Voter turnout dynamics in post-Communist Europe

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Abstract. Declining levels of turnout recently observed in some East European elections have generated concerns about the performance of the newly emerging democracies. Theories developed to explain turnout in industrialized democracies emphasize the importance of two major groups of factors: institutional and socioeconomic. This article argues that a comprehensive model of voter participation in post-Communist settings should also include a dynamic component to account for temporal changes generated by the transitional process. I test a model of voter turnout that incorporates explanations of temporal (sequence of elections) and spatial differences (electoral system type, party system characteristics and economic development). Multivariate regression is used to estimate the model, with data from fifteen East European countries over four consecutive elections.

Turnout in democracies in transition

Voter participation in the East European transitional elections of the 1990s has been remarkably different from the high levels of turnout reported by Communist authorities prior to 1989. Post-Communist turnout rates vary. While over 90 per cent of registered voters participated in the first multiparty elections in Czechoslovakia, only about 66 per cent of Hungarian voters in 1990 and less than 50 per cent of Polish voters in 1991 went to the polls. Moreover, observers have expressed concerns about a decline in turnout in some of the countries in the region. These varying levels of engagement in electoral participation across space and over time are indicative of changing patterns of behaviour among East European voters.

Voter turnout in new emerging democracies has its unique important dimensions. The process of political liberalization and democratization makes it possible for people to face unlimited but, very often, unknown and uncertain choices. Exposed to serious hardships, voters are challenged by many competing alternatives, and they have to decide whether and how to respond to the changing transitional environment. Since 'unequal participation spells unequal influence' (Lijphart 1997), changes in voting behaviour could have a disturbing impact on the fair representation of societal interests. Therefore, the problem of voter participation in times of fundamental political and economic transformation requires special attention.

Several contending explanations of voter behaviour have been suggested and tested in a relatively large body of literature on developed democracies. Cross-national variations in turnout levels have been studied as a function of socioeconomic, institutional and party system characteristics. Previous studies provide mixed empirical evidence about the linkage between participation and macroeconomic conditions (Powell 1982; Jackman 1987; Lewis-Beck 1988; Radcliff 1992; Brady et al. 1995; Gray & Caul 2000). On the other hand, the impact of institutions on electoral participation has been overwhelmingly confirmed in the literature. A number of studies emphasize the role of compulsory voting, registration procedures and voting age (Powell 1982; Jackman & Miller 1995; Lijphart 1997; Blais & Dobrzynska 1998; Franklin 1999). The institutional argument also points at the importance of electoral system provisions establishing the ballot structure and the formula for converting votes into seats. Finally, patterns of national differences in levels of turnout have been explained through the competitive nature of the electoral race (Jackman 1987; Blais & Dobrzynska 1998; Gray & Caul 2000).

Although the existing literature offers several explanations of national variations in turnout rates, the issue of changes in participation across electoral cycles has been neglected and, therefore, remains understudied. The major reason for this neglect is that most studies focus on the experience of developed democracies that have political systems in a state of equilibrium. In those environments, institutions have been relatively stable and variations over time have not received much attention (see, e.g., Gray & Caul 2000). In addition, there is an even bigger gap in the literature concerning post-authoritarian turnout rates – they have not been studied in depth with regard to both cross-national and temporal variation.

The goal of this article is to examine the determinants of turnout rates in Eastern Europe. In the following sections, I argue that transitional elections have specific dynamics that influence the level of voter mobilization. The dynamic changes in voter behaviour are seen as a product of the broad context of democratic transition. I develop a model that explains the varying rates of participation in East European elections. Pooled data from fifteen post-Communist states are used to test the impact of electoral sequence, institutional arrangements, party systems and the economy on the behaviour of national electorates. I conclude with a discussion of the results and their implications for the viability of democracy in post-Communist Europe.

Transitional dynamics

The problem of mass mobilization during times of democratic transition is a major challenge to an emerging political system. Big changes in behaviour that

accompany the collapse of previous regimes include increased interest in politics, activated political consciousness, open expression of various demands, and participation in petitions and demonstrations (Huntington 1975). The mass outburst in diverse forms of participation is especially intense in the time immediately after the opening of the old regime. Observers note that the collapse of any authoritarian regime is followed by mass pressure to participate marked by extremely high levels of enthusiasm and impatience for changes and reforms on the part of the public. Summarizing results from case studies in Latin America, O'Donnell and Schmitter (1986) conclude that the first post-authoritarian elections are 'moments of great drama'. This period is charged with tension, hope and popular belief that individuals can shape the course of events. The initial enthusiasm and impatience gradually calm down with the establishment of the new order and the redistribution of roles and resources.

