

## Economics of Voting in Post-communist Countries \*

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### Abstract

I analyze economic determinants of voting behavior in post-communist elections in the Czech Republic, Hungary, Poland and Slovakia. I argue that election results reflect the voters' experience with economic reforms: those who benefited from the reforms vote for the right wing pro-reform parties, whereas those who have become worse off vote for the left wing parties. This identifies two categories of voters, the winners and the losers of reforms. The *winners* are the private entrepreneurs, white-collar workers, and university educated voters. On the other hand, the *losers* are the unemployed, retirees, and blue collar and agricultural workers. Cross-section patterns of political support are determined by the parties' association with the reforms rather than their incumbency status. Incumbency only appears significant in explaining the marginal vote gain or loss between elections.

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# 1 INTRODUCTION

Politics and economics have become intensely intertwined in the post-communist countries of Central and Eastern Europe (CEE). The collapse of communist regime and the subsequent political liberalization created conditions for implementation of wide-ranging economic reforms. In turn, the continuation of reforms and the very sustainability of democracy have been threatened by the political backlash brought about by adverse effects of the reforms. Throughout the region, pro-reform parties failed in the second and/or subsequent post-communist elections and were replaced by parties generally opposed to radical economic transition. The objective of this paper is to present results of an empirical analysis of the interactions between economics and politics in the specific conditions of post-communist transition.

Economic analysis of voting gained prominence with the seminal work of Downs (1957) (for a survey of the ensuing literature in Economics as well as Political Science, see Miller 1997). Empirics of the relationship between economic and political developments have already been well researched in the context of Western developed countries. The voting (popularity) function explains the electoral results (popularity in opinion polls) of political parties by linking them to economic, as well as political, events. The origins of this literature go back to Kramer (1971), Nannestad and Paldam (1994) take stock of the ensuing research, and Paldam (1991) analyzes robustness of the voting function. The main empirical result is the so-called *responsibility hypothesis*: the voters hold the current government responsible for the state of the economy. Moreover, voters are found to be retrospective and myopic.

There are good reasons to believe that voters in the post-communist countries behave differently from the ones in Western democracies. First, post-communist voters lack experience with the political processes and institutions inherent to democracy. Second, retrospective voting typically observed in the developed countries may not be an appropriate strategy in times of extra-ordinary economic turbulence. Third, economic decline during the initial stage of economic transition cannot be directly attributed to the government in office at the time, as it is the consequence of the mediocre state of the economy after the collapse of communism rather than bad economic policies of the post-communist governments. Finally, economic payoffs at stake in elections during fundamental economic transition are arguably much larger than those in developed countries.

The present paper builds on, and extends, my previous work in Fidrmuc (1999), where I studied cross-section patterns of support for individual parties in the same four countries. It contributes to the modest literature on voting in communist and post-communist countries. Lafay (1981) analyzes the relationship between economics and politics under communist regime in Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, and Romania during 1960's and 1970's. Minich and Šorm (1995) study the Czech and Slovak elections in 1992, Jackson et al. (1996) and Bell (1997) look at the Polish 1993 election, and Pacek (1994) covers Bulgaria in 1991, Poland in 1991, and Czechoslovakia in 1992. Finally, Warner (1999) studies the popularity of reform in Russian 1995 parliamentary election. The present paper distinguishes itself by its breadth—the analysis covers nine elections in four countries (Czech Republic, Hungary, Poland, and Slovakia); the level of generality—it shows that the same functional relationship holds across the four countries; and a novel methodology—by pooling data across various elections and countries, it juxtaposes cross-section and dynamic aspects of voters' support.

In the next two sections, I introduce the data set and methodology used. Section 4 contains the results of the empirical analysis. I then discuss the results and offer some concluding remarks in the last section.

## **2 DATA**

The objective of the present paper is to explain the recent political developments in the transition countries of CEE by linking them to the underlying economic processes. The basic idea is that the voters' decisions are affected by the state of the economy at the moment of the election, and/or their expectations of future economic developments. The process of economic reform has played a fundamental role in determining the current state of the economy. Therefore, besides being interested in the general relationship between economics and politics, I seek to identify the relationship between voters' support for economic reforms, and election outcomes.

The analysis of the relationship between economics and electoral outcomes in the post-communist countries poses several data related challenges. Typically, voting functions are studied using time-series data – see, for example, Fair (1978, 1996), and Paldam (1991). This approach is not possible in the transition countries of CEE because only three or four elections have taken place since the fall of communism. For that reason, I use regional data, where both election results as well as explanatory variables are observed at the level of individual counties. Application of this approach

has been rather limited so far – an exception is Rattinger (1991). Use of cross-section data makes it difficult to estimate dynamic effects – the changes of party support between elections – but on the other hand, it avoids encountering structural breaks in the relationship captured by the voting function. The dynamic analysis is further complicated by the political volatility inherent to the early periods after the fall of communism, when party mergers and/or break-ups were very common and political alliances changed often. Nevertheless, this concern can be (at least partly) remedied by pooling data across elections and countries and specifying the regression equations so that dynamic and/or incumbency effects can be captured. Finally, analysis of regional data stipulates different degree of aggregation, as it implicitly assumes that voters' decisions are affected by the state of local economy instead of national economy (this adds an additional dimension to the discussion of sociotropic versus egotropic voting, see Nannestad and Paldam, 1994).

I analyze the following elections (see Table 1 for election results):

- **Czech Republic:** the Chamber of Deputies (lower house), 1992, 1996, and 1998, the first two resulted in reelection of pro-reform government, whereas the last one yielded government formed by social-democrats;
- **Hungary:** the Parliament (those seats that were awarded by proportional vote), 1994 (transition from right wing to post-communist dominated government) and 1998 (transition from post-communists to right wing);
- **Poland:** the Sejm (lower house), 1993 (transition from right wing to post-communist dominated government) and 1997 (transition from post-communists to right wing);
- **Slovakia:** the National Council, 1992 (transition from pro-reform government to a nationalist one) and 1994 (transition from pro-reform government<sup>1</sup> to one dominated by nationalists).

I focus on the second and subsequent elections after the collapse of the communist regime. The first post-communists elections are not included because they took place before the process of economic reforms started, and it is unlikely that reform-related issues played a role. Instead, the first free elections appeared to be dominated by the post-communist euphoria rather than economic issues.

The unit of analysis is always the county (micro-regions, called 'okres' in the Czech and Slovak Republics, 'megye' in Hungary and 'województwo' in Poland). There are 76 counties in the Czech Republic, 20 in Hungary, 49 in Poland and 38 in Slovakia. The data were compiled from various

publications of the national Statistical Offices of the respective countries (the data can be obtained from the author upon request).

