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American Journal of Political Science, Volume 37, Issue 2 (May, 1993), 391-414.

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American Journal of Political Science

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*A Cross-National Analysis of Economic Voting: Taking Account of the Political Context**

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A large literature has demonstrated that such economic factors as growth, inflation, and unemployment affect the popularity of incumbents within many democratic countries. However, cross-national aggregate analyses of "economic voting" show only weak and inconsistent economic effects. We argue for the systematic incorporation of political factors that shape the electoral consequences of economic performance. Multivariate analyses of 102 elections in 19 industrialized democracies are used to estimate the cross-national impact of economic and political factors. The analyses show that considerations of the ideological image of the government, its electoral base, and the clarity of its political responsibility are essential to understanding the effects of economic conditions on voting for or against incumbents.

The bulk of the research on "economic voting" has concentrated on the effects of aggregate measures of national economic performance on short-term changes in government popularity or vote. Other aspects of the incumbent's performance, such as war experiences or scandals, have also received attention. The first studies (Goodhart and Bhansali 1970; Mueller 1970; Kramer 1971) traced changes over time in government evaluations in Britain and the United States. Research on these topics is now part of the portfolio of voting studies in many nations. Individual-level survey-based studies, as well as aggregate analyses of trends over time, have contributed to description and explanation. The literature is very large and increasingly sophisticated. (Reviews can be found in Monroe 1979; Paldam 1981, 1991; Kiewiet 1983; Kiewiet and Rivers 1984; Powell 1987; Lewis-Beck 1988.) Such factors as unemployment, inflation, and economic growth are related to changes in support for the government in many countries.

Despite the large literature analyzing economic effects over time within countries, it has proved surprisingly difficult to demonstrate consistent effects in cross-national studies. At the individual level, Lewis-Beck's (1988) comparative analysis of survey results in five nations finds

*The authors wish to thank the following scholars for comments and advice on this paper or its predecessors: Larry Bartels, Russell Dalton, John Huber, Simon Jackman, Michael Lewis-Beck, Peter Merkl, Lynda W. Powell, Harvey Palmer, William Riker, John Robertson, Larry Rothenberg, and Kaare Strom. The research was supported in part by a grant from the National Science Foundation (SE-8603544).

notable differences in the degree to which citizens' dissatisfaction with the economy affects their support for the government. Effects are quite strong in Britain; somewhat less in Germany, France, and Spain; and very weak in Italy.

At the aggregate level, Strom and Lipset (1984) analyzed 163 elections from 1950 to 1982. They found some effect of inflation on incumbent government losses (but only after 1973), but no significant impact of either unemployment or industrial production. Lewis-Beck and Mitchell (1990) report moderate effects of inflation and unemployment, but not of economic growth, in an analysis of 27 elections in five countries. The most comprehensive and discouraging results are reported by Paldam, whose most recent (1991) publication analyzes 197 elections in 17 countries. He finds few economic coefficients that are twice the size of their standard errors (24–26), extremely low *R*-squared statistics, and coefficients for inflation that are frequently in the wrong direction. He notes courageously that "it is hard to accept such negative conclusions as most of the ones reached in the chapter. However, I am now confident that the results are as presented" (1991, 9). Similar results are reported in Horst and Paldam (1990) and in our Table 1 below.

That cross-national comparisons frequently fail to replicate the within-nation results is a fascinating and disturbing puzzle. We think that the solution lies, at least in part, in greater attention to the electoral context in which citizens choose and the policymaking context within which they evaluate the performance of incumbents. We do not pretend to have solved all the difficulties, but we think we can demonstrate substantial progress.

We begin by replicating Paldam's (1991) results. We agree that his analysis is basically correct. His (largely negative) results hold up in two slightly different empirical formulations, which we reconcile. We then introduce, roughly in ascending order of importance, four successive considerations of political context. First, we consider economic performance relative to the performance of other industrialized democracies at the same time. It seems reasonable to think that voters are more likely to penalize a government for a 10% rate of inflation when most countries are experiencing 3% than when most countries are experiencing 11%.¹ Second, we take account of the "swing" in votes that the government experienced in the previous election, usually a positive swing that leads to an overstatement of the government's real base of support. Third, we consider the policymaking context in which the government operates. If

¹This is not to say that we believe citizens to be attentive to macroeconomic fluctuations in nations other than their own. Rather, such comparisons will help approximate incumbents' abilities to defend economic performance in the light of external shocks, such as the oil crises of the 1970s or the general difficulties of the international economic system.

the legislative rules, the political control of different institutions, and the lack of cohesion of the government all encourage more influence for the political opposition, voters will be less likely to punish the government for poor performance of the economy. Responsibility for that performance will simply be less clear. Finally, we take account of the ideological image (perceived left-right position) of the government and the usual association between that image and the economic problems of unemployment and inflation.

Economic Conditions and Anti-Incumbent Voting: The Base-Line Models

The Dependent Variable: Gains or Losses of Incumbent Governing Parties

Our study covers competitive national elections to the lower or popular house of the legislature² in 19 industrialized democracies from 1969 through 1988—somewhat more than 100 national elections.³ The countries are Australia, Austria, Belgium, Canada, Denmark, Finland, France, (West) Germany, Greece, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom, and the United States.⁴ The dependent variable in our analysis is the gain or loss in percentage of the vote received by the incumbent governing party (or coalition of parties).⁵

²Most of the industrialized democracies are parliamentary systems in which the executive depends on support in the popular house of the legislature. Direct elections for a strong president create comparison problems because candidate personalities loom larger in these elections, and elections are more volatile. In the United States, we use only the elections to the House of Representatives that take place in the same year as a presidential election. The measure of incumbent performance is the percentage of the vote gained or lost in the House of Representatives over the last four years by the party of the incumbent president. For analysis of retrospective voting, these elections seem conceptually most comparable to legislative elections in the parliamentary systems.

³In our 19 democracies, there were 111 relevant elections in the two decades from 1969 to 1988. We had to eliminate four elections because of lack of economic data (New Zealand, 1978, 1987; Switzerland, 1971, 1975) and five elections where the fracturing or consolidating of parties made it problematic to estimate gains or losses for the incumbents (Netherlands, 1972; Norway, 1973; Belgium and Greece, 1977; France, 1978).

⁴From the list of larger industrialized nations that were democracies for a number of elections in this period, we have deleted only Spain, which was still experiencing consolidation of its party system in the late 1970s and early 1980s.

