Chapter 4

A critical threshold model of presidential popularity

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1. Introduction

During the past decade research into the relationship between economic fluctuations and public support for political officials has burgeoned into a small industry. Since those first tentative conclusions of Goodhart and Bhansali (1970), Mueller (1971), and Kramer (1971), the election results and leadership support levels from virtually every major industrial democracy have been correlated with economic time series. A variety of specifications of both the independent variables has been tested, and increasingly elaborate models of economy–polity interaction proposed. Although the disparate conclusions resulting from the various models and data defy generalization, we may fairly conclude that the bulk of the evidence sustains the thesis that the economy has served as a significant source of postwar electoral change. Beyond this modest statement, little else can be concluded.

Micro decisions underlie these macro relationships, and a definitive understanding of the effects of the economy on political support awaits clarification of a number of issues about how electorates perceive and evaluate the economy. Is information about current economic conditions, for example, obtained primarily through experience (e.g. being laid off

* The chapter is a revised version of Kernell's contribution to the Bonn conference. Hibbs participated in revising the paper and supplied the section on the formalization of the threshold model. Although the authors agree that the logit specification best represents the threshold model, presently they are independently working with different specifications of the economy–popularity relationships. The authors are grateful to the National Science Foundation for research support (grants soc-7818542 and soc-78-27022, respectively).

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from work) or is it mainly consumed as a political issue, vicariously via the media and opinion leaders? If experience predominates as the information source then we may expect to find the political ramifications of a given economic change to be directly proportional to its cumulative individual impact. And to the degree that groups within the population are differentially affected by given economic conditions, they should also differ in their satisfaction with the government's performance. Consumed as an issue, on the other hand, the economy is mediated in the political marketplace by the news media and elite referents. Moreover, other pressing national concerns may at times completely remove the economy from public view. The political impact of economic conditions may, therefore, have a less than perfect association than suggested by its aggregated individual effects. Accordingly, understanding the relationships between the economy and public opinion may require that we study less the structural features of the economy (such as how many people are directly and indirectly affected by a percentage point rise in unemployment) or even the collective self-interest of income classes, and more the structural features of the polity. The presence, strength, and ideologies of labor parties and economic performance expectations formed from the stable party images are potentially important mediating agents.

Survey research confirms the problematic character of how voters process economic information in arriving at electoral choices. Most studies (see Fiorina, 1978, and Chapter 5 in this volume) have concluded that one's current and anticipated financial status is poorly related with evaluations of economic performance by the government. This led Kinder and Kiewiet (1979) to sever "personal" from "collective" economic judgements, with only the latter having much to do with political behavior.

As an alternative to individual-level survey research, analysis of public opinion trends among subgroups in the population may yield insights into whether citizens assess the economy from a private or from a public goods perspective. Disaggregation of public opinion trends along class-relevant lines in particular, permits us to explore how differentially affected citizens perceive and politically respond to a changing economic environment. Hibbs (1979a) observed, for example, that blue-collar workers throughout the 1970s have been relatively more averse to unemployment than inflation when compared to their white-collar counterparts. And Schneider (1977) using the Nixon–Ford presidential popularity time series disaggregated for six income groups discovered that with uncanny consistency unemployment had a larger impact on presidential approval at each step down the income scale while the effect of inflation grew with increasing income.

In this paper we shall analyze trends in the popularity ratings of United States presidents from 1953 through 1974 among partisan subgroups.[1] Partisanship may be a valuable dimension for disaggregation for several reasons. First, a generation of scholarly research has found that party identification is the single most important cue governing "partisan" political behavior. Division of the citizenry into Republicans, Democrats, and Independents should provide as internally homogeneous groupings of political opinions as we shall be likely to obtain with a single variable in the American setting, thereby providing an opportunity to compare how differently placed citizens in the economy and polity vary in their responses to macroeconomic conditions. Secondly, because class and party are generally perceived to be integrally, if imperfectly linked since the Depression, it remains unclear whether differing relationships found for income groups, such as in Schneider's work, reflect underlying economic priorities or the partisan mixes of the income classes. At the same time partisan disaggregation allows us to examine the degree to which the differential class composition of the political parties produces different relationships for Democrats and Republicans. Thirdly, party identification is the most relevant cleavage for elites. Understanding how these groups differ in their economic concerns should provide insight into the strategic choices available to the government. A Republican president, for example, who identifies his core constituency as fellow Republicans might occasionally target policy to win support from Independents and Democrats.

At least three alternative hypotheses are available which predict how Democrats and Republicans will differ in judging presidential performance. From a political economy perspective the most interesting one follows Hibbs and Schneider in predicting that Republicans will be more attentive to inflation and Democrats to unemployment in judging the president's job performance. A strong version of this hypothesis argues that these economic biases are absolute and therefore that the relationships will be stronger for the priority variable. A weaker version requires only that inflation be *relatively* more important to Republicans and unemployment *relatively* more important to Democrats. We shall examine the implications of the "party qua class" hypothesis below.

