



What's past is prologue, or is it? Generational effects on voter turnout in post-communist countries, 1990–2013



Lukáš Linek*, Ivan Petrušek

Institute of Sociology, Czech Academy of Sciences, Jiřská 1, Prague 1, 110 00, Czech Republic

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ABSTRACT

A common theme in studies of voter turnout in Central and Eastern Europe (CEE) is that the legacy of communism attenuates electoral participation. It is argued that socialization and the political habits that emerged under communism impeded democratic development by not motivating citizen activism. This paper examines this claim for voter turnout in the Czech Republic, Slovakia, Hungary, and Poland for all general elections since 1990 using cohort analysis on pooled crosssectional post-election surveys from given countries. This paper shows that socialization and political habit formation under communism have had no discernible effect on voter turnout in the Czech Republic, Slovakia and Hungary between 1990 and 2013. Generational effects are evident in Poland suggesting that this country's political history is qualitatively different from that of its neighbours. This research is important in highlighting that citizens' political development within non-liberal democratic regimes does not always lead to lower levels of voter turnout. Consequently, the decline in turnout in CEE is likely to have attitudinal rather than generational origins where contemporary rather than historical political developments are most important.

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There is a consensus within the academic literature that electoral behaviour in post-communist countries is influenced by their communist past. This perspective adopts the “what's past is prologue” perspective (elegantly expressed in Act 2, Scene 1 of Shakespeare's *The Tempest*) that the communist experience has had, and continues to have, a strong and measurable impact on post-communist citizens' electoral behaviour. Some authors emphasise the weak social roots of political parties (van Biezen, 2003; Kostelecký, 2002), low relevance of cleavages in structuring political competition (Gijsberts and Nieuwbeerta, 2000; see literature reviews by Evans, 2006 and Whitefield, 2002) and high levels of electoral volatility (Epperly, 2011; Powell and Tucker, 2014; Tavits, 2008). Other studies show that post-communist countries have lower levels of party membership (van Biezen et al., 2012) and lower proportions of individuals with party identification than Western European countries (Dalton and Weldon, 2007; White et al., 1997). However, we still do not know if the communist experience influences voter turnout as well. Studies of the relationship between communist experience and civic participation in

general suggest that such an experience makes post-communist citizens less willing to participate (Bernhard and Karakoc, 2007; Howard, 2003; Pop-Eleches and Tucker, 2013). This raises the question of whether the experience of communism also influences voter turnout in newly democratized countries.

In this paper we focus on how generational effects change voter turnout in post-communist countries. These generational effects are examined in terms of three sets of theories. First of all, political socialization in different political regimes and periods is expected to lead to generational differences in the level of pro-democratic values, trust in political institutions, belief in the function of political parties, and adequacy of elections as a means of choosing political representatives (Lyons, 2013; Mishler and Rose, 2007). These differences may translate into a differential willingness to vote. Secondly, voter turnout is influenced by specific experiences linked to the organization of elections in communist regimes. These elections were not competitive and participation was effectively mandatory. Such a combination allows us to analyse if participation in communist elections helped form a “habit of voting” that is observable in later competitive democratic elections (Czesnik et al., 2013). Thirdly, our study also allows us to check the generalizability of findings from advanced democracies concerning strong generational effects on turnout and younger generations having a much

* Corresponding author.

E-mail address: lukas.linek@soc.cas.cz (L. Linek).

lower propensity to vote than older generations (Bhatti and Hansen, 2012a; Blais et al., 2004; Blais and Rubenson, 2013; Franklin, 2004; Wass, 2007). These generational effects seem to be driven mainly by changing levels of belief that voting is a civic duty. Thus, besides the hypotheses that are specific to post-communist countries, we also present a hypothesis which stresses the similarity of post-communist countries with advanced democracies. The findings of this study are important because general theories of electoral participation have been tested on new data.