A characteristic feature of Communist regimes was the constant effort to mobilize enthusiasm through ideological claims and fabricate mass participation through intimidation, and reported turnout figures approached 100 per cent. *Voluntary* mass participation of all kinds accompanied the start of the transition (Gigli 1995). Hundreds of thousands of people went out on the streets demanding changes and large masses of voters went to cast their ballots, for the first time of their own volition. This 'great drama' of the first founding elections is followed by a gradual decline in the rate of participation in ensuing electoral contests. Over time, voters in post-Communist transitional democracies became less enthusiastic. They came to recognize a new freedom to abstain from politics as well as participate in it (Rose et al. 2001). They also faced the reality of a political system in flux where they had to deal with the hardships of an economy undergoing reconstruction. Deteriorating economic conditions and corruption became major concerns that discouraged this great enthusiasm and its accompanying high levels of political participation. Subsequent elections were often held before the term of the parliament expired due to government crises. Such crises were not rare in transitional settings where unpopular measures had to be undertaken in the name of reform (Pacek 1994). Gradually, some voters, disappointed with politics and the slow pace of reform, withdrew from voting. Because of this exhaustion and the decline in public interest in politics as compared to the unusually high enthusiasm at the start of transition, I hypothesize that:

Hypothesis 1. Voter turnout in the first post-Communist parliamentary elections is higher than in subsequent elections; turnout gradually decreases in the ensuing elections.

Institutions

Theoretically, electoral laws should have a strong impact on voting behaviour. Institutional arrangements determine who is able to vote, define the registration procedure and may even provide for compulsory voting. They also define the formula for allocation of seats, which shapes political parties' efforts to mobilize the electorate nationwide or at the constituency level. Since 1989, most of the countries in Eastern Europe reformed their electoral laws in order to promote competitive free and fair elections. All countries in the region adopted rules that guaranteed universal suffrage and free participation with no registration costs. There were differences, however, in the electoral formulae used for seat allocation. While some countries ran elections using the proportional representation (PR) multimember district formula from the start, others switched from majority rule in single-member districts (SMD) to a PR or a mixed system for the second or the third election.

As other studies suggest, the specifics of the PR system generate incentives for parties to direct their appeals to the entire electorate because every vote increases the probability of winning seats (Powell 1986; Jackman 1987). As rational players, party leaders under SMD concentrate their campaign efforts on mobilizing voters in places where outcomes are expected to be close. Since only a plurality, or a simple majority of 50 per cent plus one, is needed to win, the importance of a single vote diminishes. Under PR in multimember districts, on the other hand, seats are allocated proportionally and votes are not 'wasted'. Thus, the degree of proportionality produced by different systems is important for voters when they make a decision to participate. Although all electoral systems usually favour the largest parties, PR still generates more proportional outcomes (Taagepera & Shugart 1989; Lijphart 1994; Sartori 1997). Voters develop stronger incentives to vote when they are sure that their vote will contribute to their representation (Jackman 1987; Jackman & Miller 1995). Because of the nationwide mobilization of the electorate and the degree of representation guaranteed through the use of PR, I hypothesize that:

> *Hypothesis 2.* Voter turnout levels will be higher in parliamentary elections governed by PR than in elections where SMD systems are used.

The party system

Some characteristics of the parties competing for power can also generate uncertainty and confusion among voters and thus can affect turnout. The number of parties is of special interest here. There are societies where numerous parties emerge either along the lines of issues such as ethnicity, religion

and historical heritage, or around influential individual politicians. The resulting high number of parties contending for seats in the assembly confuses voters in transitional environments making it difficult for them to choose between existing alternatives. The literature on turnout levels in developed democracies is not conclusive on the nature of the relationship between the number of parties and levels of participation. One argument is that voters are encouraged to participate when they have more choices. Others have found that extreme fractionalization of the party system actually alienates voters who are not sure who will participate in the post-election government coalition (for more on this relationship, see Blais & Dobrzynska 1998; Gray & Caul 2000). This problem is very relevant to the situation in post-Communist Europe. With the collapse of the Communist one-party system, many party organizations were formed in a short period of time; they split, merged and reorganized between elections. Voters had to follow these developments and update their information on the eve of each election in order to decide if and how to vote. The high volatility in the party system and in patterns of party identification associated with multipartism leads to the hypothesis that:

> *Hypothesis 3*. The larger the number of parties competing in a post-Communist transitional election, the lower the turnout of voters.

Closeness in electoral competition also shapes turnout rates. When the level of competition is high, citizens find more reasons to participate (Powell 1986). There is a high probability that every vote can make a difference in a race that is close and, therefore, more competitive. Clear outcomes breed apathy and ignorance because of the tiny probability that a single vote could make a difference and influence the result. In many post-authoritarian East European elections the declining, but still strong and resourceful, ex-Communist parties were confronted by growing opposition coalitions. The stakes were high and the outcome in many instances was not clear. We can expect that:

> *Hypothesis 4*. When the election is close, voter turnout will be higher than in situations of big differences in the electoral support of the main participating parties.

The socioeconomic setting

It is commonly believed that economic development encourages higher levels of turnout in industrialized nations (Powell 1982: 37; Blais & Dobrzynska 1998, but see also Jackman 1987; Gray & Caul 2000). The rationale behind this proposition is that people living in places with a modernized and well-

performing economy are better informed about politics and are more actively
involved in various forms of participation. In the developing world, quite the
opposite (i.e., poor economic performance) is found to encourage voters to
participate (Radcliff 1992). In transitional countries undergoing structural
reforms, electorates are found to be very sensitive to economic recession, but
pretty unresponsive when the economy is doing well (Pacek 1994; Pacek &
Radcliff 1995). The empirical evidence for the Polish 1991 elections is mixed:
while unemployment emerges as a strong predictor of declining turnout,
higher personal income is actually found to have a negative effect on voters'
decision to go to the polls (Wade et al. 1994).

