

ROBERT KUNOVICH

## “THROWING THE RASCALS OUT:” MACROECONOMIC CONDITIONS, PERSONAL ECONOMIC HARDSHIP, AND PROTEST VOTING\*

The 1993 national parliamentary election results from Poland came as a surprise to many observers. Just four years after voting the Communists out of office by an overwhelming majority, Poles returned post-communist successor parties to power in a dramatic turn to the left. Most scholars explain this turn to the left as a reaction to the economic hardship caused by the transition to market economies (Orenstein 1998). Scholars argue that the electoral shift in Poland has significance beyond local politics as it “constitutes a visible new signpost on the path of ‘transition to democracy’ . . . Various elections soon to be held in the region will unavoidably be interpreted through the prism of the Polish elections” (Workshop on Political Parties and Party Systems 1994: 369).

The purpose of this chapter is to examine both contextual and individual-level sources of protest voting in Poland, and, indirectly, to explain the turn to the left in 1993. Generally, protest voting means switching one’s vote to an opposition party in a national parliamentary election. Specifically, protest voting in Poland in 1993, the focus of this

---

\* I wish to thank Amy Katnik, Sheri Kunovich, and Anna Shadley for their helpful advice and comments on earlier versions of this chapter.

chapter, is defined as switching one's vote from a non-post-communist party in the 1991 national parliamentary election to a post-communist party in the 1993 national parliamentary election since the post-communist parties were the opposition during the 1993 election. I seek to answer the following questions: (1) To what extent do Poles engage in protest voting in the 1991, 1993, and 1997 elections? (2) Does protest voting vary by voivodship? (3) Do macroeconomic conditions affect protest voting above and beyond any effect of one's personal economic situation? (4) Does personal economic hardship affect protest voting above and beyond any effect of macroeconomic conditions? and (5) What is the mechanism through which macroeconomic conditions and personal economic hardship affect protest voting – specifically, do they have direct effects on protest voting and/or indirect effects on protest voting through disapproval of social change?

At the contextual level, I focus on the effects of macroeconomic conditions (e.g., average wages and the unemployment rate) on protest voting. The effect of personal economic hardship (e.g., income, changes in income, and being unemployed) on protest voting pertains to the individual-level analysis. I regress protest voting in 1993 on macroeconomic variables, personal economic hardship, attitudes toward social change, and background controls – all of which were measured prior to the act of protest voting. Regressing disapproval of social change on macroeconomic conditions, personal economic hardship, and background controls allows me to examine the possibility of indirect effects of macroeconomic conditions and personal economic hardship on protest voting through disapproval of social change. I use hierarchical linear modeling to analyze the data. This type of modeling controls for problems typically encountered when analyzing contextual data. Using odds ratio, I regress a dichotomous dependent variable (protest voting) on contextual and individual-level variables.

Key findings suggest that protest voting was common in the 1993 parliamentary election and that it varied by voivodship. The unemployment rate in the voivodship of residence directly increases the probability that an individual engages in protest voting in 1993. An average wage in the voivodship has a weak indirect effect on protest voting through disapproval of social change. Personal economic hardship also affects protest voting. Income has a negative effect on protest voting, and changes in income and being unemployed have indirect effects on protest voting through disapproval of social change. Thus, results suggest that macroeconomic conditions and personal economic hardship play key roles in “throwing the rascals out” (Lewis-Beck 1988).

## Social Change and Parliamentary Elections in Poland

In the late 1980s, an apparently stable and entrenched Communist government brought the Solidarity trade union into Round Table negotiations to discuss the economic difficulties facing the nation (Heyns and Bialecki 1991; Lewis 1998). These talks led to the legalization of Solidarity and semi-free elections, which were held in June 1989. Solidarity-sponsored candidates shocked all observers by winning all but one seat in the upper house and all of the seats they were allowed to contest in the lower house of the Polish national parliament. The fundamental cleavage that defined the 1989 election was “society versus the authorities” (Marody 1995). Heyns and Bialecki (1991) argue: “support for Solidarnosc cannot be separated from antigovernment sentiments in general” (355). Following the 1989 election, the political system was dominated by the Solidarity social movement, rather than by individual political parties (Millard 1994).

The Solidarity-led government faced many difficult tasks – most critical was transforming the centrally planned economy into a market economy. In 1989, the socialized sector of the economy, which accounted for about 80 percent of national income, was monopolistic and highly inefficient (Slay 2000). The government budget was running a large deficit and inflation was very high. In response to this, political leaders implemented the Balcerowicz plan, “shock therapy,” which was designed to transform the centrally planned economy to a market-based capitalist economy as quickly as possible (for a more detailed review, see Slay 2000).