The second hypothesis treats differences among party groups to be purely partisan. Repeatedly, party identification has been found to shape perceptions and evaluations of the economic health of the country, the

[1] With the exception of presidential campaign periods, the American Institute of Public Opinion has solicited monthly from national samples their opinions to the question: "Do you approve or disapprove of the way —— is handling his job as president?"

government's economic performance, and even one's own personal financial well-being (most recently, Kinder and Kiewiet, 1979, and Fiorina, 1978). The role of partisanship as a determinant of presidential performance evaluations is apparent from the distributions of the popularity ratings in figs. 4.1 and 4.2. That these ratings rarely wander far from their respective means confirms partisanship's confining effect on other, more transitory forces.

Partisanship may interact with economic conditions to shape popular-

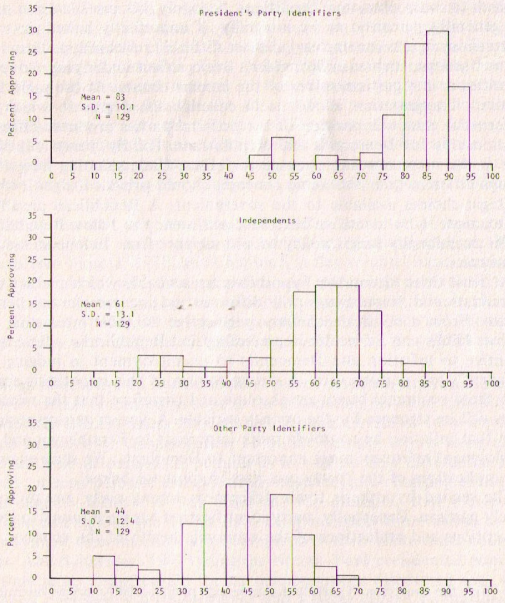

Figure 4.1. Distribution of support for Republican Presidents among partisan groups.

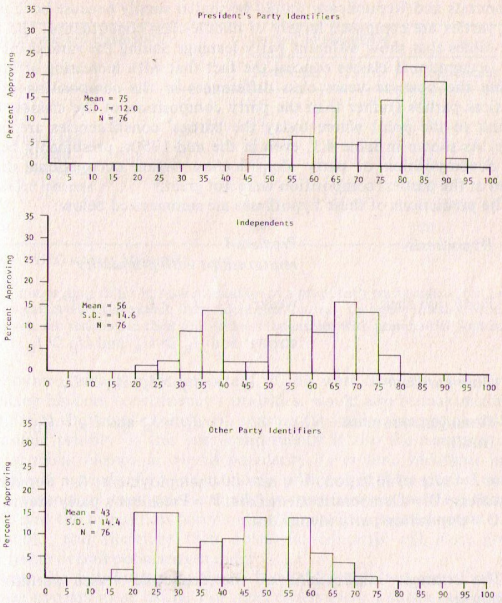

Figure 4.2. Distribution of support for Democratic Presidents among partisan groups.

ity in a variety of ways. Not only should opposition party identifiers be more negative in their evaluation of the president than the president's party identifiers, they may also examine his performance more critically, more judgmentally. If so, the relationships between economic indices and popularity should be stronger among the opposition party identifiers.

The third hypothesis denies that party identification is a relevant cleavage. The argument here is more substantive than the normally perfunctory null hypothesis. The economy–popularity relationships for

Democrats and Republicans should be similar simply because both political parties are composed largely of middle-class constituents. The familiar tables that show different party leanings among the various income and occupational classes conceal the fact that with increasing affluence during the postwar years class differences in the composition of the political parties (rather than the party composition of the classes) have shrunk to the point where today the parties' constituencies are much alike. As shown in table 4.1, even in the mid-1950s, presumably before the decomposition of party identification began, occupational differences in the parties' composition were not great.[2]

The predictions of these hypotheses are summarized below:

Hypothesis	*Predicted relationships with popularity*	
Party qua class	weak:	$I_R > I_D, U_D > U_R$
	strong: add	$I_R > U_R$ and $U_D > I_D$
Pure partisan		$I_O > I_P, U_O > U_I$
Homogeneous mass (null)		$I_R = I_D$ and $U_R = U_D$

where I = rate of inflation; U = rate of unemployment; R = Republican identifiers; D = Democratic identifiers; P = President's party identifiers; and O = opposition party identifiers.