Our study focuses on voter turnout in parliamentary elections in four post-communist countries: the Czech Republic, Slovakia, Poland, and Hungary. An important consideration in every research is selection bias (King et al., 1994: 115–149). In the subset of post-communist states examined in this paper there is variation on the dependent variable because turnout ranges from 98% for Czechs and Slovaks in June 1990 to 40% in Poland in 2005. With this variation in turnout problems associated with selection bias, such as underestimating the causal effect of our key independent variables, i.e. age, period, and cohort effects, are attenuated. Moreover, the trends in turnout in the four post-communist countries studied are divergent where electoral participation has declined for Czechs and Slovaks and remained reasonably constant for Hungary and Poland. For these reasons, modelling the generational effects on turnout in the Czech Republic, Slovakia, Poland, and Hungary provides considerable variation on the dependent variable and change over time. Case selection was also influenced by practical concerns, i.e. data. Study of generational effects on turnout requires having post-election surveys for as many elections as possible over a prolonged period. Thus, it was important to have survey data (i.e. ideally post-election surveys or academic surveys fielded close after an election) for each country for all democratic elections since 1989/1990.

While the Czech Republic, Slovakia, Poland, and Hungary share a communist past, they differ in the ways their communist regimes functioned after the end of Stalinism, especially in terms of liberalization and tolerance of alternative political organizations (e.g. Linz and Stepan, 1996). Their political regimes before WWII also differed. Czechoslovakia had a democratic regime with regular elections and mandatory electoral participation, while Poland and Hungary had, for most of the interwar period, authoritarian regimes with limited levels of political competition. This variability allows us to enquire whether there is some kind of general communist experience that influences voter turnout or whether differences in the nature of communist regimes translate into contrasting effects of the past on contemporary voter turnout.¹

We begin this study with a presentation of theoretical assumptions about generational effects on turnout which are based on theories of political socialization, habitual voting and value change. Then we outline the analytical strategy we have employed to investigate generational effects on turnout. We briefly explain the fundamentals of cohort analysis, outline the analytical approach taken, and proceed to present the data used in our analyses.² In the

analytical section, we first describe the evolution of turnout in four post-communist countries over time. Then we use a hierarchical logistic regression model to analyse generational effects on turnout. Our study demonstrates clear generational effects on voter turnout in Poland, and weak effects in the other three countries. Furthermore, our modelling results do not show higher turnout among generations socialized in democratic regimes, compared to those socialized under communism. In the conclusion, methodological and theoretical questions and the implications of these results are discussed.

1. Why should electoral participation in post-communist countries be dependent on generations?

Our theoretical framework for studying generational effects on turnout integrates two approaches to explain voter turnout in post-communist countries. The first suggests that political regime change is not that important for the electoral participation in newly democratized countries. This explanation stresses the importance of general value change. Similar to the advanced democracies, younger generations should have a lower propensity to participate in elections since they do not care as much about partisan politics and traditional political institutions (Dalton and Wattenberg, 2002; Dalton, 2008).

The other two explanations highlight the role of political regimes for “learning” to vote. One of them focuses on the role of primary political socialization during impressionable years (Alwin, 1993; Sears, 1975). To simplify this argument, individuals socialized in times when a positive emphasis was placed on democracy, pro-democratic, and pro-participative values should be more likely to vote than those socialized in periods with a less positive emphasis on democracy and participation. The other stream of literature focuses on the fact that electoral participation is at least partially learned or even habitual (Aldrich et al., 2011; Franklin, 2004; Plutzer, 2002). It argues that individuals learn to vote during their first three or four elections and thereafter they reproduce learned voting behaviour. The applicability of both arguments to the post-communist context strongly depends on two factors: (1) the meaning of the electoral experience under the communist regime; and (2) the meaning of socialization in democratic versus communist regimes.

1.1. The socialization hypothesis

The socialization argument is based on the persistence model. According to this model, values learned when young persist for the rest of one’s life. Most of the literature suggests that this process is the strongest during the impressionable-years of adolescence and early adulthood when political values are the least stable and the most susceptible to change (Alwin, 1993; Sears, 1975). In subsequent stages of life, these values may become more stable, but the relationship to politics established during the impressionable years remains more or less stable for the rest of one’s life (Krosnick and Alwin, 1989; Sears and Levy, 2003: 83–87).