Studies of Western democracies have also suggested reduced voting
rates for farm labourers because they tend to be less well educated, more
socially isolated and less exposed to the mass media (Lipset 1960). The post-
Communist founding elections took place in circumstances of great uncer-
tainty and unawareness about the main participants in the electoral contest.
The new parties were established in the cities where they started publishing
and distributing their newspapers. Because of a lack of resources and regional
organization, those first publications did not penetrate deep into the country-
side. The population in the cities was both better informed and better edu-
cated. It was actively involved in all kinds of activities: signing petitions,
participating in demonstrations and organizing protests. Therefore, the urban
population in former Communist states is also expected to be more likely to
vote than people living in rural areas. This leads to two hypotheses con-
cerning the impact of the socioeconomic environment on voting in Eastern
Europe:

> *Hypothesis 5*. The worse the state of the economy is in a transitional
> country, the higher the turnout.

> *Hypothesis 6*. The larger the size of the urban population, the higher the
> turnout.

Explaining differences in turnout

Model and variables

Unlike Blais and Dobrzynska (1998), who test a model of voter turnout with
a large pool of elections from both developed and emerging democracies, I
focus on post-Communist elections only. Thus, the previously used approach
of comparing average voter turnout across static cross sections (Jackman 1987;

Jackman & Miller 1995) would be inappropriate for this study. Most importantly, a significant part of the variation in turnout rates within countries will remain unexplained. Also, while developed democracies have party systems in equilibrium, states in transition are characterized by extreme levels of volatility, both in party development and voter identifications. Motivations for electoral participation vary over time as a result of various changes in the broad context of democratization. Such considerations require the use of separate elections in separate countries as units of analysis.

The argument developed in the preceding sections distinguishes four groups of factors that shape levels of voter turnout in the East European post-1989 elections: transitional dynamics, institutions, party system and socioeconomic context. The functional form of the model that I suggest is:

$$\begin{aligned} \text{TURNOUT} = {}& a + b_1\text{SECOND} + b_2\text{THIRD} + b_3\text{FOURTH} + b_4\text{PR} \\ & + b_5\text{PARTIES} + b_6\text{CLOSENESS} + b_7\text{ECONOMY} \\ & + b_8\text{URBAN} + e \end{aligned}$$

where the dependent variable, TURNOUT, is the percentage of registered voters who cast their ballots in a particular national election. Powell (1982), Jackman (1987) and Lijphart (1997) measure turnout as a percentage of the eligible population, while Franklin (1999) and Blais and Dobrzynska (1998) express it as a percentage of those registered to vote. I use the latter approach because, in Eastern Europe, the names of all eligible voters appear on the registration lists compiled by the government. For systems using majority with run-off procedures, results of voter turnout are taken from the first round of the elections. Data are collected from various sources.[1]

The dynamic component is modeled through three dummy variables: SECOND, THIRD and FOURTH. For example, SECOND takes the value of 1 if the election is the second in a sequence of national post-Communist elections, and 0 if otherwise. These variables are designed to grasp the variance in the dependent variable that is theoretically attributed to the election sequence. With the first election used as reference category, the theoretical expectation is that $0 > b_1 > b_2 > b_3$.

PR stands for proportional electoral system. Because the presence of proportional allocation of seats is the institutional element expected to increase turnout, the type of electoral system is indicated through the use of party list PR. This is a dummy variable coded as 1 when all the seats contested in an election are allocated through PR in multimember districts. Majoritarian single-member district and mixed systems are coded as 0. For this analysis, I also use another measure that takes into account the specifics of some of the

new electoral laws in Eastern Europe, mainly the mixed systems. This time, PR is measured through the proportion, in per cent, of seats competed for under the proportional representation rule. Thus, a continuum can be constructed where majority/plurality rules are coded as 0 per cent, the PR systems as 100 per cent and the mixed systems lay in-between taking values corresponding to the percentage of seats competed in multimember districts. Thus, all the available information on the type of electoral system is used (see Note 1 for details on data sources).[2] I expect a positive relationship between turnout and proportionality of the electoral system.

The variable PARTIES represents multipartyism and is operationalized through the number of parties competing the election. I count parties that get more than 4 per cent of the vote since they are viable participants in the electoral contest and thus visible to the public. Some previous studies (Jackman & Miller 1995; Blais & Dobrzynska 1998) have used Laakso and Taagepera's (1979) effective number of parties, but the argument that voters make such complicated calculations and distinguish a 2.3 from a 2.8 party system is unconvincing. Other studies have used a threshold of 1 or 5 per cent (Gray & Caul 2000). My choice of 4 per cent as a threshold is based on the average electoral threshold used in the East European systems. In other words, voters are affected by the number of parties that have the potential to cross the legal hurdle. I also estimate the model using a 3 per cent and a 5 per cent criterion to test the robustness of results. My expectation, based on Hypothesis 3, is for $b_5 > 0$.

The CLOSENESS variable is designed to capture the distance between major participants in the election. Following Blais and Dobrzynska (1998) and Gray and Caul (2000), I measure it as the difference in the vote shares obtained by the two strongest parties. A small margin of victory indicates a very close election where the result is difficult to predict. Because of the uncertain outcome in close races, I expect turnout to increase when the gap between the leading and the second party decreases.