2. The strategic implications of the economic versus partisanship hypotheses

According to the "party qua class" hypothesis Democratic and Republican identifiers are viewed as differing in their relative concern with inflation and unemployment. One might be tempted to further argue that a Republican president's overall popularity will more heavily depend upon his ability to control inflation while for a Democratic president the unemployment rate is more important. If this were true, the president, by servicing his core constituency's priorities, would also be maximizing his popularity. But such a conclusion rests on the faulty assumption that the economic priority of this core constituency is also the main source of the marginal change in overall popularity. Over time variations in approval will instead reflect the economic priorities of those citizens nearest the threshold of approval. Generally, we may suspect, political independents and the opposition party's identifiers will be located nearer to the threshold, and therefore their economic concerns will more greatly determine overall popularity trends.

From the distributions in figs. 4.1 and 4.2 this latter view of marginal change appears more likely. For most observations a substantial share of the opposition party's identifiers approve of the president's performance, but presumably with less intensity than his own party's identifiers.[3] This may frequently place the president in the bind of having to deny his core constituency economic goods in order to improve his public standing, at least in the short run.

The strategic implication of the partisanship hypothesis is simpler, and under certain conditions probably more salutary, for presidential economic performance. The president's core constituency is comparatively complacent and to the degree that the more attentive opposition identi-

[2] When class is defined by income categories party differences appear even smaller. Evidence from Axelrod's (1972) study of electoral coalitions indicates that poor citizens (defined as less than $3000 annual income) comprised a larger proportion of Republican Party constituency in three of the last five presidential elections. Axelrod's figures were recalculated to eliminate turnout rates to better represent the attitudinal support for the parties.

Table 4.1

Occupational self-classification	Percent of identifiers	
	Democrats	Republicans
Farmers	15	16
Business	11	18
Professional and white-collar	13	23
Skilled blue-collar	35	27
Unskilled laborers	25	16
Total	99	100

Source: AIPO survey, May 1957.

Party groups may differ in their evaluation of a president's performance, but only in the overall levels of approval. Party identification may therefore interact little with the economic variables in their time-series relationships with presidential popularity.

[3] Moreover, the larger standard deviations in the opposition party's ratings indicate that they, as a group, are more volatile in their support of the president.

fiers have no clearly established economic priorities, it frees the president to follow either prescriptive policy or ideological goals. At the same time the opposition identifiers' attentiveness and position near the threshold forces the president to deal with economic problems. The only constraint on the latter strategy is the slope of the short-run Phillips curve tradeoff. A president cannot pursue an extreme policy of full employment or low inflation ignoring the tradeoff since the opposition identifiers are equally attentive to both indices.

In moving to a critical threshold model of popularity we need then to consider not only the relative differences in economic concerns of partisan groups but also their proximity to the threshold of approval change.

3. The threshold of support

A distribution of public opinion akin to the normal curve is a more reasonable representation of public opinion than the dichotomous distribution imposed by the Gallup Poll's presidential "approve or disapprove" question. Assume then that each group's evaluation of the president's performance are normally distributed along an approval–disapproval continuum. Assuming a particular distribution allows us to stipulate precisely the net popularity change following a given shift along this continuum. As evaluations adjust to changing economic conditions, some citizens' opinions will cross the threshold dividing approval and disapproval. For example fig. 4.3 depicts 60 percent of the citizenry approving the president's performance. If some large, negatively valued event

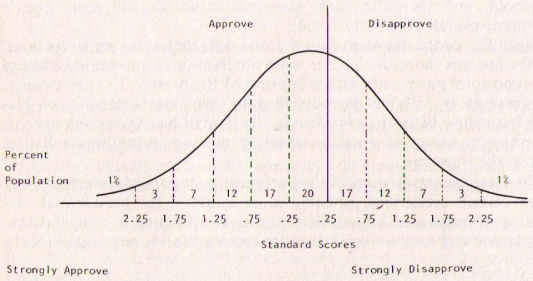

Figure 4.3.

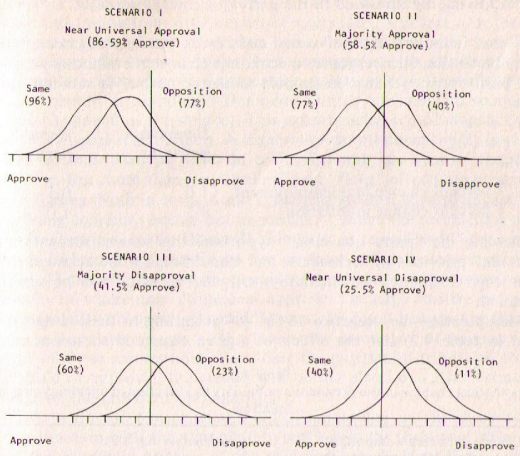

Figure 4.4. The relationship of economic change with presidential popularity as a function of the current distribution of support.

(such as President Ford's pardon of Nixon) were to shift this distribution a half a standard normal score to the right, the president's popularity would plummet 20 percentage points while a similar shift to the left would improve his popularity by 17 points.