The data were pooled across elections and countries, resulting in a data set of 442 observations, with each election distinguished by a dummy variable (the Czech 1992 election is the reference election). The dependent variable is the percentage of votes accruing to parties belonging to the following categories based on their (perceived) political orientation: pro-reform (primarily right-wing and centrist parties), left-wing, nationalists, and minority. The categorization has been based on the *perceived* political orientation of the parties before the election, rather than the actual policies pursued by the parties *ex post*.<sup>2</sup> Another dimension for aggregation was the incumbency status – adding up the votes for parties present in the government at the time of election.<sup>3</sup> The vote shares for different party categories are summarized in Table 1.

An inspection of the statistics in Table 1 reveals that pro-reform parties enjoy high support in the Czech Republic (in excess of 40%). Slovakia is characteristic by extraordinarily high support for nationalists. The nationalists were rather successful also in Hungary, compared with the remaining two countries. The high share of votes accruing to small parties in Poland in 1993 (nearly 35%) indicated the political fragmentation and instability preceding that election. Across all four countries, the political systems have stabilized over time in that the share of votes for the parties aggregated in ‘other’ declined. The extent of political volatility and fragmentation is also apparent from the votes accruing to the government. Incumbent parties fared especially badly in Slovakia in 1992, Hungary in 1994, and Poland in 1993. Finally, the last two columns indicate the vote gain/loss of the incumbent parties. The average vote loss is 2.9 percentage points, or 8.4 % (2.8 divided by the average vote for government). This by far exceeded the 1.6 % *cost of government* reported by Paldam (1991) for 197 elections in 17 OECD countries.

The right hand side of the regression equation contains a set of economic and demographic variables (see Table 2). The following economic indicators were used: the unemployment rate, the average wage, the number of small individual entrepreneurs and self-employed (as percentage of population, excluding farmers), and the share of employment in industry and agriculture. Demographic indicators included were the (logarithm of) population density, the proportions of population in the following categories: post-productive age (retirement age as determined by the national standards<sup>4</sup>), university educated, roman catholics (education and religion are only available for the Czech Republic and Slovakia), and national minorities<sup>5</sup> (Moravian in the Czech Republic,

and Hungarian in Slovakia). The variables used were generally end-of-year values of the election year, except for wages, which were the average values of the election year.<sup>6</sup> The statistics reveal a rather uneven regional distribution of costs and benefits of reforms (see Table 2). Unemployment rate is lower and wages are higher in some regions, especially urban areas, while rural areas are often stricken with extremely high unemployment and low wages. Other variables show substantial regional differences as well. Voting results also vary substantially from region to region (as indicated by standard deviations reported in Table 1).

### 3 METHOD

The estimated equations have the following form:

$$V_{i,j} = \mathbf{a} + \mathbf{b} \cdot V_{i,t,j} + \mathbf{S}_i \mathbf{g} \cdot X_{i,t} + \mathbf{S}_i \mathbf{j}_i \cdot \Delta X_{i,t} + \mathbf{S}_k \mathbf{d}_k \cdot D_k + \mathbf{e}_{i,j} \quad (1)$$

where  $V_{i,j}$  stands for the share of votes received by parties of category  $j$  in election  $t$ ;  $X_{i,t}$  are the explanatory economic and demographic variables,  $\Delta X_{i,t}$  are the changes in economic variables,  $D_k$  are the dummy variables for individual elections, and  $\mathbf{e}_{i,j}$  is the error term. I estimated equation (1) in several alternative forms: First,  $V_{i,j} = \mathbf{a} + \mathbf{S}_i \mathbf{g} \cdot X_{i,t} + \mathbf{S}_k \mathbf{d}_k \cdot D_k + \mathbf{e}_{i,t}$  captures the cross-section patterns of political support, and the results are reported in Table 3A. Second,  $V_{i,j} = \mathbf{a} + \mathbf{S}_i \mathbf{g} \cdot X_{i,t} + \mathbf{S}_i \mathbf{j}_i \cdot \Delta X_{i,t} + \mathbf{S}_k \mathbf{d}_k \cdot D_k + \mathbf{e}_{i,t}$  includes also the changes in the main economic variables – change in unemployment rates and the real wage growth (using the nominal wage growth yielded similar results) over one year preceding the election (due to lack of 1990 data for the Czech and Slovak Republics, I was unable to include changes over longer periods). The results are reported in Table 3B. Third, to capture the incumbency effects, the key economic variables (unemployment, average wages, and the proxy for entrepreneurial activity) were interacted with a dummy variable equal to one if the party in question was represented in the government. The regression coefficients resulting from this specification are reported in Table 3C. These regressions were estimated on a data set that includes nine elections and contains 442 observations. Finally, I also estimated a dynamic version of the equation,  $V_{i,j} = \mathbf{a} + \mathbf{b} \cdot V_{i,t,j} + \mathbf{S}_i \mathbf{j}_i \cdot \Delta X_{i,t} + \mathbf{S}_k \mathbf{d}_k \cdot D_k + \mathbf{e}_{i,p}$  which includes the lagged vote and changes in economic variables. This specification is intended to capture the patterns of changes of political support between subsequent elections, and was estimated with 259 observations. The economic variables included were the change in unemployment rates and real wage growth, and the best results were achieved with a three-year period before the election. The results are reported in

Table 4. Finally, to capture country specifics, Table 5 reports the estimates of cross-section patterns of support for the four countries separately (party specific patterns of support are subject of a related paper, see Fidrmuc (1999)). All regressions were estimated by OLS (with heteroscedasticity robust t-statistics reported).

## **4 EMPIRICAL RESULTS**

Clearly, economics played an important role in shaping the political developments in the transition countries. Looking at coefficient estimates listed in the Tables 3 and 4, one can observe the general patterns of voting behavior of individual social and/or economic groups. I estimated all regressions first for the three main categories of political parties – pro-reform, left wing, and nationalists. The last two columns in each table then report results for the government parties. Comparing the results based on these two ways of aggregation highlights the motives affecting voting behavior at the polls. If voters hold the government responsible for the state of the economy, as is the typical observation in the developed democracies, then the estimates based on aggregation according to incumbency status should give better results. On the other hand, if the voters' decisions are primarily motivated by their opinions on the speed of reform, then the first aggregation should give a better fit.

