 - P_t)] = \beta(x_t + gx_{t-1} + \ldots + g^{k^*}x_{t-k^*} - g^{k^*+1}x_{t-k^*-1} - g^{k^*+2}x_{t-k^*-2} - \ldots) \tag{5.16}$$

For performance held fixed at $\bar{x}$ during the old and the new administrations, equation (5.16) is equivalent to

$$\ln[P_t'/(1 - P_t)] = \beta\bar{x}(1 + g + g^2 + \ldots + g^{k^*} - g^{k^*+1} - g^{k^*+2} - g^{k^*+3} - \ldots) \tag{5.17}$$

Summing up the geometric progressions in equation (5.17) gives

$$\ln[P_t'/(1 - P_t'] = \beta\bar{x}[(1 - g^{k^*+1})/(1 - g) - g^{k^*+1}/(1 - g)] = \beta\bar{x}[(1 - 2g^{k^*+1})/(1 - g)] \tag{5.18}$$

Hence, the time path of political support for our hypothetical president, who has been in the White House for $k^* + 1$ periods (lag $k = 0, 1, 2, \ldots, k^*$) and was preceded in office by administrations of the current out-party, is

$$\begin{aligned}
k^* = 0&: \quad \beta\bar{x}[(1 - 2g)/(1 - g)] \\
k^* = 1&: \quad \beta\bar{x}[(1 - 2g^2)/(1 - g)] \\
k^* = 2&: \quad \beta\bar{x}[(1 - 2g^3)/(1 - g)] \\
&\vdots \\
k^* = \infty&: \quad \beta\bar{x}[1/(1 - g)]
\end{aligned}$$

It is now clear that if performance is held constant at $\bar{x}$ and $\beta\bar{x}$ is negative (which, in the more realistic multivariate case, may be taken to mean that negatively valued performance variables prevail over positively valued ones, and so the vector product $\beta'\bar{x}$ is negative), political support for new presidents will trend downward from initial level $\beta\bar{x}[(1 - 2g)/(1 - g)]$ toward the steady-state level $\beta\bar{x}[1/(1 - g)]$. The initial, first-period support levels are determined by the magnitudes of β, $\bar{x}$ and g, and the rate of decline toward steady-state values is determined by g (assuming, again, for illustrative purposes that performance is constant at $\bar{x}$). In our stylized example, if the new president who inherited a 10-percent unemployment rate from prior out-party administrations stays in office long enough for g^k to reach 0, and if the unemployment situation remains unchanged, his support will eventually decline from

$$\ln[P_t'/(1 - P_t')] = 0.60, \text{ or 65 percent}$$

to

$$\begin{aligned}
\ln[P_t'/(1 - P_t')] &= -0.02 \cdot 10 \cdot \left(\sum_{k=0}^{\infty} 0.8^k\right) \\
&= -\frac{0.02 \cdot 10}{1 - 0.8} \\
&= -1.0
\end{aligned}$$

which implies a poll rating of 27 percent.

Of course if the incumbent president's performance is more favorable than that of earlier administrations, this trend will be offset. Conversely, the trend of declining support will be accelerated if the new administration's performance is less favorable than the situation inherited from the opposition. Eventually, support will converge [at rate g^k or $1/(1 + \rho)^k$] to the equilibrium level $[\beta\bar{x}/(1 - g)]$ implied by any sustained performance record.[22]

Next consider a hypothetical case in which the incumbent president was preceded by administrations of his *own* party, back in time

through all relevant prior periods. In other words, as in the transitions from Kennedy to Johnson and from Nixon to Ford, the transition to the current president represents a shift of administration, but not a change in the party controlling the White House. In this situation the logit of political support for an incumbent who had been in office for $k^* + 1$ periods (from lag $k = 0$ back to lag $k = k^*$) would be given by the lag function

$$\begin{aligned}\ln[P_t'/(1 - P_t')] &= \beta[w \cdot (x_t + gx_{t-1} + \cdots + g^{k^*}x_{t-k^*} \\ &\quad + g^{k^*+1}x_{t-k^*-1} + g^{k^*+2}x_{t-k^*-2} + \cdots) \\ &\quad + (1 - w) \cdot (x_t + gx_{t-1} + \cdots + g^{k^*}x_{t-k^*} \\ &\quad - g^{k^*+1}x_{t-k^*-1} - g^{k^*+2}x_{t-k^*-2} - \cdots)] \\ &= \beta[x_t + gx_{t-1} + \cdots + g^{k^*}x_{t-k^*} \\ &\quad + (2w - 1)g^{k^*+1}x_{t-k^*-1} \\ &\quad + (2w - 1)g^{k^*+2}x_{t-k^*-2} + \cdots]\end{aligned} \tag{5.19}$$

Despite appearances, equation (5.19) has implications very similar to those of equation (5.16). In fact, the magnitude of w only affects the initial support levels from which the dynamics may be evaluated. This will become clearer if we assume, as in the first example, that only the unemployment rate appears in the model, that it has a negative coefficient, and that unemployment performance has been constant over time at value $\bar{x}$. For fixed performance $\bar{x}$, equation (5.19) can be written

$$\begin{aligned}\ln[P_t'/(1 - P_t')] &= \beta\bar{x}[1 + g + g^2 + \cdots + g^{k^*} \\ &\quad + (2w - 1)g^{k^*+1} + (2w - 1)g^{k^*+2} \\ &\quad + (2w - 1)g^{k^*+3} + \cdots] \\ &= \beta\bar{x}\left(\frac{1 - g^{k^*+1}}{1 - g} + \frac{(2w - 1)g^{k^*+1}}{1 - g}\right) \\ &= \beta\bar{x}\left(\frac{1 + (2w - 2)g^{k^*+1}}{1 - g}\right)\end{aligned} \tag{5.20}$$

Evaluating equation (5.20) shows that the time path of political support for a president who followed administrations of his own party and has occupied the White House for $k^* + 1$ periods (lag $k = 0, 1, 2, \ldots, k^*$) is

$k^* = 0$: $\beta\bar{x}\,[(1 + (2w - 2)g)/(1 - g)]$
$k^* = 1$: $\beta\bar{x}\,[(1 + (2w - 2)g^2)/(1 - g)]$

$k^* = 2$: $\beta\bar{x}\,[(1 + (2w - 2)g^3)/(1 - g)]$
.
.
.
$k^* = \infty$: $\beta\bar{x}\,[1/(1 - g)]$

It is apparent that for all values of w between 0 and 1, political support for the new president will again tend to decline over time. As w approaches 1 (and, hence as $2w - 2$ approaches 0)—that is, as the way in which voters evaluate performance approaches a pure Party process—the decline becomes less dramatic. This is so because for w close to 1 the electorate does not make a great distinction between the new president and prior presidents of the same party. As a result, the president's initial support level, $\beta\bar{x}[(1 + (2w - 2)g)/(1 - g)]$, is close to the steady-state level, $\beta\bar{x}/(1 - g)$, which leaves little room for erosion of support, given a fixed stream of performance under the current and previous administrations of the same party. If w is exactly equal to 1, the process the electorate uses to evaluate performance makes no distinction at all between the new president and the sequence of prior presidents of the same party. Consequently, there is not any tendency for political support to decline with time after the new president assumes office.