⁵In the unusual case of Germany in the spring of 1983, we assumed that the retrospective voting reference point for the voters was the SPD-FDP coalition that had been in office until the previous October, rather than the new CDU/CSU-FDP coalition that had displaced it. The context of the election, which was virtually called as a referendum, makes this seem the more reasonable assumption. We also disregarded a few small "caretaker" governments formed shortly before an election in several countries. Government parties are identified by holding cabinet office as reported in *Keesing's Archives*.

Two somewhat different, although related, formulations appear in the literature. One approach uses the absolute vote (or seat) percentage won by the government in the current election as the dependent variable (Lewis-Beck and Mitchell 1990).⁶ Because partisanship and social cleavages typically create a fairly stable base of party support from election to election, however, we should use the vote for the same parties in the previous election as one of the independent variables. We can then see what role is played by economic conditions in altering that base of support. In Britain in 1979, for example, the incumbent Labour party won 36.9% of the vote, which is the dependent variable in this approach. The 1974 Labour vote of 39.2% is one of the independent variables; various measures of economic performance are additional independent variables.

The other approach calculates the incumbent gains or losses by subtracting the percentage of total valid votes won by the government parties in the last election from their percentage in the current one (Paldam 1991). In the second approach, the incumbent vote change for Britain in 1979 was a loss of 2.3%, which is used directly as the dependent variable predicted by economic conditions.

These two approaches differ somewhat because the size of the government baseline varies with different elections in different countries. A loss of two percentage points may mean something different for a government that won 40% last time as compared with a government that won 60% last time. However, if we include the absolute vote received by the government in the last election in both approaches, the two approaches become virtually identical. Of course, the coefficient for that absolute vote is different with the two different dependent variables. But the coefficients for all the other independent variables, including the economic conditions in which we are here interested, will be the same.

In the subsequent analyses, we use the "difference" variable, which is more common in the literature, as our dependent variable and always include a measure of absolute government support in the last election. (We expect its coefficient to be negative, on the argument that it is easier to lose an absolute percentage of the electorate from a larger base.) This approach reconciles differences in the previous literature and avoids the needless presentation of two identical sets of results.⁷

⁶We report the results for votes, rather than seats, throughout this analysis. We think that theoretically the predictions about the economy focus on voters' choices, not the outcome of those choices filtered through vote-seat translations. Empirically, the results for seats are roughly consistent with those we report, but with greater variability.

⁷Paldam (1991) uses a complex transformation of the dependent variable to deal with potential outliers. However, he reports that the untransformed percentage points give very similar results. To simplify replication and comparability, we report results using the raw,

The Economic Variables

Three economic variables reappear in various forms throughout the literature on retrospective economic voting: inflation, unemployment, and real national growth. For our analysis, we collected measures of each of these economic characteristics for 19 industrialized democracies from 1967 to 1988 (International Monetary Fund 1990; OECD 1984; United Nations 1987). In the case of unemployment, we averaged the (rather similar) estimates from OECD and the UN, where both were available. We weighted each economic measure to reflect its average value in the four quarters preceding and including the election. Following the standard convention in this research, the growth and inflation variables are constructed as measures of change: they reflect the percentage change in the gross domestic product and the consumer price index, respectively. The unemployment variable, however, is based on the absolute percentage of the work force. (Use of change variables for unemployment level and for inflation did not yield additional explanatory power.)

The Economic Baseline Model: Replication

In Table 1, we replicate the cross-national work of Paldam, using a slightly different set of countries and election years. The first three independent variables are our measures of gross domestic product (GDP) growth, inflation, and unemployment. We show the unstandardized regression coefficients, followed by their standard errors. We expect, of course, that the signs will be negative for inflation and unemployment, positive for GDP growth.

The economic variable results are quite similar to those reported by Paldam (1991). GDP and unemployment are in the correct direction, but the coefficients are weak and smaller than their standard errors, making them insignificant by conventional standards. The inflation coefficient is essentially zero. If we omit the absolute percentage of the vote in the last election, the results are even a bit more similar to Paldam's, as GDP growth and unemployment are basically unchanged, while inflation is small and in the wrong direction.

The last independent variable is the absolute vote received by the governing parties in the last election. The absolute vote is negatively related to incumbent gains: as expected, it is easier to lose absolute per-

untransformed dependent variable. However, we find, as did Paldam, that the results are quite robust; constraining extreme values of the dependent variable to plus or minus 10 percentage points, or log transforming the dependent variable, yields similar results to those we report.

Table 1. Basic Economic Model

Independent Variables	Parameter Estimate	Standard Error
Inflation	-.013	.104
Unemployment	-.160	.120
GDP growth	.123	.168
Previous government vote percentage	-.091*	.042
Intercept	2.62	2.63
Number of cases = 102		
<i>R</i> -squared = .07		
Adj. <i>R</i> -squared = .03		
Standard error of regression = 4.54		

Note: Dependent variable is change in governing party's (or parties') vote share.

* $p < .05$; ** $p < .01$.

centage points from a larger base. The effect is significant at .05 and implies that a government that had won 50% of the vote in the last election would lose about 1% more than a government that had won 40% in the last election.

The Economic Baseline Model: First Refinement

It is not clear whether the impact of economic variables on the vote is better conceptualized in absolute terms or in relation to some current international baseline of comparison. It seems likely that voters will evaluate governments relative to some expectations about how the economy should have performed. Common knowledge suggests that by the 1980s the levels of inflation that would have been shocking in the 1960s came to be perceived as acceptable, or even as positive performance. Although we have no individual-level measures of expectations, it seems reasonable to use the international average levels of growth, inflation, and unemployment to estimate a baseline against which each country's citizens could judge the performance of their own economy.⁸

Using this changing international baseline also makes it possible to analyze data from the 1960s, 1970s, and 1980s without distortions caused by all the "bad" performance being located in certain periods. Thus, this conceptualization of objective economic performance helps guard against serial autocorrelation effects, as well as capturing, we think, an important element in voter evaluation.

⁸The idea of using the international economic performance averages as a comparative baseline was suggested to us by Larry Bartels.

When we apply the two approaches with this comparative internationalization of economic performance, the results (not shown) are somewhat encouraging but far from decisive. All variables have the correct signs and are slightly larger than their respective standard errors. The GDP growth and inflation coefficients are substantially improved (to +.269 and -.177, respectively). The unemployment coefficient is little changed. The *R*-squared improves from .07 to .10. However, none of the economic variables yet reach statistical significance by conventional standards.