ECONOMY is a continuous variable that reflects the state of economic development. I measure it through GDP (gross domestic product) per capita growth for the election year. When the election is held before 1 July, the value from the previous year is used. I also test the model with another measure of economic performance – the inflation rate. It is anticipated that higher levels of economic performance will bring fewer voters to the polls.[3]

Finally, the URBAN variable is introduced to control for possible influences of the sociodemographic context. It is measured through the percentage of people living in urban areas at the time of the election using data from World Bank (1996). From the theoretical discussion preceding Hypothesis 6, I expect that $b_8 > 0$.

Turnout rates

The data set includes fifteen countries, twelve of which have gone through a sequence of four consecutive elections since 1989.[4] Table 1 displays a summary of the data.

Turnout rates vary between 43.2 per cent in the Polish election of 1991 and 96.8 per cent in the Czech part of Czechoslovakia in 1990. The type of electoral system indicated by the presence of multimember districts also varies between 0.00 and 100.00. What cannot be seen directly from Table 1 is the variation in the share of PR seats competed for in mixed systems. These shares vary between 25.8 per cent in the Albanian 1997 election and 76.7 per cent in the 1995 Croatian parliamentary election. The degree of multipartism ranges from two parties with more than 4 per cent of the vote in 1991 Albania to ten in the Latvian race of 1995. On average, the two strongest parties have been over 15 per cent apart, a gap quite visible to voters. Closest was the 1995 Latvian assembly election – which was not surprising with ten relatively strong parties running candidate lists. In the first free election in Romania, the distance between the first and second parties was the greatest: over 59 per cent. The average rate of change in GDP is below minus 1 per cent; the changes fall in a broad range reflecting the ups and downs of economic transition. On average, over 60 per cent of East European people live in the cities. The smallest urban population, slightly over one-third, is found in Albania, while the percentage of Russians who live in cities is double this rate.

Decline in turnout over time

Figures 1 and 2 reveal how turnout levels changed over the course of four elections in two groups of countries: the first, where the founding elections are held at the national level, and the second, where the sequence starts

Table 1. Summary statistics for all variables in the voter turnout model, Eastern Europe 1990–2000

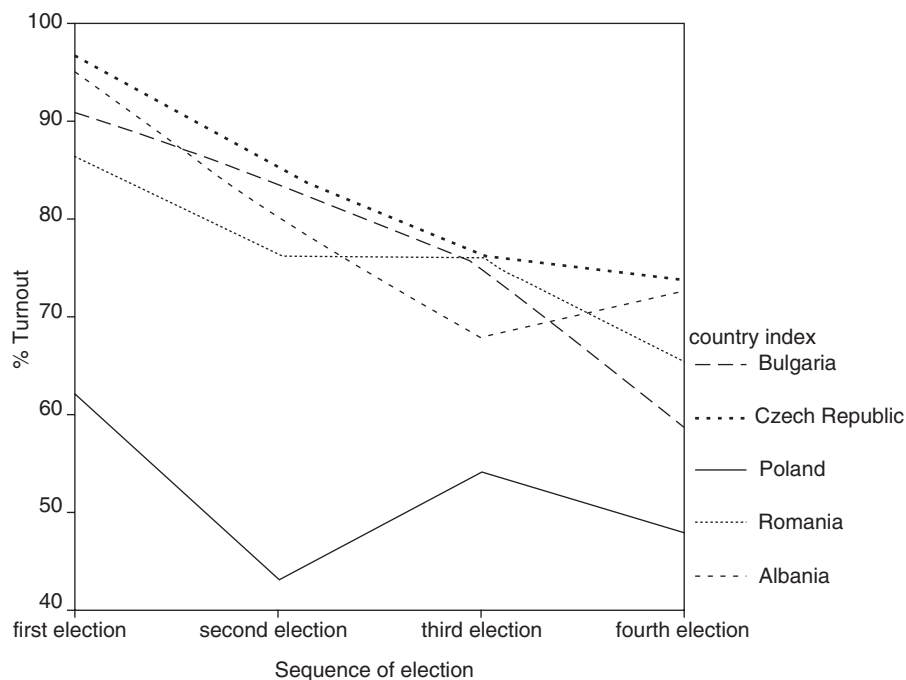| Variable	Minimum	Maximum	Mean	Standard deviation
Turnout (%)	43.20	96.79	72.99	12.21
% PR seats	0.00	100.00	72.37	34.87
Number of parties	2.00	10.00	5.65	1.94
Closeness	0.25	59.08	16.66	12.66
GDP change	−91.90	102.00	−1.17	33.94
Urban (%)	36.60	73.80	62.35	9.56

Figure 1. Decline in voter turnout: Albania, Bulgaria, Czech Republic, Poland and Romania.

with an election at the republic level before national independence is achieved. Figure 1 reveals a clear pattern of decline in voter participation over time. In most cases, as expected, turnout in the first election is very high. Then it drops for the next two elections in four of the five countries. A slight increase can be seen in the fourth Albanian election. The public there was probably re-mobilized in rejection of certain authoritarian trends in the current regime dominated by the Albanian Democratic Party. In Bulgaria, the Czech Republic and Romania, the decrease in citizen interest in voting continued and turnout dropped further in the fourth election. Quite a different pattern of change in participation is observed for Poland, where turnout dropped by 19 per cent for the second election and recovered by 11 per cent for the third. Overall, Polish voters have been much less mobilized than voters in other East European states.