### **4.1 Cross-section Patterns of Voting Behavior**

The basic static regressions (Table 3A) explain between 75 and 87 % of the variance. The economic and demographic variables come out quite strongly significant when parties are categorized according to their position on reform. On the other hand, only the measure for entrepreneurial activity is significant in the regression for government parties – in fact, re-estimating the equation only with the entrepreneurs variable and the election dummies yields virtually the same  $R^2$ . This seems to indicate that the voters in post-communist countries are motivated by the parties' position on reform (and its speed) rather than their incumbency status.

Unemployment has been probably the most acute consequence of economic transition in CEE. From virtually zero, the unemployment rate shot up to in excess of ten percent in most countries. Regression results indicate that unemployment strongly reduces support for parties associated with economic reforms, and increases support for left wing parties. One percentage point increase in regional unemployment rate (compared to the mean, not over time) on average reduces the electoral showing of the pro-reform parties by some 0.6 percentage point, and increases the vote the left wing

parties by nearly the same amount.<sup>7</sup> Hence, excessive unemployment clearly contributed to the poor performance of pro-reform parties, and the rise of support for post-communist and left wing parties. Interestingly, unemployment also reduces support for the nationalists, indicating that the rise of nationalism throughout the region has not been caused by rising unemployment.

If there is a social group that is virtually bound to support reforms, it is the private entrepreneurs. Private enterprises were virtually non-existent under the communist regime. While the unemployed may see a slow-down or reversal of the reforms as a remedy to their declining living standards, the very livelihood of the entrepreneurs hinges on the success of economic transition. Therefore, one should expect higher support for the pro-reform parties and lower support for the left-wing parties in the regions with greater entrepreneurial activity. To account for the emerging private sector, I used the number of small private (unincorporated) entrepreneurs, excluding farmers, expressed as percentage of population. Clearly, this captures only the small business part of the private sector. Nevertheless, this is probably highly correlated with the actual size of the private sector. The results show a strong positive effect of private entrepreneurial activity on support for pro-reform parties, and an even stronger negative effect on support for left-wing parties and nationalists. The size of the coefficient estimates and their significance reveals the importance of this socio-economic group: one percent of population (including children) becoming entrepreneurs transforms into 0.9 percent of support for the pro-reform parties, and costs the left wing and nationalist parties 1.1 and 1.0 percent of support, respectively. The entrepreneurs also strongly support the government (the coefficient is 1.2), perhaps out of desire for political stability.

Economic transition has caused substantial reallocations among sectors. Typically, firms operating in the service sector benefited from the reforms whereas industrial and agricultural enterprises often experienced severe problems. To capture the sector-specific effects, I included the share of employment in industry and agriculture in the regressions. Industrial and agricultural employees are typically blue-collar workers. One can expect that they have benefited less from the transition compared to white-collar workers, and therefore will be more likely to support parties challenging reforms. Indeed, industrial employment in general increases support for the left wing (not significantly though) and nationalist parties, and reduces support for pro-reform parties. Similarly, agricultural employment negatively affects support for the pro-reform parties. However, compared to the variables discussed above, industrial and agricultural employment appear less important in shaping election results.



With the inclusion of average wages (expressed as the percentage difference over the national mean wage), I intended to capture the uneven distribution of benefits of the reforms in terms of income. One can expect that high wages will increase support for reforms, when controlling for other potential factors (unemployment, entrepreneurial activity). However, wages seem to have strong effect only on the support for nationalists, who apparently get the votes of low-income voters. The effect on support for the left wing parties is also positive but not significant, whereas the pro-reform parties' electoral outcomes seem to be actually negatively correlated with wages.<sup>8</sup>

Demographics should naturally have an effect on voters' preferences. The retirees have been hit disproportionately by the adverse effects of reform. Arguably, they can be expected to have different preferences regarding radical reforms than the younger population. The insignificance of this variable in Table 3A reflects differences across countries (see Table 5), whereas the retirees seemed to have supported pro-reform parties in the Czech Republic, they tend to support left wing and/or nationalist parties in the other three countries.

The log of population density is intended to serve as proxy for the urbanization of the region. The higher the population density, the greater in general the share of region's population living in towns. Indeed, the support for pro-reform parties is higher in urban regions, but the effect on left wing and nationalist parties is not significant.

## **4.2 Incumbency Effects and Dynamic Patterns of Support**

The results of regression for government parties in Table 3A indicate that economics, except for entrepreneurial activity, apparently does not significantly affect the electoral outcomes of the incumbent parties. Results of country specific regressions reported in Table 5 lead to a similar conclusion. The economic variables come out significant in the regressions for the Czech Republic and Slovakia, where the governments were largely composed of pro-reform parties, but not so for Hungary and Poland, where a pro-reform government replaced one controlled by left wing parties. Hence, in contrast with the typical finding in the literature, incumbency status of parties does not appear to play an important role. Instead, the patterns of voting behavior are primarily determined by the voters' position on the reforms (and its speed) rather than by holding the government responsible for the economy.

The *responsibility hypothesis* implies that the voters hold the government responsible for the state of the economy. Accordingly then, the regions with low unemployment should display lower

support for the government, regardless of its political orientation. This is not the case in CEE. On the contrary, patterns of support are quite stable, and do not change much when a party moves from the opposition to the government, or vice versa. The static regression specification then captures cross-section patterns of political support – it identifies which socio-economic groups support different categories of parties.

A potential explanation is that voters punish or reward the government for changes in the relevant economic indicators, not levels. Table 3B reports results of regressions with both levels and changes included among explanatory variables. Two dynamic indicators are included, unemployment rate change and real wage growth, both computed over one year before the election (because of lack of data, I could not use longer lags). According to the responsibility hypothesis, support for the government should be correlated negatively with unemployment rate change and positively with wages growth. Regression results reveal that the support for the government was indeed negatively affected by unemployment rate change. Rising unemployment also increases support for the left wing parties, but has no significant effect on the pro-reform parties (while the effect of unemployment rate remains the same as before). The coefficient of real wage growth is only significant for the nationalists, but not for the incumbent parties.

Another way of disentangling the effects of incumbency status is to use dummy variables denoting whether the government was controlled by pro-reform or left wing parties. Regression results are reported in Table 3C. I interacted the unemployment rate, the unemployment rate change, the average wages, and the measure of entrepreneurial activity with a dummy variable that takes value of one if the party in question was in charge of the government (when parties are aggregated according to incumbency, the dummy denotes a pro-reform government). Significance and size of the coefficient of variable interacted with the dummy then indicate whether and how the effect of that variable depends on the incumbency status.