Election Context: The Short-term Vote "Base"

A Second Refinement: Taking Account of the Previous "Swing"

In countries in which elections usually create majorities for single parties or preelection coalitions, governments typically come to power on the basis of a short-term shift in voter support. The short-term factors that generated this swing then moderate, and in the subsequent election, the government often sheds some of that advantage that brought it to power. Voters regress to more "normal" patterns of behavior. This effect is believed to be one reason that incumbents usually lose votes in democratic elections. (See Paldam 1986, and the references cited therein; also see Strom and Lipset 1984.)

We attempt to "normalize" the voting shifts by taking account of the governing party's gains or losses in the previous election. That is, we construct a lagged measure of the party's vote gain or loss from time $t - 2$ to time $t - 1$. We conceptualize this prior vote gain (or, possibly, loss) as a short-term base of government support that we expect to revert toward normal in the current election. For our 102 elections, the average incumbent governing party or coalition had gained slightly more than .6 percentage points in the *previous* election. Single-party majority governments had gained over three percentage points in the previous election. We enter our measure of "swing" in the previous election as an independent variable into our equations that predict government vote or change in the current election. As we shall see in Tables 2 and 3, incumbents do consistently lose part of their previous electoral gains. Taking account of this fact improves the predictive power of our model (the adjusted *R*-squared increases from about .10 to .15), but the economic coefficients are little changed.

Political Context: Clarity of Responsibility

We think that cross-national analyses of the impact of economic conditions need to take account of additional critical features of the politi-

cal context. This section focuses on the features that affect the clarity of responsibility that voters can perceive for governmental policymaking. After demonstrating that political context affects the likelihood that incumbent governments will lose votes in an election, we return to analyze its interaction with economic variables in the last sections.

Clarity of Responsibility

The underlying assumption of most economic studies is that at least some citizens consider national economic performance in the period before an election as an important element in their voting decisions. The voter assigns credit or blame to the incumbent government for that performance, and the vote is shifted accordingly. Individual studies have shown that voter assignment of responsibility to the government is a key linkage between economic performance and voters' choices (Fiorina 1981; Lewis-Beck 1988). The vote itself may be either purely "retrospective," or it may look to the future and use the perceived performance of the current incumbents as one means of estimating their future performance (Fiorina 1981; Lewis-Beck 1988, chap. 6).

We suggest that the critical linkage of the voter's assignment of responsibility to the government is not merely an individual-level idiosyncrasy or rationalization. Rather, it will strongly reflect the nature of policymaking in the society and the coherence and control the government can exert over that policy. The greater the perceived unified control of policymaking by the incumbent government, the more likely is the citizen to assign responsibility for economic and political outcomes to the incumbents.

We also know that governments tend to lose votes in elections. Rose and Mackie (1983) found, for example, that the incumbent government lost votes in about two-thirds of the elections in the postwar period. They report that the average governing party lost about 1% of the vote in the average election. Paldam (1986) reports an average loss of about 1.7%. Most of the studies of popularity over time report at least a decline from an initial "honeymoon" period (e.g., Goodhart and Bhansali 1970; Mueller 1970; Paldam 1986). Rose and Mackie (1983) report that the general tendency to lose votes was only slightly worse in the 1970s than in the 1960s.

There are several related explanations for the tendency of governments to lose support, in addition to their loss of part of the previous "swing" that brought some of them to office (discussed in the last section). Mueller (1970) suggested that "coalitions of minorities" are inevitably alienated as the government makes policy choices. Others point to the inflated expectations of voters that are generated in election cam-

paigns (e.g., Brittan 1975), the strategic ability of oppositions to nullify positive achievements by promising to continue them (Downs 1957), or the inevitable corruptions of power that eventually tarnish any administration with scandal.

Each of these explanations implies that incumbents would do well to maintain symbolic visibility but to diffuse political responsibility. In the election debates, they can then obscure the weaknesses of their incumbency by blaming them on others who shared power. American presidents have often had exceptional opportunities to do this by running against "Congress," when controlled by the other party. (The master of this technique seems to have been Dwight David Eisenhower; see Greenstein 1982.) Members of Congress do this by running against their colleagues, regardless of the party in the majority (Fenno 1978). As we shall see, opportunities to diffuse responsibility can be found in other countries as well.

We expect that the presence of opportunities to diffuse responsibility will help insulate incumbents from all the factors that cause them to lose votes. We further expect that both positive and negative effects of economic performance will be diminished in countries where responsibility is widely diffused, a point that is examined later.

Two relatively stable features of the political systems are likely to affect clarity of responsibility and, hence, anti-incumbent voting. One of these is the *lack of voting cohesion of the major governing party or parties*. Party is the major unifying cue for voters on the ballot. In most parliamentary systems, political parties are relatively unified, and governments are sustained by very high levels of cohesive voting. In such countries as Australia, Denmark, Finland, France, West Germany, New Zealand, Sweden, and Britain, legislative voting data show government parties voting together 95% of the time or more (Clausen and Holmberg 1977; Converse and Pierce 1986; Loewenberg and Patterson 1979; Mezey 1979; Ozbudun 1970; Von Beyme 1985, 224ff.). Less reliable evidence suggests similar cohesion in most of the other democracies in our sample.

However, four countries are consistently identified in the literature as having a marked lack of internal party cohesion: Italy (Sartori 1976), Japan (Flanagan and Richardson 1984), the United States (Schwarz and Shaw 1976), and Switzerland. In the systems in which party cohesion is lower, "opposition" parties may play critical roles in policymaking. Candidates and factions often compete somewhat independently of national parties and geographic or clientelist linkages diffuse the connection between voting choice and government performance. Under such conditions, we would expect the formally "governing" parties to be less penalized for incumbency. In the absence of precise comparative data-tracking

cohesion across time and space, we simply create an indicator variable for lack of party cohesion and code Italy, Japan, the United States, and Switzerland with a one on that variable; other countries are coded zero.

A second feature that should serve to diffuse government responsibility is *a participatory and inclusive committee system in the legislature*, especially one with many strong and specialized committees whose chairs are distributed *proportionally to all political parties*. This last feature is especially important for our purposes because it provides opposition parties with both real and symbolic bases of power. Whatever the positive role of such arrangements in policymaking, for our purposes the point is that they would seem to diffuse and obscure clarity of responsibility.