Looking at Figure 2, we can see that one of the countries (Estonia) follows the same basic pattern of decrease in the rate of participation. The curves representing Latvia, Lithuania and Slovenia are different: they rise for the second
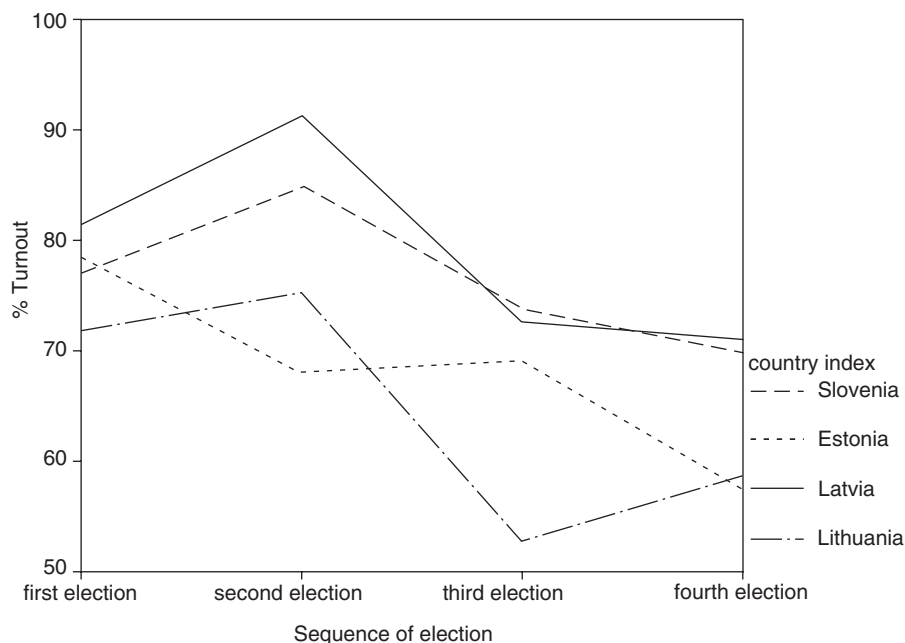
Figure 2. Decline in voter turnout: Estonia, Latvia, Lithuania and Slovenia.

multiparty election, but drop below the levels of 1990 by the fourth electoral cycle. The peak for the second election was the result of growing mass enthusiasm following state independence; then, transition dynamics helped to shape a pattern of decline similar to that of the other countries.

Another way of looking at the general trend is through summary information on how turnout levels vary by electoral cycle. Table 2 reports differences in the minimum, maximum and mean turnout rates in the fifteen East European states. The mean values clearly suggest that the first post-authoritarian elections had the highest rate of participation and then voter turnout decreased with each next electoral contest. An exception from the trend is seen in the minimum value for the second election, 43.2 per cent in the 1991 elections in Poland (see also Figure 1), the lowest participation rate for the entire sample. The extremely low degree of mass involvement in the 1991 contest for assembly seats in Poland has been explained in the literature by both 'widespread cynicism', and confusion resulting from a very fragmented party system and voters' lack of experience with democratic procedures (Wade et al. 1994). For the entire sample, however, the numbers convincingly suggest a decline in voter mobilization over time.

Table 2. Voter turnout by sequence (in per cent), Eastern Europe 1990–2000

Election	Minimum	Maximum	Mean	Standard deviation
First	66.00	96.79	86.28	9.96
Second	43.20	91.18	74.88	12.50
Third	52.92	76.29	68.43	8.02
Fourth	47.93	84.15	66.36	9.95

Regression methodology

Each case in this analysis is an election in a particular country. Thus, we have a pooled time-series cross-sectional design where countries are the cross-sections and the time of the elections is indicated by their order. In the data matrix, the variables change over time and across space. Since electoral systems in Eastern Europe have changed over the last ten years, the type of electoral system varies not only between cross-units, but also within some of the cross-units. Examples of such instances are Bulgaria, Croatia, Macedonia and Albania.

Multivariate regression is used to test the hypothesized relationships. I run additional tests that show there is no heteroskedasticity that could possibly contaminate the results. The robustness of parameter estimates, however, could still be undermined by outliers, given the small sample size. To detect possible unusual observations, I first design partial regression plots of residual variables, as suggested in previous studies (Jackman 1987; Bollen & Jackman 1990). From these graphs, the Polish 1991 election is distinguished as an unusual case. The DFITS test for changes in all regression coefficients as a result of omission of single observations confirms the results of the partial regression plots. Dropping the Polish election from the pool, however, does not affect substantially the results. There is no doubt that the case was properly included in the sample. Also, there are no measurement errors when I check the data sources and calculation procedures. The 1991 election in Poland remains in the analysis and a dummy variable is used to control for this case.