Under the impressionable-years model, a political generation cannot be formed in the absence of shared historic experience (Mannheim, 1952). Thus, the term generation refers to a group of people who were born around the same point in time and, as a result, share the same socio-historically specific experience which may shape their attitudes, values and actions (Mannheim, 1952; Inglehart, 1989). What kind of events and socialization experiences should, then, be relevant to the formation of political generations in post-communist countries, and more specifically, of political generations with different levels of voter turnout? The basic line can be drawn between political regimes, delineating

¹ Existing studies tend to emphasize the uniform effects of communist heritage (typically Pop-Eleches and Tucker, 2013), while one of the main objectives of our study is to find any differences between the effects of communist socialization between the countries, depending on the different trajectories of their communist regimes.

² The terms cohort and generation are used interchangeably throughout the present text. Strictly speaking, cohort refers merely to a group of individuals born in the same year or in the same interval (of three, five, or ten years). Generation is a cohort or a group of cohorts with *shared and distinct* experiences of a given time period. Thus, every generation is a cohort defined by year of birth, while every cohort is not necessarily a generation (Alwin and McCammon, 2006).

generations socialized in the interwar democratic regime of Czechoslovakia, in the interwar authoritarian regimes of Poland and Hungary, during World War II, under the communist regime, and in post-communist democracy.

Generally speaking, the different political regimes probably differed in the ways they valued democracy, the institution of elections, and citizens' electoral participation. It can be assumed that *political socialization in an undemocratic regime results in weaker internalization of pro-democratic values and consequently in lower voter turnout, while socialization in democratic regime results in more effective internalization of pro-democratic values and consequently in higher voter turnout* (H1a). This argument is further substantiated by evidence of lower civic participation among individuals socialized under the communist regime (Pop-Eleches and Tucker, 2013).

This relatively simple argumentation may seem dubious with regard to the different nature of elections in the communist and democratic regimes. The citizens of communist regimes did not experience meaningful elections because they had no choice between candidates – the act of casting one's ballot for a single candidate was a kind of affirmative vote. Moreover, participation in these elections was required, even if not always mandated by the law (Furtak, 1990; Hermet, 1978; Hermet et al., 1978). The official levels of voter turnout in these elections approximated 100%.³ The goal was to demonstrate unity of the people under the leadership of the party. In this sense, the elections were a legitimization ritual rather than a way of competing for power (Karklins, 1986: 450–452; Furtak, 1990). As a result, non-participation in such elections was regarded as an expression of opposition to the regime (dissident behaviour) and critical interest in politics, rather than lack of interest or apathy (Karklins, 1986).

Given non-competitive elections and compulsory voting in communist regimes, some authors argued that people in post-communist countries value their freedom to participate in politics free of orders (Rose, 1995). It can be inferred from this argument that people socialized in the communist regime should be less likely to participate in elections because mandatory voting in the past nurtured a negative attitude to electoral participation in them (see H1a). In contrast, Bernhagen and Marsh (2007) argue that *citizens socialized under communism should be more likely to vote than those socialized after the democratic transitions because the former value the right to free elections while the latter take it for granted* (H1b). Following the introduction of meaningful, democratic elections, citizens socialized under communism should be more likely to value their right to vote. While Rose's argument emphasizes freedom from mandatory political participation, Bernhagen and Marsh focus on the right to vote freely (at long last).

