

The Economy and Policy Mood: A Fundamental Dynamic of Democratic Politics?

Author(s): Randolph T. Stevenson

Source: *American Journal of Political Science*, Vol. 45, No. 3 (Jul., 2001), pp. 620-633

Published by: [Midwest Political Science Association](#)

Stable URL: <http://www.jstor.org/stable/2669242>

Accessed: 18/09/2014 20:36

---

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at  
<http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Midwest Political Science Association is collaborating with JSTOR to digitize, preserve and extend access to *American Journal of Political Science*.

<http://www.jstor.org>

# The Economy and Policy Mood: A Fundamental Dynamic of Democratic Politics?

**Randolph T. Stevenson** Rice University

This article aims to establish empirically whether changes in the aggregate policy preferences of voters in western democracies relate systematically to national economic performance. Results from a time-series, cross-sectional regression analysis of data on aggregate policy preferences from fourteen western democracies (1956–1989) support a hypothesis originally suggested, for the American case, by Durr (1993): when the economy expands aggregate policy preferences move left, but when the economy contracts aggregate policy preferences move right. This finding sustains the normatively appealing conclusion that change in aggregate policy preference reflects the measured response of many individuals to changes in their political environment.

Students of American Politics have, in recent years, proposed a close causal connection between changes in the aggregate policy preferences of citizens and changes in public policy (Shapiro and Jacobs 1989; Erikson, Wright, and McIver 1994; Stimson, MacKuen, and Erikson 1995; Erikson, Stimson, and MacKuen 2001). If this kind of “dynamic representation” is real, it supports a normative theory of democracy in which the public’s role is closer to Rousseau’s vision of a directing “general will” than to the Madisonian view that elections are the only reliable link between voters and politicians (Schumpeter 1942; Riker 1982). The normative message of “dynamic representation” lacks force, however, if changes in aggregate policy preferences are not themselves meaningful. If policy preferences are uninformed and vary capriciously (Berelson, Lazarsfeld, McPhee 1954; Converse 1964; Delli Carpini and Keeter 1996) or are easily manipulated by politicians (Riker 1982) then policy responsiveness to these changes can hardly be considered a virtue.

Such questions have motivated empirical researchers to explore the meaning of aggregate opinion change by trying to identify its systematic causes (e.g., Page and Shapiro 1992). This article adds to this effort by including economic performance among the potential sources of change in aggregate policy opinion, and, unlike previous efforts that have focused on the United States, by examining the question in a large sample of western democracies. To anticipate the conclusion and to indicate the direction of the argument, the findings indicate that the aggregate policy preferences of citizens in fourteen Western democracies respond systematically to changes in the economies of those countries. Further, these responses are realized rather slowly through time and, despite the many historical, cultural, and institutional differences separating western publics, are similar within each country in the sample. These findings sustain the normatively appealing conclusion that change in aggregate policy preference reflects the measured response of many individuals to changes in their political environment.

I demonstrate here these conclusions using data from the post-war histories of fourteen western democracies. I begin with a discussion of the

---

Randolph T. Stevenson is Assistant Professor of Political Science, Rice University, 6100 Main Street, Houston, TX 77005 (stevensor@ruf.rice.edu).

The author would like to thank David Brown, John Ambler, Rick Wilson, and Paul Brace for their comments on earlier drafts of the paper. Also, Heemin Kim, Richard Fording, and Robert Franzese generously shared their data. All remaining errors are my own.

*American Journal of Political Science*, Vol. 45, No. 3, July 2001, Pp. 620–633

©2001 by the Midwest Political Science Association

concept of aggregate policy preference, how others have used it, and how I use it. Next, I provide a brief review of previous work on the American case that has tried to connect changes in aggregate policy preferences to economic performance. I draw from this review the main theoretical hypothesis tested in this article: *when the economy expands aggregate policy preferences move left, but when the economy contracts aggregate policy preferences move right*. Finally, I offer two measures of aggregate policy preferences that can be constructed across countries and over time and use these measures in a statistical analysis of the hypothesized relationship.

## The Concept of Aggregate Policy Preference

The easiest way to explore how economic change influences the public's policy preferences is to examine movements in opinion about specific policies. For some countries (e.g., the United States, Britain, France, and Germany) identically worded questions have been included on many different surveys. Change in the aggregate responses to these questions over time could be examined for any connection with economic performance. Page and Shapiro (1992) adopt this policy-specific strategy in their analysis of stability and change in the opinions of Americans. Stimson (1998), however, has argued that an issue specific strategy ignores the interdependence of aggregate opinion across different issues. His factor analysis provides evidence that Americans' opinions about issues like government spending on health, education, defense, and the environment, as well as the government's role in guaranteeing civil rights and economic security, reflect a single "latent" dimension of opinion.<sup>1</sup> Given this interdependence, analyses of opinion on any individual issue will be biased against finding systematic determinants of opinion change—since such studies do not take advantage of relevant information concerning other issues and leave issue-specific idiosyncrasies in the data (noise that combined analysis would "average out"). Consequently, in this analysis, we will consider how the economy impacts a general measure of aggregate policy preferences rather than how it moves opinion on individual issues.

Stimson calls the underlying dimension of American policy opinion that he identifies "policy mood." The opposition between "liberal" and "conservative" opinion

defines this dimension. Liberal opinions call for the federal government to be an active "provider and protector of jobs, health care, schools, housing, civil rights, and the like." (Durr 1993, 159). Conservative opinions are the opposite, consistently favoring a more limited role for government.<sup>2</sup>

This conception of aggregate policy opinion, which I will (following Stimson) call "policy mood," is readily exported to other western democracies. While we have no equivalently broad factor analyses of public opinion data in most of these countries, many other sources of evidence converge on the idea that these citizens' preferences over a range of policy issues are highly correlated with a single left/right dimension (Huber 1989; Inglehart 1990; Dorussen and Taylor Forthcoming). Further, across countries, people seem to have a similar understanding of the policy content of the left and right (Huber and Inglehart 1995; Fuchs and Klingeman 1989; Gabel and Huber 2000). In the rest of this article, then, I will focus on explaining how economic change impacts the "policy mood" of western publics, where policy mood is simply the aggregate preferences of citizens on a left/right dimension of politics.

## Change in Policy Mood: Comparative and American Perspectives

The quantitative, cross-national literature on public opinion formation and change has not yet answered the question of how economic performance might impact policy preferences. While there is a long-standing debate about whether the economic circumstances of early socialization cause later political attitudes (Inglehart 1990; Duch and Taylor 1993, 1994), this debate ascribes no role to fluctuations in the economy that may occur later in life. In addition, although the empirical connection between economic performance and political support has been recognized since the early 1970s (Goodhart and Bhansali 1970; Kramer 1971; Mueller 1970), few students of this phenomenon have considered how the economy might impact other kinds of public opinion (Nannestad and Paldam 1994 provide a recent review).

The principal reason for this lack of interest among comparativists has been the persistence, in cross-national research, of the sociological model of political behavior. The sociological model explains peoples' policy preferences by their positions in the class and religious cleavage

<sup>1</sup> The factor analysis reveals a strong single factor that accounts for 71 percent of the variance of aggregate opinion across issues.