Regression results

Table 3 reports the results for the parameter estimates of the model. I estimate it first with PR and then with the proportion of PR seats as indicators of systems using multimember competitive districts. The significance of the sequence of elections holds in the two tests. Each of the three dummy variables has coefficients close in magnitude and statistically significant at the

Table 3. Voter turnout in Eastern Europe, 1990–2000

Variable	1 B	SE	2 B	SE
Second election	−8.12**	(3.85)	−8.60**	(4.02)
Third election	−14.01***	(3.82)	−15.01***	(4.00)
Fourth election	−19.80***	(3.87)	−20.07***	(4.09)
PR	7.75**	(2.61)	–	–
PR seats (%)	–	–	0.09**	(0.04)
Number of parties	−1.45*	(0.80)	−1.50*	(0.87)
Closeness of race	−0.07	(0.11)	−0.09	(0.11)
Economy	−0.04	(0.04)	−0.04	(0.04)
Urban population	−0.21	(0.14)	−0.26*	(0.15)
Poland 1991	−31.67***	(9.09)	−31.01**	(9.52)
Constant	102.94***	(9.32)	104.06***	(9.79)
Adjusted R^2	0.56		0.52	
N	51		51[†]	

Figures are unstandardized regression coefficients, standard errors in parentheses; $*p < 0.1$; $**p < 0.05$; $***p < 0.001$, two-tailed tests; [†]data on closeness of the electoral race are not available for the 1990 elections in Estonia, Latvia, Lithuania and Ukraine, and these are excluded from the regression analysis.

commonly accepted levels. The PR variable has the expected sign and is statistically significant for each of the two indicators. As anticipated, multipartism, indicated by the number of parties that get over 4 per cent of the vote, has a negative coefficient that is significant at the 0.1 level.[5] Closeness of the two leading parties in the electoral race has the expected sign, but fails to reach statistical significance. Similarly, the estimated parameter for the economic variable has the correct sign, suggesting a negative relationship with turnout but is not statistically significant at the commonly accepted levels of confidence.[6] Urban population has an opposite sign and approaches significance only in one of the two tests. The coefficient of the dummy variable controlling for the Polish 1991 election is negative and significant, and confirms that this case is really different.

One final check to establish how stable the estimates are is to test for multicollinearity. Partial correlation coefficients between all the explanatory variables are calculated. However, the highest correlation (0.474) is that between the number of parties and urban population, and is not troublesome. To use a more rigorous test, separate auxiliary regressions were run for each independent variable regressed on the remaining variables. Results from this

procedure show that, except for the dummy variables, multicollinearity is not a serious threat.[7]

Analysis and discussion

The results reported in the preceding section strongly suggest that recent turnout rates in Eastern Europe reflect specific dynamics driven by the nature of the transition from one-party Communist regime towards pluralistic democratic system. As shown by the negative signs of the three election coefficients in Table 3, the first parliamentary elections had the highest turnout compared to ensuing contests. The differences between the estimated parameters of the temporal dummy variables clearly show how the average turnout rate declines with each next election. It drops by more than 8 per cent for the second election, and then further drops by around 6 per cent for the third and another 5 per cent for the fourth. The multivariate regression analysis confirms the decline in mass mobilization of voters attributed to the transitional dynamics. The relationship holds even when we control for other institutional and socioeconomic factors that vary over time as well.

The results also show that the new institutional arrangements recently introduced in Eastern Europe affect voter turnout. Electoral competition in PR multimember districts encourages participation: turnout is over 7 per cent higher than under SMD elections. This finding is consistent with Blais and Dobrzynska's (1998) conclusion that the main difference in the effects of electoral system type is the one between PR and all other systems. However, the results from the second test, where the share of PR seats is used as indicator, suggest that the size of the proportional element is also important. A 10 per cent increase in the seats contested under PR is estimated to produce an increase in the average turnout of about 1 per cent, other things being equal. This finding is especially interesting with regard to mixed systems where politicians can redesign the rules in order to alter the share of seats allocated through PR and, in some instances, have done so. Rules based on majority or plurality principles and on competition in single-member districts discourage voting. Elections held both under PR and systems with stronger PR elements have higher turnout rates.

The analysis offers stable support for the importance of the number of parties running in a national election. The negative coefficient indicates that potential voters are confused and discouraged when there are too many parties competing for seats. The presence of one additional relatively stronger and more visible party in the electoral arena decreases turnout by about 1.5 per cent. On the other hand, there is no conclusive evidence for the impact of the other element of the party system – the closeness between the two

largest running parties. While the negative coefficient still suggests that turnout declines with increasing gaps between the two strongest contestants, there is insufficient evidence for the effect of close competition. One explanation for this could be that voters in transitional Eastern Europe are unable to gauge properly how close the two leading parties are in the forthcoming election, given the constantly changing distribution of power within the party systems.

The data on post-Communist elections do not provide conclusive evidence for the hypothesized impact of socioeconomic factors on voter participation. Some mobilizing effect of worsening economic conditions is suggested by the results, but the estimated impact is weak and not sufficiently significant to allow generalizations. Also, based on the understanding that city residents are more exposed to news and politics, countries with larger urban populations were expected to have higher turnout rates. The analysis, however, does not confirm this argument. It is possible that rural voters might have been forced to vote by local functionaries of the ex-Communist parties who needed their support to survive. Especially in the early post-authoritarian elections, these parties were still very strong in the small towns and villages (Troxel 1992). They had the resources necessary to manipulate the election campaign and influence voters' behaviour.

Conclusion

The results of this study on turnout in post-Communist Europe support the initial expectation of a declining trend in voters' participation after the first free election. Enthusiasm about voting gradually decreased in the course of the next three elections. At some point in time, turnout rates will probably start to fluctuate around a mean unique for each country. However, it is still too early to say if the lowest levels have already been reached and if further decline is to follow. New data on upcoming elections will help us give a more definitive answer to this question.