With respect to unemployment, the effect of incumbency on pro-reform and left wing parties goes in fact in the wrong direction – incumbency actually makes unemployment less costly for the pro-reform parties, and further increases the positive effect on support for the left wing parties. Unemployment change only significantly affects the left wing parties, and the effect of incumbency has the expected sign here – whereas rising unemployment generally increases the support for the left wing, when the government is left wing the overall effect is actually negative. Finally, the result for

the entrepreneurs indicates that they indeed tend to support the government whatever its political orientation, but the size of the effect is much greater if the government is right wing.

Finally, in Table 4 I study the effects of economics upon the dynamics of voters' support. In this dynamic specification, the electoral outcomes of parties are explained by their share of vote in the previous election, unemployment change and real wage growth. Best results were obtained with unemployment change and wage growth computed over a three-year period. Unlike in the static setting, the incumbency status of parties now appears to be important, both unemployment change and wage growth are strongly significant for the government parties and have the expected signs. Wage growth also reduces support for the left wing and nationalist parties, whereas unemployment change is only marginally significant for the pro-reform parties (in addition, the size of the effect is much smaller compared to the one reported for the government parties).

The results presented in Table 4 indicate that whereas there is basically no support for the responsibility hypothesis when studying static cross-section patterns of support in the post-communist countries, this is no longer true when looking at dynamic patterns of voters' support. The explanation of this apparent contradiction is actually simple—static analysis identifies the general patterns of allegiance of individual economic and/or demographic categories with different parties. On the other hand, dynamic analysis explains the vote gain or loss of parties, and thus identifies the motivation of the swing voters—those voters who changed their patterns of support. Responsibility hypothesis performs well when explaining the motivation of the swing voters, but not the general patterns of support in the post-communist countries. The general pattern of support is rather stable across individual elections, as is also demonstrated by high coefficient estimates (close to unity) and very high significance levels for the lagged vote variable in Table 4.

## 5 CONCLUSIONS

The empirical results presented in this paper indicate that there is indeed a strong relationship between economic developments and voting behavior in the post-communist countries. Uneven distribution of benefits and costs of reform creates *winner*s and *loser*s, and thus constituencies supporting or opposing radical economic reform. Voting behavior in the transition countries thus appears to be essentially forward looking, not retrospective – voters support those parties, which they expect to deliver policies favorable to them. The *winner*s, who form the pro-reform constituency, are the private entrepreneurs, urban residents, white-collar workers and highly

educated voters. On the other hand, the *losers*, who oppose reforms, are the unemployed, retirees, blue-collar workers and rural residents. Consequently, it is the balance between positive and adverse effects of the reforms that underlies the differences in political development across transition countries, rather than differences in history, culture, or the extent of post-communist legacy. The same general pattern of interactions between economics and politics holds within as well as across the four countries analyzed. The pattern of support is also remarkably stable over the tenures of different governments. This stands in contrast with the prevailing result obtained by scholars studying voting behavior in developed countries, namely that “incumbents benefit from an expanding economy and challengers thrive on misery” (Alesina and Rosenthal, 1995). Nonetheless, while the cross-section pattern of voters’ support reflects their preferences regarding the reforms, the *responsibility hypothesis* appears to account the dynamics of voters’ support: those voters who change their voting behavior between elections apparently do so in order to reward or punish the government.

The result indicating stable cross-section pattern of support has an intriguing implication for party politics in transition. We should see right wing parties concerned about rising unemployment, on the other hand, left wing parties are in relatively good position to implement harsh austerity measures and privatize state-owned enterprises—since they will not be hurt so much by the political consequences of such measures. This is in line with the argument put forward by Cukierman and Tommasi (1998). Accordingly, the fact that left wing parties implement right wing policies can be understood by the voters as a credible signal that such policies are indeed necessary—assuming politicians are better informed about the current state of the world than voters. On the other hand, the same policies pursued by a right wing government would be seen as being ideologically motivated. Indeed, post-communists in Poland and Hungary proved to be more effective reformers than their predecessors who started the reforms. On the other hand, the right-wing government in the Czech Republic, despite establishing a reputation of being tough on reforms early on, later generally avoided politically costly reforms by postponing bankruptcy legislation, failing to implement policies aimed at enterprise restructuring, and implicitly reinstated the soft budget constraint by refinancing banks troubled by bad loans.

Nonetheless, this pattern of political allegiance is probably specific to the transitional period, and as the post-communist countries converge to the new steady-state equilibrium, one can also expect voting patterns to converge to those observed in the developed countries. The importance of

responsibility-hypothesis pattern for vote gains/losses seems to demonstrate the beginning of such convergence.

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<sup>1</sup> The nationalist government elected in 1992 was dismissed in March 1994, and replaced with a grand coalition of the remaining parties. The nationalists regained office in September 1994.

<sup>2</sup> While such categorization is always to some extent subjective, I attempted to strike balance between insights obtained in discussions with nationals from the respective countries as well as newspaper analyses (international and local).

<sup>3</sup> Determining the incumbency status was not always straightforward. Polish Sejm before the 1993 election was extremely fragmented, and some of the parties associated with the previous government failed to exceed the 5% hurdle (newly introduced then). HZDS government in Slovakia was toppled in March 1994 and replaced by a broad coalition of opposition parties. The Czech government was restructured in November 1997 and the new government did not include representatives of the ODS (although it included former ODS members who split off and formed the US).

<sup>4</sup> Differences in national limits for retirement explain the low figure for Poland in Table 2.

<sup>5</sup> Bohemia and Moravia are the two parts of the Czech Republic. Although Czech is spoken in both parts, 16% of Czech citizens reported Moravian nationality in the 1991 census. Hungarians, making up 11% of Slovak population, are mainly concentrated in regions along the Hungarian border. It is estimated that Roma make up between 3-8% of Slovak population.

<sup>6</sup> There were a few exceptions to this rule: demographic data were not available on a yearly basis and the nearest available year was used. In addition, in a few cases where a particular variable was not available for the election year, the year preceding the election was used.

<sup>7</sup> All coefficients obtained in regressions on the pooled data set reflect in fact average effects of the variable in question across countries, elections, as well as individual parties. See Table 5 for country specific estimates.

<sup>8</sup> Opinion polls usually suggest that right wing parties in CEE derive support from individuals with higher incomes. These are typically entrepreneurs, and white collar workers, and these groups are already controlled for in the regressions.