For the purpose of comparing the dynamics of the economic versus partisanship hypothesis we shall examine four "typical" scenarios of presidential popularity displayed in fig. 4.4. Each offers a significantly different partisan distribution of support for testing the effects of changing economic conditions on popularity. Although hypothetical, these scenarios conform well with the familiar "life cycle" patterns of presidential approval (Mueller, 1970). Initial reductions in approval for a popular president should occur more heavily among opposition party members (from scenario I to II) while subsequent losses for an already unpopular president will be located disproportionately among his own party identifiers (from scenario III to IV).

4. Applying the threshold to the party qua class hypothesis

We shall stipulate the following differences between Democrats and Republicans in their response to economic change in evaluating presidential performance (change in support measured normal in standard intervals):

	Democratic partisans	*Republican partisans*
1 percent change in unemployment	1.0	0.5
1 percent change in inflation	0.5	1.0

Following the "party qua class" hypothesis this schema recognizes the different priorities of Democrats and Republicans while acknowledging that their responses to unemployment and inflation will be similarly directed.

Manipulating the scenarios in fig. 4.4 according to these weights, we find in table 4.2 that the effects of a given change in the economy on

Table 4.2
Hypothetical changes in the president's popularity as a function of unemployment and inflation.

Change in the *more* important economic index for president's party identifiers	Scenario (see fig. 4.3): I	II	III	IV
	(percentage point change in popularity)[a]			
A. 1% *increase* in unemployment for Democratic president or consumer prices for Republican	−10	−14	−13	−9
B. 1% *decrease* in unemployment for Democratic president or consumer prices for Republican	+4	+10	+12	+12
Change in the *less* important economic index for president's party identifiers				
C. 1% *increase* in consumer prices for Democratic president or unemployment for Republican	−11	−12	−10	−7
D. 1% *decrease* in consumer prices for Democratic president or unemployment for Republican	+6	+12	+13	+12

[a] Percentages derived from standard scores shift of the normal distribution.

popularity vary according to both the party which occupies the White House and the partisan distribution of approval.[4] A decrease in the unemployment rate of one percentage point, for example, will have a relatively minor effect on a popular Democratic president's standing (where the standard score equals 4 percentage points in row B) while it will greatly benefit an unpopular Democrat (where one standard score subsumes 12 percent of the sample). This pattern makes sense independent of any special contextual effects. A highly popular president simply has little room for improvement while an unpopular one has a lot of people to win over. But more than just "ceiling" and "floor" effects are present in these figures. Note in rows A and C that the greatest adverse impact of a worsening economy occurs not in scenario I where the president is most popular, but in scenario II and III. Similarly, in rows B and D the benign effects of improving conditions are at least as strong in scenario III, where 42 percent approve the president's performance as compared to scenario IV where only 26 percent approve. The large positive and negative popularity changes in the middle scenarios result because the fluctuations in popularity occur at the threshold, or margin, of opinion. In a world of these assumptions, the closer the partisan distributions to the threshold of approval, the greater will be the effect of a given economic change on the president's popularity.

Perhaps the most interesting result of employing the threshold model in conjunction with the economic hypothesis is (as shown in table 4.2) that the economic priority of the president's party identifiers – either unemployment or inflation – may not be the variable which most affects his overall popularity. Again, this is because popularity is changing at the margin, and in two of the scenarios (I and II) his party identifiers are further from the threshold than are the opposition identifiers. For a highly popular president the index which is less important to his party's identifiers will in fact contribute more to both improving (A > B) and reducing (C > D) his public prestige. Perhaps this explains why President Johnson's popularity appears to have suffered more from rising prices than it benefited from declining unemployment during the Vietnam war. (See Kernell, 1978, table 5.)[5]

Thus far we have considered changes in inflation and unemployment

[4] The entries in table 4.2 are derived by shifting the subgroup distributions identified for each scenario in figure 4.4 according to the weights of 1 and 0.5 standard normal scores as stipulated above. For this hypothetical exercise the "same" and "opposition" parties are each assumed to constitute half of the electorate.

[5] If we were to find evidence for the presence of both the economic and partisan hypotheses – that is, differential economic priorities with stronger relationships for opposition identifiers – the payoff of pursuing a marginal strategy would be enhanced for every scenario.

in isolation. Let us bring the model into closer conformity with reality by also assuming a short-run Phillips' curve tradeoff between these variables. Suppose that a given president is considering a change in fiscal (or monetary) policy to reduce unemployment from 5 to 4 percent. Would it be politically beneficial? Using the estimates of the MIT–FRB econometric model, the short-term effect would be to increase inflation from 3 to 3.8 percent (de Menil and Engler, 1972; Nordhaus, 1975). Calculating the net effects of his tradeoff for Republican and Democratic presidents in each of the scenarios, we find in fig. 4.5 that in seven out of the eight cases the opinion change would prove favorable for the incumbent president. Ironically, the one instance where the president would lose support is for an already popular Democrat in the White House. Given our assumptions, Republican presidents can, paradoxically, always afford to make this exchange. We find then that not only does a given change in the economy affect some presidents more than others, but the partisan context of approval will even determine the direction of opinion change.