The conclusion that electoral laws provide an important incentive structure for voter turnout is consistent with findings from previous studies (Powell 1986; Jackman 1987; Jackman & Miller 1995; Blais & Dobrzynska 1998). Under the specific conditions of post-Communist transition, which include lack of experience with competitive elections, the institutional arrangements have effects similar to those found in Western democracies. The results reported in this study indicate that the East European voters respond rationally to the electoral rules and cast ballots when they believe that their vote matters. Yet a comprehensive understanding of participation in post-Communist elections

is impossible without an account of the context of electoral competition. While close elections in developed democracies mobilize voters to participate, in Eastern Europe people often face the difficulty of establishing how close a race really is.

The main contribution of this study is that – using data from post-Communist Europe – it confirms the idea of a dramatic drop in voter participation after the high rates experienced in the first transitional elections. Preliminary observations of post-authoritarian elections in other parts of the world, however, do not suggest such a clear drop in participation. While we know that transitional environments differ in many ways, including in the way that previous regime practices and dynamics impact on them, our knowledge about the determinants of post-authoritarian turnout is far from complete. Another important question related to the findings of this study concerns whether or not there is a systematic withdrawal of certain social groups from engaging in voting. It is evident that the aggregate data used here do not allow us to address this issue. Future studies on voting behaviour at the micro-level are also warranted.

Notes

1. *Database on Central and Eastern European Elections* for Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Poland, Romania, Russia, Slovakia and Ukraine; CSCE (1990a) for the Ukrainian 1990 election; Grofman et al. (1999) for the Estonian 1990 election; CSCE (1990b), Racz & Kukorelli (1995), Tokes (1997) and the *IPU Database* for the Hungarian elections; CSCE (1992a), Pano (1997), *Elections Around the World* and the *IPU Database* for the Albanian elections; CSCE (1990b, 1992b, 1995, 2000) for Croatian elections; Ramet (1997) and *Elections Around the World* for the Slovenian elections; Mojanoski (1996) and *Elections Around the World* for the Macedonian elections. Data for GDP rate of change and unemployment are taken from *Statistical Yearbook 1997* (United Nations 2000) and the *Labour Statistics Database of the International Labour Organization*.
2. Another way to measure the type of electoral rules is through the level of resulting disproportionality (Blais & Dobrzynska 1998). This option, however, is not feasible because of the presence of mixed system elections in the data set for which detailed data are available only for the PR part.
3. Following Radcliff (1992), I also consider the possibility for a curvilinear relationship between economic growth and turnout. The results of the F test show that a quadratic function does not improve the goodness of fit of the model.
4. Only parliamentary elections in the following countries are included: Albania (1991, 1992, 1996, 1997); Bulgaria (1990, 1991, 1994, 1997); Croatia (1990, 1992, 1995, 2000); Czech Republic (1990, 1992, 1996, 1998); Estonia (1990, 1992, 1995, 1999); Hungary (1990, 1994, 1998); Latvia (1990, 1993, 1995, 1998); Lithuania (1990, 1992, 1996, 2000); Macedonia (1990, 1994, 1998); Poland (1991, 1993, 1997); Romania (1990, 1992, 1996, 2000); Russia

(1993, 1995, 1999); Slovakia (1990, 1992, 1994, 1998); Slovenia (1990, 1992, 1996, 2000) and Ukraine (1990, 1994, 1998). Presidential elections are not considered for three reasons: the president is not directly elected in all of the countries; the first presidential elections were not the first competitive elections; and the time series of presidential elections is too short to discern the presence or absence of temporal changes.

5. I test the model with two other measures of multipartyism: the number of parties with over 3 per cent and over 5 per cent of the vote. The new estimates are consistent with the results reported in Table 3.

6. The use of another indicator of economic development (i.e., inflation measured in per cent) produces basically the same result for the economy variable. The rest of the estimates remain stable.

7. The advantages of leaving the temporal dummy variables weigh stronger than the disadvantages of multicollinearity. These variables represent the sequence of elections and play a substantial role in modeling turnout dynamics.

References

Blais, A. & Dobrzynska, A. (1998). Turnout in electoral democracies, *European Journal of Political Research* 33: 239–261.

Bollen, K.A. & Jackman, R.W. (1990). Regression diagnostics: An expository treatment of outliers and influential cases. in J. Fox & J.S. Long (eds.), *Modern methods of data analysis*. Newbury Park, CA: Sage.

Brady, H.E., Verba, S. & Scholzman, K.L. (1995). Beyond SES: A resource model of political participation, *American Political Science Review* 89: 271–294.

CSCE (1990a). *Elections in the Baltic States and Soviet Republics* (A compendium of reports on parliamentary elections held in 1990). Washington, DC: Commission of Security and Cooperation in Europe.

CSCE (1990b). *Elections in Central and Eastern Europe* (A compendium of reports on the elections held from March through June 1990). Washington, DC: Commission on Security and Cooperation in Europe.

CSCE (1992a). *Albania's second multiparty elections, March 22 and 29, 1992*. Washington, DC: Commission of Security and Cooperation in Europe.

CSCE (1992b). *Parliamentary and presidential elections in an Independent Croatia, August 2, 1992*. Washington, DC: Commission of Security and Cooperation in Europe.

CSCE (1995). *The parliamentary elections in Croatia, October 29, 1995*. Washington, DC: Commission of Security and Cooperation in Europe.