Change in the type of political regime is a useful, but very rough indicator of changes in political generations because the communist regimes in Czechoslovakia, Hungary, and Poland lasted for more than forty years. For example, Pop-Eleches and Tucker (2013) demonstrate that civic participation declines with length of communist experience: the longer one lived under the communist

regime, the less active in civil society one is. At the same time, these authors demonstrate that early socialization in times less penetrated by ideology and repression has the strongest demobilizing effects. Their research suggests that the diverse stages of the communist regime created differences in individuals' political identities, attitudes to politics, and, consequently, electoral participation. Therefore, we have decided to define certain stages of the communist regime based on (1) intensity of communist indoctrination and propaganda, and (2) level of positive and negative evaluations of democracy and elections.

Disregarding relevant but relatively short periods of reforms and liberalization, the history of the countries of interest warrants a distinction between three basic stages of the communist regime: Stalinism, post-Stalinism, and post-totalitarianism (e.g. Linz and Stepan, 1996; for much detailed categorization, see Pop-Eleches and Tucker, 2013). The early stages of communism in all four countries were characterized by Stalinism, with its political violence, strong indoctrination and political mobilization of citizens, and zero tolerance of opposition. A slow liberalization of the regime in the mid-1950s marked the transitions to post-Stalinism in Czechoslovakia and Hungary and to post-totalitarianism in Poland (the latter characterized by tolerance of and negotiation with opposition groups). By the end of the 1960s, the transition to the post-totalitarian stage of the communist regime was completed in all countries analysed. Nevertheless, the resulting degree of liberalization in Poland and Hungary was much greater than in Czechoslovakia.

Primary political socialization in different stages of the communist regime should translate into different attitudes of these generations toward democracy and elections, and consequently into different levels of voter turnout. The later the generations were socialized, the lower levels of ideological propaganda they were exposed to and, consequently, the more they should support the democratic regime (as opposed to the communist, non-democratic one). Democratic support should translate into higher electoral turnout in these groups, and therefore, *turnout among the generation socialized in the post-totalitarian stage should be higher than among the generation socialized under Stalinism and post-Stalinism* (H2a).

On the other hand, Pop-Eleches and Tucker (2013) demonstrated that the political socialization in later stages of the communist regime had the strongest demobilizing effect. In that period life was full of hypocrisy and compromise while ideology and repression were less common. These effects were possibly related to a retreat into private life, de-politicization, and resignation from public affairs (Bren, 2010; Howard, 2003; Shlapentokh, 1989). Therefore, *turnout among individuals socialized during the later stages of the communist regime should be lower than among those socialized under Stalinism and post-Stalinist liberalization* (H2b).

1.2. The hypothesis of habitual voting

The theory of habitual voting presents a different argument as to why voter turnout should be different between individuals socialized under communism and those socialized later in newly established democratic regimes (Aldrich et al., 2011; Denny and Doyle, 2009; Franklin, 2004; Gerber et al., 2003; Green and Shachar, 2000; Plutzer, 2002). Voters in established democracies form their voting habits gradually, starting from the first elections in which they are eligible to vote. The longer an individual consistently participates in elections, the stronger their voting habits. In turn, the longer one consistently abstains from voting, the stronger their non-participation habit. As a result, voting habits differ between age groups; they are typically weaker among younger

³ Turnout was lower in some cases. Under the communist regime in Poland, turnout oscillated between 94 and 99 percent. However, in 1985, it declined to 79 percent according to official figures or even to approximately 66 percent, according to the opposition. Similarly low levels of turnout occurred in the referendum of 1987 and in the municipal elections of 1988, when turnout was as low as around 56 percent (Roszkowski, 1992). This decline was probably because the Solidarity trade union urged citizens to boycott the elections. The first boycotts occurred as early as 1980, but those were limited to major cities like Warsaw, Krakow, and Gdansk. The radical wing of Solidarity also urged to boycott the semi-free "contract elections" of June 1989. Levels of turnout in Hungary in the 1980s, too, were not close to 100% (Heyns and Bialecki, 1991). Actual turnout levels in the Soviet Union oscillated somewhere between 90 and 95 percent (Friedgut, 1979; Karklins, 1986).

groups who have less strong voting habits than all others. Thus, the theory of habitual voting explains age effects on voting.