The downward trend of political support becomes more pronounced as w approaches 0 (and, hence, as $2w - 2$ approaches -2), because voters make little distinction between prior administrations of the president's party and earlier administrations of the out-party. At $w = 0$, a pure Admin, or president-specific, process of performance evaluation prevails in the electorate. Here, the president's performance is judged relative to that of all previous administrations, with no distinction made between previous administrations of his own party and the out-party. Therefore, if $w = 0$, the present example collapses to the first one, in which the incumbent's initial support is proportional to the discounted (mal)performance of previous administrations. Hence, for the performance fixed at $\bar{x}$ and $\beta\bar{x} < 0$, support trends downward as in the first case from $\beta\bar{x}[(1 - 2g)/(1 - g)]$ toward $\beta\bar{x}/(1 - g)$.

If the parameter β were positive or, in the more realistic multivariate case, if positively valued outcomes prevailed empirically among the performance variables evaluated by voters, the trends discussed above would be inverted. In other words, there would be a tendency for a new president's support to trend *upward* over time until it reached the equilibrium level consistent with a particular sustained

performance record. Yet negatively valued outcomes (such as unemployment and inflation) frequently weigh more heavily on political choices than do positively valued events (such as robust real income growth rates). The tendency of a new president's support rating to decline from early "honeymoon" levels, which many previous studies have picked up with ad hoc, exogenous time-trend and time-cycle terms,[23] is therefore an endogenous feature of the model. And, as a comparison of the time paths of political support in the two hypothetical examples shows, other things being equal, the endogenous trend is sharper when the transition to a new president also involves a change in the party holding the White House.

5.2 Empirical Results

THE VARIABLES: MEASURING POLITICAL SUPPORT AND ECONOMIC AND POLITICAL PERFORMANCE

For the reasons reviewed in the last section, the dependent variables are weighted logits—WT · $\ln[P'_{jt}/(1 - P'_{jt})]$—where P'_{jt} is the proportion of the jth group in quarter t responding "approve" to the Gallup approval question[24] and WT is the heteroscedasticity weight. The regression experiments are based on quarterly observations spanning the period from Kennedy to Reagan,[25] 1961:1 to 1984:1. The approval rating data used to form the logits are graphed by partisan group in Figure 5.3.

The economic performance variables on the right side of the regression equations include the unemployment gap, Ugap, which is the deviation of the official (civilian) unemployment rate from Gordon's calculation of the so-called natural rate (see the discussion of Ugap in Chapters 2 and 4), the consumer price index inflation rate, p, and the percentage rate of change of per capita real personal disposable income, r.[26] Clearly Ugap and p should enter the equations with negative signs and r should have a positive sign, although, as the previous discussion indicated, we can anticipate significant intergroup variations in the magnitude of the coefficients, especially the unemployment coefficients. The equations also include the rate of change of energy prices, p-oil, during the quarters when the two OPEC oil price shocks were absorbed: 1973:4–1975:4 and 1979:2–1981:2. Entering p-oil in the models allows to evaluate the idea that the public did not hold presidents fully responsible for the acceleration of prices, the decline in real income growth, and the rise in unemployment associated with the OPEC shocks, because these price hikes were imposed

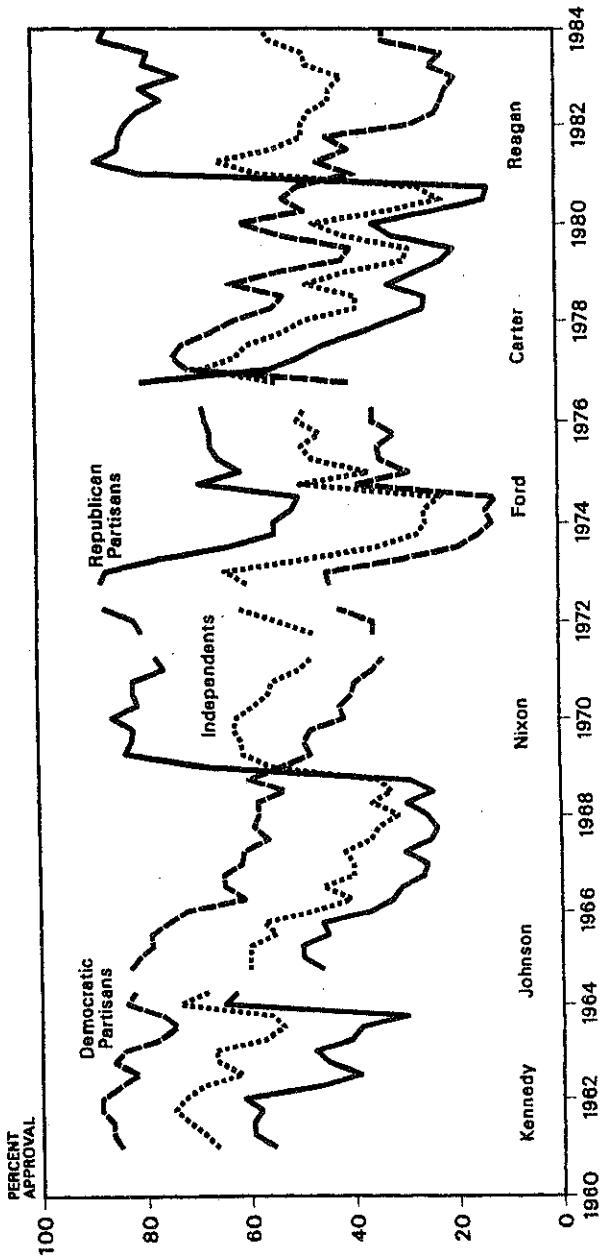

Figure 5.3 Gallup poll presidential approval ratings by partisan group.

externally and therefore were to a large extent beyond the control of domestic political authorities.

The reasoning behind the inclusion of p-oil may be clarified as follows. The deterioration of macroeconomic conditions caused by the OPEC shocks was proportional to the inflation of energy prices (p-oil). Let λ_p, λUgap, and λ_r denote, respectively, the parameters for the extra inflation, unemployment, and decline in real income growth rates viewed by the public as attributable to the oil shocks and hence outside the control of U.S. authorities.

$$\beta_p(p - \lambda_p \cdot p\text{-oil})$$
$$\beta_{\text{Ugap}}(\text{Ugap} - \lambda_{Ugap} \cdot p\text{-oil})$$
$$\beta_r(r + \lambda_r p\text{-oil})$$

should appear in the political support model in place of terms such as $\beta_p p$, β_{Ugap}Ugap, and $\beta_r r$. Inasmuch as λ_p, λ_{Ugap}, and λ_r cannot be estimated individually (they are not identified), however, including the term $\beta_{p\text{-oil}} \cdot p$-oil additively in the estimation equations along with p, Ugap, and r represents the joint effect:

$$\beta_{p\text{-oil}} \cdot p\text{-oil} = (-\beta_p\lambda_p - \beta_{\text{Ugap}}\lambda_{\text{Ugap}} + \beta_r\lambda_r) \cdot p\text{-oil}$$

Given that β_p and β_{Ugap} are negative and β_r is positive, $\beta_{p\text{-oil}}$ clearly should be positive in the regressions if the public in fact did not hold incumbents fully accountable for the deterioration of the economy brought on by the OPEC shocks.