We build on the excellent and suggestive work of Strom (1984, 1990) and our own supplementary analysis to construct a variable identifying legislatures whose committee systems are both strong *and* explicitly require proportionate sharing of committee chairs with parties not in the government.⁹ Such systems are found in Austria, Belgium, Denmark (after 1973), West Germany, Netherlands, Norway, Sweden, and Switzerland. We expect that in these systems governing parties will be less penalized for incumbency because of the real and symbolic involvement of the opposition parties in policymaking. We would note that these committee systems in all probability reflect a variety of additional power-sharing arrangements and values as well (Lijphart 1984), further diffusing responsibility.

There are three more political features that offer varying conditions of clarity of responsibility before the election:

1. Bicameral opposition. In a number of countries, especially in federal systems, the national constitution provides a second legislative chamber. Some "second" chambers, such as the Senates in the United States and Australia and the Bundesrat in Germany have substantial policymaking roles and are also elected on a schedule or base that makes control by nongovernmental parties not unlikely. (See Lijphart 1984, chap. 6, for a discussion of "strong bicameralism.")

Our variable for "bicameral opposition" takes on the value one when at the time of the election the governing party (or parties) did not com-

⁹We classify the committee system of the popular house of the legislature as "strong" when it has two of the three properties of size (over 10 committees), specialization to fit the government bureaucracy, and limitations in the number of committee memberships held by individual legislators. It is inclusive if committee chairmanships must be shared proportionally among all parties, or at least the major ones, regardless of their presence in the government. We emphasize our debt to Strom (1984, 1990), whose reports we have supplemented by drawing on *Parliaments of the World* (Inter-Parliamentary Union 1976; 1986, 625-75).

mand a majority in a "second chamber" that had significant policymaking powers. Cases are found in Australia in the early 1970s and 1980s and in West Germany in the mid and late 1970s. In these cases, we expect policy responsibility, and hence the penalties (and rewards) of incumbency, to be more blurred because the opposition controlled one of the legislative institutions that must be involved in policymaking.¹⁰

2. *Minority governments.* One element in clarity of responsibility is the government's command of a secure legislative majority. True "minority" governments, which are able to continue in office only because the majority of legislators cannot agree on a better replacement and who must seek support from various opposition parties to pass any legislation, should be the least responsible for policy outcomes. The party or parties in a minority government can always claim that their best efforts were blocked by other parties and that responsibility for policy failures must be shared by them.¹¹ Several previous studies (Rose and Mackie 1983; Strom 1990, 124; Paldam 1991, 23) have found that minority governments suffered lower levels of election losses than majority governments (but see Lewis-Beck and Mitchell 1990).

3. *Coalition governments.* Among majority governments, it seemed intuitively plausible that voters would be likely to hold single-party governments more responsible for policies than multiparty coalitions. Lewis-Beck (1988, 108–09) suggests that observed differences across systems in individuals taking economic factors into account might be explained by the complexity of government coalitions (also see Lewis-Beck and Mitchell 1990 for supportive cross-national data). The idea of complexity would take account at least of the number of parties in the government; we think the nature of the coalition arrangement could be relevant as

¹⁰It would also be reasonable to consider the conditions in France between 1986 and 1988, with conservative parties in control of the legislature, the prime minister, and the cabinet, but a Socialist president with substantial influence, as institutionally comparable to these cases of bicameral opposition (see the account by Pierce 1990). Cases of "divided government" in the United States could also be considered this way. Reconstituting the bicameral opposition variable to include these cases does not alter the reported results, although the unstandardized coefficient in Table 2 is somewhat smaller.

¹¹A "supported minority" government is a government in which the parties in the government do not themselves have a majority of legislative seats but have explicit agreement of support from an "outside" party that gives the government an effective majority. Analysis, not shown, indicates that these governments do better than majority governments in avoiding vote losses but are not nearly as distinctive as pure minority governments. Replacing our pure minority governments in Tables 2 and 3 with a variable for all kinds of minority governments yields similar results, but most of the effect comes from the pure minority cases.

well. In any case, coalition governments would seem both to blur the responsibility of individual parties for whom the voter must vote and to offer a possibility of vote switching within the government.

A simple inspection of the vote losses of different types of governments supports the idea of a scale of responsible governments ranging from unsupported minority governments to single-party majorities. Across the 93 parliamentary cases, we find that the pure minority governments (14 cases) actually *gained* an average of 1.8% of the vote, while supported minorities lost 1.8%, postelection majority coalitions lost 2.5%, preelection majority coalitions lost 2.8%, and single-party majority governments (34 cases) lost 3.6%. Examining the "number of parties in the government" shows that majority coalitions including four competing parties lost 2.1%; those including two or three competing parties lost 2.4%; and those with no parties in the government competing against each other lost 3.1%.¹² (These figures exclude the presidential systems, whose coalition/divided government considerations are complex and need not be dealt with here.)

Clarity of Responsibility and Incumbent Vote Losses

Table 2 shows the effect of these measures of political conditions on the incumbents' vote gain or loss, taking account of both the absolute vote for these parties in the previous election and their swing in the previous election. As each condition is expected to blur political accountability, we expect each of the coefficients for the responsibility conditions to be positive.¹³

Table 2 strongly supports our expectations. Note first the bottom two lines, which show the base of support of the government after the previous election. The next to last line is the simple vote won by the government in the last election. It continues to show a significant and negative coefficient, about the same size as in Table 1.

The bottom line in Table 2 shows the effect of the shift in support for the parties in government from the election before last ($t - 2$) to the last election ($t - 1$). The negative coefficient is consistent with the idea

¹²We were concerned only with government parties competing against each other for the same voters. Thus, cases such as the Liberal-Country alliance in Australia and CDU-CSU in Germany are counted as a single party for this purpose.

¹³We are aware that the equations in Table 2 are, technically, misspecified because we do not at the moment include the economic variables. However, their inclusion does not substantially modify these results, and we prefer not to burden the reader with equations and tables of even greater complexity. We have for that reason also deleted some interesting but statistically marginal effects, such as the greater losses by minority governments after longer time in office.