Franklin (2004) questioned the ordinal relationship between age groups and voting habits by arguing that it depends on the competitiveness of elections in which individuals' voting habits were formed. The more competitive the elections, the more easily the voting habit forms. As a result, voting habits may differ not only between age groups but also between generations. If a certain generation formed voting habits in times of increased electoral competitiveness, then its members should be more likely to vote throughout their lives, compared to generations whose turnout habits were formed in the context of less competitive elections.

All theories of habitual voting explain turnout as a learned behaviour, but they disagree on whether repeated voting is caused by (1) attitude change at the individual level, (2) due to the fact that participating individuals tend to be targeted by electoral campaigns, or (3) by the reduced information costs of voting (with regard to the practicalities of casting one's ballot). In the first case, the causal mechanism is based on attitudes to voting, elections and election results, or differential mobilization of voters and non-voters (e.g. Plutzer, 2002; Franklin, 2004; Gerber et al., 2003). In the latter case, the causal mechanism is based on habitual behaviour and reducing the costs of voting (e.g. Aldrich et al., 2011; Denny and Doyle, 2009). A voter who casts the ballot regularly knows where the polling station is, what she is expected to do, what kind of documents must be presented there, etc. However, any discussion of the implications of the theory of habitual voting for generational effects on turnout in post-communist countries must be contextualized. How citizens in communist regimes learned how to vote matters when contrasted with the learning experience in democratic regimes.

The first hypothesis based on insights from the theory of habitual voting emphasizes the process of learning the voting routine (especially the routine of going to the polling station on Election Day). Thus, socialization of citizens of communist regimes into full participation in elections (no matter how meaningless) may have positive effects on turnout in democratic elections because these generations have learned to vote. Therefore, *turnout among individuals socialized under communism should be higher than among those socialized in the post-communist democratic regime. The longer a cohort had the opportunity to learn full electoral participation under communism, the higher its turnout under democracy* (H3). Whether one participates in competitive or non-competitive elections should not make a difference in the way a citizen's voting habit is formed. This hypothesis is very similar to Letki's (2004) finding that past membership in a non-democratic organization, such as a communist party, increases political engagement in a democracy.

The third hypothesis emphasizes another aspect of the theory of habitual voting, namely the cognitive aspects of participation and the ability to choose between the parties running in the election. The habit of voting for a single (communist) party list is not useful in competitive elections in which one has to choose between multiple candidates or parties. Therefore, voter socialization in undemocratic elections should not promote the forming of voting habits in competitive elections. *There should be no generational effects on turnout, minimally among voters socialized under the*

communist regime (H4).⁴

1.3. The value change hypothesis

The explanations of generational effects on turnout in post-communist countries presented so far stress the importance of different political regimes and are area specific. However, there is a possibility that post-communist countries follow the pattern found in advanced democracies. The general slow decline in turnout in long-term democracies is partly explained by generational replacement as much of the decline is concentrated among newer generations (Bhatti and Hansen, 2012a; Blais et al., 2004; Heath, 2007; Miller, 1992; Miller and Shanks, 1996; Wass, 2007; Wattenberg, 2002, 2007). Generational differences in turnout are evident in many western democratic countries. In Canada and the USA previous research shows that electoral participation declined as those born in the 1970s and 1980s entered the electorate (Blais et al., 2004; Smets and Neundorff, 2014; see also Wattenberg, 2007; Miller, 1992). In European countries there is also turnout decline among generations born in 1960s and thereafter (Persson et al., 2013; Wass, 2007; Bhatti and Hansen, 2012a).