<sup>2</sup> The issue of defense spending is the exception. It loads negatively with other kinds of government spending.

structure of society. Consequently, theoretically interesting change in aggregate policy preferences can only come from change in the class and religious alignments of the population (e.g. Franklin, Mackie, and Valen 1992; Dalton, Flanagan, and Beck 1984; Inglehart 1990). These changes, however, happen very slowly, are often unidirectional, and occur mostly through intergenerational replacement. More short-term fluctuations in policy opinion (like the kind that would result if economic performance helps determine policy opinions) have consequently been ignored or presumed random.

In contrast to the comparative literature, the last decade of work on American public opinion has argued for the “rationality” of short-term changes in aggregate policy opinion. Page and Shapiro (1992) marshal a wealth of survey data, which is comparable over long time spans, in support of this view. This evidence is a needed corrective to the position, once widely held, that change in aggregate policy opinion cannot be meaningful because *individual* expressions of opinion seem to fluctuate randomly from time to time.<sup>3</sup> This empirical revision is bolstered by an emerging theoretical consensus on the nature and sources of American public opinion (e.g., Zaller 1992; Iyengar and Kinder 1987; Mutz 1998). This consensus reconciles the responsiveness of aggregate policy opinion with the apparent instability of individual opinion by arguing that expressions of opinion are constructed by individuals from a set of “relevant considerations” that are available in memory. Opinions fluctuate both because specific expressions of opinion are just samples from this set and because the contents of this set of considerations change as individuals encounter new political information or are reminded of old information. The first source of fluctuation, random sampling, cannot lead to any systematic pattern in the aggregate, but the second source of individual fluctuation will lead to systematic patterns in aggregate opinion if people tend to rely on the same sources of political information. In modern democracies in which the mass media has become the preeminent source of news, this is surely the case (Mutz 1998). Consequently, changes in the political environment will be systematically reflected in aggregate opinion if those changes are communicated to the public by the mass media.

<sup>3</sup>In the American literature, the sociological model (championed by the “Columbia school”) was quickly replaced by the Michigan model, which emphasized the importance of partisan affiliations and the instability of policy opinion (Campbell et al. 1960; Converse 1964). Neither of these ideas leaves much room for an economic influence (either opinions are too stable due to long-term sociological circumstances or socialized partisan commitments, or they are too unstable—because they are random).

Although the important works in this new consensus have not focused on how changes in economic performance get translated, via the a changing media message, into shifts in public opinion; the general message that change in aggregate public opinion is systematically related to change in the political environment has produced some interest in this question. Specifically, Durr (1993) has offered a theoretical story connecting economic change to aggregate opinion change: proposing that the policy mood of Americans should move left when the economy is expanding and right when the economy is contracting.

Durr’s argument builds an analogy between consumer choice and the individual’s demand for different bundles of public policies. In simple theories of consumer choice, individuals demand the mix of goods that maximizes their utility, subject to a budget constraint imposed by their personal income. As their income changes they may demand a different mix of goods, depending (in part) on the relative prices of the goods. For Durr, support for a given bundle of policies is analogous to this consumer decision: an individual demands the mix of public policies that maximizes her utility (if enacted), subject to a budget constraint imposed by the national economy. Durr’s two-good model includes only “left” and “right” policies and lets individuals choose some quantity of each in their optimal mix.<sup>4</sup>

Durr’s hypothesis that a good economy increases support for leftist policy follows from his assertion that leftist policy is more expensive than rightist policy. If this is true, the decreasing marginal value of money implies that increases in income (here national income) will make individuals more willing to “buy” more expensive leftist policy, substituting it for less expensive rightist policy. In contrast, when national income falls, less expensive rightist policy is substituted for leftist policy.<sup>5</sup>

Durr’s empirical analysis supports his hypothesis: changes in the economic expectations of Americans are closely related to changes in Stimson’s (1998) measure of policy mood. Further, Durr adds the inductive conclu-

<sup>4</sup>One could argue that Durr’s utility maximizing voters are out of step with the more passive voters that populate current theories of public opinion (e.g., Zaller 1992). Durr’s theory, however, remains the only published theoretical explanation for the relationship.

<sup>5</sup>A slight departure from this logic leads to the same conclusion, without the assumption that leftist parties are necessarily more expensive than rightist policies (which may be empirically objectionable—e.g., the Reagan defense build up). Specifically, if voters see leftist policies as *luxury goods* relative to rightist policies (over some range of income), then, regardless of their relative prices, a rational individual will maximize her utility by demanding more leftist policies when national income increases and less when it decreases.

sion that this relationship is “long-remembered”—so that only sustained economic change will cause significant swings in policy opinion to the left or right.

While these results are convincing, more work is needed: perhaps the empirical relationship Durr identifies is uniquely American and confined to the last half of the twentieth century. Durr characterized the relationship between the economy and policy mood as a long-remembered, equilibrium relationship that tends to move in long waves through time. As a result, it is possible that the particular evolution of policy mood that occurred in post-war America just happens to correspond to some of the significant changes in the economy in the same period. With a long-remembered process and relatively short time-series, it is hard to rule out such possibilities. Alternatively, even if the relationship between economic expectations and policy mood that Durr identified represents a real causal relationship, it could be that it is conditional on the particular structure of the American system in the post-War period (which was in many ways historically unique). Indeed, a theme in recent cross-national studies of political behavior has been the conditionality of behavioral relationships on the institutional and historical circumstances in which they transpire (e.g., Powell and Whitten 1993; Anderson 2000). If this were also the case for Durr’s economy-preference link, the relationship would only be useful in describing the dynamics of public opinion in the post-war United States.

Thus, despite Durr’s useful work, the question asked in the title of this article remains open: Is there systematic a relationship between economic performance and policy mood that is a general feature of democratic politics in advanced democracies? A proper evaluation of this question requires that the hypothesis be tested in democracies beyond the United States—that have had different economic experiences, different electorates, and different institutions.

### **Policy Performance and Policy Mood: An Alternative Perspective**

A growing body of research shows that in the American political system a negative feedback operates between the policies produced by the government and those demanded by the public (Durr 1992; Wlezien 1995; Erikson, Stimson, and MacKuen 2001). For example, when a government increases spending on education, welfare, and health, public opinion becomes less supportive of further spending in these areas.

The usual explanation for these empirical results depends on the assumption that policy mood reflects not only preferences for “levels” of policy but also preferences for change in policy. For example, suppose an initial status-quo policy is located left of the median voter’s ideal point. If the government moves policy rightward (towards the median voter’s position but not beyond it), the median voter will be more satisfied with policy and so will be less likely to express the opinion that policy should move still further right. The logic is similar for policy movement away from the median voter’s position and for policy movement that “leapfrogs” her position. Subsequent to each of these changes, the voter will demand less change in the direction policy has been moving than she demanded previously. We should thus expect a negative relationship between movements in policy and the amount of change demanded by the median voter.

This reaction hypothesis depends on the assumption that voters pay attention to the actual policy produced by the government—an assumption that may be questionable given most voters lack the incentive to do such monitoring. An alternative logic, however, leads to a similar result without assuming that voters monitor policy: If voters use the known ideology of the government as a simplifying heuristic for inferring the current state of public policy (Lupia and McCubbins 1998), a version of the reaction hypothesis still obtains. In this version, however, we expect government ideology (rather than actual policy) to be negatively related to policy preference. The empirical models that follow allow for both of these possibilities.