As politicians were implementing new economic policies, the once united Solidarity movement came apart at the seams. The breakdown of Solidarity, from political friction between individuals in Solidarity (Roskin 1993), led to the creation of many new political parties. These parties were from the ranks of the Solidarity movement as well as from the left and far right. Some were labeled “couch” parties because they were small enough that all of the members could fit on one couch. The 1991 elections reflected this fragmentation of the party system as twenty-nine parties gained representation (Millard 1994). In the 1991 elections, Solidarity’s weak performance was unexpected, as was the strong performance of the left (Millard 1994). Despite this, center-right non-post-communist parties formed a coalition government and continued with economic and political transformation.

Within this environment, politicians were implementing policies with little input from citizens (Przeworski 1993) and citizens were facing economic hardship and uncertainty. Despite increases in the GDP growth rate

(from -7.0 percent in 1991 to 3.8 percent in 1993) and decreases in inflation, unemployment rose to 16.4 percent in 1993 and annual increases in consumer prices remained well over 30 percent as late as 1993 (Slay 2000). As the economic difficulties persisted and a small segment of society benefited from the economic transition, many Poles grew suspicious and nervous over increasing social inequality (Cichy 1996).

The 1993 national parliamentary election returned post-communist successor parties to power. A new electoral threshold had been set to limit the number of parties gaining representation. The split of the center-right vote among numerous center-right parties allowed the left to gain a majority with only 36 percent of the vote (Millard 1994; Workshop on Political Parties and Party Systems 1994). The electoral victory of the left has largely been explained as a reaction to the economic hardship caused by the Balcerowicz plan, organizational resources among the communist parties, and the failure of the incumbent center-right political parties to formulate mass support based on real social cleavages. Orenstein (1998), summarizing a consensus view in area studies journals, states: "Voters rejected Solidarity . . . because they were disenchanted with the effects of neoliberal economic reform and with the cultural conservatism of center-right parties on issues like abortion, religion, xenophobia, and foreign affairs . . . Out of touch right-nationalist parties were hit by an electoral backlash in 1993 . . . that was fueled in large part by economic decline" (472).

According to Millard (1994), "In opposition after January 1990, the SdRP bore no responsibility for the hardships of economic transition and reaped the benefits of its persistent criticism of industrial and social policy as unemployment rose and the scope of welfare provision shrank" (493). Szelenyi et al. (1997) argue that parties on the left were also successful because social class became more important in the 1993 elections and because these parties were able to mobilize blue-collar constituencies. Thus, one can hypothesize that macroeconomic conditions and personal economic hardship are key explanatory variables in protest voting and the turn to the left.

## **Economics and Elections**

Previous research has demonstrated that economics and elections are related (Lewis-Beck 1988; Markus 1992; Niemi and Weisberg 1992; Wade, Groth, and Lavelle 1994; Wade, Lavelle, and Groth 1995). Scholars have examined the relationship between economics and elections in three contexts: (1) the

relationship between economic conditions and government approval; (2) the manipulation of the economy by incumbents to improve electoral chances; and (3) the selection of candidates by the electorate based on real differences in economic policy (Niemi and Weisberg 1992). Regarding the relationship between economic conditions and government approval, scholars make a distinction between personal economic conditions, or “pocketbook voting,” and macroeconomic conditions, or “sociotropic voting” (Markus 1992). The basic idea is that “although many . . . have only the fuzziest of notions about many aspects of politics and government, they do have a sense of whether ‘times are good’ or ‘times are bad,’ and they tend to vote accordingly” (Markus 1992: 152).

Lewis-Beck provides a comprehensive, comparative examination of the relationship between economics and elections in Great Britain, France, Germany, Italy, Spain, and the United States (1988). He uses individual-level survey data from these six countries to examine the effect of peoples’ evaluations of the economy as a whole and their own economic situation on intention to vote for incumbents and the opposition. Key findings indicate that people are more likely to vote for opposition parties or coalitions as macroeconomic conditions worsen and that personal economic hardship (pocketbook voting) rarely affects voting behavior. Markus (1992) uses pooled cross-section and time-series data from the United States to examine the effects of macroeconomic conditions and personal economic conditions on voting for the incumbent presidential candidate. Main findings show that both macroeconomic conditions and personal economic conditions affect voting behavior.

Wade et al. (1994, 1995) examine the sources of political participation and party voting in Poland in 1991 and 1993. They use aggregate data to examine the effects of socioeconomic variables (e.g., average income in the voivodship) and religious variables (e.g., the number of priests in the voivodship) on voter turnout and the percentage of the vote for major parties. Regarding party voting in 1991, results indicate that adverse economic conditions (e.g., unemployment) were associated with a higher percentage of the vote for parties on the left. In 1993, however, the authors find that unemployment does not predict party voting. Instead, urban/rural differences have significant effects on party voting.