Three noneconomic variables important to American electoral politics are also included in the models. First, the regressions include the number (in thousands) of Americans killed in action in Vietnam, which is designed to pick up the war-induced deterioration of presidential approval ratings. Opposition to the Vietnam War made it impossible for Lyndon Johnson to seek renomination and reelection in 1968, and the deep divisions it created in the Democratic party helped elect Richard Nixon (who narrowly defeated Hubert Humphrey) to the presidency. Research suggests that the gruesome flow of body-bags, rather than autonomous moral misgivings or even impatience with the protracted duration of the conflict, is what best explains growth of the war's unpopularity among the general electorate.[27] The killed-in-action rate, therefore, is the most appropriate variable for capturing the erosion of domestic mass political support generated by intensification of the war.

Second, the equations include a Watergate variable to take account of the extraordinary decline in Nixon's political support generated by the greatest American political scandal of the postwar era. This variable was formed by summing discrete Watergate events in each quarter, weighted on a scale of 1 to 3 according to how strongly the president was incriminated personally by each event in national press reports. Because the Watergate variable is based on events that were identified and scored independently of the time path of Nixon's approval ratings, it is a genuine exogenous variable and not merely a term tailored to track the collapse of the president's mass political support in 1973 and 1974.

Finally, in view of the unique visibility of the president when public attention is focused on international affairs, the regressions include a "rally 'round the president" variable taken from John Mueller's work and extended through administrations subsequent to those in Mueller's studies.[28] Rally points are dramatic, sharply focused international events, normally of crisis proportions, that involve U.S. interests and, hence, the president as chief executive. A bipartisan spirit generally prevails during such events, and media criticism is muted. Consequently, presidents ordinarily enjoy a brief boost in their approval ratings. As Nelson Polsby put it: "Invariably, the popular response to a president during international crisis is favorable, regardless of the wisdom of the policies [the president] pursues."[29] Similarly, J. R. Lee observed: "[The president] becomes the focus of attention in times of crisis . . . symbolizing national unity and power . . . The public's reaction will include a feeling of patriotism in supporting presidential action, a desire not to hurt a president's chance of success."[30] The Rally variable is simply the number of rally events in each quarter.

The noneconomic variables were not included in the models simply to improve the regression fits. Although in this chapter we are mainly interested in the response of mass political support for presidents to macroeconomic performance, it is not possible to obtain accurate (unbiased and consistent) estimates of the relationship between macroeconomics and electoral politics if variables correlated with the economy that affect political support are omitted from the equations. Over the entire sample period, Rally events are distributed more or less independently of fluctuations in the economy, but this is not true of Watergate and Vietnam. When the first OPEC energy shock hit in late 1973, for example, the Watergate scandal was still running strong. Consequently, if no attempt were made to take account of Watergate

events, some of the decline in Nixon's support caused by the scandal would be incorrectly attributed to the post-OPEC bulge in inflation, and the quantitative results would tend to exaggerate inflation's electoral importance.

Matters become more serious when we consider the correlation of unemployment and the intensity of the Vietnam War. The absorbtion of manpower by the military and the strong fiscal stimuli associated with our intervention in Vietnam produced a fully utilized economy and unusually low rates of unemployment. (Over the regression sample range, the correlation of the unemployment gap and the Vietnam killed-in-action variables is −0.60.) Indeed, the troughs of postwar unemployment occurred at the peaks of the Korean and Vietnam wars. Low unemployment enhances presidents' mass political support, whereas the Vietnam War obviously was a political liability for Presidents Johnson and Nixon. (Korea was also a major liability for Truman, but the quantitative analyses in this book begin with the Kennedy administration.) Hence, models that omitted consideration of Vietnam would tend to underestimate the political benefits of favorable unemployment performance. In fact, in the limiting case, failure to take account of the war might even lead to the conclusion that low or falling unemployment yields declines in political support.[31]

Estimates of the political support model for partisan subgroups—Democrats, Republicans, and Independents—based on equation (5.14) are reported in Table 5.1. As equation (5.14) indicates, the model is nonlinear by virtue of the parameters w and g, and so the regressions were undertaken using a standard nonlinear algorithm. Although the lag sums in the model extend to the distant ("infinite") past, observations on the right-side performance variables were generally available for 52 periods (quarters) prior to the first Gallup approval rating in the estimation range (1961:1). Therefore, the equations are estimated with finite lags without affecting the consistency of the estimates.

PARTISANSHIP, PRESIDENTIAL PERSONALITIES, AND HYPOTHETICAL PERFORMANCE ASSESSMENTS: THE SHADOW PERFORMANCE CONSTANTS

Consider first the president-specific, shadow performance constants, $S_{(t)}$, in Table 5.1. Recall that the $S_{(t)}$ terms are designed to pick up voters' unobserved assessments of how those out of power might have performed had they controlled the White House. President-specific constants are very crude proxies indeed for such hypothetical

Table 5.1 Nonlinear, weighted least-squares estimates of the political support model, quarterly, 1961:1–1984:1

Independent variable	Partisan group (average sample fractions)		
	Democrats (0.46)	Republicans (0.26)	Independents (0.28)
Regression intercept, α	3.58	4.30	2.19
	(0.582)	(0.056)	(0.467)
Shadow constant, $S_{(t)}$			
Kennedy	0.985	−0.818	−0.038
	(0.042)	(0.045)	(0.049)
Johnson	0.652	−0.852	−0.321
	(0.040)	(0.045)	(0.052)
Nixon	−0.165	1.43	0.476
	(0.034)	(0.047)	(0.040)
Ford	0.154	1.45	0.891
	(0.057)	(0.070)	(0.072)
Carter	0.408	−0.554	−0.089
	(0.037)	(0.045)	(0.047)
Reagan	−0.765	1.44	−0.019
	(0.033)	(0.055)	(0.038)
Lag weight decay rate, g	0.834	0.771	0.842
	(0.005)	(0.012)	(0.007)
Party/Admin weight, w	0.697	0.748	0.783
	(0.021)	(0.033)	(0.028)
Noneconomic terms			
Vietnam			
β	−0.084	−0.069	−0.062
$\beta/(1-g)$	−0.506	−0.301	−0.392
	(0.003)	(0.005)	(0.003)
Rally events			
β	0.223	0.290	0.246
	(0.007)	(0.01)	(0.001)
Watergate			
β	−0.026	−0.017	−0.020
	(0.001)	(0.001)	(0.001)

Table 5.1 (*continued*)

Independent variable	Partisan group (average sample fractions) Democrats (0.46)	Republicans (0.26)	Independents (0.28)
Economic terms			
Inflation rate (p)			
β	−0.028	−0.039	−0.031
$\beta/(1-g)$	−0.166	−0.169	−0.195
	(0.001)	(0.002)	(0.002)
Per capita real disposable income growth rate (r)			
β	0.011	0.018	0.015
$\beta/(1-g)$	0.068	0.081	0.095
	(0.001)	(0.002)	(0.001)
Unemployment gap (Ugap)			
β	−0.030	−0.025	−0.015
$\beta/(1-g)$	−0.182	−0.109	−0.095
	(0.002)	(0.004)	(0.002)
Energy price inflation rate (p-oil)			
β	0.002	0.0011	0.0017
	(0.0004)	(0.0006)	(0.0005)
Fit			
Correlations of actual proportions and fitted proportions implied by the fitted logits	0.98	0.96	0.92

Notes: This table is based on 89 periods ($T = 89$). Asymptotic standard errors, based on the model assumption of unit variances, appear in parentheses.

assessments of shadow performance. As a practical matter, they necessarily absorb all president-to-president variation in approval ratings stemming from the unique appeal ("personality") of particular chief executives, as well as from unobserved factors favoring one party or the other that are unrelated to interparty and interadministration comparisons of explicitly measured performance. Nonetheless, these constants yield some useful information.