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**Table 1. Electoral Statistics**

	Pro-Reform		Left Wing		Minority		Nationalists		Other		Government		Gov't Gain	
	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.
Czech Rep. 1992	44.14	5.94	29.18	4.83	4.96	4.83	8.98	2.44	12.74	2.17	44.14	5.94	n.a.	n.a.
Czech Rep. 1996	46.63	6.60	39.35	4.90	0.37	4.90	8.67	2.39	4.98	0.94	41.86	6.13	-2.28	3.35
Czech Rep. 1998	43.09	6.34	44.99	5.48	0.00	5.48	4.14	1.11	7.78	0.80	43.09	6.34	1.23	1.52
Slovakia 1992	15.50	6.86	20.36	7.66	11.74	7.66	46.02	17.68	6.39	2.18	18.23	5.77	n.a.	n.a.
Slovakia 1994	20.40	7.92	21.09	6.39	11.91	6.39	41.46	15.59	5.13	1.73	27.62	8.82	-7.41	7.20
Hungary 1994	37.87	3.44	35.96	5.27	0.00	0.00	18.22	2.57	7.95	2.17	18.22	1.85	n.a.	n.a.
Hungary 1998	39.19	4.03	36.16	4.15	0.00	0.00	21.99	2.78	2.66	0.79	39.09	3.82	-13.07	3.27
Poland 1993	13.86	4.75	45.99	7.85	0.00	0.00	5.34	2.04	34.81	4.91	13.86	4.75	n.a.	n.a.
Poland 1997	44.21	9.03	41.86	9.14	0.00	0.00	5.70	1.98	8.23	2.64	37.01	8.37	-2.53	5.92
<b>Whole Sample</b>	<b>36.03</b>	<b>14.19</b>	<b>36.09</b>	<b>10.87</b>	<b>2.95</b>	<b>9.98</b>	<b>14.31</b>	<b>15.79</b>	<b>10.63</b>	<b>9.27</b>	<b>34.371</b>	<b>12.859</b>	<b>-2.881</b>	<b>5.904</b>

**Notes :** Parties are classified according to two criteria: political orientation and incumbency status, as indicated below.

**Czech Republic 1992:** *Pro-Reform:* Civic Movement (OH), Civic Democratic Party (ODS-KDS), Civic Democratic Alliance (ODA), and Christian Democrats (KDU-CSL); *Left Wing:* Left Block (LB) and Social Democrats (CSSD); *Nationalists:* Republicans (SPR-RSC).

**Czech Republic 1996:** *Pro-Reform:* Civic Democratic Party (ODS), Civic Democratic Alliance (ODA), Christian Democrats (KDU-CSL), Free Democrats (SD-LSNS) and Democratic Union (DEU); *Left Wing:* Communist Party (KSCM) and Social Democrats (CSSD); *Nationalists:* Republicans (SPR-RSC).

**Czech Republic 1998:** *Pro-Reform:* Civic Democratic Party (ODS), Freedom Union (US), and Christian Democrats (KDU-CSL); *Left Wing:* Communist Party (KSCM) and Social Democrats (CSSD); *Nationalists:* Republicans (SPR-RSC).

**Slovakia 1992:** *Pro-Reform:* Civic Democratic Union (ODU), Democratic Party (DS), and Christian Democrats (KDH); *Left Wing:* Party of Democratic Left (SDL), and Social Democrats (SDSS); *Nationalists:* Movement for Democratic Slovakia (HZDS), Slovak National Party (SNS).

**Slovakia 1994:** *Pro-Reform:* Democratic Union (DU), Democratic Party (DS), and Christian Democrats (KDH); *Left Wing:* Party of Democratic Left and Social Democrats (SV), Communist Party (KSS); *Nationalists:* Movement for Democratic Slovakia (HZDS), Slovak National Party (SNS).

**Hungary 1994:** *Pro-Reform:* Democratic Forum (MDF), Young Democrats (Fidesz), and Free Democrats (SzDSz); *Left Wing:* Socialist Party (MSzP), Communist Party (MP); *Nationalists:* Smallholders (FKgP), Hungarian Truth and Lie Party (MIEP), and Christian Democrats (KDNP).

**Hungary 1998:** *Pro-Reform:* Democratic Forum (MDF), Young Democrats (Fidesz), and Free Democrats (SzDSz); *Left Wing:* Socialist Party (MSzP), Communist Party (MP); *Nationalists:* Smallholders (FKgP), Christian Democrats (KDNP), and Hungarian Truth and Lie Party (MIEP).

**Poland 1993:** *Pro-Reform:* Democratic Union (UD), and Walesa's Non-Partisan Block (BBWR); *Left Wing:* Democratic Left Party (SLD), Peasant Party (PSL), and Labor Union (UP); *Nationalists:* Movement for Independent Poland (KPN).

**Poland 1997:** *Pro-Reform:* Freedom Union (UW), and Solidarity Electoral Action (AWS); *Left Wing:* Democratic Left Party (SLD), Peasant Party (PSL) and Labor Union (UP); *Nationalists:* Polish Reconstruction Movement (ROP).

**Government:** Czech Republic 1992: OH+ODS-KDS+ODA+KDU-CSL; Czech Republic 1996: ODS+ODA+KDU-CLS; Czech Republic 1998: ODS+US+KDU-CSL; Slovakia 1992: ODU+DS+KDH; Slovakia 1994: SV+DU+KDH (this coalition replaced HZDS government 6 months before the election); Hungary 1994: MDF+Fidesz; Hungary 1998: MSzP+SzDSz; Poland 1993: UD+UP; Poland 1997: SLD+PSL.