In summary, previous research on economics and elections shows that macroeconomic conditions and personal economic conditions influence voting behavior. However, previous research in voting behavior has suffered from two major deficiencies. First, most scholars have relied upon cross-sectional survey data to examine voting behavior. The use of such data

has a serious implication for the measurement of voting behavior – scholars usually measure voting behavior with *intention* to vote for a specific party in future elections.<sup>1</sup> In addition, with cross-sectional data, it is impossible to control for changes in objective macroeconomic and personal economic conditions (Kramer 1983; Markus 1992).

A second major limitation of previous research on voting behavior concerns the unit of analysis problem. For example, some scholars use individual-level survey data to examine voting behavior while other scholars use only aggregate data. Both unit of analysis choices are associated with certain assumptions and consequences. With individual-level data, contextual effects can be measured only indirectly based on perceptions of the larger environment. Also, the assumption is made that voting behavior does not significantly vary between regions (e.g., electoral districts). In other words, we would have to assume that structural characteristics of regions, such as the unemployment rate, have no effect on voting behavior. Scholars using only aggregate-level data run the risk of making the classic ecological fallacy (Przeworski and Teune 1970; Robinson 1950). A significant relationship between two aggregate variables does not translate down to the individual level. Thus, despite the fact that the unemployment rate may be correlated with the percentage of the vote for parties on the left, we cannot conclude that being unemployed affects individual voting behavior. Also, with aggregate-level data, the assumption is made that voting behavior does not vary significantly within the aggregate units of analysis. In other words, it is assumed that an individual's education, income, or other personal characteristics do not affect their voting behavior. Thus, with aggregate data, it is possible to examine only structural relationships of the aggregate units. Finally, with aggregate-level data it is impossible to distinguish between pocketbook and sociotropic voting (Kramer 1983; Markus 1992).

In this analysis, I combine individual-level panel data with voivodship-level data and use hierarchical linear and non-linear modeling. I regress protest voting in 1993 (actual behavior) on contextual-level macroeconomic variables and individual-level attitudes toward social change,

---

<sup>1</sup> The relationship between intention to vote for a specific party in future elections and actual voting behavior is far from perfect. Using the panel data from Poland, a cross-tabulation between intention to vote in future elections (measured in 1993) and actual voting behavior (taking place in 1993) generated the following results: 39 of 47 individuals who intended to vote for the Democratic Left Alliance actually did, 9 of 78 individuals who intended to vote for the Democratic Union actually did, and 19 of 39 individuals who intended to vote for the Polish Peasants Party actually did.

objective measures of personal economic hardship, and background controls – all of which were measured prior to the act of protest voting. Hierarchical linear and nonlinear modeling allow me to control for problems typically encountered when analyzing multi-level data. Moreover, hierarchical nonlinear modeling techniques allow me to regress a dichotomous dependent variable on contextual and individual-level variables. Thus, I am able to examine voivodship-level predictors of protest voting, such as the unemployment rate, individual-level predictors of protest voting, such as being unemployed, and to separate the effects of contextual and individual variables on protest voting.

## Research Hypotheses

I test the following research hypotheses:

Hypothesis 1. Poles engage in protest voting in the 1991, 1993, and 1997 national parliamentary elections in varying degrees.

Hypothesis 2. In each election protest voting varies significantly by voivodship.

Hypothesis 3. Macroeconomic conditions in the voivodship directly affect protest voting above and beyond any effect of personal economic hardship. Voivodships with lower average wages and higher unemployment rates experience higher levels of protest voting.

Hypothesis 4. Personal economic hardship directly increases protest voting above and beyond any effect of macroeconomic conditions. Individuals with less income, those who experience decreases in income, and those who are unemployed are more likely to engage in protest voting.

Hypothesis 5. Macroeconomic conditions of the voivodship and personal economic hardship have indirect effects on protest voting through disapproval of social change.

## Data and Measurement

The data file used in this analysis consists of the 1,769 individuals who were surveyed in 1988, 1993, and 1998. I combine these survey data with voivodship-level data from the 1993 Polish statistical yearbook (Główny Urząd Statystyczny 1993). In my analyses, I include only individuals who completed the 1993 survey wave prior to the September 1993 elections – 1,505 of 1,769. In addition, I exclude those who moved to a different

voivodship between 1988 and 1998 to ensure that contextual variables are properly assigned.

### ***Protest Voting***

I measure protest voting in 1991, 1993, and 1997 with dummy variables (1 = yes). I define protest voting for each of these years as follows:

—for 1991: not voting or voting for a non-communist party in 1989 *and* switching one's vote to a post-communist party in 1991;

—for 1993: not voting or voting for a non-post-communist party in 1991 *and* switching one's vote to a post-communist party in 1993;

—for 1997: not voting or voting for a post-communist party in 1993 *and* switching one's vote to a non-post-communist party in 1997.

Due to the large number of political parties in Poland, I focus on a basic political division into post-communist parties and non-post-communist parties.<sup>2</sup> Data on voting behavior in 1989 and 1991 are from the 1993 survey wave, and data on voting behavior in 1993 and 1997 are from the 1998 survey wave. Thus, the data represent retrospective accounts of actual voting behavior.