### **Data, Measurement, and Model Specification**

In this section, I describe two ways to measure aggregate policy preferences across countries and over time and then discuss how to measure the independent variables in the model (i.e., economic performance, government partisanship, and policy performance). Finally, I explain how to overcome several econometric difficulties presented by these data.

#### **Measuring the Dependent Variable: Policy Mood**

Stimson (1998) measured his concept of policy mood by combining information from thousands of different survey questions on the policy opinions of Americans. Unfortunately, the available survey data on the policy opinions of citizens in other democracies are not nearly as

comprehensive as those for the United States, rendering similar measurements for these countries impossible. Consequently, I turn to two alternative measures of policy mood that are available across countries over many years: mean left/right self-placement from the Eurobarometer surveys; and a measure, based on party manifesto and electoral data, developed by Kim and Fording (1998).

The “mean left/right self-placement” measure is constructed from answers to a Eurobarometer survey question asked in the European Union countries every spring and fall since 1972. Respondents are shown a card depicting a ten-point scale and asked, “In political matters, people talk of the ‘left’ and the ‘right.’ How would you place your views on this scale?”<sup>6</sup> The distribution of responses to this question for citizens in a given country is an estimate of the distribution of left/right policy preferences in that country. I take the mean of this distribution (in each country and time period) as a summary measure of policy mood.

This measure will reflect true policy mood if respondents’ answers to the question are based, to a significant extent, on their *policy* preferences. Fortunately, it is possible to evaluate this assumption since the content of left/right self-placement has been the subject of a number of systematic analyses. For example, Inglehart (1990) shows that survey respondents’ left/right self-placements are strongly correlated (in the expected directions) with their views on specific policies. Further, Huber (1989), in a careful analysis of the European countries, finds that differences in the distribution of left/right self-placement across countries (e.g., some countries have a greater number of extreme voters) result from similar differences in the distribution of policy opinion.

The specific aggregate measure used in the analysis reported below is the mean of the left/right self-placement distribution within a country.<sup>7</sup> I have data on this variable from fall 1973 to fall 1992 for Belgium, Denmark, France, Germany, Ireland, Italy, the Netherlands, and the United Kingdom; from spring 1982 to fall 1992 for Portugal and Spain; and from fall of 1980 to the spring 1992 for Greece.

The second measure of policy mood is less direct than mean left/right self-placement, but provides much

<sup>6</sup>Answers were originally coded so that “1” is the most extreme leftist and “10” the most extreme rightist. In the analysis in this article this scale is reversed so that high numbers correspond to leftist orientations.

<sup>7</sup>There were small differences in the sample size used to calculate this mean in different countries and surveys. Weighted regression was used to account for these small differences but in every case differences with the unweighted results were tiny. Since the kind of weighting required cannot be used with panel-corrected standard errors in standard packages, I have not used weighted estimates in the reported results.

greater temporal and spatial coverage. This measure, developed by Kim and Fording (1998), combines an indicator of the left/right policy preferences of political parties (as revealed through their election manifestos) with voting data to produce an estimate of the underlying voter preference distribution on a left/right policy scale.<sup>8</sup> The median of this distribution is their measure of policy mood. They construct the measure in three steps: First, they order the parties in each election on a left/right ideological dimension that runs from 0 to 100. Second, for each party they find the interval on the left/right dimension defined by the midpoint between the party and its nearest competitors on the left and right.<sup>9</sup> Finally, they assume that the actual electoral support each party obtains in the election comes entirely from voters whose ideal points fall into this interval. This procedure thus produces a grouped frequency distribution of voter ideal points (with the boundaries between groups given by the intervals defined above). Suppose, for example, the German Christian Democrats received 43 percent of the vote, had ideology score of 50, and were flanked on either side by the Social Democrats (with an ideology score of 40) and the Free Democrats (with an ideology score of 55). Kim and Fording would assert that the ideal points of 43 percent of the German electorate fell between 45 and 52.5 on their 101-point left/right ideology scale. The location of the ideal points of the other German voters could be inferred similarly. Kim and Fording’s measure of policy mood at this election would be the median of the resulting grouped frequency distribution.

Kim and Fording’s method produces plausible estimates of policy mood if the assumptions about voters that underlie its construction are valid (at least approximately). The first of these assumptions holds that voters recognize the meaning of the left/right dimension of politics and base those meanings on policy concerns. The plausibility of this assumption has already been discussed. The second assumption requires that left-right policy preferences are an important determinant of vote choice. Many studies have shown the importance of left/right spatial voting in European electorates (three of the most sophisticated analysis come from Whitten and Palmer 1996; Quinn, Martin, and Whitford 1999; and Alvarez, Nagler, and Bowler 2000). Finally, the method assumes that most of the electorate votes sincerely—that is, they do not vote for less preferred alternatives in a strategic effort

<sup>8</sup>Budge, Robertson, and Hearl (1997) explain and justify the use of manifestos to measure left/right party positions. Gabel and Huber (2000) evaluate, generally favorably, how well this and other measures succeed in placing parties.

<sup>9</sup>If there is no party to the left (right), the left (right) end of the scale defines the interval boundary.

**TABLE 1** Descriptive Statistics

	Obs.	Mean	Std. Dev.
<b>Semiannual and Quarterly Data Used in Models 1–4, Table 2</b>			
Mean left/right self placement (–10 = most right, –1 = most left)	345	–5.38	0.21
Change in mean left right self placement (absolute value)	323	0.16	0.13
Inflation	1272	0.08	0.05
Unemployment	1154	6.93	3.27
Growth	1170	0.03	0.03
Welfare	1648	13.3	3.76
Government Partisanship (–10=most right, 0 = most left)	1668	–6.18	1.41
<b>Annual Data Used in Models 5–8, Table 2</b>			
Median Policy Preference (0 = most right, 100 = most left)	588	57.41	9.21
Change in Policy Preference (absolute value)	574	2.75	2.66
Unemployment Rate	476	4.36	3.36
CPI Inflation Rate	546	5.81	4.57
Growth Rate of GDP per capita	406	0.03	0.02
Welfare	489	11.76	3.68
Government Partisanship (–10=most right, 0 = most left)	573	–5.33	1.35

- Numbers are the average within country averages (i.e., statistics within each country are calculated and then the average of these statistics is reported) except for min and max, which are the overall minimum and maximum.
- The absolute value of change in policy preference is reported, as this is more descriptive with respect to the magnitude of change. However, absolute values were not used in the analysis in the text. The mean of the series for non-absolute values is very close to 0 (since positive and negative changes cancel each other out).
- Some variables have series longer than 1955–1988. These whole series are used in the univariate tests reported in the text (i.e., unit root tests).

to influence the outcome. If many voters vote strategically, policy preferences cannot be inferred from observed votes and the method fails. The evidence on this point is in Kim and Fording's favor: Quantitative analyses show that in many democracies some strategic voting does occur, but the extent of this behavior is limited and decreases rapidly with the complexity of the electoral system (Cox 1997).<sup>10</sup> Kim and Fording's own attempt to account for strategic voting in their method produced "corrected" estimates identical to the uncorrected ones.<sup>11</sup>