Since the equations are estimated for partisan groups in the electorate, it comes as no news whatsoever to learn that the shadow constants reflect the perceptual filter of party identification. Respondents in the surveys who generally consider themselves to be Democrats uniformly exhibit larger shadow constants during Democratic presidencies than during Republican presidencies. In other words, they normally see Democratic presidents as having greater personal appeal than Republican ones, and attribute less-favorable shadow performance to the Republicans when they are in opposition than to the Democrats when they are out of power. Just the reverse is true of respondents who report a general attachment to the Republican party. Among the Republican partisans, such factors as hypothetical assessments of out-party shadow performance and the idiosyncratic appeal of individual presidents in every case enhance support for Republican presidents and diminish support for Democratic presidents. Not surprisingly, the magnitudes of the constants for Independents (survey respondents who reported no party attachment) fall between those of the other two groups. Among Independents, assessments of unobserved shadow performance and of the appeal of particular presidents are not colored so obviously by partisan biases.

Intergroup patterns in the $S_{(t)}$ parameters are summarized in Table 5.2, which gives the time-weighted averages of the logit equation constants, along with the corresponding magnitudes in terms of approval percentage points actually registered by the Gallup polls. The entries in the table should be interpreted as follows. Among Democratic partisans, the weighted mean of the shadow constants for Democratic presidents is +0.65. Translated into percentage points in the Gallup polls, this implies that, on average, unobserved systematic and idiosyncratic factors added about 15 points to the approval ratings of Democratic presidents. For Republican presidents, the mean shadow constant in the equation for Democratic partisans is approximately −0.28. This translates to −6 percentage points in the approval polls. Among Republican respondents, the shadow constant means go in the opposite direction and the magnitudes are much larger.

'able 5.2 Weighted averages of shadow performance constants by party of he president

'artisan group	Impact on logit[a] | impact on percent approval[b]		
	Democratic presidents (1)	Republican presidents (2)	Bias toward Republican presidents [(2) − (1)] (3)
)emocrats	+0.654 | +15.2%	−0.275 | −6.2%	−0.928 | −21.4%
ndependents	−0.173 | −7.2%	+0.416 | +10.2%	+0.589 | +17.4%
Republicans	−0.744 | −18.3%	+1.44 | +32.8%	+2.18 | +51.1%
Weighted average of group biases:[c]			+0.31 | +9.0%

a. Impacts on logits are averages of the shadow constants for partisan groups and are calculated by weighting each president-specific constant by the fraction of the total number of periods each president was in office. In this case $T = 89$.

b. Impacts on approval percentages are calculated from expressions of the form $[F(\bar{y}_j) - F(\bar{y}_j - \bar{s}_j)] \cdot 100$, where the $\bar{y}_j$ are the average logits for each partisan group for Democratic and for Republican presidents; the $\bar{s}_j$ are the corresponding average shadow constants shown in the table; and F is the logistic distribution operator, $F(x) = \exp(x)/[1 + \exp(x)]$.

c. Averages of group biases are calculated by weighting the bias for each group by its fraction of the total survey samples, which are shown at the top of Table 5.1.

Support for Democratic presidents in the polls is diminished an average of 18 percentage points, and the approval ratings of Republican presidents are raised by a whopping 33 points.

The shadow constants of Independents also appear to be more favorable for Republican presidents than for Democratic presidents. Apparently, Independents typically find Republican presidents more appealing on personal grounds than Democratic presidents, and/or generally imagine the shadow performance of Republican oppositions to be more favorable than that of Democratic oppositions. This may mean that a significant number of the self-identified Independents in the surveys are "closet" Republicans. In any case, the constants in the equations for Independents indicate that, on average, the approval ratings of Democratic presidents are depressed by about 7 percentage points and the approval ratings of Republican presidents are raised by around 17 points. Clearly, much of the intergroup variation (as well as the variation over time) in popular support for presidents is unexplained by movements in the measured macroeconomic and political variables included in the model.

The weighted averages of the shadow constants indicate that, net

of the impact of the substantive performance variables in the model, Republican presidents during the sample period have enjoyed a sizable advantage over their Democratic counterparts. The magnitudes of these "biases" in favor of Republican presidents, which are estimated by subtracting the relevant average for Democratic presidents from the relevant average for Republican presidents, are shown on the far right side of Table 5.2. For Independents, these computations show that, in terms of shadow constants, the bias toward Republican chief executives averaged about +0.59. This translates to 17 percentage points in the Gallup approval polls. Among Republican partisans, the bias was enormous, amounting to about +2.2, or 51 percentage points in the Gallup approval ratings. Naturally, the bias runs the other way among Democrats in the surveys. The difference of the average constants is −0.9, or −21 percentage points in the polls. But this pro-Democratic bias among Democrats is much smaller than the corresponding pro-Republican bias among Republican partisans. Other things being equal, Republican partisans were much more likely to support Republican presidents than Democratic partisans were to support Democratic presidents. Inasmuch as Democratic partisans made up about 46 percent of the electorate during the sample period whereas Republicans comprised only about 26 percent, such a differential was necessary for Republican presidents to achieve much support in the polls or, in fact, to be elected in the first place.

The combined pro-Republican biases of Republican partisans and Independents more than offset the pro-Democratic bias of Democratic partisans, however. Summing of the group biases, weighted by the relative sizes of groups in the electorate, shows that across the entire electorate Republican chief executives enjoyed a net political support advantage of about 9 percentage points in the polls (see the bottom of Table 5.2). Put another way, the macroeconomic performance of Democratic presidents had to be superior to that of Republican presidents in order for Democratic chief executives to achieve equivalent aggregate approval ratings.[32] The fact that Democratic presidents have had a much larger nominal partisan base in the electorate than have Republican presidents has not translated into an automatic support advantage—quite the contrary. Although the reasons for pro-Republican bias in political choices are unclear,[33] a similar phenomenon was noted by Donald Stokes, by Michael Kagay and Greg Caldeira in their analyses of the election survey data, and by Ray Fair in his study of aggregate presidential voting outcomes during the twentieth century.[34]

POLITICAL DISCOUNT RATES AND PARTY AND ADMINISTRATION COMPARISONS: THE g AND w PARAMETERS

The g parameters in the equations define the rate of decay of the distributed lag coefficients for the performance variables—that is, the rate at which past outcomes are discounted when the electorate makes current political evaluations of the president. When g is equal to or near 0, the models collapse to the static specification used in many studies, in which only the most recent performance outcomes affect political support. On the other hand, a value of g close to 1 means, as noted earlier, that effective political memories extend far back in time and past outcomes are not discounted steeply when voters make contemporaneous political choices. The nonlinear least-squares estimates of g vary between 0.77 and 0.84, indicating that politically relevant memories of past performance are roughly homogeneous across partisan groups and extend many quarters back in time. The idea that political support is based on cumulative, relative performance is, therefore, not merely an appealing theoretical fiction. Assuming g to be less than 0.77 to 0.84 would yield inferior predictions of fluctuations in the logits of the Gallup approval rating data.