### ***Macroeconomic Conditions***

I focus on two general indicators of macroeconomic conditions: average monthly wages and the registered unemployment rate. These data are available for all voivodships in 1992 from the 1993 Polish statistical yearbook (Główny Urząd Statystyczny 1993).

### ***Personal Economic Hardship***

There are three indicators of personal economic hardship: income in 1988, the change in income from 1988 to 1993, and being unemployed in 1993. Individuals not in the labor force were assigned a score of zero to the 1988 and 1993 income variables. I standardized the 1988 and 1993 income variables so that they would be comparable over time. I calculated the change in income from 1988 to 1993 by subtracting income in 1988 from income in 1993. Thus, a positive value on the change in income variable indicates that the respondent had an increase in income from 1988 to 1993. Being

---

<sup>2</sup> For a definition of post-communist parties, see Slomczynski and Shabad (chapter 8 in this volume).



unemployed is measured by a dummy variable in which those who are unemployed are coded as 1.

### *Disapproval of Social Change*

I use a weighted scale to measure one's general attitude toward the social changes that have occurred since 1989. The weighted scale is composed of three questions from the 1993 survey: (1) Have the past four years in Poland generated only gains, more gains than losses, both gains and losses, more losses than gains, or only losses? (2) Is life better in Poland today, or was it better four to five years ago? and (3) Do the changes bring possibilities, or threats? Answers of the type "Don't know" were assigned the mean score. The inter-items correlations range from 0.347 and 0.491. I used principal axis factoring to create the scale (with mean substitution to replace missing values). The three items form a strong factor (Eigenvalue = 1.314, Cronbach alpha = 0.690). High scores on the scale reflect disapproval of the social change since 1989. The scale has a mean of zero and a standard deviation of one.

### *Individual-level Control Variables*

Individual-level control variables include education, social class, sex, age, religiosity, size of community, interest in politics, membership in the Communist Party, and membership in Solidarity. *Education* is expressed in terms of years of schooling. *Social class* is represented by a set of ten dummy variables (1 = yes): employer, self-employed, manager, supervisor, expert, office worker, skilled manual worker, unskilled manual worker, farmer, and not working. I code men, those who have ever been members of the Communist Party, and those who have ever been members of Solidarity as 1. I measure *age* in years. I measure *religiosity* with the frequency of church attendance, from not at all, through less than once a month, once a month, and once a week, to more than once a week. *Size of community* reflects an ordinal variable containing nine response categories (from less than 2,000 to more than 500,000). In the 1993 survey, respondents were asked about their *interests in politics*. A high score reflects their positive answers.

All control variables are constructed on the basis of the questionnaire items from the 1993 survey wave, except for the following variables: religiosity, size of community, and membership in the Communist Party. These exceptional variables are measured with items from the 1988 survey wave.

## Methods

To examine contextual and individual-level sources of protest voting, I use hierarchical generalized linear modeling (HLM 5.0 for Windows). Because protest voting is a dichotomous variable, I pursue models in which the predicted probability is constrained to fall within the (0,1) interval. HLM uses a restricted penalized quasi-likelihood (PQL) procedure to estimate the coefficients and the variance and covariance parameters.

I estimate two types of models. The first is a fully unconditional model, which is formally defined as:

$$n_{ij} = \log [\phi_{ij} / (1 - \phi_{ij})] = \gamma_{00} + u_{0j}, \quad (1)$$

where  $n_{ij}$  is the log odds of success – that is, *protest voting* – for individual  $i$  in voivodship  $j$ ,  $\phi_{ij}$  is the probability of protest voting for individual  $i$  in voivodship  $j$ ,  $\gamma_{00}$  is the average proportion of protest voting across all voivodships, and  $u_{0j}$  is the deviation from the average proportion of protest voting for voivodship  $j$ . This model allows me to test the null hypothesis according to which protest voting does not vary across voivodships. It is a baseline model that provides information to help estimate the percentage of between-voivodship variance in protest voting explained by other conditional models.

The second (conditional) model, with one contextual variable (e.g., the unemployment rate) and one individual variable (e.g., income), is formally defined as:

$$n_{ij} = \log [\phi_{ij} / (1 - \phi_{ij})] = \gamma_{00} + \gamma_{01}W_j + \gamma_{10}(\bar{X}_{ij} - X_{..}) + u_{0j}, \quad (2)$$

where  $n_{ij}$  is the log odds of considered outcome – that is, protest voting – for individual  $i$  in voivodship  $j$ ,  $\phi_{ij}$  is the probability of protest voting for individual  $i$  in voivodship  $j$ ,  $\gamma_{00}$  is the average proportion of protest voting across all voivodships, controlling for the unemployment rate and income,  $\gamma_{01}$  is the expected difference in the log odds of success between two individuals who differ by one unit on  $W_j$  (i.e., by 1 percent in the unemployment rate),  $W_j$  is the rate of unemployment in voivodship  $j$ ,  $\gamma_{10}$  is the expected difference in the log odds of success between two individuals who differ by one unit on  $X_{ij}$  (i.e., by one unit of income), controlling for the unemployment rate,  $(X_{ij} - X_{..})$  is the grand mean centered income for person  $i$  in voivodship  $j$ , and  $u_{0j}$  is the deviation from the average proportion of protest voting for voivodship  $j$ , controlling for the unemployment rate and income.