Kim and Fording calculated their measure for all the elections between 1955 and 1989 for a large number of countries, including all those for which I have left/right self-placement data, as well as seven countries that are not

included in the Eurobarometer surveys. These are Australia, Austria, Canada, New Zealand, Norway, Sweden, and the United States. Despite the advantage in coverage, however, I use the measure primarily as a compliment to mean left/right self-placement rather than as the principal focus of the analysis. This is necessary because the measure contains irregular gaps in the annual time-series for each country (elections only occur every few years and, in most the parliamentary systems, on no fixed schedule). Such irregular time-series are notoriously difficult to work with, especially if one is interested in effects that play out slowly over time. Kim and Fording's solution to this problem was to interpolate linearly the data between election years. This is a reasonable compromise given the intractability of the problem; and in this article I use these data with the interpolated values. In the discussion of the results, however, I note the ways in which the interpolation may influence the answers we obtain. Table 1 provides descriptive statistics for both measures (as well as the other variables used in the analysis).<sup>12</sup>

<sup>10</sup>In countries that use proportional representation and have large district magnitudes it is often difficult for voters to gain the information necessary to cast strategic votes (see Cox 1997). In countries in which the strategic calculus is easier (e.g., the United Kingdom) estimates of the extent of strategic voting are seldom as high as 10 percent.

<sup>11</sup>Fording and Kim have also demonstrated that the measure is largely in tune with other measures of aggregate left/right policy preferences that are available for individual countries or for limited time periods.

<sup>12</sup>Descriptive statistics were calculated for each country separately and the across-country averages of these descriptive are reported in Table 1.

### Measuring the Explanatory Variables: Economic Performance, Policy Performance, and Government Ideology

My main goal here is to test whether the aggregate policy preferences of citizens in western democracies move left when the economy expands and right when it contracts. Since this hypothesis makes no theoretical distinction between different aspects of economic performance, it provides no guidance about which economic indicators should be used in the analysis.<sup>13</sup> Rather than rely arbitrarily on one indicator, I estimate the empirical models using three different indicators of macro-economic change: the GDP growth rate, the unemployment rate, and the inflation rate. If the hypothesis is correct, higher growth should push policy preferences left, while higher unemployment and inflation should move preferences to the right.

Because I am using two different dependent variables, one measured yearly and the other semiannually, I collected both yearly and quarterly data on these three indicators.<sup>14</sup> All the data on unemployment and inflation (both quarterly and annual) as well as the quarterly GDP growth rate are from the OECD. Each series is seasonally adjusted and the GDP growth rate has been adjusted for inflation. For annual growth rates (measured, in this case, as the percentage change in real GDP per capita), the best annual data comes from the Penn World Tables. Both these data sources provide internationally comparable data from the mid-1950s.<sup>15</sup>

The policy reaction hypothesis requires that we measure the current position of left/right policy and government ideology in each time period. To do this, I use expenditure data to track the extent to which the budgets for traditionally leftist programs are expanding or contracting. The specific measure includes spending (as a percentage of GDP) on welfare, social security, and unemployment insurance (simply “social spending” below).<sup>16</sup>

<sup>13</sup>Other studies that have tried to establish links between the economy and political behavior (e.g., voting and popularity) have found that different measures of the economy have quite different impacts on behavior (e.g., Powell and Whitten 1993).

<sup>14</sup>I use the quarterly economic data with the semiannual survey data as follows: for the fall surveys, which were usually conducted in the fourth quarter, I use economic data from the third quarter; for the spring surveys, which were usually conducted in the second quarter, I used first quarter economic data.

<sup>15</sup>I use the growth rate of GDP per capita in the analysis. It makes no difference whatsoever if one uses absolute rates of growth (not per capita) instead.

<sup>16</sup>This series is from OECD National Accounts Table 6. It was also used in Franzese (2001). Using per capita measures of spending (rather than spending as a percentage of GDP) makes no difference in the analyses.

I measure government partisanship on the left/right dimension using a measure of the left/right partisanship of the government developed by Franzese (2001). The measure scores parties on a ten-point scale (right = 10, left = 0) using party policy positions that are reviewed in Laver and Schofield (1990) as well as the expert coding of party positions from Laver and Hunt (1992). The share of portfolios that each party held in cabinet weights the raw scores for party positions. The resulting measure gives the ideological “center of gravity” of the cabinet.

### Estimation Strategy

When all of the annual data are combined into a single data set, there are complete data for fourteen countries (Australia, Austria, Belgium, Canada, Denmark, Germany, Ireland, Italy, the Netherlands, New Zealand, Norway, Sweden, the United Kingdom, and the United States) from 1955 to 1988. The empirical design for this dataset is a balanced time-series cross-section.<sup>17</sup> For the semiannual dataset, data on all the variables exists for eleven countries, but not for the same time periods in each country. The empirical design is therefore an unbalanced time-series cross-section.

Both balanced and unbalanced time-series cross-section designs have been studied extensively in the statistical, economics, and political science literature. Consistent with the procedures outlined in Beck and Katz (1995), I report panel-corrected standard errors and OLS estimates of the coefficients from regressions that allow for country specific constant terms.<sup>18</sup> The dynamics within panels are handled by including lagged dependent variables. Lagrange multiplier tests for serial correlation of the errors indicate that two lags of the dependent variable are needed to capture successfully the dynamics in both the annual and semiannual data.<sup>19</sup>

The tables in the next section provide estimates for model specifications including different combinations of the independent variables. Not only does this ensure that the estimated effects are robust to these kinds of model-

<sup>17</sup>While the panels are always balanced, the beginning date for the growth series is later than that for the other series so the number of observations included may vary across estimations containing different covariates.

<sup>18</sup>All the statistical models were estimated using STATA version 6.0. *Mathematica* programs were written to produce recursive predicted values from the time-series estimates.

<sup>19</sup>This test and all other tests that are reported for the full sample (rather than each country separately) are the panel equivalents of the usual tests. Two lags are also indicated by plots of the autocorrelation and partial autocorrelation functions of the dependent variables for each country.

ing decisions, but also ensures that collinearity among the regressors, which we might expect in these data, is not a serious problem for this analysis.<sup>20</sup>

## Results

The initial discussion of the results concentrates on the most important hypothesis in the article: when the economy expands policy mood moves left, but when it contracts policy mood moves right. Only after discussing how this relationship unfolds in the short and long term for both measures of the dependent variable do I consider the various control variables that have been included in the specifications.

### The Impact of the Economy on Policy Mood: Mean Left/Right Self-Placement

If policy mood moves left when the economy is improving and right when it is deteriorating, we would expect mean left/right self-placement to relate negatively to inflation and unemployment and positively to growth (recall that this dependent variable is coded so that higher numbers indicate more leftist positions). Table 2 presents the estimates of the relationship for four model specifications.

**Direction and statistical significance of the estimated effects.** Note first the signs and statistical significance of the coefficients on the economic variables: they unambiguously confirm the hypothesis. The estimated coefficients for each measure of the economy, in each model specification, are in the expected direction and statistically significant.<sup>21</sup> Especially encouraging is the invariance of the result to issues of model specification (i.e., which variables are included and how one measures the economy), since this indicates that the data, not the specification decisions are driving the results.<sup>22</sup>

**The magnitude of the estimated effects.** Confirmation of the direction and statistical significance of the hypoth-

<sup>20</sup> This is not to say that collinearity is not present; only that it does not critically damage our ability to identify the relationships in the data.