Recall that if a performance variable x is held at some constant value $\bar{x}$ indefinitely, the ultimate impact on the political support index is $\beta\bar{x}/(1-g)$, where β is the contemporaneous impact of $\bar{x}$ estimated by the relevant regression coefficient in Table 5.1. Given that $\beta\bar{x} \cdot (1 - g^{k+1})/(1-g)$ is the impact after k lags, the proportion of the ultimate impact of sustained performance $\bar{x}$ felt by the kth lag[35] is $1 - g^{k+1}$. Hence, for a typical g equal to, say, 0.82, 18 percent of the ultimate impact of a sustained movement in x is felt contemporaneously, 55 percent is felt after one year (4 quarters), 80 percent after two years (8 quarters), and about 96 percent after four years (16 quarters).[36] The electorate is not quite as myopic, therefore, as some analyses of the American political economy have implied. Yet economic (as well as noneconomic) outcomes during the last half of the four-year presidential term clearly have decisive influence on political support on election days, and this leaves plenty of room for incumbents to pursue election-oriented macroeconomic policy plans. Certainly the heavy weight that voters seem to assign to recent outcomes—and the steep discounting of more distant outcomes—does not undermine the logic of political business cycle strategies.

The w coefficients define the relative contribution of interadministration and interparty performance comparisons to a president's political support. The estimates of w in Table 5.1 vary between 0.7 and 0.8. This means that interparty performance comparisons are an important component of the process by which the electorate makes contemporaneous political choices. (Remember, however, that the shadow performance constants, $S_{(t)}$, undoubtedly embody important, unobserved, president-specific sources of political support.) A pattern illustrated theoretically by the hypothetical cases analyzed earlier is, then, empirically relevant. If we hold performance constant and negatively valued outcomes prevail, there is a tendency for a new president's political support to begin at a higher level and to trend downward more sharply when there has been a change in the party holding the White House as opposed to a simple shift in administration. Conversely, if we hold performance constant across comparisons and negatively valued outcomes outweigh positively valued ones, a president following administrations of his own party is likely to enjoy less of an elevated, "honeymoon" level of political support early in his term, but he is also likely to experience a less dramatic decline in political support over time.

Notice, however, that after 24 periods (six years) or so have elapsed, the lag function weights g^k become negligible in magnitude. Consequently, at this point the Party and Admin components of political choices are not distinguishable. (For example, 0.82^{24} is 0.0085, a quantity that for practical purposes may be treated as 0.) A president who makes it well into a second term, therefore, is typically not helped or hurt significantly by the record of his predecessors, whether they belonged to his own party or to the opposition party. Aside from unmeasured factors embedded in the $S_{(t)}$ constants, which include the unique appeal of individual presidents, as well as components of the parties' political stock not picked up by the substantive variables in the model, during a second term a president's approval ratings are based almost entirely on a distributed lag of his own current and prior performance. At the time of this writing, though, no president since Eisenhower has served two full terms.

POLITICAL SUPPORT AND NONECONOMIC EVENTS

The noneconomic terms in the model—Americans killed in action in Vietnam, international Rally events, and the Watergate scandal events—all enter the regressions in Table 5.1 with properly signed and statistically significant coefficients. Escalation of American losses in Vietnam and the unfolding of the Watergate scandal obviously

contributed to the deterioration of Johnson's and Nixon's approval ratings, and Rally events were sources of upward movement in public support for all presidents.

Where it is sensible, two coefficients are reported for the performance variables in Table 5.1: the ordinary regression (β), which gives the contemporaneous response of the (logit) dependent variable to a unit increase in an independent variable, and the steady-state or long-run coefficient, $\beta/(1 - g)$, which gives the ultimate response of the dependent variable to a sustained unit increase in an independent variable. Because the lag rate of decay parameter g varies a bit across partisan groups, the $\beta/(1 - g)$ estimates render a slightly different impression of intergroup differences than do the β coefficients.

The estimates in Table 5.1 pertain to the impact of the performance variables on the logits of approval rates $\ln(P'_{jt}/(1 - P'_{jt})$. Practical political interest, however, centers on sources of variation in the actual approval proportions in the polls, P'_{jt}. Because P' is a nonlinear function of $\ln(P'/(1 - P')$, the response of the approval proportions to changes in performance is not obvious from the results in Table 5.1.[37] Therefore, to give an idea of the practical political consequences of fluctuations in the noneconomic variables, I computed the implied changes in the percentage of each group expressing approval of the president (100 P'_{jt}) following reasonable movements in the Vietnam, Rally, and Watergate variables.[38] The computations, which were done separately for Democratic and Republican presidents, are reported in Table 5.3.

The entries at the top of Table 5.3 indicate that a Vietnam killed-in-action rate of 1000 per quarter, sustained one full year, depresses approval rates between 4 and 6 percentage points. The magnitudes of these decreases in political support are modest, and Presidents Johnson and Nixon could have easily absorbed them and maintained their effectiveness in the White House. But the war dragged on much longer than a year, and the casualty rate rose much higher than 1000 per quarter. Continued "indefinitely," which given the values of the lag rate of decay coefficients (g) means 5 to 6 years (essentially the duration of the conflict in its shooting phase), the same killed-in-action rate of 1000 per quarter yields declines of between 6 and 12 points in approval ratings. American losses, however, climbed well above 1000 per quarter, or 4000 per year. In 1966 battle fatalities averaged 1200 per quarter, and they increased steadily thereafter, peaking at nearly 5000 per quarter during the first half of 1968, following the Tet offensive. As a result of this escalation of the war, nearly

Table 5.3 Gallup poll approval ratings: responses to Vietnam losses, Rally crisis events, and Watergate scandal events (percent)

Event	Democrats	Republicans	Independents
Vietnam killed-in-action			
1000 per quarter sustained 1 year—			
During Johnson	−5.9	−4.4	−4.9
During Nixon	−5.5	−3.8	−4.9
1000 per quarter sustained indefinitely—			
During Johnson	−11.7	−6.7	−9.6
During Nixon	−10.1	−5.8	−9.7
Battle fatalities 1967:1–1968:3 (during Johnson)	−27	−19	−22
Rally crisis events			
1 event in 1 quarter			
Democratic presidents	+4.5	+6.9	+6.2
Republican presidents	+5.1	+4.8	+6.2
3 events in 1979:4, 2 events in 1980:1 (during Carter)	+24	+17	+22
Watergate scandal events			
1 event tied directly to Nixon (+3)	−0.6	−0.3	−0.5
Change in Nixon's approval rating from 1972:2 to 1974:3 due to Watergate	−21	−17	−20

10,000 American troops were killed in 1967, and almost 15,000 were killed in 1968. President Johnson had paid a high price for the carnage in terms of lost political support even before he paid the ultimate political price in March 1968, when he found it necessary to announce that he would not seek renomination and reelection.