I also estimate two hierarchical linear models to predict *disapproval of social change*. First is the One-Way ANOVA with Random Effects model, or the fully unconditional model, which is formally defined as:

$$Y_{ij} = \gamma_{00} + u_{0j} + r_{ij}, \quad (3)$$

where  $Y_{ij}$  is the disapproval of social change score for person  $i$  in voivodship  $j$ ,  $\gamma_{00}$  is the mean level of disapproval of social change across all voivodships,  $u_{0j}$  is the random coefficient associated with voivodship  $j$ , and  $r_{ij}$  is the individual-level residual. The fully unconditional model provides an estimate of the within and between-voivodship variance in disapproval of social change and tests the null hypothesis that the voivodship means are equal.

The second hierarchical linear model refers to the intercepts as outcomes. With one voivodship-level variable (e.g., the unemployment rate) and one individual-level variable (e.g., income), it is formally defined as:

$$Y_{ij} = \gamma_{00} + \gamma_{01}W_j + \gamma_{10}(X_{ij} - \bar{X}_{..}) + u_{0j} + r_{ij}, \quad (4)$$

where  $Y_{ij}$  is the disapproval of social change score for person  $i$  in voivodship  $j$ ,  $\gamma_{00}$  is the mean level of disapproval of social change across all voivodships,  $\gamma_{01}$  is the effect of the unemployment rate on disapproval of social change,  $W_j$  is the rate of unemployment in voivodship  $j$ ,  $\gamma_{10}$  is the average effect of income on disapproval of social change across all voivodships,  $(X_{ij} - \bar{X}_{..})$  is the grand mean centered income score for person  $i$  in voivodship  $j$ ,  $u_{0j}$  is the random coefficient associated with voivodship  $j$  (the voivodship-level residual after controlling for income and the unemployment rate), and  $r_{ij}$  is the individual-level residual (after controlling for income and the unemployment rate). I compare the variances of the voivodship and individual-level residuals from the intercepts as outcomes model to those from the One-Way ANOVA with Random Effects model in order to determine how much between- and within-voivodship variation in disapproval of social change the independent variables explain.

For a more detailed review of hierarchical generalized linear modeling and hierarchical linear modeling, see Bryk and Raudenbush (1992), Guo and Zhao (2000), and Raudenbush et al. (2000).

## Results

To what extent do Poles engage in protest voting? To answer this question, I examine the relationships among voting behavior in 1989, 1991, 1993, and 1997. Results presented in Table 12.1 indicate that protest voting in Poland

**Table 12.1.** Voting Behavior in the 1989, 1991, 1993, and 1997 Polish National Parliamentary Elections

Voting behavior	1989-1991		1991-1993		1993-1997	
	N	Valid %	N	Valid %	N	Valid %
Switched vote to a post-communist party:						
of which voted for a non-post-communist party in previous election	11	1.2	320	38.1	44	5.8
of which did not vote in previous election	11	1.2	217	25.8	27	3.5
Switched vote to a non-post-communist party:	0	0.0	103	12.3	17	2.2
of which voted for a post-communist party in previous election	241	25.6	93	11.1	39	5.1
of which did not vote in previous election	198	21.0	3	0.4	31	4.1
Consistently supported a post-communist party	43	4.6	90	10.7	8	1.0
(in consecutive elections)	48	5.1	46	5.5	294	38.5
Consistently supported a non-post-communist party						
(in consecutive elections)	643	68.2	381	45.4	386	50.6
Missing data:	552		655		732	
of which did not vote in either election	233		142		180	
of which did not vote in the subsequent election	248		77		228	
of which "don't know" in previous election	14		20		128	
of which "don't know" in subsequent election	48		389		27	
of which "don't know" in either election	9		27		169	
Valid N	943		840		763	
Total N	1,495	100.0	1,495	100.0	1,495	100.0

was common only during the 1993 parliamentary election. In 1991, only 11 individuals (1.2 percent of the valid cases) protest voted – that is, switched their vote from a non-communist party in the 1989 election to a post-communist party in the 1991 election. By contrast, 241 individuals (25.6 percent of the valid cases) switched their vote from the Communist Party in 1989 (or from not voting) to a non-post-communist party in 1991. While this switch is interesting, it does not reflect protest voting because non-post-communist parties were the incumbents. Finally, 48 individuals (5.1 percent of the valid cases) and 643 individuals (68.2 percent of the valid cases) remained loyal to post-communist and non-post-communist parties, respectively, in the 1991 elections. Thus, protest voting in 1991 was very limited. The voting pattern reflects a consolidation of power among the center-right/non-post-communist parties as they received many votes from people who voted for the post-communists in 1991.