<sup>21</sup> Consistent with the “general to specific” modeling approach that is advocated in most of the econometric literature, other specifications with longer lags for the dependent variable and independent variables were tried. In each case statistical tests rejected these more complex specifications.

<sup>22</sup> Including inflation and unemployment separately only strengthens the result as it eliminates the mild collinearity that exists between the variables in some specifications.

esized relationship says nothing about the substantive significance of the results. To assess this, we need to calculate how much mean left/right self-placement moves when the economy changes in typical ways. Although the inclusion of lagged dependent variables (LDV) in the model complicates this calculation, the appropriate methods are well known in political science (Stimson 1985; Beck 1991). Specifically, the LDV specification allows for some of the “total effect” of a change in an independent variable to be realized in future periods.<sup>23</sup> Consequently, to understand the substantive impact of this change, we must consider not only the size of the immediate effects (which are reflected in the size of the coefficients on the independent variables) but also the size of the effects that happen in subsequent periods (which are a function of the coefficients on the LDV terms). Summing over all of these period-specific effects gives the “total effect” of the change.

From the estimates in Table 2, the total effect of a one-time change in the growth rate of 3 percent (one standard deviation) leads to a change in mean left/right self-placement of 0.07 points. For unemployment, a one standard deviation change produces a movement of 0.09 points; and for inflation, such a change moves mean left/right self-placement 0.08 points.<sup>24</sup> These effects are about a third of the average “within country” standard deviation in mean left/right self-placement. These effects are not large when taken separately. However, when the various indicators of the economy are all moving together or if the economy moves in the same direction for several periods, then the effects can be quite large.

A real world example of such an effect is illustrative: In the early 1970's Belgium, like much of the rest of Europe, experienced an economic slowdown. Inflation and unemployment both worsened and growth slowed. From the winter of 1971 to the fall of 1974 the inflation rate in Belgium increased (semiannually) by .011, 0.008, .001, .014, .001, .015, and .063 points. Over the same period, the unemployment rate changed by 0.1, 0.4, 0.2, 0.0, 0.1, -0.1, and 0.4 points. Using the estimates in Table 2, we can estimate the cumulative impact that all of these economic changes should have produced in the mean left/right self-placement of Belgians: a rightward shift of 0.2 points on the policy mood scale. This is a large effect (approximately one standard deviation in mean left/right self-placement

<sup>23</sup> The total effect of a one-time change an independent variable (i.e., it moves to a new level and stays there) is defined, in our case, as  $\beta/(1-\gamma_1-\gamma_2)$ \*(the change), where  $\beta$  is the estimated coefficient on the independent variable and  $\gamma_1$  and  $\gamma_2$  are the coefficients on the lags of the dependent variable.

<sup>24</sup> The result for growth is from Model 2 and the results for inflation and unemployment are from Model 4.

**TABLE 2** Effects of the Economy on Mean Left/Right Self Placement

	Semiannual Data, Mean of Survey Responses (-10 = Rightmost, -1 = Leftmost)			
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
<b>Dynamics</b>				
Mean L/R self-placement two quarters ago	0.33 <sup>1</sup> (0.07)	0.33 <sup>1</sup> (0.07)	0.34 <sup>1</sup> (0.07)	0.34 <sup>1</sup> (0.07)
Mean L/R self-placement one year ago	0.21 <sup>1</sup> (0.07)	0.22 <sup>1</sup> (0.07)	0.30 <sup>1</sup> (0.07)	0.30 <sup>1</sup> (0.07)
<b>Economy</b>				
Growth Rate of GDP in previous quarter	0.86 <sup>1</sup> (0.38)	1.05 <sup>1</sup> (0.38)	— —	— —
Unemployment Rate in previous quarter	— —	— —	-0.01 <sup>3</sup> (0.008)	-0.01 <sup>1</sup> (0.006)
Inflation Rate in previous quarter	— —	— —	-0.63 <sup>2</sup> (0.34)	-0.57 <sup>2</sup> (0.33)
<b>Policy</b>				
Social Spending in previous year	-0.01 (0.008)	— —	-0.005 (0.01)	— —
Partisanship of Government in previous year (-10 = Rightmost, 0 = Leftmost)	-0.02 <sup>1</sup> (0.007)	-0.02 <sup>1</sup> (0.007)	-0.01 <sup>3</sup> (0.008)	-0.01 <sup>3</sup> (0.007)
Adjusted R <sup>2</sup>	0.90	0.90	0.91	0.91
Number of Observations	294 obs. 11 ctrys.	298 obs. 11 ctrys.	284 obs. 11 ctrys.	288 obs. 11 ctrys.

Cells marked "1" are statistically significant at greater than .05 in a two-tailed test and .025 in a one-tailed test, "2" are statistically significant at greater than .10 in a two-tailed test and .05 in a one-tailed test, and "3" are statistically significant at greater than .20 in a two-tailed test and .10 in a one-tailed test. Country specific intercepts are omitted from the table.

for the Belgian case) and illustrates how the model translates moderate but uniform (across indicators) and steady economic change into substantial movements in policy mood.<sup>25</sup>

These effects are realized relatively slowly over time. Specifically, it takes three or four years (in models 2 and 4, respectively) for 90 percent of the total effect of a change in an independent variable to be realized.<sup>26</sup> This finding is consistent with Durr's analysis of the U.S. case, in which he characterized policy mood as a "long-memored" process in which the effect of any change in the economy is smoothed out over time, causing policy mood to swing

slowly between the left and right.<sup>27</sup> This result is intuitively pleasing since a single, discrete change in one of the economic variables will not create large shifts in policy mood on its own. Instead, the data produce the sensible conclusion that only sustained economic change, which is also consistent across economic indicators, will lead to significant change in policy mood. When this kind of change does occur, however, the change in the public's policy preferences can be substantial.

In sum, these data confirm the hypothesis and provide a plausible interpretation of how the relationship plays out over time and across indicators of the economy.

**The impact of the economy on policy mood: Kim and Fording's measure.** As noted, the spatial and temporal coverage of mean left/right self-placement is limited to

<sup>25</sup>From the winter of 1973 to the fall of 1978 (roughly the period over which the effects should have played out and for which we have data) the measured mean left/right self-placement of Belgians moved right by about 0.5 points.

<sup>26</sup>In Model 2, 0.59 percent of the change is realized after 1 year, .82 after 2 years and .92 after 3 years. In Model 6 these values are .48 after 1 year, .73 after 2 years, .86 after 3 years and .93 after 4 years.

<sup>27</sup>Durr's estimates also indicate that it takes between two and three years for a change in the economy (in his case, aggregate economic perceptions) to be fully felt in aggregate policy preferences.