Simulation experiments with the political support equations indicate that by the third quarter of 1968, as a result of the high American

killed-in-action rate after 1966, President Johnson's approval ratings in the Gallup polls were down 27 percentage points among Democratic partisans and 22 points among Independents, as compared to 19 points among Republicans in the electorate.[39] The simulation results yield the same intergroup pattern as do the other estimates (in Table 5.1 as well as in Table 5.3) of mass political reactions to the war. Even though battle fatalities generally ran higher during Johnson's tenure as commander in chief than during Nixon's, the political support of Democratic partisans (and Independents) was apparently much more sensitive to the Vietnam catastrophe than was that of Republican partisans.

These model-based results are consistent with public opinion data showing that opponents of the war and those advocating "dovish" policies were more likely to be black, less educated, of lower income, and Democratic by political affiliation.[40] Moreover, we know that the children of lower-status Americans suffered a disproportionate share of the Vietnam casualties.[41] So the comparatively large erosion of political support among Democrats caused by the escalation of the war probably stemmed at least partly from the fact that the social composition of the Democratic party's mass base included more of those segments of American society that bore the brunt of the war's human toll than did the Republican party's core constituency.

It makes little sense to think of indefinite repetition of Rally crisis events, and so Table 5.1 only shows estimates of the initial contemporaneous boost to the logit of presidential approval ratings associated with the Rally term. The logit model parameters in this table suggest that the impulse to rally 'round the president during international crises may be somewhat more prevalent among Republican partisans than among others. But intergroup differences are not large. The impact of Rally events on actual ratings, shown in Table 5.3, indicates that international crises typically raise support for presidents by 5 to 6 points in the polls.

Rally events are not very frequent; about 1.5 per year is the long-run average. On only five occasions between 1961 and 1984 has more than one event occurred in a quarter. President Carter, however, experienced a unique sequence of five distinct events from 1979:4 to 1980:1, related to the seizure of American hostages in Tehran and the Soviet invasion of Afghanistan. This unprecedented string of Rally events produced a dramatic recovery in Carter's approval ratings which, in the wake of accelerating prices and falling real incomes, had fallen by the third quarter of 1979 to a level not seen since the Watergate scandal (Figure 5.3). The estimates in Table 5.3, based on simulation experiments with the fitted political support equations, suggest that by 1980:1 the crisis events had raised Carter's quarterly average approval ratings by 17 or more percentage points in all groups. Although such a sequence is unlikely to be repeated in the future, the Carter episode illustrates the upper bounds of the impact of international crisis events on political support for the president. And even though the political benefits of Rally events are transitory, they were large enough in this case to help a severely weakened and vulnerable president to survive (more easily than many had anticipated) a vigorous challenge to his renomination by Senator Edward Kennedy.[42] By election day, however, the boost to Carter's standing with the electorate had worn off, and he was easily defeated by Ronald Reagan.[43]

The last noneconomic term in the model represents the Watergate scandal, which ultimately drove President Nixon from office. The logit model estimates in Table 5.1 reinforce the view that partisanship colored the electorate's response to the Watergate events. Nixon's support among Republican partisans was less adversely affected by the scandal than were his approval ratings among Independents and, especially, Democrats. Yet the computations in Table 5.3 show that a single Watergate revelation incriminating Nixon personally and scored +3 on the +1 to +3 Watergate-events importance scale had negligible impact on the President's approval rating. Nixon's problem was that the scandal escalated far beyond this level, as one revelation followed another. The press-weighted Watergate variable averaged about 15 in 1973 and peaked at 24 in 1973:2 during the Senate hearings. Simulating the equations to obtain the hypothetical time path of the president's political support had there been no Watergate scandal, indicates that between 1972:2 and 1974:3 Nixon's approval ratings were depressed 21 points among Democrats, 17 points among Republicans, and about 20 points among Independents. In the aggregate, then, Nixon appears to have suffered a loss of nearly 20 percentage points in the Gallup polls as a result of the Watergate events.[44]

MACROECONOMIC PERFORMANCE AND MASS POLITICAL SUPPORT

It is natural to expect political responses to macroeconomic performance to vary across electoral groups because, as shown in Chapters 2 and 3, the consequences of macroeconomic outcomes (particularly unemployment outcomes) are unevenly distributed within the electorate. The regression parameter estimates in Table 5.1 are broadly

consistent with what we know about the distributional consequences of economic configurations. The contemporaneous or first-period impact of inflation (β) is largest for Republicans and smallest for Democrats, with Independents falling in between. But, as noted earlier, given the variation in the lag weight decay rates (g) across groups, the long-run or steady-state estimates $\beta/(1 - g)$ convey more useful information about intergroup patterns in the impact of the macroeconomy on political support. The long-run estimates in Table 5.1 indicate that cross-partisan group differences in sensitivity to inflation are not substantial, although again Democrats appear to be somewhat less averse to rising prices than are Republicans or, especially, Independents.[45] Inasmuch as lower-income and lower-occupational-status individuals are more likely to be Democrats than Republicans or Independents, these results square with the basic conclusion in Chapter 3 that inflations have not imposed disproportionately heavy burdens on less-advantaged groups in the electorate. For if the lower-income and lower-occupational-status classes were the main victims of inflations, we would expect a much larger negative inflation coefficient in the equation for Democrats than in the equations for Republicans or Independents.

Nonetheless, in the electorate generally, political support for presidents is adversely affected by high inflation rates. And because the inflation regression coefficients are estimated in the presence of the real income growth rate, the results mean that even when money incomes fully keep pace with rising prices, inflation still erodes presidential approval ratings. In other words, voters have a "pure" aversion to inflation that does not seem to hinge on whether inflation actually chips away at real income growth rates.

The parameter estimates for the growth rate of per capita real personal disposable income are smaller than the inflation estimates in all groups. And, as in the case of inflation, cross-partisan group differences in the response of political support to real income growth rates are not dramatic. In fact, insofar as the macroeconomy is concerned, only the unemployment gap coefficients reveal intergroup differences of real political importance. In view of the evidence presented in Chapters 2 and 3 showing that unemployment has much larger effects on the distribution of economic well-being than does inflation, this pattern is not surprising.