The main explanation of this decline in turnout is based on broader cultural change that impinges on political values and identities. Younger cohorts do not feel that voting is a duty (Blais and Rubenson, 2013), they lack a sense of party identification (Heath, 2007), political efficacy and positive evaluations of parties (Abramson and Aldrich, 1982; Teixeira, 1992). It is reasonable to expect that younger generations in post-communist countries have also lost interest in party politics in the same way as those in the advanced democracies. The logic of this argument is that political regimes and their change do not have an effect on turnout. However, what matters is cultural change as reflected in such things as norms of citizenship and particularly having a sense of civic duty and partisanship (Dalton and Wattenberg, 2002; Dalton, 2008, 2013). If one accepts the value change hypothesis this implies that the *electoral participation of newer cohorts should be lower than that observed among older generations of voters* (H5). The level of electoral participation should be particularly lower among the youngest cohorts. Alternatively, if the participation of the newer cohorts doesn't differ from that of older cohorts, the generalizability of this hypothesis would be undermined.

2. Analytical approach, methods and data

In order to investigate the generational effects on electoral participation in post-communist countries, we apply cohort analysis, simultaneously examining age, period, and cohort effects (Glenn, 2005). Though it is easy to make conceptual distinctions between age, period, and cohort, it is much more difficult to separate their effects in an actual analysis because of a functional dependence between these three aspects. This so-called identification problem in cohort analysis does not have one ideal solution; however, there are better solutions, especially those which use more realistic assumptions (Glenn, 2005, 2006). In the following analysis, we use a hierarchical age-period-cohort model with cross-classified random effects for cohorts and periods (HAPC-CCREM; see Yang and Land, 2006, 2013). This model uses individual-level data from repeated cross-sectional surveys and strives to resolve the identification problem of age-period-cohort analysis based on two assumptions: (1) linear age-period-cohort dependence is eliminated through a different period grouping of the age, period and cohort variables (see Mason et al., 1973) and a non-linear relationship between age and the dependent variable (see Fienberg and Mason, 1985); (2) age, period, and cohort effects are treated differently based on their different ontological status where

⁴ From the perspective of the statistical hypothesis testing, hypothesis number 4 could be thought of as the null hypothesis of the whole article, i.e. there are no generational effects on the individual turnout in the post-communist countries. Hence, the remaining hypotheses discussed in this article could be viewed as alternative hypotheses to this null hypothesis which postulates no effect. The directions of generational effects formulated in the alternative hypotheses are justified on the basis of different theories.

age is considered to be a characteristic specific to an individual at the time of data collection, while period and cohort are considered to be supra-individual (contextual) features.⁵

In the first level of the employed hierarchical model, age is considered to be a feature of an individual in the year of data collection and enters the model as a fixed effect. In the second level, a concrete individual is a member of more groups and is nested in and cross-classified by two types of social contexts (period and cohort). Therefore, it is necessary to specify the hierarchical model as one with cross-classified effects. This model works with random effects for periods and cohorts on the intercept of the level 1 logistic regression model.⁶

Our aim is to estimate the gross, or total, effects of generations when controlling only for age and period. In this paper, we are not interested in the effects of other variables and in what causes generational effects. Even though, strictly speaking, our hypotheses contain claims about causal explanations of different levels of electoral participation of various birth cohorts, these explanations are more statements of possible causal effects. Moreover, we do not have comparative data for effective testing. Thus, our models include only a small number of variables. At the first level, because of the curvilinear effect of age on turnout (see, for example, [Bhatti and Hansen, 2012b](#); [Bhatti et al., 2012](#); [Fieldhouse et al., 2007](#); [Wolfinger and Rosenstone, 1980](#); [Wass, 2007](#)), we include age in linear and quadratic forms. Moreover, we control also for the sex of the respondent as several papers have used the same strategy (see [Blais et al., 2004](#); [Wass, 2007](#); [Bhatti and Hansen, 2012a](#)). Inclusion of sex in the models has no effect on the direction, strength and statistical significance of age, period and generational effects. At the second level, we include 15 five-year birth cohorts and all elections/periods for which we were able to assemble data. Our model is specified as follows:

Level 1 model:

$$\text{logit}(\text{VOTE}_{ijk} = 1) = \beta_{0jk} + \beta_1 \text{AGE}_{ijk} + \beta_2 \text{AGE}_{ijk}^2 + \beta_3 \text{FEMALE}_{ijk}$$