Table 2. Political Model

Independent Variables	Parameter Estimate	Standard Error
Opposition committee chair	2.14*	.879
Weak party cohesion	3.10**	1.09
Politically significant bicameral opposition	2.52	1.60
Minority government	3.16*	1.37
Number of government parties	.613	.434
Previous government vote percentage	-.114*	.053
Previous government vote swing	-.170*	.075
Intercept	.086	2.23
Number of cases = 102		
R-squared = .31		
Adj. R-squared = .26		
Standard error of regression = 3.97		

Note: Dependent variable is change in governing party's (or parties') vote share.

* $p < .05$; ** $p < .01$.

of "swings" in support around a "normal vote" baseline. A government that came in with greater than the average .6 gain is likely to shed some of that gain—about a fifth of it—in the current election.

Turning to the clarity of opposition variables, we see that opposition sharing of strong committee chairs and weak party cohesion are each worth 2% to 3% of the vote to an incumbent government. Coefficients for these variables are all at least twice their standard errors, statistically significant at the .05 level or greater. Opposition control of a major policymaking institution also helped insulate the incumbents from losses. The coefficient is substantial (opposition control of a strong second house would save the incumbents 2.5 percentage points), although not quite statistically significant at .05.

It is clear that pure (unsupported) minority governments are much less likely—by about 3% of the vote or more—to lose votes than majority governments. These results are consistent with various earlier studies, including those of Paldam (1991) and Strom (1990).

The number of parties in the government coalition competing against each other in the election falls short of statistical significance by usual standards, but the variable is in the correct direction and is substantially greater than the standard error. The more parties competing against each other in the coalition, the less the vote loss. The magnitudes are fairly substantial. Each additional competing party added to the government

coalition is worth .6% of the vote. Exploration of other formulations, such as each of the types of majority status mentioned above, or a simple juxtaposition of single-party and multiparty governments, yields similar results.

Ideological Leanings of the Incumbents

It is well known that left- and right-leaning incumbent governments have tended to take somewhat different approaches to economic policy. While the magnitude of difference varies with different parties and at different times, left-wing governments have traditionally been more concerned with such goals as full employment and income redistribution, while their right-wing counterparts have been more concerned with fighting inflation and controlling taxes. Moreover, left-wing governments have traditionally committed themselves to use the powers of the state more aggressively on behalf of their salient goals. It has also been generally true that left-wing governments have drawn more heavily on working-class and urban electorates, while right-wing governments have drawn on middle-class, suburban, and rural electorates.

From these differences in ideological stance and traditional clientele come differences in the policy packages usually employed and, critical for our purposes, differences in the standards that voters may use to evaluate government performance. In general observers—and voters, we think—expect left-wing governments to deal better with unemployment and short-term economic stimulation, while they expect right-wing governments to deal better with inflation. If voters are assessing governments retrospectively, judging their performance in office, they might well hold right-wing governments to a higher standard on inflation and be less concerned about unemployment. Vice versa, for left-wing governments. Moreover, the core constituencies of right-wing governments are more likely to be those who care more about inflation, while the core constituencies of left-wing governments are more likely to be those who care about unemployment. (Hibbs 1982 shows that voters hold “their” parties more accountable for performance on the most salient dimension than they hold the opposition.)

All these considerations suggest the need to examine the effects of economic performance on inflation and unemployment distinctively for governments of different ideological persuasions. To do this, we used the average ratings of parties on the left-right scale in the survey of country experts conducted by Castles and Mair (1984) in 1982 to create an average government ideology score. (For multiparty governments, we weighted each party’s score by the percentage of the legislative seats it held in the government coalition.) Castles and Mair (1984) explicitly told their ex-

perts to use a scale on which ultra-left was 0, moderate left was 2.5, center was 5, moderate right was 7.5, and ultra-right was 10.

For the subsequent analysis, we have accordingly classified all governments whose average score was over 6.25 (closer to moderate right than center) as "right-wing" governments. We create an indicator variable (dummy variable) for right-wing governments. The (comparative) inflation and unemployment variables are multiplied by this indicator variable, creating interactive variables.¹⁴ The subsequent equations in our analysis include both the original and interactive variables. The coefficients for the original inflation and unemployment coefficients thus have the right-wing cases eliminated from them and serve as measures of the effects of inflation and unemployment on left and center governments. The effects of inflation and unemployment on right-wing governments are found by summing the original coefficients and the interactive coefficients.

When the government ideology analysis is carried out on the baseline economic equations in Table 1, the effects (not shown) are interesting but still inconclusive. It seems apparent that only right-wing governments are penalized for inflation. Only nonrightist governments are penalized for unemployment. Indeed, right-wing governments even seem to be helped somewhat by unemployment. However, the coefficients, although now in the expected directions and stronger than before, seldom reach statistical significance by usual (.05) standards. Even after the political variables from Table 2 are added to the equation, the economic variables still routinely fail to reach statistical significance at the .05 level. We need one further refinement.

Integrating Economic and Political Features

The logic of clarity of responsibility is that the effect on economic voting is interactive. That is, where clarity of responsibility is high, the economic variables should have the predicted effects: GDP growth should help all governments; higher inflation should hurt rightist governments, while lower inflation helps them; higher unemployment should hurt leftist governments, while lower unemployment should help them. But where clarity of responsibility is low, the economic factors will be blurred. (Paldam pushes in this direction by considering economic effects in two-party systems [1991, 24] and in stable majority governments [25] and finds promising, though seldom statistically significant, results.)

¹⁴Because of the problem of the diminishing number of cases, we have treated center and left governments in a single category. Looking at all three forms separately, this seems the best grouping. Dichotomizing at the pure midpoint turns out to yield less clear results.

The simplest test of this (interactive) hypothesis is to distinguish electoral situations in which clarity of responsibility is high from those in which clarity of responsibility is low. Fortunately, many of the factors that contribute to lower clarity of responsibility go together. Systems with legislative institutional arrangements that guarantee opposition participation in policymaking tend to be those with proportional representation and more multiparty and minority governments.¹⁵ Thus, we can fairly reasonably distinguish *systems* by their average clarity of responsibility, not having to worry too much about the weighting of the individual political variables in Table 2, or about whether voters adapt anew to each political situation or draw more general inferences about responsibility.