5. Formalizing the threshold model

The previous discussion of the threshold of support and its implications for marginal changes in a president's approval rating in the polls is readily formalized in the following way. Imagine that each survey respondent rates the president's performance on an *observed*, continuously valued approval/disapproval index Y^*. As the previous discussion suggested, we shall assume here that Y^* exhibits systematic variation across partisan and/or class-defined subgroups (j) but that for individuals (i) Y^* may be considered homogeneous. Y^* is determined by the linear equation

$$Y^{*j}_{it} = f_j(Z_t) + v_{jt}, \tag{4.1}$$

where $f_j(Z_t)$ represents substantive terms and associated subgroup coefficients defined ahead; and $v_{jt} = v_j + u_{jt}$, u_{jt} being an independently distributed random disturbance.

Let the *observed* survey responses revealing approval or disapproval for the president be designated by the binary variable Y^j_{it}:

$$Y^j_{it} = \begin{cases} 1 \text{ for respondents approving of the president's performance,} \\ 0 \text{ for respondents disapproving.} \end{cases}$$

Furthermore, assume that the measured binary choice variable Y reflects the index Y^* such that

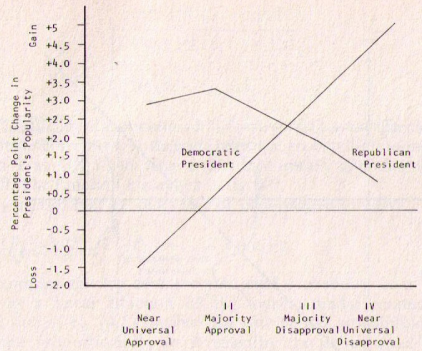

Figure 4.5. Illustration of the differential effects of Phillips' curve tradeoff in presidential popularity. Tradeoff: Δ unemployment = −1; Δ inflation = +0.8.

$$Y^j_{it} = \begin{cases} 1 \text{ if } Y^{*j}_{it} > c, \\ 0 \text{ if } Y^{*j}_{it} \leq c, \end{cases} \tag{4.2}$$

where c is a "critical threshold."

It follows that the probability (P) of observing an "approval" response for individual i in group j at time t is

$$\begin{aligned} P_{jt} = P(Y^j_{it} = 1) &= P[f_j(Z_t) + v_{jt} > c] \\ &= P[f_j(Z_t) + u_{jt} > (c - v_j)] \\ &= P[f_j(Z_t) + u_{jt} > c_j], \end{aligned} \tag{4.3}$$

where: $c_j = (c - v_j)$.

$(1-P_{jt})$ gives the probability of a "disapproval" response. Notice that the disturbance specification amounts to permitting the threshold constant to vary across groups; in other words groups have different exogenously given inclinations to approve/disapprove of the president's performance as well as having differential sensitivity to movements in the Z variables (for example, unemployment and inflation).

Since people approve of the president's performance ($Y = 1$) when

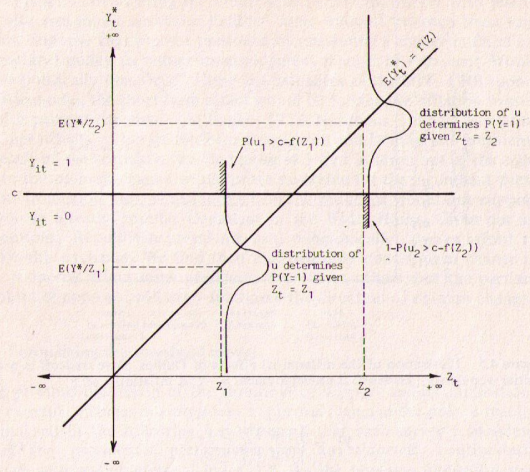

Figure 4.6. Observed binary responses and unobserved continuously valued approval ratings.

Y^* exceeds some critical threshold c_j, the probability of support hinges on the value of $c_j - f(Z)$ and the distribution of the random variable u. The point is illustrated by fig. 4.6 for a single Z variable for a particular group.

The above means that P_{jt} may be regarded as a cumulative distribution function. Any appropriate distribution for u will yield a well behaved probability function. It is convenient, however, to assume u logistic (which differs trivially from the normal distribution) with mean zero and scale parameter s, which implies the probability function:

$$P_{jt} = P[u_{jt} > c_j - f_j(Z_t)]$$

$$= 1 - \frac{\exp[(c_j - f_j(Z_t)/s]}{1 + \exp[(c_j - f_j(Z_t)/s]}$$

$$= \frac{\exp[(f_j(Z_t) - c_j)/s]}{1 + \exp[(f_j(Z_t) - c_j)/s]}$$

$$= L^*[(f_j(Z_t) - c_j)/s], \tag{4.4}$$

where L^* is the logistic operator, $L^*(Z) = \exp Z/(1 + \exp Z)$.