CSCE (2000). *Croatia's parliamentary elections, January 3, 2000*. Washington, DC: Commission of Security and Cooperation in Europe.

Database on Central and Eastern European Elections: Results and Legislation. A joint project of the University of Essex, the International Foundation of Election Systems and the Association of Central and Eastern European Officials. Available online at: www.essex.ac.UK/elections/.

Elections Around the World. Available online at: www.agora.stm.it/elections/election.

Franklin, M.N. (1999). Electoral engineering and cross-national turnout differences: What role for compulsory voting? *British Journal of Political Science* 29(1): 205–224.

Gigli, S. (1995). Toward increased participation in the political process, *Transition* (18 September).

Gray, M. & Caul, M. (2000). Declining voter turnout in advanced industrial democracies, 1950 to 1997, *Comparative Political Studies* 33(9): 1091–1122.

Grofman, B., Mikkel E. & Taagepera, R. (1999). Electoral systems change in Estonia, 1989–1993, *Journal of Baltic Studies* 30: 227–249.

Huntington, S. (1975). *Political order in changing societies*. New Haven, CT: Yale University Press.

IPU (Interparliamentary Union) Database. Available online at: www.ipu.org/parline.

Jackman, R.W. (1987). Political institutions and voter turnout in the industrial democracies, *American Political Science Review* 81: 403–423.

Jackman, R.W. & Miller, R.A. (1995). Voter turnout in the industrial democracies during the 1980s, *Comparative Political Studies* 27(4): 467–492.

Laakso, M. & Taagepera, R. (1979). Effective number of parties: A measure with application to West Europe, *Comparative Political Studies* 12: 3–27.

Labour Statistics Database of the International Labour Organization. Available online at: http://laborsta.ilo.org/cgi-bin/broker.exe.

Lewis-Beck, M.S. (1988). *Economics and elections: The major Western democracies*. Ann Arbor, MI: University of Michigan Press.

Lijphart, A. (1994). *Electoral systems and party systems: A study of twenty-seven democracies, 1945–1990*. Oxford: Oxford University Press.

Lijphart, A. (1997). Unequal participation: Democracies unresolved dilemma, *American Political Science Review* 91(1): 1–14.

Lipset, S.M. (1960). *Political man: The social basis of conflict*. New York: Doubleday & Co.

Mojanoski, T.T. (1996). *Soziajalen i Politichki Profil na Politichkite Partii vo Macedonia* (A social and political profile of the political parties in Macedonia). Skopje: Liber.

O'Donnell, G. & Schmitter, P.C. (1986). *Transitions from authoritarian rule: Tentative conclusions about uncertain democracies*. Baltimore, MD: Johns Hopkins University Press.

Pacek, A.C. (1994). Macroeconomic conditions and electoral politics in East Central Europe, *American Journal of Political Science* 38(3): 723–744.

Pacek, A.C. & Radcliff, B. (1995). The political economy of competitive elections in the developing world, *American Journal of Political Science* 39(3): 745–759.

Pano, N. (1997). The process of democratization in Albania. in K. Dawisha & B. Parrott (eds.), *Politics, power and the struggle for democracy in south-east Europe*. Cambridge: Cambridge University Press, pp. 285–352.

Powell, G.B. (1982). *Contemporary democracies: Participation, stability and violence*. Cambridge, MA: Harvard University Press.

Powell, G.B. (1986). American voter turnout in comparative perspective, *American Political Science Review* 80(1): 17–43.

Radcliff, B. (1992). The welfare state, turnout and the economy: A comparative analysis, *American Political Science Review* 86(2): 444–454.

Racz, B. & Kukorelli, I. (1995). The second-generation post-Communist elections in Hungary in 1994, *Europe-Asia Studies* 47(2): 251–279.

Ramet, S.P. (1997). Democratization in Slovenia: The second stage. in K. Dawisha & B. Parrott (eds.), *Politics, power and the struggle for democracy in south-east Europe*. Cambridge: Cambridge University Press, pp. 189–225.

Rose, R., Munro, N. & White, S. (2001). Voting in a floating party system: The 1999 Duma election, *Europe-Asia Studies* 53(3): 419–443.

Sartori, G. (1997). *Comparative constitutional engineering: An inquiry into structures, incentives and outcomes*, 2nd edn. New York: New York University Press.

Stimson, J. (1985). Regression in space and time: A statistical essay, *American Journal of Political Science* 29: 914–947.

Taagepera, R. & Shugart, M.S. (1989). *Seats and votes: The effects and determinants of electoral systems*. New Haven, CT: Yale University Press.

Tokes, R.L. (1997). Party politics and political participation in postcommunist Hungary. in K. Dawisha & B. Parrott (eds.), *The consolidation of democracy in East Central Europe*. Cambridge: Cambridge University Press, pp. 109–149.

Troxel, L. (1992). Socialist persistence in the Bulgarian elections of 1990–1991, *East European Quarterly* 26(4): 407–420.

United Nations (2000). *Statistical Yearbook 1997*. New York: United Nations, pp. 165–182.

Wade, L.L., Groth, A.J. & Lavelle, P. (1994). Estimating participation and party voting in Poland: The 1991 parliamentary elections, *East European Politics and Societies* 8(1): 94–121.

World Bank (1996). *From plan to market: World development report 1996*. New York: Oxford University Press.

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