**TABLE 3** Effects of the Economy on Kim and Fording's Measure of Policy Mood

	Annual Data, Kim and Fording's Measure (1 = Rightmost, 100 = Leftmost)			
	<i>Model 5</i>	<i>Model 6</i>	<i>Model 7</i>	<i>Model 8</i>
<b>Dynamics</b>				
Policy Mood one year ago	1.16 <sup>1</sup> (0.07)	1.20 <sup>1</sup> (0.07)	1.21 <sup>1</sup> (0.06)	1.21 <sup>1</sup> (0.06)
Policy Mood two years ago	-0.36 <sup>1</sup> (0.07)	-0.36 <sup>1</sup> (0.07)	-0.37 <sup>1</sup> (0.06)	-0.39 <sup>1</sup> (-6.43)
<b>Economy</b>				
Growth Rate of GDP in previous year	6.75 (8.91)	10.67 <sup>3</sup> (8.24)	— —	— —
Unemployment Rate in previous year	— —	— —	-.11 (0.10)	-0.18 <sup>1</sup> (0.08)
Inflation Rate in previous year	— —	— —	-0.08 <sup>2</sup> (0.046)	-0.10 <sup>1</sup> (0.04)
<b>Policy</b>				
Social Spending in previous year	-0.16 <sup>1</sup> (0.07)	— —	-0.05 (0.07)	— —
Partisanship of Government in previous year (-10 = Rightmost, 0 = Leftmost)	-0.25 <sup>3</sup> (0.16)	-0.22 <sup>3</sup> (0.16)	-0.23 <sup>3</sup> (0.15)	-0.22 <sup>3</sup> (0.16)
Adjusted R <sup>2</sup>	0.92	0.91	0.92	0.91
Number of Observations	364 obs. 13 ctrys.	392 obs. 14 ctrys.	437 obs. 13 ctrys.	476 obs. 14 ctrys.

Cells marked "1" are statistically significant at greater than .05 in a two-tailed test and .025 in a one-tailed test, "2" are statistically significant at greater than .10 in a two-tailed test and .05 in a one-tailed test, and "3" are statistically significant at greater than .20 in a two-tailed test and .10 in a one-tailed test. Country specific intercepts are omitted from the table.

the members of the European Union in the period starting in the mid-1970s. This limits the generalizability of the results, especially since the 1970s are associated with dramatic economic and political upheavals in many European cases. Consequently, it would be useful to examine data from earlier time periods and also from countries outside the EU and Europe. Kim and Fording's (1998) measure of policy mood makes this possible.

Table 3 provides the estimates for a set of model specifications in which the dependent variable is Kim and Fording's annual measure of policy mood and the independent variables are also measured using annual data. Otherwise, these specifications are identical to those in Table 2.

The results in Table 3 confirm the relationships established in the last section: All the signs of the coefficients are in the predicted direction and all but two coefficients are statistically significant. Collinearity may account for the insignificant estimates (growth and unemployment variables in models 5 and 7): When the so-

cial spending variable is not included in the specification (as in models 6 and 8, respectively) the variables are statistically significant as expected. Thus, although the two measures of policy mood used in the analysis are constructed in completely different ways, both tell the same story about the directional relationship: when the economy (however measured) improves, aggregate policy preferences move left.

The only real difference between these results and those using left/right self-placement is in how the effects are realized over time. The analysis based on Kim and Fording's data indicates that it takes about six years for 90 percent of the total effect of a change in the economy to be realized. This is twice the time estimated in the previous analysis. What is the significance of this difference? While it clearly introduces some uncertainty about how the relationship is realized over time, it hardly undermines the conclusion that economic change is having the hypothesized effect. Further, in weighing the evidence, recall that Kim and Fording's measure relies on linearly interpolated

values for the years between elections. This approximation is likely to produce generally correct estimates, but the subtler results that depend directly on the time-series aspects of the data may be more sensitive to distortions introduced by the interpolation.<sup>28</sup> Consequently, we should not overemphasize the differences in the estimates of the dynamics (which are likely an artifact of the linear interpolation in the Kim and Fording data).<sup>29</sup>

Overall, then, the analysis of these data increases confidence in the previous results using mean left/right self-placement. Despite the very different ways in which the two measures of policy mood are constructed, they tell the same substantive story: when the economy expands policy mood moves left, and when the economy contracts policy mood moves right.

**The impact of policy performance and government ideology on policy mood.** There is considerable consistency in the estimates for policy performance and government partisanship across the various model specifications in Tables 2 and 3. For the measure of social spending, the estimated relationship is negative in each equation. This is what the policy reaction hypothesis predicts and what Durr (1993) and Wlezien (1995) found in their analyses of the American case. The result, however, is only statistically significant in model 5. As noted above, this may be due to the collinearity between social spending and the economic variables. Indeed, when social spending is included in specifications without the economic variables, it becomes statistically significant as expected. My conclusion, however, is necessarily conservative: the results for the social spending variable are consistent with, but do not necessarily confirm, the policy reaction hypothesis.

The estimated effect of government partisanship on policy mood is clearer than the result for social spending: the estimates are negative and statistically significant in each specification. This finding is consistent with the idea that the policy reaction occurs because people react against the ideology of the government in general rather than to actual movement in policy. Instead of monitoring government policy closely, citizens appear to use the

known ideology of the government as a simplifying heuristic for inferring the current state of public policy. Consequently, when the Right is in power citizens think policy is (or will soon be) moving rightward and when the Left is in power they expect policy to move left.

## Model Fit, Robustness, and Predictive Ability

In evaluating the empirical case for the relationship between the economy and policy mood, it is important to know how well the estimated models can predict real changes in policy mood across countries and over time. Further, in any time-series cross-sectional analysis that seeks to make general claims, it is important to know how well the general model fits specific cases. This section offers evidence that the predictive ability of the empirical model is strong and that it “fits” the data in each country.

### “Post-dicting” the American Case

Stimson’s effort to track movements in the policy mood of Americans over the last half-century (by combining responses on thousands of policy opinion survey questions) provides a unique opportunity to evaluate the empirical models. Stimson’s measure was constructed quite differently from the measures of policy mood used in this analysis and so comparing our predictions for the U.S. case to Stimson’s measure constitutes a strong test for the predictive ability of the model.<sup>30</sup>

Figure 1 provides predictions for levels of policy mood in the American case. The predictions were generated from models 4 and 8 and are plotted against Stimson’s measure of policy mood.<sup>31</sup> The predictions were produced by using real data on changes in the American economy and government ideology from 1965 to 1995 and recursively calculating predicted values for the policy mood scores over the entire period.<sup>32</sup>

<sup>30</sup>For the mean left/right self-placement variable this test is particularly demanding, since no data for the United States was used in estimating these models.