Voting behavior in the 1993 national parliamentary election represents a sharp break from the previous pattern. After three to four years of economic hardship during the transition to free markets and democracy, 320 individuals (38.1 percent of the valid cases) protest voted by switching their vote to a post-communist party. In contrast to the 1991 election, only 93 individuals (11.1 percent of the valid cases) switched their vote to a non-post-communist party. The frequency of protest voting in the 1993 election is highlighted by the large decrease in consistent support for non-post-communist parties from 1991 to 1993 (68.2 percent in 1991 to 45.4 percent in 1993). Finally, a small number of voters continued to support a post-communist party in the 1993 election (5.5 percent of the valid cases).

The 1997 elections can be characterized as stabilizing elections. Vote switching and protest voting are both uncommon – only 5.1 percent protest voted by switching their vote from a post-communist party to a non-post-communist party and only 5.8 percent switched their vote from a non-post-communist party to a post-communist party. Moreover, large percentages of the electorate consistently supported the post-communists and non-post-communists in consecutive elections. In summary, in each of the elections, a small percentage of voters switched their vote to a party in a new party family. However, protest voting in Poland was common only during the 1993 national parliamentary election. Thus, I focus on protest voting in 1993 in the remainder of the chapter.

Does protest voting in 1993 vary by voivodship? This proves to be a crucial question. If protest voting does not vary across regions, then macroeconomic conditions within those regions, by definition, cannot explain regional differences in protest voting. In other words, there has to be

regional variance in protest voting to explain regional variance. I answer this question using the One-Way ANOVA with Random Effects model in HLM, which allows me to test the null hypothesis that protest voting does not vary by voivodship. Results from this fully unconditional model clearly show that the null hypothesis should be rejected. A chi-square statistic of 118.508 with 48 degrees of freedom indicates that protest voting does vary by voivodship in a statistically significant manner.

Do macroeconomic conditions affect protest voting above and beyond the effect of one's personal economic situation? To answer this question, I regressed protest voting on macroeconomic conditions, including the average salary and the unemployment rate, as well as indicators of personal economic hardship, attitudes toward social change, and other individual-level control variables. Results from this regression analysis (see Table 12.2) indicate that the unemployment rate has a positive effect on protest voting. Specifically, a 1 percent increase in unemployment increases the probability of engaging in protest voting by about 4 percent. This represents a fairly large effect in that the unemployment rate ranges from 5.9 percent (in Warszawskie) to 24.1 percent (in Koszalinie). However, contrary to my expectations, average wages in the voivodship of residence do not affect protest voting.

Personal economic hardship affects protest voting above and beyond any effect of macroeconomic conditions in the case of income in 1988. Specifically, a one-unit increase in income in 1988 decreases the probability of engaging in protest voting in 1993 by about 22 percent. Interestingly, neither the change in income from 1988 to 1993 nor being unemployed directly affects protest voting.

Individual-level control variables also significantly affect protest voting. Each additional year of education decreases the probability of protest voting by 8 percent. Regarding social class, experts are about 44 percent less likely to protest vote, while farmers are 55 percent more likely to protest vote – both in comparison to all other social class categories. Age has a negative effect on protest voting – every year of age reduces the probability of protest voting by 1–2 percent. People who have ever been members of the Communist Party are over 2.5 times more likely to protest vote, while people who have ever been members of Solidarity are about 58 percent less likely to protest vote.

Finally, people's attitudes toward the social change play a key role in influencing their decision to protest vote. Each unit increase in disapproval of social change increases the probability of protest voting by 50 percent. To explore the possibility of indirect effects through disapproval of change,

I regress this variable on macroeconomic conditions, personal economic hardship, and individual-level controls. I present results in Table 12.3.

**Table 12.2.** Regression of Protest Voting on Macroeconomic Conditions, Personal Economic Hardship, and Individual-level Control Variables<sup>a</sup>

Variables	Protest voting		
	Log odds of success	Standard error	Odds of success
Intercept	-0.532*	0.110	0.587
<i>Macroeconomic conditions</i>			
Average wages (x 1,000), 1992 <sup>b</sup>	-0.228	0.489	0.796
Unemployment rate, 1992	0.042*	0.019	1.043
<i>Personal economic hardship</i>			
Income, 1988	-0.243*	0.135	0.784
Change in income, 1988–1993	-0.136	0.117	0.873
Unemployed, 1993 (1 = yes)	-0.022	0.327	0.978
<i>Individual-level controls</i>			
Education, 1993	-0.080*	0.038	0.923
Social class, 1993 <sup>c</sup>			
Expert (1 = yes)	-0.588**	0.455	0.555
Farmer (1 = yes)	0.442*	0.195	1.556
Male, 1993 (1 = yes)	-0.098	0.151	0.907
Age, 1993	-0.014*	0.006	0.986
Religious attendance, 1988	-0.152	0.129	0.859
Size of community, 1988	-0.075**	0.047	0.928
Interest in politics, 1993	-0.045	0.104	0.956
Ever a member of Communist Party, 1993 (1 = yes)	0.998*	0.196	2.713
Ever a member of Solidarity, 1993 (1 = yes)	-0.866*	0.273	0.421
<i>Evaluation of social change since 1989</i>			
Disapproval of social change, 1993	0.402*	0.104	1.495