**Table 2. Selected Explanatory Variables: Descriptive Statistics**

Economic Variables	Unemployment Rate [%]		Wages <sup>1</sup> [thousands]		Unemployment [change]		Real Wage Growth [%]		Entrepreneurs [% of population]		Industry [% of employment]		Agriculture [% of employment]	
	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.
Czech Rep. 1992	2.90	1.41	4.57	0.36	n.a.	n.a.	n.a.	n.a.	9.08	1.99	38.32	7.63	11.69	6.44
Czech Rep. 1996	3.75	1.88	9.06	0.76	3.89	1.73	24.94	4.02	9.33	2.73	40.99	8.46	9.37	5.82
Czech Rep. 1998	5.58	2.51	9.77	0.96	3.38	1.70	14.05	5.36	11.19	1.76	40.99	8.46	9.37	5.82
Slovakia 1992	11.82	3.65	4.19	0.32	n.a.	n.a.	n.a.	n.a.	5.19	1.54	33.95	8.99	11.84	7.23
Slovakia 1994	17.70	5.89	5.75	0.53	12.9	3.6	4.3	6.0	4.90	1.48	35.34	8.56	15.09	7.78
Hungary 1994	11.38	3.35	36.20	4.03	n.a.	n.a.	n.a.	n.a.	7.27	1.84	35.83	8.81	9.37	3.54
Hungary 1998	9.23	2.86	43.08	5.05	13.1	3.4	-12.7	5.1	6.49	1.48	35.83	8.81	9.37	3.54
Poland 1993	18.16	5.62	0.354	0.035	n.a.	n.a.	n.a.	n.a.	4.29	1.08	21.67	6.48	32.30	15.42
Poland 1997	14.95	4.85	0.796	0.088	18.16	5.62	13.38	2.87	4.29	1.08	22.21	6.73	33.97	16.42
<b>Whole Sample</b>	<b>9.24</b>	<b>6.83</b>	<b>n.a.</b>	<b>n.a.</b>	<b>0.41</b>	<b>3.52</b>	<b>13.62</b>	<b>11.22</b>	<b>7.68</b>	<b>3.15</b>	<b>34.69</b>	<b>10.81</b>	<b>15.56</b>	<b>12.79</b>
Demographic Variables	Population Density		Retirees [% of population]		University educated [% of population]		R.Catholic [% of population]		Nat. Minority <sup>2</sup> [% of population]					
	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.	Mean	St.dev.				
Czech Rep.	210.4	392.6	19.93	2.09	5.51	2.08	39.55	14.25	11.71	19.53				
Slovakia	172.7	258.0	17.50	2.01	4.74	2.54	59.28	13.30	12.80	21.74				
Hungary	518.7	392.8	19.30	1.52	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.				
Poland	144.5	145.0	13.41	1.74	5.76	2.43	n.a.	n.a.	n.a.	n.a.				
<b>Whole Sample</b>	<b>194.3</b>	<b>385.3</b>	<b>18.01</b>	<b>3.25</b>										

**Notes:** Economic variables typically refer to the election year or the year immediately preceding the election. Demographic variables refer to different years in early 1990's depending on sources available. Figures reported here are the unweighted cross-section means, not actual national average values.

<sup>1</sup> Wages are reported here in thousands of national currency, regression equations contained wages as percentage deviations from the national mean.

<sup>2</sup> Moravian minority in the Czech Republic, and Hungarian minority in Slovakia, respectively.

**Table 3A. Static Cross-section Analysis**

Variable	Reformers		Left		Nationalist		Government	
Constant	38.205	7.72	42.581	10.08	16.635	2.98	30.521	5.77
Unemployment	-0.581	-7.05	0.530	5.82	-0.508	-5.24	-0.091	-0.95
Wage <sup>1</sup>	-0.080	-1.97	0.061	1.35	-0.128	-2.62	-0.046	-0.94
Entrepreneurs <sup>3</sup>	0.893	4.20	-1.114	-5.92	-1.031	-4.08	1.242	5.10
Industry <sup>3</sup>	-0.082	-2.05	-0.041	-1.15	0.132	2.67	-0.064	-1.51
Agriculture <sup>3</sup>	-0.095	-1.84	0.039	0.69	-0.163	-3.03	-0.073	-1.24
Minority <sup>3</sup>	-0.065	-3.46	-0.089	-5.76	-0.181	-6.47	-0.031	-1.30
Pop.density [log]	1.112	1.77	-0.642	-1.04	0.046	0.06	0.414	0.63
Retirees <sup>3</sup>	-0.021	-0.12	0.004	0.03	0.129	0.68	0.226	1.16
Czech 1996	1.057	1.15	11.863	14.44	-0.974	-1.12	-4.108	-4.14
Czech 1998	-2.489	-2.49	17.788	18.02	-3.803	-3.46	-4.071	-3.51
Slovak 1992	-21.226	-14.16	-17.241	-12.05	37.063	15.25	-20.500	-13.00
Slovak 1996	-12.092	-7.27	-20.110	-12.00	35.770	16.71	-9.831	-4.74
Hungarian 1994	-1.486	-1.14	-0.321	-0.22	8.427	6.69	-23.795	-18.19
Hungarian 1998	-1.053	-0.77	0.409	0.33	9.775	6.85	-2.345	-1.52
Polish 1993	-18.428	-8.10	1.676	0.77	1.761	0.85	-21.981	-8.72
Polish 1997	9.999	4.50	-0.712	-0.34	0.409	0.21	0.846	0.32
R <sup>2</sup>	0.860		0.757		0.865		0.806	
Adjusted R <sup>2</sup>	0.854		0.747		0.860		0.799	

**Table 3B. Static Cross-section Analysis with Dynamic Effects**

Variable	Reformers		Left		Nationalist		Government	
Constant	38.038	7.51	45.198	10.39	12.836	2.18	29.372	5.15
Unemployment	-0.602	-6.55	0.441	4.36	-0.415	-3.67	-0.006	-0.05
Unempl.[change] <sup>1</sup>	0.135	0.60	0.486	1.91	-0.481	-1.30	-0.501	-2.02
Wage <sup>1</sup>	-0.096	-1.98	0.072	1.45	-0.163	-3.34	-0.025	-0.44
Real Wage Growth <sup>1</sup>	0.059	0.61	-0.108	-1.31	0.227	2.00	-0.043	-0.40
Entrepreneurs <sup>3</sup>	0.901	4.23	-1.098	-5.97	-1.043	-4.17	1.220	5.00
Industry <sup>3</sup>	-0.082	-2.04	-0.033	-0.95	0.122	2.56	-0.068	-1.63
Agriculture <sup>3</sup>	-0.096	-1.88	0.045	0.80	-0.174	-3.27	-0.073	-1.25
Minority <sup>3</sup>	-0.065	-3.51	-0.087	-5.76	-0.184	-6.55	-0.031	-1.27
Pop.density [log]	1.147	1.81	-0.698	-1.13	0.171	0.24	0.385	0.57
Retirees <sup>3</sup>	-0.034	-0.19	-0.034	-0.20	0.164	0.88	0.270	1.39
Czech 1996	0.631	0.56	10.746	10.32	-0.023	-0.02	-2.755	-2.32
Czech 1998	-2.674	-2.05	15.534	11.93	-0.974	-0.58	-2.513	-1.84
Slovak 1992	-21.008	-13.90	-17.210	-11.87	37.316	15.65	-20.896	-13.17
Slovak 1996	-11.882	-6.71	-20.900	-12.00	37.133	16.32	-9.762	-4.63
Hungarian 1994	0.131	0.05	-2.308	-0.85	13.324	4.05	-25.511	-8.68
Hungarian 1998	-0.271	-0.15	-0.133	-0.08	11.572	5.38	-3.405	-1.81
Polish 1993	-18.316	-7.32	-0.632	-0.27	5.064	1.96	-20.906	-7.98
Polish 1997	10.253	4.51	0.046	0.02	-0.284	-0.14	-0.011	0.00
R <sup>2</sup>	0.860		0.760		0.868		0.808	
Adjusted R <sup>2</sup>	0.854		0.750		0.863		0.800	