Various schemes gets us to roughly the same classification of countries during this period. For our analysis, we simply assigned one point for each of the major political features in Table 2: weakly cohesive parties, opposition sharing of committee chairs, opposition control of a policymaking institution, pure minority governments, and each additional (competing) party added to the governing coalition. If we average these scores for each country, we find the following indicators of increasing lack of clear responsibility: New Zealand, 0; Greece, 0; France, .1; Britain, .2; Canada, .3; Australia, .4; Ireland, .7; United States, 1.0; Japan, 1.0; Austria, 1.2; Sweden, 1.4; Germany, 2.6; Belgium, 2.6; Denmark, 2.8; Norway, 2.8; Italy, 3.2; Netherlands, 3.2; Finland, 3.3; and Switzerland, 5.0. Other formulations, paying more attention to majority governments or other legislative features, or weighting the components a little differently, give roughly the same breakdown.

For the dichotomous classification needed for our analysis, we divide the systems at 2.0 on the lack of clarity scale, at the substantial gap between Sweden (1.4) and Belgium and Germany (2.6). We think that in the 11 countries at the lower end, responsibility should generally be clear enough that voters should hold governments responsible for economic performance. In the eight countries at the higher end, with an average of over two "blurring" conditions, responsibility is so blurred that voters should generally find it very difficult to assess government responsibility.

In Table 3, we reexamine the baseline economic models from Table 1 with all four refinements: (1) we use the comparative economic performance measures, rather than the simple economic variables; (2) we show

¹⁵This relationship is enhanced both because proportional representation (PR) rules yield few elected majorities and because legislative rules that encourage opposition influence tend to encourage the formation of minority governments (just as argued by Strom 1990). PR election rules and opposition-encouraging legislative rules are typically found in the same systems (on constitutional designs, see, e.g., Lijphart 1984; Powell 1989).

Table 3. Countries Divided according to Usual Clarity of Responsibility

Independent Variables	Less Clear Responsibility		Clearer Responsibility	
	Parameter Estimate	Standard Error	Parameter Estimate	Standard Error
Comparative GDP growth	.067	.349	.490*	.187
Comparative inflation	-.300	.297	.166	.171
Right-wing comparative inflation	.031	.640	-.558*	.273
Comparative unemployment	-.233	.296	-.611**	.176
Right-wing comparative unemployment	.571	.548	.706*	.332
Minority government	2.06	2.42	4.42*	1.74
Previous government vote percentage	-.156*	.070	.105	.082
Previous government vote swing	-.395*	.164	-.176*	.084
Intercept	6.14	4.06	-8.27*	3.81
Number of cases	41		61	
R-squared	.37		.39	
Adj. R-squared	.21		.30	
Standard error of regression	4.64		3.37	

Note: Dependent variable is the change in governing party's (or parties') vote share.

Countries estimated as having less clear responsibility (from variables in Table 2) are Belgium, Denmark, Finland, Germany, Italy, Netherlands, Norway, and Switzerland.

* $p < .05$; ** $p < .01$.

the government's baseline of swing votes in the previous election; (3) we use the interactive government left-right position for inflation and unemployment; and (4) we show the analysis separately for countries of lower clarity and higher clarity of responsibility. The first data column shows the lower clarity countries (Germany through the Switzerland), in which we expect the economic coefficients to be weaker. The second data column shows the higher clarity countries (New Zealand through Sweden on the scale mentioned above), in which we expect the economic coefficients to be stronger.

The results in Table 3 are very encouraging indeed. We expect that the coefficients in the first columns (the countries with less clear responsibility) will be weak and insignificant. We expect the coefficients in data column 3 will be statistically significant and in the correct direction. The correct direction, of course, is to gain votes for economic growth but to lose votes for comparatively high unemployment and inflation. By and large, both sets of expectations are realized.

Looking at the results for the economic variables, we first see GDP growth (relative to the average for other industrialized democracies). In the first column, the nations with less clear responsibility (41 elections), the coefficient is only .067 and far less than the very large standard error. In the nations with clear responsibility (61 elections), the unstandardized coefficient is .490, nearly significant at .01.

Unemployment results are equally dramatic. In the nations without clear responsibility, we see that the effect of (relative) unemployment is weak ($-.233$) and slightly less than the standard error for left and center governments and actually is helpful to right governments, although not significantly so. In the nations with clear responsibility, the left and center governments are sharply penalized by unemployment, about .6% of the vote (.611) for each percentage above the international average, significant at .01. Right governments again are slightly helped by unemployment, but the difference in coefficients implies a trivial net coefficient of .09.¹⁶

Finally, the inflation results, troubling in many previous studies, become much clearer also. In the nations without clear responsibility, all the inflation effects are trivial; both types of governments are hurt by it (in net), but none of the relationships are significant. In the nations with clear responsibility, the left and center government effects of inflation remain small, statistically insignificant and in the “wrong” (positive) direction. But right governments are significantly penalized. Summing the original and interactive coefficients ($+.166$ and $-.558$), we find that right-wing governments lose about .4% of the vote (.392) for each percentage of inflation above the international average. The interactive coefficient is significant at .04.

After the economic coefficients, we see minority governments, which lose fewer votes in both kinds of countries, although the effects are notably larger and significant in the countries with normally clear responsibility. (Other political variables are not included in these equations because our dividing of the sample has eliminated most of their variance within each subset.) At the bottom of the table, we see the two government baseline variables. The effects of previous absolute vote are weak and in the “wrong” direction in the clearer responsibility countries; effects are more significant and in the expected direction in the countries

¹⁶Recall that the effect on right-wing governments is the sum of the original and interactive coefficients, so the net effect from the tables is substantively quite small. However, that right-wing governments are slightly helped by unemployment is a fairly robust finding in this analysis. We have no simple explanation, although we suspect that it reflects response of their constituents to the governments’ keeping faith with their general economic package of commitments, not a preference for unemployment as such.

with less clear responsibility. In both types of systems, governments lose some of their previous "swing," although the effects are larger in the countries with less clear responsibility.

As we have introduced four modifications from the simple analyses of Table 1, a comment on their relative importance may be in order. First, if we rerun Table 3 with the original economic performance data, rather than the performance relative to other industrialized democracies, we find fairly similar results. The three key economic coefficients (GDP growth, right-wing government inflation, and nonright government unemployment) remain statistically significant at the .05 level. However, the magnitudes of the coefficients are reduced by about 20% to 30%. Second, the economic results are slightly weakened if we omit the "swing" element of the government vote base from the equation, but most remain significant. Third, it seems to be essential to take some account of government ideology in analyzing the inflation and unemployment results. Fourth, as we can see in Table 3, it is also essential to consider the system context.