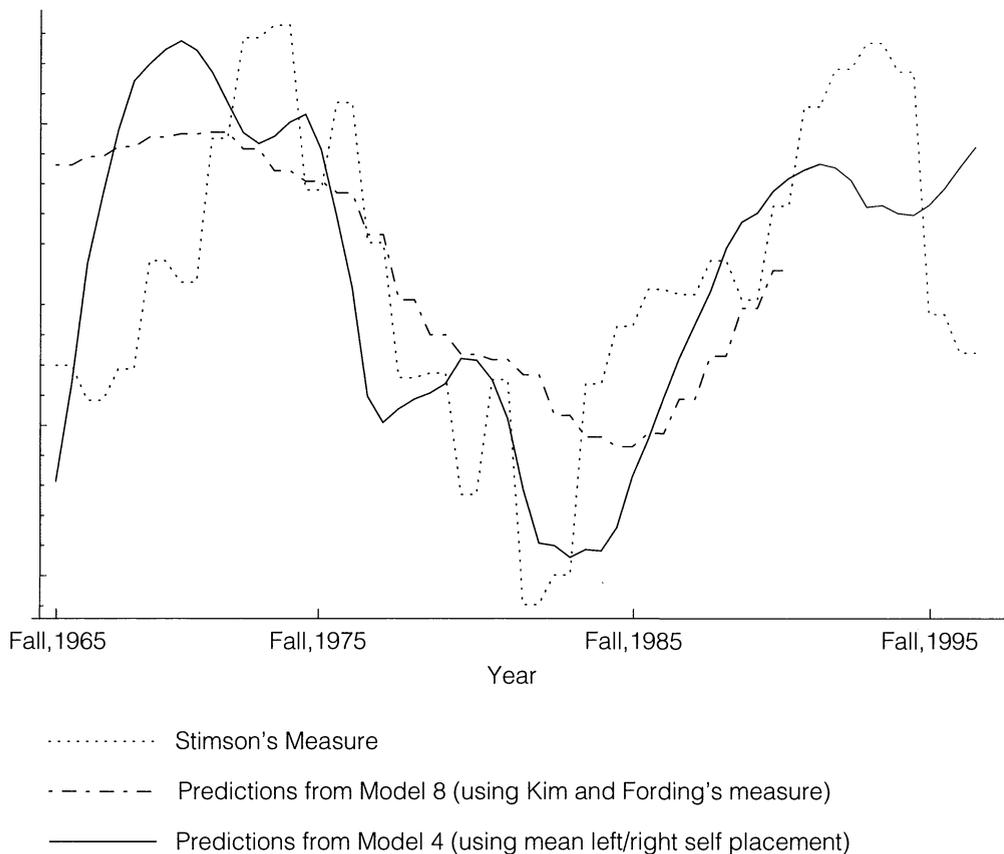
<sup>31</sup>Since the scales of the variables differ, they were standardized by subtracting the mean of each series from each value in the series and then dividing by the standard deviation of the series.

<sup>32</sup>The recursive prediction uses exogenous data on policy mood for the initial time period, along with the model estimates and data on the economy, to produce an estimate of policy mood in the next period. This estimate is then used as an input to find the next value in the series.

<sup>28</sup>Jackman and Stevenson (2000) use Markov Chain Monte Carlo methods to avoid the need to linear interpolate. Their reestimates of the models in Table 3 confirm the direction and significance of the reported relationships and reconcile the estimates of the dynamics with our other results.

<sup>29</sup>The models in Table 3 were replicated using only the data for election years (i.e., no interpolated data). This sacrifices the ability to say anything about the dynamic aspects of the relationship, but again confirm the direction and significance of the reported results.

**FIGURE 1** Model Predictions for Policy Mood for the United States Compared to Stimson's Measure of Policy Mood



All series are standardized to a common scale.

The results are unambiguous: both predicted series track Stimson's measure even though very different processes generated them. The estimates based on the Eurobarometer data do the best job reproducing Stimson's measure of American policy mood, even though the United States is not included in the sample. If the results already reported left any doubt that the relationship between economic performance and policy mood put forward in this article is real, this figure should dislodge it.

### The Fit of the Model in Each Country

"Cross-validation" is a useful technique for evaluating the country-specific fit of time-series cross-section models (Beck and Katz 1998). It is implemented for a given country in the sample by dropping the data for that country, reestimating the model on the reduced data set and predicting the values for the dependent variable for the dropped country. A general model that applies to all the countries in the sample should produce accurate predictions for these "out of sample" cases.

Doing this for each country in the sample, we can access how well the model "fits" each country. For the models based on Kim and Fording's data, cross-validated predicted values closely match the real data for all the countries in the sample, except for Ireland. The results are similar for the models based on mean left/right self-placement, although the correspondence between predicted and real values is less snug than with the Kim and Fording data. In addition, the Irish case is not exceptional using this measure.

It is interesting that the model based on Kim and Fording's measure does not fit the Irish case, since spatial voting on a left/right dimension is an important assumption used in constructing the measure. Voting in Ireland, however, is notoriously *not* about left/right politics.<sup>33</sup> The main political cleavage in Ireland has traditionally been between pro- and anti-treaty supporters; and only

<sup>33</sup>Irish voters may recognize a left/right dimension and be able to place themselves on this dimension even though it is only a minor consideration in their vote choice. This may be why the left/right self-placement measure fits the Irish case better than the Kim and Fording measure based on electoral data.

recently have the main parties begun to differentiate themselves on the left-right dimension. It is encouraging then that the cross-validation picks out this case as an exception to the general model.<sup>34</sup>

## Conclusion

People want policy to move left when the economy is expanding and right when the economy is contracting. Previous work on the American case is consistent with this claim and suggests a consumer choice analogy to explain it. The empirical analysis in this article generalizes the empirical finding to the larger set of western democracies and shows that it is robust to a variety of modeling strategies. This contrasts sharply with recent work emphasizing the conditionality of behavioral relationships in different political contexts (Powell and Whitten 1993; Anderson 2000). The relationship between the economy and policy preference holds in countries with very different cultures, institutions, and historical experiences.

These empirical results are also relevant to the literature on economic voting. If voters' policy preferences move left during good economic times, this shift should translate, at least for policy-oriented voters, to votes for the left on election day. This suggests an indirect path connecting the economy to the vote (i.e., economy → preference → vote) that runs counter to usual explanations of economic voting in the literature, which tie economic performance only to the incumbent (whatever her partisanship). To my knowledge no published study in the economic voting literature has tested specifically for this effect.<sup>35</sup>

Most importantly, the robustness of the empirical result should attract the attention of theorist trying to explain the nature and sources of public opinion more generally. Durr's explanation for the result remains underdeveloped: it does not, for example, account for the limited information that most people have about politics. More persuasive explanations for the phenomenon may come from an integration of this empirical result with the

general explanation of public opinion expression that is emerging from the work of Zaller (1992), Iyengar and Kinder (1987), Page and Shapiro (1992), and others.

This empirical analysis goes far beyond previous work in establishing that a good economy pushes policy mood to the left while a poor one pushes it to the right. The relationship that Durr identified for the United States is not just an artifact of time and place or of the peculiarities of the American system. Instead, it appears to be a widespread and fundamental feature of politics in advanced democracies—a feature that should command the attention of all students of the democratic political process.