It is obvious from (4.4) that the response probabilities monotonically approach 1 as $f_j(Z_t)$ gets large and monotonically approach 0 as $f_j(Z_t)$ gets small. The function is graphed in fig. 4.7.

Finally, notice that eq. (4.4) may be manipulated to yield

$$L^{*-1}P_{jt} = \ln(P_{jt}/1 - P_{jt}) = [f_j(Z_t) - c_j]/s, \tag{4.5}$$

which expresses the log of the conditional probability odds ratio (the "logit") as a linear function of the logistic model parameters. The left-hand side of eq. (4.5) involves the true period probabilities P_{jt}, but only sample proportions $\hat{P}_{jt}$ are revealed by the survey data. Rewriting (4.5) to conform to the situation confronted empirically gives

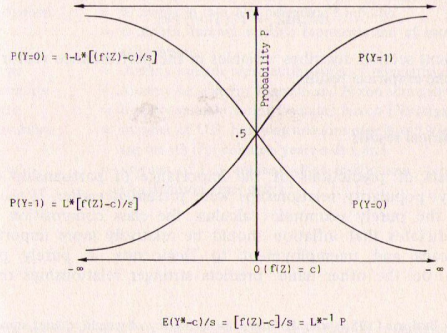

Figure 4.7. Choice probabilities, $P(Y)$, as a logistic function of observed data, $X \cdot B$, and unobserved approval ratings, Y^*.

$$\ln(\hat{P}_{jt}/1-\hat{P}_{jt}) = [f_j(Z_t) - c_j]/s + [\ln(\hat{P}_{jt}/1-\hat{P}_{jt}) - \ln(P_{jt}/1-P_{jt})]$$

$$= [f_j(Z_t) - c_j]/s + e_{jt}. \quad (4.6)$$

Assuming independent samples from a binomial population, the asymptotic distribution $\hat{P}_{jt}$ is normal with mean P_{jt} and variance $P_{jt}(1-P_{jt})/n_{jt}$, where n is the number of observations used to form $\hat{P}_{jt}$. It follows that e has mean zero and variance $1/n_{jt}\hat{P}_{jt}(1-\hat{P}_{jt})$, which implies the weighted least-squares estimating equation[6]

$$w^*_{jt} \cdot \ln(\hat{P}_{jt}/1-\hat{P}_{jt}) = w^*_{jt} \cdot [f_j(Z_t) - c_j]/s + w^*_{jt} \cdot e_{jt},$$

where $w^*_{jt} = \sqrt{(n_{jt}\,\hat{P}_{jt}(1-\hat{P}_{jt}))}$. (4.7)

Equation (7) gives the form of the model used in regression experiments. The logit $\ln(\hat{P}/(1-\hat{P}))$ appears in place of the unobserved Y^* for the reasons just reviewed. All parameters are identified up to the scale factor $(1/s)$ and the thresholds c_j are necessarily embedded within the intercept constants.

The nonlinear marginal response of the President's approval rating to movements in the macro economy, described and illustrated in the previous section, simply follows from the fact that the derivative of $\hat{P}$ with respect to Z is nonlinear (see fig. 4.7):[7]

$$dP_t/dZ_t = \hat{P}_t(1-\hat{P}_t)\cdot f_j. \quad (4.8)$$

The next section describes variables in the performance vector Z and reports the empirical results.

6. Empirical results

Three sets of predictions of the importance of partisanship on the economy–popularity relationships were presented earlier. If the public follows the purely economic calculus, the class composition of the parties dictates that inflation should be relatively more important to Republicans and unemployment to Democrats. A purely partisan calculus, on the other hand, predicts stronger relationships on both

[6] See Berkson (1955) who discusses the efficiency of weighted least squares relative to the maximum likelihood alternative.

[7] The descriptive illustration relied on the normal distribution: the derivative in eq. (4.10) is based on the logistic model, but the difference is negligible.

economic indices for the opposition party's identifiers be they Republicans or Democrats. And finally, the null hypothesis argues that there should be no significant inter-group differences on either economic index. These predictions can be tested against each other by estimating the logistic representation of popularity with unemployment and inflation for each partisan group's ratings. Although the economic predictions and the discussion of the threshold model ignored the relative placement of Independents we shall analyze their popularity relationships as well, by assuming that they occupy a middle position between Democrats and Republicans in all of the rankings.