The long-run, steady-state estimates for Ugap, $\beta/(1 - g)$, indicate that the political support of Democratic partisans is 1.7 to 1.9 times more sensitive to unemployment fluctuations than is the political

support of Republicans and Independents. Most political conflicts surrounding macroeconomic policies center, however, on the relative priority that should be given to inflation and unemployment. So, from a political point of view, it is probably more informative to examine the relative magnitudes of the associated coefficients across partisan groups. Multiplying the ratio of the unemployment gap and inflation parameters by −1 yields what is known as the marginal rate of substitution (MRS)—that is, the implicit rate at which voters are willing to substitute extra unemployment for inflation:[46]

	Partisan Group		
Marginal rate of substitution	Democrats	Republicans	Independents
$-\left(\frac{\text{Unemployment gap}}{\text{Inflation}}\right)$	−1.1	−0.65	−0.49

The coefficient ratios, or marginal rates of substitution, suggest that in order for a given level of the political support index (the logit of the approval rate) to be maintained among Democratic partisans, an increase of 1 percentage point in the unemployment gap would have to be accompanied by a drop in the inflation rate of about 1.1 points. This suggests that Democrats in the electorate are just about indifferent to equivalent, compensating movements in unemployment and inflation. The marginal rates of substitution of unemployment for inflation for Republicans and Independents are much smaller. This implies that these groups have flatter, more inflation-averse preference (indifference) curves. Among Republicans and Independents, a politically innocuous increase of 1 percentage point in unemployment requires that inflation decline by approximately 0.65 and 0.48 point, respectively.

Alternatively, if the inflation rate rose by 1 point, the political support index for Democrats would remain unchanged if the unemployment gap fell by 0.9 point (1/−1.1). By contrast, it would take an unemployment decline of 1.5 (1/−0.65) to 2.0 (1/−0.49) percentage points per point of increased inflation to keep the political support of Republicans and Independents unchanged. It is clear, then, that what constitutes a politically acceptable short-run inflation-unemployment

trade-off in the United States differs considerably across the parties' core constituencies. Yet, despite the partisan differences, these results also underscore the observations in Chapter 4 about how heavily the general electorate in the United States appears to weight inflation relative to unemployment. Even Democrats, who are significantly more unemployment averse than other electoral groups, seem to be willing to trade higher unemployment for lower inflation on an almost point-for-point basis. The objective, measurable economic costs of inflation and unemployment reviewed in Chapters 2 and 3 simply do not account for implicit preference schedules that are so inflation averse. Less tangible perceptual and psychological factors obviously play a large role in the American public's reaction to inflations.

Politicians watch actual approval ratings in the polls rather than logits. Therefore, I have computed the changes in the percentage of each partisan group supporting the incumbent president induced by increases of 2 percentage points in the unemployment gap, the real income growth rate, and the inflation rate. The computations are reported in Table 5.4.[47] Because the effects of transitory movements in the macroeconomy lasting only a quarter or so are small, the induced changes in approval ratings implied by the logit model coefficient estimates are computed for increases in the economic variables sustained 4 quarters, 8 quarters, and indefinitely.[48] Finally, because the responses of political support to changes in the macroeconomy depend on initial support levels (see the discussion of Figure 5.2 and equation 5.5 above), the computations for each partisan group are made from benchmarks equal to the group's mean approval rating for Democratic and Republican presidents. (The means are shown in the first column of Table 5.4.)

The intergroup patterns in the responses to increases in the economic variables mimic the patterns revealed by the logit model regression coefficients just discussed, except now the responses are expressed in terms of percentage-point changes in the approval polls. If sustained for 4 quarters (one year), a 2-percentage-point increase in the unemployment gap yields declines in presidential approval ratings ranging between about 2.4 and 4.2 percentage points, with the maximum response occurring, as expected, in the Democratic partisan group. The adverse political effects of the 2-point increase in unemployment accumulate with time. After 8 quarters, approval ratings are depressed from 3.6 points to over 6 points, with the response again largest for Democratic partisans. In the case of a severe contrac-

Table 5.4 Percentage changes in Gallup approval ratings induced by changes in macroeconomic performance

Average approval rating (percent)	Partisan group	Change of +2 in unemployment gap (Ugap) sustained—			Change of +2 in per capita real personal disposable income growth rate (r) sustained—			Change of +2 in inflation rate (p) sustained—		
		Four qtrs	Eight qtrs	Indefinitely	Four qtrs	Eight qtrs	Indefinitely	Four qtrs	Eight qtrs	Indefinitely
	Democrats:									
68.2	Democratic Presidents	−4.2	−6.3	−8.4	+1.5	+2.2	+2.9	−3.8	−5.7	−7.6
33.6	Republican Presidents	−4.1	−5.9	−7.6	+1.6	+2.4	+3.1	−3.7	−5.4	−7.0
	Republicans:									
37.7	Democratic Presidents	−3.3	−4.4	−5.0	+2.5	+3.4	+3.9	−5.0	−6.6	−7.5
75.6	Republican Presidents	−2.7	−3.7	−4.3	+1.9	+2.5	+2.9	−4.2	−5.8	−6.7
	Independents:									
50.3	Democratic Presidents	−2.4	−3.6	−4.8	+2.4	+3.5	+4.7	−4.8	−7.2	−9.6
49.5	Republican Presidents	−2.4	−3.6	−4.8	+2.4	+3.5	+4.7	−4.8	−7.2	−9.6

tion lasting two years, which created, say, an extra 4 points of unemployment, the political effects would be nearly twice as large,[49] ranging from 6 to almost 12 percentage points in the approval ratings. The remaining unemployment estimates in Table 5.4 show the impact on political support of a 2-point rise in unemployment that is sustained indefinitely—which, practically speaking, means 5 to 6 years. In this case approval falls by 7.4 to 8.4 percentage points among Democrats, as opposed to only 4 to 5 points among Republicans and Independents. These are large, politically important responses, and they clearly differentiate Democrats from Republicans and Independents.

The response of approval ratings to a 2-percentage-point increase in the growth rate of per capita real personal disposable income is more modest. (The mean growth rate during the regression sample period was 2 percent, and so this experiment represents a doubling of the average real income growth stream.) Table 5.4 indicates that the responses are generally largest for the Independents. In this group the rise in presidential approval ratings induced by a 2-point increase in the real income growth rate lasting indefinitely is a little less than 5 percentage points. An increase of the same magnitude in the inflation rate produces bigger political responses in all groups, comparable in magnitude to the responses to increased unemployment. Unlike the results for unemployment, however, the effects of inflation peak among Independents rather than among Democrats.

Inflation clearly took on special importance after the two OPEC oil price hikes. From the fourth quarter of 1973 to the third quarter of 1974, in the wake of the first OPEC oil price shock, energy prices in the United States rose 115 percent. From the second quarter of 1979 to the third quarter of 1982, during the second oil shock, U.S. energy prices increased about 170 percent.[50] Energy purchases amount to about 10 percent of total consumption, so the 1973–1974 rise in energy prices directly added more than 11 points to cumulative inflation, and the 1979–1980 rise added 17 points. Therefore, had voters held Presidents Nixon and Carter fully responsible for these accelerations of the general price level, presidential approval ratings probably would have declined by magnitudes significantly larger than those shown in Table 5.4 for an increase of 2 points in the inflation rate sustained 4 periods (8 points of cumulative inflation). In addition, the extra unemployment and lost real income associated with the shocks would have further depressed political support for the incumbents had the public held them solely accountable for the economic problems.