<sup>a</sup> Results are from the population average model with robust standard errors.

<sup>b</sup> All level-1 and level-2 variables have been centered around their grand means. The residual parameter variance for all level-1 coefficients has been set to zero.

<sup>c</sup> The reference category for social class includes: employer, self-employed, manager, supervisor, office worker, skilled manual worker, unskilled manual worker, and not working. A comparison of the percentage of protest voting within each class category without controls suggested experts and farmers differ from other groups

\*  $p < 0.05$  (one-tailed t-test); \*\*  $p < 0.10$  (one-tailed t-test).

**Table 12.3.** Regression of Disapproval of Change on Macroeconomic Conditions, Personal Economic Hardship, and Individual-level Control Variables

Variables	Disapproval of social change	
	Unstandardized coefficient	Standard error
Intercept	-0.020	0.064
<i>Macroeconomic conditions</i>		
Average wages (x 1,000), 1992 <sup>a</sup>	-0.169**	0.124
Unemployment rate, 1992	-0.001	0.008
<i>Personal economic hardship</i>		
Income, 1988	-0.081**	0.058
Change in income, 1988 to 1993	-0.120*	0.041
Unemployed, 1993 (1 = yes)	0.349*	0.122
<i>Individual-level controls</i>		
Education, 1993	-0.103*	0.016
Social class, 1993		
Expert (1 = yes)	0.084	0.151
Farmer (1 = yes)	0.113	0.110
Male, 1993 (1 = yes)	-0.139*	0.069
Age, 1993	-0.005**	0.003
Frequency of religious attendance, 1988	-0.081*	0.034
Size of community, 1988	0.010	0.019
Interest in politics, 1993	-0.034	0.028
Ever a member of Communist Party, 1993 (1 = yes)	0.343*	0.067
Ever a member of Solidarity, 1993 (1 = yes)	-0.207*	0.078
Percent between-voivodship variance explained	29.5	
Percent within-voivodship variance explained	11.5	

## Chi-square Table

Parameter	Variance	$\chi^2$ (d.f.)
Intercept	0.026*	66.354 (46)
Level-1	0.855	

<sup>a</sup> Average wages, unemployment rate, income, changes in income, education, age, religious attendance, size of community, and interest in politics have been centered around their grand means. The residual parameter variance or all level-1 coefficients has been set to zero.

\*  $p < 0.05$  (one-tailed t-test); \*\*  $p < 0.10$  (one-tailed t-test).



Results suggest that macroeconomic conditions have mainly direct effects on protest voting. Results from the fully unconditional model suggest that only about 4 percent of the variance in disapproval of social change exists between voivodships. Thus, there is not much variance to explain. Despite this, average wages have a weak, negative effect on disapproval of change ( $p < 0.10$ ). Consequently, there is likely a small indirect effect of average wages on protest voting through disapproval of change.

Personal economic hardship is a better predictor of disapproval of social change than are macroeconomic conditions. Each unit increase in income from 1988 to 1993 decreases disapproval of social change by .120. Also, individuals who are unemployed score .349 higher on the disapproval of social change scale than those who are employed. Thus, changes in income and being unemployed have indirect effects on protest voting through disapproval of social change.

Other individual-level control variables also influence people's evaluation of social change since 1989. Education and the frequency of church attendance decrease disapproval of social change. Men and people who have ever been members of Solidarity score lower on the disapproval scale than women and those who have never been members. Finally, those who have ever been members of the Communist Party score higher on the disapproval scale than those who have never been members.

Thus far, I have focused on protest voting in 1993. I have examined regional variation as well as individual and voivodship-level predictors of protest voting in 1993. However, a small percentage of the electorate also engaged in protest voting in 1997 – roughly 5 percent did not vote or voted for a post-communist party in 1993 and switched their vote to a non-post-communist party in 1997. Does protest voting in 1997 vary by voivodship and are the sources of protest voting in 1997 similar to those in 1993?