**Table 3C. Static Cross-section Analysis with Dynamic and Incumbency Effects**

Variable	Reformers		Left		Nationalist		Government	
Constant	38.176	<i>7.77</i>	44.550	<i>10.22</i>	14.879	<i>2.61</i>	32.222	<i>6.19</i>
Unemployment	-0.910	<i>-4.74</i>	0.395	<i>2.76</i>	-0.412	<i>-3.65</i>	0.244	<i>1.38</i>
Unempl * Inc <sup>2</sup>	0.395	<i>1.88</i>	0.274	<i>1.35</i>			-0.600	<i>-2.94</i>
Unempl.[change] <sup>1</sup>	0.805	<i>1.10</i>	0.869	<i>2.79</i>	-0.557	<i>-1.49</i>	-0.426	<i>-0.84</i>
U[change] * Inc <sup>2</sup>	-0.808	<i>-1.05</i>	-1.292	<i>-2.72</i>			0.186	<i>0.33</i>
Wage <sup>1</sup>	-0.071	<i>-0.71</i>	0.027	<i>0.60</i>	-0.115	<i>-2.35</i>	0.049	<i>0.41</i>
Wage * Inc <sup>2</sup>	-0.024	<i>-0.23</i>	0.099	<i>1.03</i>			-0.101	<i>-0.82</i>
Entrepreneurs <sup>3</sup>	-1.122	<i>-1.39</i>	-1.234	<i>-6.60</i>	-1.053	<i>-4.19</i>	-0.072	<i>-0.08</i>
Entr * Inc <sup>2</sup>	2.122	<i>2.68</i>	1.337	<i>2.07</i>			1.333	<i>1.62</i>
Industry <sup>3</sup>	-0.095	<i>-2.36</i>	-0.016	<i>-0.45</i>	0.126	<i>2.58</i>	-0.080	<i>-1.87</i>
Agriculture <sup>3</sup>	-0.138	<i>-2.84</i>	0.067	<i>1.24</i>	-0.165	<i>-3.07</i>	-0.089	<i>-1.59</i>
Minority <sup>3</sup>	-0.064	<i>-3.40</i>	-0.101	<i>-6.44</i>	-0.181	<i>-6.45</i>	-0.025	<i>-1.17</i>
Pop.density [log]	1.039	<i>1.72</i>	-0.576	<i>-0.96</i>	0.041	<i>0.06</i>	0.531	<i>0.85</i>
Retirees <sup>3</sup>	-0.006	<i>-0.03</i>	-0.010	<i>-0.06</i>	0.177	<i>0.95</i>	0.160	<i>0.87</i>
Czech 1996	0.659	<i>0.60</i>	9.639	<i>9.20</i>	0.467	<i>0.39</i>	-3.400	<i>-3.11</i>
Czech 1998	-3.147	<i>-2.43</i>	14.841	<i>11.17</i>	-1.834	<i>-1.16</i>	-2.627	<i>-2.00</i>
Slovak 1992	-21.599	<i>-13.98</i>	-17.411	<i>-10.94</i>	36.737	<i>15.49</i>	-18.210	<i>-11.33</i>
Slovak 1996	-12.636	<i>-7.42</i>	-30.888	<i>-6.55</i>	36.077	<i>16.59</i>	-8.661	<i>-1.62</i>
Hungarian 1994	-2.107	<i>-1.42</i>	0.295	<i>0.17</i>	7.685	<i>5.70</i>	-21.610	<i>-15.00</i>
Hungarian 1998	17.754	<i>2.86</i>	-12.270	<i>-2.30</i>	9.098	<i>5.98</i>	2.726	<i>0.42</i>
Polish 1993	-18.328	<i>-7.73</i>	-2.002	<i>-0.84</i>	3.360	<i>1.44</i>	-17.027	<i>-7.08</i>
Polish 1997	27.036	<i>4.87</i>	-11.785	<i>-2.37</i>	-0.521	<i>-0.25</i>	1.025	<i>0.16</i>
R <sup>2</sup>	0.863		0.769		0.867		0.818	
Adjusted R <sup>2</sup>	0.856		0.757		0.861		0.809	

**Notes:** Number of observations: 442. Estimated by OLS, t-statistics (heteroscedasticity robust) are reported in italics. Dependent variable is the share of votes received by parties in the respective category.

<sup>1</sup> Wage is the percentage deviation from the national average. Unemployment change and real wage growth refer to one-year period preceding the election

<sup>2</sup> Explanatory variable multiplied by a dummy equal to unity if the government was formed by pro-reform and left wing parties, respectively, or when the government was pro-reform (for the column denoted government).

<sup>3</sup> Entrepreneurs, minorities, and retirees are the percentages of population, industry and agriculture are percentage of employment.

**Table 4. Dynamic Analysis**

Variable	Reformers		Left		Nationalist		Government	
Constant	0.290	<i>0.15</i>	18.636	<i>9.33</i>	5.027	<i>4.99</i>	5.803	<i>3.60</i>
Previous Vote	0.945	<i>23.55</i>	0.810	<i>19.02</i>	0.800	<i>25.82</i>	0.731	<i>24.73</i>
Unemp [change]	-0.169	<i>-1.59</i>	-0.054	<i>-0.51</i>	-0.074	<i>-0.58</i>	-0.648	<i>-4.96</i>
Real Wage Growth	0.184	<i>3.59</i>	-0.117	<i>-2.52</i>	-0.143	<i>-3.60</i>	0.149	<i>3.08</i>
Czech 1998	-3.485	<i>-4.57</i>	-3.750	<i>-4.47</i>	-5.659	<i>-9.28</i>	6.049	<i>8.36</i>
Slovak 1996	5.482	<i>3.80</i>	-13.266	<i>-9.98</i>	0.583	<i>0.33</i>	-1.297	<i>-1.02</i>
Hungarian 1998	4.765	<i>2.37</i>	-13.285	<i>-6.35</i>	0.277	<i>0.17</i>	-5.440	<i>-2.57</i>
Polish 1997	27.812	<i>14.71</i>	-12.622	<i>-8.77</i>	-1.927	<i>-2.60</i>	-1.750	<i>-1.51</i>
R <sup>2</sup>	0.881		0.860		0.970		0.836	
Adjusted R <sup>2</sup>	0.878		0.856		0.970		0.831	

**Notes:** Number of observations: 259. Dependent variable is the change in the share of votes received by parties in the respective category. Estimated by OLS, t-statistics (heteroscedasticity robust) are reported in italics. Unemployment change and real wage growth refer to the period of three years preceding the election.