Previous research has identified a number of significant determinants of presidential popularity trends in addition to the economy. Because these variables are often correlated with the economic indices, we shall examine the economic relationships within the context of a more encompassing model of presidential popularity:

$$\log(P/1-P) = a + b_1 \cdot \textit{inflation} + b_2 \cdot \textit{change in unemployment} + b_3 \cdot \textit{rally} + b_4 \cdot \textit{early term} + b_5 \cdot \textit{administration} + b_6 \cdot \textit{Watergate} + b_7 \cdot \textit{N.V. bombing} + b_8 \cdot \textit{U.S. killed}, \quad (4.9)$$

where

inflation	=	% change in consumer prices over preceding 6 months,
unemployment	=	% change in rate over preceding 6 months,
rally	=	6 month dummy variable representation of international rally events,
early term	=	dummy variable representing surge of popularity,
administration	=	dummy variable for Johnson and Nixon administrations,
Watergate	=	dummy variable during President Nixon's Watergate period,
N.V. bombings	=	number of U.S. bombing missions over North Vietnam during month (for Johnson years only), and
U.S. killed	=	number of U.S. soldiers killed in Vietnam during months (for Johnson years only).[8]

[8] The specification of the right-hand side of the equation is based on an earlier analysis of the overall popularity time series reported in Kernell (1978). We remind readers that Hibbs disagrees with this specification and hence with the implications of the model for the public's relative aversion to inflation and unemployment.

Table 4.3
Logit estimates of presidential popularity for partisan groups, monthly observations.

Variables	Eisenhower – Nixon (*N*=130) President's party identifiers	Independents	Opposition identifiers	Kennedy – Johnson (*N*=75) President's party identifiers	Independents	Opposition identifiers
Inflation[a]	−0.026[b] (−2.68)	−0.021 (1.22)	−0.017 (−1.07)	−0.133 (−3.47)	−0.204 (−4.61)	−0.256 (−3.56)
Unemployment[a]	0.0003 (0.08)	−0.017 (−2.44)	−0.017 (−2.73)	−0.038 (−2.34)	−0.069 (−3.21)	−0.079 (−2.56)
Rally	0.006 (0.65)	−0.007 (−0.45)	−0.008 (−0.54)	0.027 (2.31)	0.043 (2.81)	0.081 (3.64)
Early term	0.002 (0.27)	0.051 (2.96)	0.053 (3.63)	0.032 (1.66)	0.062 (2.58)	0.134 (3.64)
Watergate	−0.84 (−11.39)	−1.40 (−9.71)	−1.11 (−8.90)			
N.V. Bombing				−0.0006 (−4.04)	−0.00003 (−1.74)	−0.00007 (−2.62)
U.S. killed				−0.0004 (−4.22)	−0.0004 (−3.87)	−0.0005 (−2.46)
Nixon/LBJ (dummy variable)	−0.10 (−3.95)	−0.10 (−2.92)	−0.13 (−2.87)	−0.04 (−1.43)	−0.055 (−1.43)	−0.06 (1.23)
Intercept	1.5 (75.0)	0.75 (19.6)	0.02 (0.55)	1.94 (35.05)	0.80 (11.75)	0.062 (0.59)
$\bar{R}^2/DW$	0.92/1.9	0.79/0.7	0.71/1.0	0.94/1.8	0.88/1.3	0.78/0.8

[a] Percent (in decimals) change in consumer prices or unemployment rate over preceding 6-month period. For other variable definitions see Kernell (1978, table 5).
[b] Entries are unstandardized regression coefficients and the *t*-statistics.

In the estimates provided in table 4.3 a couple of interesting general patterns to the relationship should be noted. First, there are no glaring anomalies present among the equations for either the economic or political significance. Secondly, the most striking pattern to be found among the economic (and political) relationships in table 4.3 is not in the differences among the partisan subgroups as suggested by the predictions, but in the overall stronger relationships for each subgroup during the Democratic administrations. For the Kennedy and Johnson presidencies both unemployment and inflation are substantially stronger correlates of popularity for each partisan subgroup, with inflation increasing almost tenfold. Whether this pattern reflects a structural shift in the economic environment of the 1960s or the public's response to the greater willingness of Democratic administrations to intervene actively in the economy is unclear.

Of the several economic predictions strongest support can be marshalled for the partisan calculus. In comparing the estimates of the president's partisans with those of the opposition identifiers, we find that only for inflation during the Republican administrations were the opposition party relationships weaker, and even here the difference appears to be minor. The unemployment coefficients are stronger among opposition identifiers for both administrations. Republicans not only paid closer attention to inflation during Democratic administrations, but they also appear to have examined the unemployment rate more critically in evaluating the presidential performance. Similarly, the relationships for the political variables – *Watergate*, *N.V. bombing*, and *U.S. killed* – are consistently stronger for opposition party identifiers. In that each political condition worsened during the time-period, they describe a pattern of opposition withdrawal from the president's coalition of support. Note too, the stronger *early term* relationships for opposition identifiers project a similar image of initial support and subsequent withdrawal of approval.