An examination of the frequency of protest voting in 1997 by voivodship revealed that there is limited variation across voivodships in protest voting. The number of protest votes in 1997 by the number of voivodships is as follows: 26 voivodships had 0 protest votes, 15 voivodships had 1 protest vote, 5 voivodships had 2 protest votes, 2 voivodships had 3 protest votes, and 1 voivodship had 8 protest votes. Thus, 84 percent of the voivodships included in the analysis had fewer than 2 protest votes in 1997. Clearly, it is not possible to examine the effects of voivodship-level, macroeconomic conditions on protest voting in 1997. The occurrence of protest voting in 1997 and regional variation in it is simply too limited. Despite this, I did conduct a logistic regression in which I regressed protest voting in 1997 on all individual-level variables – including personal economic hardship and the

control variables. None of the individual-level variables significantly affect protest voting in 1997. Together, these results emphasize the uniqueness of the 1993 national parliamentary elections.

In summary, results suggest that protest voting in Poland was largely confined to the 1993 election in which communist parties were victorious – about 38 percent of the valid cases engaged in protest voting in 1993. Despite this, there was small-scale vote switching in all parliamentary elections from 1991 to 1997. Results also indicate that protest voting in 1993 varies by voivodship. This made it possible to examine the effects of macroeconomic conditions on protest voting. Macroeconomic conditions have direct and weak indirect effects on protest voting. Protest voting is significantly higher in voivodships with higher unemployment rates. Moreover, average wages have a weak indirect effect on protest voting through disapproval of change. Voivodships with higher average wages had lower average levels of disapproval of social change, which at the individual-level increases protest voting. Finally, income decreases protest voting while changes in income and being unemployed have indirect effects on protest voting through disapproval of social change. Thus, macroeconomic conditions and personal economic hardship affect protest voting in Poland in 1993 and partially explain the turn to the left.

## Conclusion and Discussion

I have begun the analyses of this chapter by showing that Poles engage in protest voting in the 1991, 1993, and 1997 national parliamentary elections in varying degrees. In support of Hypothesis 1, the pattern of voting shows that the 1993 elections were qualitatively different than the 1991 and 1997 elections. The 1991 elections, and also the 1989 semi-free elections, appear to be ideological elections in which individuals voted to destroy the hegemony of the Communist Party. These first elections were about getting rid of the Communists rather than voting based on social class or other social cleavages. The 1993 elections and the turn to the left, rather than being an anomaly, seem to reflect the establishment of “normalcy” – by this, I mean voting behavior that reflects basic cleavages in society. Those individuals who were most severely affected by the economic transition reacted by switching their vote to a party that would work to further their interests. Finally, the 1997 elections are characterized by the stabilization of voting preferences. The degree of vote switching and protest voting appears to have greatly subsided.

Hypothesis 2, stating that in each election protest voting varies significantly by voivodship, is not supported because the macro-level differentiation of this type of political behavior in the 1997 elections is negligible. However, in the elections for which Hypothesis 2 holds, macroeconomic conditions in the voivodship directly affect protest voting above and beyond any effect of personal economic hardship. Voivodships with lower average wages and higher unemployment rates experience higher levels of protest voting. Thus, Hypothesis 3 is confirmed.

In accordance with Hypothesis 4, in the 1993 elections personal economic hardship directly increases protest voting above and beyond any effect of macroeconomic conditions. Individuals with less income, those who experience decreases in income and those who are unemployed are more likely to engage in protest voting. Moreover, as predicted by Hypothesis 5, macroeconomic conditions of the voivodship and personal economic hardship have indirect effects on protest voting through disapproval of social change.

This chapter makes several important contributions to research on the relationship between economics and elections in general, and to research on the left turn in Eastern European politics in particular. Scholars have long argued that economic conditions affect elections. Economic downturns and economic hardship are expected to decrease support for political incumbents. Scholars have examined the relationship between economics and elections in many contexts and using various methods. However, most of the analyses have been limited by the utilization of cross-sectional data. Such data force researchers to make concessions regarding how voting behavior is measured as well as how the effects of personal economic hardship are separated from macroeconomic conditions.

The strength of this chapter lies in the use of panel data *and* a combination of these data with aggregate-level economic data. Having panel data covering the 1989, 1991, 1993, and 1997 national parliamentary elections allowed me to measure actual voting behavior rather than voting intention. I was able to regress voting behavior on independent variables that were measured prior to the elections. Finally, I was able to assess changes in objective economic conditions and separate the effects of macro- and microeconomic conditions on voting behavior.

This chapter makes substantive and methodological contributions to research on the relationship between economics and elections and to research on the left turn in Eastern Europe. Substantively, it demonstrates that objective macroeconomic and personal economic conditions affect voting behavior. It also demonstrates that social class matters in electoral outcomes

in Poland. The pattern of protest voting and vote switching suggests that social class has become increasingly important in electoral politics in Poland, especially after the founding elections of 1989 and 1991. In terms of methodology, this is the first attempt to use hierarchical modeling to estimate the impact of individual and contextual variables on political behavior in Eastern Europe. The application of the HLM program to the regional data in Poland proved to be useful.