It seems likely that part of the reason for varying results in previous studies is that results depend on the varying levels of clarity of responsibility in the countries and time periods selected. However, various cutting points for inclusion of some of the "mixed" systems can be used with robust results (e.g., deleting the United States from the list of "clearer" responsibility countries actually improves the economic coefficients somewhat).

Conclusion

Our purpose is to contribute to the study of "economic voting" in contemporary democracies. We have been puzzled by the contrast between the many studies within nations showing that citizens' evaluations of national economic performance help shape their likelihood of voting against the incumbent government—and the weak or inconsistent effects in cross-national studies. We argue that to explain differences in retrospective economic voting across nations and over time we must take account of the political context within which elections take place. We have tested our ideas about the political context by examining incumbent gains and losses in over 100 elections in 19 nations over the 20-year period 1969–88.

Like some of the national studies, our analysis suggests a strong need to take account of the partisan nature of the incumbent government in considering effects of inflation and unemployment. We found the support for right-wing governments is enhanced by lower inflation and hurt by higher inflation than the current international standard. Left and center

governments seemed little affected by inflation. On the other hand, left and center governments were helped by better than average unemployment records and hurt by worse than average unemployment.

Perhaps the most innovative aspect of our work is the inclusion of measures of the context of political responsibility. (However, Paldam 1991 certainly hints at the need to incorporate such considerations, as does Lewis-Beck 1988.) We explored some of these contextual factors by examining the degree to which they insulated incumbents from the ordinary penalties of officeholding. Most incumbents lose votes in most elections. In our sample, the incumbent government parties lost votes in about two-thirds of the elections; the average loss was about 2%. But the magnitude of this loss depends on political conditions in addition to economic performance and other electoral issues.

True minority governments, parliamentary governments that must depend on other parties for their continuation in office and the passage of legislation, are less likely to lose votes in elections than are their majoritarian counterparts. Moreover, voters seem less likely to penalize incumbent governments that are made up of multiple parties, although the nature of the agreements between them and the nature of voting opportunities may play varying roles in this regard. Lack of voting cohesion of the governing parties, a strong and inclusive committee system, and opposition control of the second house of the legislature also helped the incumbents electorally.

We expected from our conceptualization of clarity of responsibility that the effect of economic performance on voting would be greater where clarity of responsibility was greater. When we divide our countries according to the presence or absence of conditions that contribute to clarity of responsibility, we find very sharp differences in the impact of economic performance on voters' support for the government. In the eight countries in which policymaking responsibility is usually blurred between government and opposition, for multiple constitutional and coalitional considerations, the economic effects are very weak. In the 11 countries where responsibility is usually more sharply focused, the effects are strong and consistent.

We emphasize that we do not think economic conditions are truly irrelevant in any democracy. But the general connections between government performance and voter choice are generally much more blurred in some countries. In these circumstances, responsibility is less clear; incumbents (and opponents) have many more opportunities to shape the definition of retrospective evaluation. Students of elections in these countries must use more subtle and complex analyses and must, we suppose,

take account of the dynamics of elite strategies and citizen response in the election campaigns.

Obviously, much remains to be done to integrate economic and political conditions. It would be desirable to be able to take account explicitly of scandals, wars, and other manifestations of poor performance that shape voter evaluations. The evaluations of political leaders, independent of their parties, could be an important addition. It would also be desirable to take account of economic performance in sectors and regions that were salient to particular subgroups in the electorate.

Manuscript submitted 21 August 1991

Final manuscript received 3 August 1992

APPENDIX

A Test for Robustness

The present analysis is based on what is technically called pooled cross-sectional time-series data. The cases consist of 102 elections over 20 years in 19 countries. Such data sets present problems as well as opportunities (Stimson 1985). Because we have constructed our dependent variable as a change variable (using the percentage gains or losses of the governing parties between the current election and the previous one), because we enter previous vote levels and swings, and because time between elections varies in different countries, we are not overly concerned about serial correlation. Among the independent variables, the growth and inflation variables are, of course, change variables also; and all economic variables have been constructed relative to the current international economic situation.

However, we must be concerned about the problem of unspecified country and regional effects from a cross-sectional perspective. We know that data collection methods, such as measures of unemployment, differ somewhat across nations and regions; also there is reason to suspect that political culture and/or unmeasured political conditions and issues might have notable effects on voters' tendency to penalize incumbents.

Therefore, we have conducted two kinds of tests. On one hand, we have rerun the results from Table 3 deleting individual countries, sequentially. The reported results are quite robust in the face of this procedure. We have also constructed a strong test by entering dummy variables for each individual country except one. With 11 countries and only 61 elections in the subset of systems with relatively clear political responsibility, adding dummy variables for each country except one introduces quite a lot of noise into the equations and reduces the variance on some of our variables. Therefore, we expect the coefficients to vary, and significance to be reduced. Nonetheless, the results demonstrate quite a bit of robustness.

We consider the three key economic variables to be GDP growth, unemployment for left-wing and center governments, and inflation for right-wing governments. In Table 3 in the countries with clearer responsibility, these coefficients were .49, $-.61$, and $-.39$ (sum of $+.17$ and $-.56$), respectively. Rerunning exactly the same equations with dummy variables for every country (except one) yields coefficients of .34, $-.50$, and $-.37$ for these variables. All these new coefficients are substantially larger than their standard errors and

are significant at about the .10 level. While the size of the coefficients is reduced, especially for GDP growth, we can be satisfied that the model has survived a harsh test and has proven itself quite robust. We should note that adding the dummy variables does not rescue the economic variables in the countries with less clear responsibility.