**Table 5. Static Cross-section Analysis by Countries**

Variable	Czech Republic				Slovakia											
	Reformers	Left	Nationalist	Government	Reformers	Left	Nationalist	Government								
Constant	17.153	3.56	41.739	8.03	20.175	7.69	17.149	3.60	52.350	7.67	53.548	7.36	-20.694	-1.45	66.377	4.97
Unemployment	-1.048	-8.13	0.902	6.63	0.048	0.62	-1.017	-7.90	-0.195	-1.71	0.240	1.98	-0.011	-0.05	-0.314	-2.05
Wage <sup>1</sup>	0.006	0.13	-0.015	-0.38	-0.023	-1.22	0.003	0.08	0.332	3.05	0.154	1.80	-0.556	-2.98	0.405	2.70
Entrepreneurs <sup>3</sup>	1.201	6.30	-0.905	-5.13	-0.407	-3.79	1.147	5.90	-0.916	-1.73	-0.581	-1.39	1.573	1.66	-0.918	-1.35
Industry <sup>3</sup>	0.021	0.55	0.007	0.20	-0.020	-0.96	0.024	0.59	-0.371	-4.34	-0.174	-2.05	0.681	4.09	-0.489	-4.59
Agriculture <sup>3</sup>	-0.276	-3.55	0.367	4.36	-0.096	-2.16	-0.269	-3.50	0.126	1.15	0.271	2.71	-0.430	-2.22	0.042	0.29
Minority <sup>3</sup>	-0.098	-5.17	-0.008	-0.43	-0.002	-0.27	-0.091	-4.71	-0.271	-9.26	-0.240	-9.91	-0.355	-7.01	-0.169	-2.21
Pop.density [log]	-0.409	-0.49	0.541	0.60	-0.104	-0.37	-0.233	-0.29	3.008	3.79	0.601	0.72	-5.543	-3.87	3.382	1.48
Retirees <sup>3</sup>	0.641	4.92	-0.402	-3.05	-0.072	-1.12	0.609	4.63	-1.322	-4.99	-0.340	-1.34	1.960	4.32	-1.366	-2.70
University <sup>3</sup>	0.508	2.11	-0.024	-0.10	-0.098	-0.81	0.465	1.90	-0.826	-1.62	-0.549	-1.46	2.224	2.71	-1.543	-2.06
Catholic <sup>3</sup>	0.228	8.61	-0.147	-5.48	-0.079	-6.01	0.233	8.76	0.001	0.02	-0.344	-8.28	0.379	4.62	-0.054	-0.91
Dummy I	1.420	1.90	11.063	14.91	-0.342	-0.95	-3.328	-4.38	5.388	4.48	-1.733	-1.65	-2.734	-1.23	10.886	7.17
Dummy II	-1.392	-1.55	15.923	16.96	-4.598	-10.67	-1.379	-1.54								
R <sup>2</sup> / Adjusted R <sup>2</sup>	0.739	0.724	0.841	0.832	0.732	0.717	0.715	0.699	0.784	0.747	0.758	0.716	0.829	0.800	0.641	0.579
Variable	Hungary				Poland											
	Reformers	Left	Nationalist	Government	Reformers	Left	Nationalist	Government								
Constant	59.318	8.49	-4.574	-0.45	30.253	5.81	13.908	3.41	11.305	1.03	35.254	2.63	-2.110	-0.55	21.319	1.57
Unemployment	-0.833	-3.21	1.037	3.55	-0.225	-1.67	0.034	0.18	-0.336	-2.71	0.569	3.44	-0.018	-0.39	0.003	0.02
Wage <sup>1</sup>	0.052	0.74	-0.061	-0.52	-0.055	-1.04	0.009	0.15	-0.165	-2.41	0.280	3.06	-0.017	-0.57	-0.010	-0.09
Entrepreneurs <sup>3</sup>	-0.188	-0.36	0.451	0.55	0.110	0.34	0.169	0.43	0.280	0.29	2.197	2.00	-0.765	-2.32	1.905	1.64
Industry <sup>3</sup>	0.061	1.33	0.136	2.06	-0.113	-2.99	0.016	0.31	-0.204	-0.84	0.214	0.77	0.110	1.35	-0.110	-0.40
Agriculture <sup>3</sup>	-0.297	-1.25	0.332	1.00	-0.094	-0.65	0.281	1.28	0.121	0.91	-0.083	-0.59	0.073	1.84	-0.215	-1.70
Pop.density [log]	-0.754	-0.64	3.247	1.92	-1.812	-1.85	2.044	1.58	6.980	3.37	-8.032	-3.60	0.734	1.22	-1.847	-0.70
Retirees <sup>3</sup>	-0.325	-1.09	0.108	0.26	0.152	0.59	-0.518	-1.34	-2.430	-4.88	2.904	5.62	0.024	0.17	0.653	0.98
University <sup>3</sup>									1.083	1.80	-1.682	-2.65	0.415	2.42	-1.129	-1.93
Dummy I	-0.421	-0.32	2.559	1.56	3.116	4.55	21.121	16.93	29.159	28.08	-2.116	-1.65	0.294	0.70	23.154	16.05
R <sup>2</sup> / Adjusted R <sup>2</sup>	0.539	0.420	0.433	0.287	0.590	0.484	0.943	0.928	0.912	0.903	0.539	0.491	0.244	0.167	0.785	0.764

**Notes :** Estimated by OLS, t-statistics (heteroscedasticity robust) are reported in italics. Dependent variable is the share of votes received by parties in the respective category. Dummy I and II equals unity for the second and third elections in the sample, respectively.

<sup>1</sup> Wage is the percentage deviation from the national average. Unemployment change and real wage growth refer to one-year period preceding the election

<sup>2</sup> Explanatory variable multiplied by a dummy equal to unity if the government was formed by pro-reform and left wing parties, respectively.

<sup>3</sup> Entrepreneurs, minorities, retirees, university educated and roman catholics are the percentages of population, industry and agriculture are percentage of employment.