Although in evaluating the relative effects of unemployment and inflation the regression coefficients are comparable given the similar operational definitions of these variables, the elasticities and beta coefficients given in table 4.4 are preferable for testing the relative importance of unemployment and inflation. Elasticity coefficients which standardize the means of the independent and dependent variables give the percentage change in the dependent variable attributable to a 1 percent change in the independent variable. The beta coefficient, on the other hand, adjusts the variances of dependent and independent variables allowing a direct comparison of the explanatory power of unemployment and inflation in altering popularity. From the elasticities we find popularity more sensitive to changes in inflation by a magnitude of 4 to 1 during the Republican years and by 10 to 1 during Democratic adminstrations.

Table 4.4
Elasticities and Betas of logit estimates for inflation and unemployment.

	Eisenhower – Nixon			Kennedy – Johnson		
	President's Party	Independents	Opposition	President's Party	Independents	Opposition
Elasticities[a]						
Inflation	−0.04	−0.11	−0.17	−0.22	−1.6	−1.6
Unemployment	0.0001	−0.03	−0.05	−0.02	−0.17	−0.15
Betas						
Inflation	−0.10	−0.09	−0.07	−0.23	−0.36	−0.46
Unemployment	0.00006	−0.11	−0.11	−0.09	−0.16	−0.19

[a] Elasticities are computed at the mean values of the dependent and independent variables.

These figures suggest that any president who can control inflation – as recent presidents have failed to do – should be able to sustain high public support. With respect to actual variance in popularity during the 1953–1974 period, however, unemployment turns out to be a somewhat more important contributor to popularity than the elasticities suggest. For the Republican president's time series – most of which occurred during the politically dormant and economically static Eisenhower years – neither unemployment nor inflation had much effect on popularity. During the Kennedy and Johnson presidencies, on the other hand, although inflation continues to be the more important economic determinant of their popularity, the differences are not nearly so great.

7. Conclusion

To the degree that the American electorate judges its leaders' economic performance through a partisan rather than class-based lens, presidents need not bifurcate their economic strategies between servicing their core constituency or courting the marginal opposition constituency. In fact, in the United States during the postwar era the electorate's uniform concern with inflation means simply that a president who succesfully reduces inflation or keeps it from rising will be attracting both constituencies. The relationship for the unemployment rates can be viewed simply as a limit in how far politicians can go in fighting inflation.[9]

Given this pervasive concern with inflation, Republican leaders may find themselves in a more comfortable position than Democrats. The Republican Party's core support among the business community establishes wholly congruent priorities in economic policies: core voters, business supporters, as well as the marginal supporters (i.e. Democrats) are each focusing principally upon inflation. Democratic presidents, needing the financial and organizational support of trade unions whose traditional ideological commitment is to employment policies, find themselves in a bind of having to respond to union preferences while electorally needing to concentrate upon inflation. For modern Democratic presidents the choice is not when to be strategic but how to be strategic, for following unemployment-directed policies at the expense of higher inflation in the short run will cost a Democratic president not only votes at the Republican margin but votes among his "core" Democratic electorate as well.

[9] Also, the preoccupation with inflation minimizes the incentive to heat the economy just prior to elections *à la* Nordhaus (1975). Hibbs does not share this view since results based on his own model indicate that unemployment has a much greater impact on presidential popularity than is implied here. See Hibbs (1979b).

Given this strategic dilemma a president can pursue any of several strategies, and President Carter's recent performance epitomizes all of them. He may pursue a mixed strategy toward both low unemployment and low inflation. As with President Carter's inspired inflation-fighting amendments to the Humphrey–Hawkins Bill, this will frequently take the form of watered-down "full" employment programs. A president may move sequentially and remedially from one goal to the next. When this strategy fails it is generally characterized as "vacillating" or "temporizing" which are precisely the terms which former Treasury Secretary Michael Blumenthal used to describe the Carter administration's economic policies. He attributed this behavior to the "Democratic dillemma". Although the administration recognized that it had to be committed to an anti-inflation effort "if for no other reason [than] that they know (inflation) is politically damaging", observed Blumenthal, "the liberals (in the Adminstration) believe... that fighting inflation hurts poor people, and that we have to be very careful how we fight inflation in order not to hit ' the natural constituency of the Democratic Party' " (Rowen, 30 October 1979). Finally, in desperation presidents may surrender the hard choices, and hopefully displace responsibility, to other actors. Within this perspective the appointment of Paul Volcker to head the Federal Reserve Board makes perfect sense. We find then that by understanding the economic priorities and opinion dynamics of the American electorate, we can better understand *even* erratic macroeconomic policy.

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