REFERENCES

- Brittan, Samuel. 1975. "The Economic Contradictions of Democracy." *British Journal of Political Science* 5:129-59.
- Castles, Francis G., and Peter Mair. 1984. "Left-Right Political Scales: Some 'Expert' Judgements." *European Journal of Political Science* 12:73-88.
- Clausen, Aage R., and Sören Holmberg. 1977. "Legislative Voting Analysis in Disciplined Multiparty Systems: The Swedish Case." In *The History of Parliamentary Behavior*, ed. William Osgood Aydelotte. Princeton: Princeton University Press.
- Converse, Philip E., and Roy Pierce. 1986. *Political Representation in France*. Cambridge: Harvard University Press.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper.
- Fenno, Richard. 1978. *Home Style: House Members in Their Districts*. Boston: Little, Brown.
- Fiorina, Morris P. 1981. *Retrospective Voting in American National Elections*. New Haven: Yale University Press.
- Flanagan, Scott C., and Bradley M. Richardson. 1984. *Politics in Japan*. Boston: Little, Brown.
- Goodhart, C. A. E., and R. J. Bhansali. 1970. "Political Economy." *Political Studies* 18:43-106.
- Greenstein, Fred I. (1982). *The Hidden-Hand Presidency: Eisenhower as Leader*. New York: Basic Books.
- Hibbs, Douglas A., Jr. 1982. "On Demand for Economic Outcomes: Macroeconomic Performance and Mass Political Support in the United States, Great Britain, and Germany." *Journal of Politics* 44:426-62.
- Høst, Viggo, and Martin Paldam. 1990. "An International Element of the Vote? A Comparative Study of Seventeen OECD Countries, 1948-85." *European Journal of Political Research* 18:221-39.
- International Monetary Fund. 1990. *International Financial Statistics Yearbook*. Washington, DC: IMF Publication Services.
- Inter-Parliamentary Union. *Parliaments of the World: A Comparative Reference Compendium*. 1976; 1986. New York: Facts on File Publications.
- Keesing's. 1966-88. *Record of World Events*. London: Longman Group.
- Kiewiet, D. Roderick. 1981. "Policy Oriented Voting in Response to Economic Issues." *American Political Science Review* 75:448-59.
- . 1983. *Macroeconomics and Micropolitics*. Chicago: University of Chicago Press.
- Kiewiet, D. Roderick, and Douglas Rivers. 1984. "A Retrospective on Retrospective Voting." *Political Behavior* 6:369-91.
- King, Anthony. 1981. "What Do Elections Decide?" In *Democracy at the Polls*, ed. David Butler, Howard Penniman, and Austin Ranney. Washington, DC: American Enterprise Institute.
- Kramer, Gerald H. 1971. "Short-term Fluctuations in U.S. Voting Behavior, 1896-1964." *American Political Science Review* 65:131-43.
- Laver, Michael, and Kenneth A. Shepsle. 1990. "Divided Government: America Is Not

- 'Exceptional.''' Presented at the annual meeting of the American Political Science Association, San Francisco.
- Lewis-Beck, Michael. 1988. *Economics and Elections: The Major Western Democracies*. Ann Arbor: University of Michigan Press.
- Lewis-Beck, Michael, and Glenn Mitchell. 1990. "Transnational Models of Economic Voting: Tests from a Western European Pool." *Revista del Instituto de Estudios Economicos* 4:65-81.
- Lijphart, Arend. 1968. *The Politics of Accommodation: Pluralism and Democracy in the Netherlands*. Berkeley: University of California Press.
- . 1977. *Democracy in Plural Societies: A Comparative Exploration*. New Haven: Yale University Press.
- . 1984. *Democracies: Patterns of Majoritarian and Consensus Government in Twenty-one Countries*. New Haven: Yale University Press.
- Loewenberg, Gerhard, and Samuel C. Patterson. 1979. *Comparing Legislatures*. Boston: Little, Brown.
- Mackie, Thomas, and Richard Rose. 1991. *The International Almanac of Electoral History*. 3d ed. London: Macmillan.
- Mezey, Michael L. 1979. *Comparative Legislatures*. Durham: Duke University Press.
- Monroe, Kirsten R. 1979. "Economic Analysis of Electoral Behavior: A Critical Review." *Political Behavior* 1:137-43.
- Mueller, John. 1970. "Presidential Popularity from Truman to Johnson." *American Political Science Review* 64:18-34.
- Organization for Economic Cooperation and Development. Department of Economics and Statistics. 1984. *Main Economic Indicators, 1964-1983*. Washington, DC: OECD.
- Ozbudun, Ergun. 1970. *Party Cohesion in Western Democracies: A Causal Analysis*. Beverly Hills: Sage.
- Paldam, Martin. 1981. "A Preliminary Survey of the Findings on Vote and Popularity Functions." *European Journal of Political Research* 9:181-99.
- . 1986. "The Distribution of Electoral Results and the Two Explanations of the Cost of Ruling." *European Journal of Political Economy* 2:5-24.
- . 1991. "How Robust Is the Vote Function? A Study of Seventeen Nations over Four Decades." In *Economics and Politics: The Calculus of Support*, ed. Helmut Norpoth, Michael Lewis-Beck, and Jean-Dominique Lafay. Ann Arbor: University of Michigan Press.
- Pierce, Roy. 1990. "The Executive Divided against Itself: Cohabitation in France, 1986-1988." Presented at the annual meeting of the American Political Science Association, San Francisco.
- Powell, G. Bingham, Jr. 1987. "Comparative Voting Behavior: Cleavages, Partisanship, and Accountability." *Research in Micropolitics* 2:233-64.
- . 1989. "Constitutional Design and Citizen Electoral Control." *Journal of Theoretical Politics* 1:107-30.
- Przeworski, Adam, and Henry Teune. 1970. *The Logic of Comparative Inquiry*. New York: Wiley-Interscience.
- Rose, Richard, and Thomas Mackie. 1983. "Incumbency in Government: Asset or Liability." In *Western European Party Systems: Continuity and Change*, ed. Hans Daalder and Peter Mair. Beverly Hills: Sage.
- Sartori, Giovanni. 1976. *Parties and Party Systems: A Framework for Analysis*. Cambridge: Cambridge University Press.
- Schwarz, John E., and L. Earl Shaw. 1976. *The United States Congress in Comparative Perspective*. Hinsdale, NJ: Dryden Press.

- Stimson, James A. 1985. "Regression in Time and Space: A Statistical Essay." *American Journal of Political Science* 29:914-47.
- Strom, Kaare. 1984. "Minority Governments in Parliamentary Democracies." *Comparative Political Studies* 17:199-227.
- . 1990. *Minority Government and Majority Rule*. New York: Cambridge University Press.
- Strom, Kaare, and Seymour Martin Lipset. 1984. "Macroeconomics and Macropolitics: The Electoral Performance of Democratic Governments." Presented at the annual meeting of the American Political Science Association, Washington, DC.
- United Nations. Secretariat of the Economic Commission for Europe. 1987. *Economic Survey of Europe in 1986-87*. New York: United Nations Publication.
- Von Beyme, Klaus. 1985. *Political Parties in Western Democracies*. New York: St. Martin's Press.