Yet the coefficient estimates for *p*-oil in Table 5.1 indicate that Nixon and Carter were not punished by the electorate for the full acceleration of prices (and rise in unemployment and decline in real income growth rates) following the two OPEC energy price shocks. The reason, no doubt, is that voters realized that to a great extent the shifts in the terms of trade imposed by the OPEC cartel were beyond the control of American authorities. Just how big a break voters gave incumbents during these crises is estimated by the simulation results reported in Table 5.5.[51]

During the first OPEC crisis the simulation estimates indicate that approval ratings were compensated by between 2 and 3 percentage points. The magnitudes are not trivial, but they are hardly large enough to have made much difference to President Nixon, whose political support in the polls fell about 20 points because of Watergate alone (see Table 5.3). Carter's approval ratings appear to have been compensated by larger margins—from 2 to 6 percentage points in various partisan groups. Relative to the severity of OPEC II and the adverse effects of the 1979–1980 recession created by the administration to offset the enormous rise in inflation, however, the magnitudes are quite modest. As we saw in Table 5.3, Carter benefited much more in late 1979 and early 1980 from the rally 'round the president effect associated with the foreign policy crises in Iran and Afghanistan.

In the discussion of Figure 5.2 and equation (5.5), I pointed out that responses of approval proportions to marginal changes in the economy and other variables are influenced by the proximity of each group's baseline approval proportion to 0.5—the so-called threshold of opinion change. Within partisan groups this does not seem to be of great importance empirically, as the responses to the near-marginal 4-quarter changes in the economic variables shown in Table 5.4 suggest. In each partisan group Democratic and Republican presidents

Table 5.5 Compensation of approval ratings (percent) during OPEC oil shocks (*p*-oil)

Partisan group	1973:4–1974:3 (during Nixon)	1979:2–1980:2 (during Carter)
Democrats	+2	+6
Republicans	+2	+2
Independents	+2.6	+4.5

generally suffer about the same loss of support from adverse marginal changes in the economy and gain about the same degree of support from favorable marginal changes.

Looking across partisan groups, however, the story is different. For both Democratic and Republican presidents, the baseline presidential approval ratings of Independents are more likely to lie in the vicinity of 50 percent (0.5) than are those of Democratic and Republican partisans. In other words, Independents typically are closer to the threshold of opinion change. The reason surely is that Independents are anchored less to any particular Democratic or Republican president by exogenous political loyalties (which are picked up by the president-specific shadow performance constants in the equations) than are voters who normally think of themselves as Democrats or Republicans. Consequently, in comparison to those of the other groups, movements in the Independents' approval ratings induced by changes in the economy and other performance variables are magnified by a factor that often runs as high as 1.4.[52] Insofar as systematic sources of approval change are concerned, it follows that Independents (who, on average, made up about 28 percent of the electorate during the sample period) have a greater tendency than other groups to drift into and out of a president's base of support in the mass public. Relative to their share in the electorate and to the weight they give performance variables, Independents ordinarily contribute more than either Democratic or Republican partisans to fluctuations in aggregate presidential approval ratings stemming from marginal changes in performance. Because Independents constitute something of a swing group, support-maximizing presidents have an incentive to pay special attention to their preferences and priorities.

5.3 A Concluding Word on the Economy and Political Support for Presidents

At the beginning of this chapter I introduced a dynamic model of political choice in which voters forced to make discrete judgments applied relative rather than absolute evaluation standards. The estimation results showed that past as well as current economic (and noneconomic) events influence voters' contemporaneous political judgments. However, past outcomes are discounted backward in time, undoubtedly because the present relevance of prior performance decays over time. The rate at which the past appears to be discounted by the electorate leaves plenty of leeway for incumbents,

if they are so inclined, to pursue election-oriented, "political business cycle" economic strategies. For example, the estimates of lag weight decay rates indicate that outcomes in the quarter nearest the presidential election are weighted about 24 times more heavily than are outcomes in the first period of a 16-quarter presidential administration.[53] Viewed in terms of years rather than quarters, the same lag parameter estimates suggest that outcomes over the entire election year are weighted approximately 11 times more than outcomes over the first year of a four-year administration.[54]

Although I was mainly interested in the political implications of macroeconomic performance, in order to secure meaningful estimates of the impact of the economic conditions on political support for presidents it was necessary to take account of important noneconomic events correlated with inflation, unemployment, or real income growth rates. By and large the estimation results were consistent with the conclusions of earlier chapters. Chapter 4, which analyzed the Michigan data on public concern about inflation and unemployment, showed that the electorate has a substantial aversion to rising prices. This chapter connected such abstract concern about inflation more directly to political behavior. Estimates of the political support equations indicated clearly that movements in the inflation rate are an important source of fluctuations in presidential approval ratings in all partisan groups.

The review of the incidence and distributional costs of inflation and unemployment in Chapters 2 and 3 established that, aside from energy price shocks, unemployment was the major economic cause of redistributions away from lower income classes toward the higher income classes. The redistributive effects of inflations appeared to be small and not particularly disadvantageous to less affluent groups. Therefore, it was not surprising to see in this chapter that the political support of Democrats was much more sensitive to unemployment than was the political support of Republicans or Independents. Looking at the impact of unemployment on political support relative to that of inflation, we see the same alignment of partisan cleavages: Democrats versus Republicans and Independents. Although the "demand" for low inflation is pronounced among all groups, the estimation results imply that the relative priority given inflation as opposed to unemployment is markedly lower among Democratic partisans than among others. Voters who express a general attachment to the Democratic party made up just under half of the total electorate in the 1960s, 1970s, and early 1980s; this helps explain the tendency of presi-

dents—particularly Republican presidents—to pursue policies aimed at trading extra unemployment for reduced inflation. I will return to this important point in Chapter 7, after considering in Chapter 6 the contribution of economic performance to recent presidential election outcomes.

6 Economic Performance and the 1980 and 1984 National Elections

This campaign was about the failure of Jimmy Carter—about the way he messed up our economy and our standing in the world.

—William Casey, former campaign manager, Reagan-Bush Committee

1980 was not a watershed election. According to all the post-election surveys we've done, the people wanted change in this election. They haven't necessarily ratified what we stand for. We have this great opportunity in the next years to show what we stand for works.

—Paul Weyrich, head of the New Right's Committee for the Survival of a Free Congress

The 1980 and 1984 elections obviously represented a substantial victory for Ronald Reagan and, to a lesser degree, the Republican party. In 1980 Reagan received 55.3 percent of the two-party vote (50.7 percent of all votes cast) and became the first challenger to defeat an elected, incumbent president since Roosevelt beat Hoover in 1932. The Democrats' two-party share of the popular vote for the House of Representatives fell 3 percentage points (from 54.3 percent in 1978 to 51.4 percent in 1980), and they lost 33 seats,[1] going from 276 to 243. Democratic losses (Republican gains) in 1980 were even bigger in the Senate. The Democrats lost 12 seats, going from 58 to 46, and as a result the Republicans enjoyed their first Senate majority since 1954.[2] Among the victims of the debacle were more than half a dozen well-known liberal Democratic senators: McGovern (South Dakota), Bayh (Indiana), Culver (Iowa), Magnuson (Washington), Durkin (New Hampshire), Nelson (Wisconsin), and Church (Idaho).

After absorbing a 26-seat loss in the 1982 mid-term elections[3] (there was a standoff in the 1982 Senate contests, with no change in the preelection distribution of party strength), which occurred amid the highest unemployment rates since the Great Depression, the Republicans bounced back a bit in 1984. They gained 14 seats in the House,[4]