*Manuscript submitted November 6, 2000.*

*Final manuscript received March 5, 2001.*

## References

- Alvarez, R. Michael, Jonathan Nagler, and Shaun Bowler. 2000. "Issues, Economics, and the Dynamics of Multiparty Elections: The British 1987 General Election." *American Political Science Review* 94:131–149.
- Anderson, Christopher. 2000. "Economic Voting and Political Context: A Comparative Perspective." *Electoral Studies* 19:151–170.
- Beck, Nathaniel. 1991. "Comparing Dynamic Specifications: The Case of Presidential Approval." *Political Analysis* 3:51–87.
- Beck, Nathaniel, and Jonathan Katz. 1995. "What to Do (and Not to Do) With Time-Series Cross-Section Data in Comparative Politics." *American Political Science Review* 89:634–647.
- Beck, Nathaniel, and Jonathan Katz. 1998. "Cross-Validation in Political Science." Mimeo, University of California at San Diego.
- Berelson, Bernard, Paul Lazarsfeld, and William McPhee. 1954. *Voting: A Study of Opinion Formation in a Presidential Campaign*. Chicago: University of Chicago Press.
- Budge, Ian, David Robertson, and Derek Hearl. 1987. *Ideology, Strategy, and Party Change: Spatial Analysis of Post-War Election Programmes in 19 Democracies*. Cambridge: Cambridge University Press.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. New York: Wiley.
- Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." In *Ideology and Discontent*, ed. David E. Apter. New York: Free Press.
- Cox, Gary W. 1997. *Making Votes Count: Strategic Coordination in the World's Electoral Systems*. Cambridge: Cambridge University Press.
- Dalton, Russell, Scott Flanagan, and Paul Beck, ed. 1984. *Electoral Change in Advanced Industrial Democracies*. Princeton: Princeton University Press.

<sup>34</sup>A final issue of model specification to consider is the stationarity of the variables. A complete analysis along these lines, however, would take many pages and (as it turns out) add little to the understanding we have already gained. I have consequently provided this analysis, which includes formal tests for integration and cointegration, a discussion of how to perform such tests in a time-series, cross-section framework, and error-correction representations of the models, as an addendum to this article, available from the author.

<sup>35</sup>In unpublished work, I show that this indirect relationship does, in fact, exist (Stevenson 2000).

- Delli Carpini, Michael, and Scott Keeter. 1996. *What Americans Know About Politics and Why it Matters*. New Haven: Yale University Press.
- Dorussen, Han, and Michael Taylor. Forthcoming. "The Political Context of Issue-Priority Voting: Coalitions and Economic Voting in the Netherlands, 1970–1988." *Electoral Studies*.
- Duch, Raymond, and Michael Taylor. 1993. "Postmaterialism and the Economic Condition." *American Journal of Political Science* 37:747–779.
- Duch, Raymond, and Michael Taylor. 1994. "A Reply to Abramson and Inglehart's 'Education, Security, and Post-materialism.'" *American Journal of Political Science* 38:398–411.
- Durr, Robert. 1993. "What moves Policy Sentiment?" *American Political Science Review* 87:158–170.
- Erikson, Robert, James Stimson, and Michael MacKuen. 2001. *The Macro Polity*. Cambridge: Cambridge University Press.
- Erikson, Robert, Gerald Wright, and John McIver. 1994. *State House Democracy: Public Opinion and Public Policy in the American States*. New York: Cambridge University Press.
- Franklin, Mark, Tom Mackie, and Henry Valen, ed. 1992. *Electoral Change*. Cambridge: Cambridge University Press.
- Franzese, Robert. 2001. *Comparative Democratic Management of the Keynesian Welfare State*. Cambridge: Cambridge University Press.
- Fuchs, Dieter, and Hans-Dieter Klingemann. 1989. "The Left-Right Schema." In *Continuities in Political Action*, ed. M.K. Jennings and J. van Deth. Berlin: deGruyter.
- Gabel, Matthew J., and John Huber. 2000. "Putting Parties in Their Place: Inferring Party Left-Right Positions from Party Manifestos Data." *American Journal of Political Science* 44:94–103.
- Goodhart, C.A., and R. J. Bhansali. 1970. "Political Economy." *Political Studies* 18:43–106.
- Huber, John. 1989. "Values and Partisanship in Left-Right Orientations: Measuring Ideology." *European Journal of Political Research* 17:599–621.
- Huber, John, and Ronald Inglehart. 1995. "Expert Interpretations of Party Space and Party Locations in 42 Societies." *Party Politics* 1:73–111.
- Inglehart, Ronald. 1990. *Culture Shift in Advanced Industrial Society*. Princeton: Princeton University Press.
- Iyengar, Shanto, and Donald R. Kinder. 1987. *News that Matters: Television and American Opinion*. Chicago: University of Chicago Press.
- Jackman, Simon, and Randolph T. Stevenson. 2000. "The Dynamics of Economic Performance and Policy Mood." Presented at the International Conference on Social Science Methodology, Cologne, Germany.
- Kim, Heemin, and Richard Fording. 1998. *European Journal of Political Research* 33:73–98.
- Kramer, Gerald H. 1971. "Short-term fluctuations in U.S. Voting Behavior: 1896–1964." *American Political Science Review* 65:131–143.
- Laver, Michael, and W. Ben Hunt. 1992. *Policy and Party Competition*. New York: Routledge.
- Laver, Michael, and Norman Schofield. 1990. *Multi-Party Government: The Politics of Coalition in Europe*. Oxford: Oxford University Press.
- Lupia, Arthur, and Mathew McCubbins. 1998. *The Democratic Dilemma: Can Citizens Learn What They Need to Know?* New York: Cambridge University Press.
- Mueller, John. 1970. "Presidential Popularity from Truman to Johnson." *American Political Science Review* 65:18–34.
- Mutz, Diana. 1998. *Impersonal Influence: How the Perceptions of Mass Collectives Affect Political Attitudes*. Cambridge: Cambridge University Press.
- Nannestad, Peter, and Martin Paldam. 1994. "The VP-Function: A Survey of the Literature on Vote and Popularity Functions after 25 Years." *Public Choice* 79:213–245.
- Page, Benjamin, and Robert Shapiro. 1992. *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences*. Chicago: The University of Chicago Press.
- Powell, G. Bingham, and Guy Whitten. 1993. "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context." *American Journal of Political Science* 37:391–414.
- Quinn, Kevin, Andrew Martin, and Andrew Whitford. 1999. "Voter Choice in Multiparty Democracies: A Test of Competing Theories and Models." *American Journal of Political Science* 43:1231–1247.
- Riker, William H. 1982. *Liberalism Against Populism: A Confrontation Between the Theory of Democracy and the Theory of Social Choice*. San Francisco: W.H. Freeman and Company.
- Schumpeter, Joseph. 1942. *Capitalism, Socialism, and Democracy*. New York: Harper.
- Shapiro, Robert, and Lawrence Jacobs. 1989. "The Relationship Between Public Opinion and Public Policy." In *Political Behavior Annual*, ed. Samuel Long. Boulder: Westview.
- Stevenson, Randolph. 2000. *Why the Economy? The Micro-Foundations of the Economic Vote*. Unpublished manuscript. Rice University.
- Stimson, James A. 1985. "Regression Models in Space and Time: A Statistical Essay." *American Journal of Political Science* 29:914–927.
- Stimson, James A. 1998. *Public Opinion in America: Moods, Cycles, and Swings*. 2nd Edition. Boulder: Westview Press.
- Stimson, James A., Michael B. MacKuen, and Robert S. Erikson. 1995. "Dynamic Representation." *American Political Science Review* 89:543–565.
- Whitten, Guy, and Harvey Palmer. 1996. "Heightening Comparativists' Concern for Model Choice: Voting Behavior in Great Britain and the Netherlands." *American Journal of Political Science* 40:231–260.
- Wlezien, Christopher. 1995. "The Public as Thermostat: Dynamics of Preferences for Spending." *American Journal of Political Science* 40:981–1000.
- Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.