Level 2 model:

$$\beta_{0jk} = \gamma_0 + u_{0j} + v_{0k}, \quad u_{0j} \sim N(0, \tau_u), \quad v_{0k} \sim N(0, \tau_v)$$

Combined model:

$$\text{logit}(\text{VOTE}_{ijk} = 1) = \gamma_0 + \beta_1 \text{AGE}_{ijk} + \beta_2 \text{AGE}_{ijk}^2 + \beta_3 \text{FEMALE}_{ijk} + u_{0j} + v_{0k}$$

for $i = 1, 2, 3, \dots, n_{jk}$ individual within cohort j and time period k ;
 $j = 1, \dots, 15$ birth cohorts;
 $k = 1, \dots, z$ time periods/election years [the number of time periods varies from 6 (in the cases of Hungary and Slovakia) to 7 (for the Czech Republic and Poland)].

In this HAPC-CCREM model, β_{0jk} represents the intercept which is the mean logit of the probability of voting within a group of eligible voters for election k and birth cohort j (when the values of the independent variables are held at zero). β_1 , β_2 and β_3 represent level 1 fixed effects coefficients. γ_0 is the model intercept, or more precisely, the grand mean logit for all individuals from a particular country (again, at zero values of all independent variables). The term u_{0j} represents the random effect of cohort j , that is the contribution of a particular cohort j to the model intercept (γ_0) averaged across all national elections. The term v_{0k} stands for the random effect of election k on the model intercept (γ_0) which is averaged across all 15 birth cohorts. *Ceteris paribus*, both u_{0j} and v_{0k} are assumed to be distributed normally with a mean of zero and variances of τ_u and τ_v , respectively.⁷

We analyse four post-communist countries: the Czech Republic, Slovakia, Hungary, and Poland. They differ in both the structure of their parliaments and their electoral systems. Two of these countries have bicameral parliaments (Czech Republic and Poland) and two have unicameral parliaments (Hungary and Slovakia). To attain comparability across all four countries, we focus our attention on elections to the lower chambers of parliament in the Czech Republic and Poland (i.e. Chamber of Deputies and Sejm, respectively). In terms of the electoral system, all countries use PR system except Hungary which uses a mixed-member electoral system. In Hungary, more than a half of the seats are allocated based on the two-round majoritarian system and a smaller part by the PR system. Thus, we focus on participation in the first round during which both the PR and majoritarian system is used.⁸ In addition, Hungarian electoral law requires at least 50 per cent turnout for elections to be valid.

The data used for the analyses presented here originates from post-election surveys undertaken in these four countries from the first democratic elections in 1990 to the present. When a post-election survey in a given country was missing, we used another representative survey with questions on electoral participation and party choice in the past elections, respondent age, and sex; we always selected surveys undertaken as part of international projects, as a guarantee of quality fieldwork (Annex 1 lists the datasets used). Data from individual surveys were pooled into a single dataset, even though we run models on each country separately. Data contain information on electoral participation, year of birth, age,

⁵ Even the hierarchical model of age, period, and cohorts applied here has been criticized for not solving the identification problem, but avoiding it by estimating fixed effects for age and relying on random effects for periods and cohorts ([Harding, 2009: 1450](#)). In addition to that, [Bell and Jones, \(2014a, b\)](#) using simulation data, raised several critical questions concerning the ability of HAPC-CCREM to estimate effects correctly. Critics argue that HAPC-CCREM will estimate biased results if there are linear cohort or period trend effects ([Reither et al., 2015](#); [Bell and Jones, 2015](#)). Despite these existing critiques, the HAPC-CCREM model has become a standard way of analysing generational effects on voting (e.g. [Smets and Neundorff, 2014](#); [Dassonneville, 2013](#)).

⁶ It is possible to specify the APC model differently. First of all, it is possible to run simple APC accounting model which specifies effects of age, period, and cohort at the individual level (see [Blais et al., 2004](#)). Secondly, it is possible to run hierarchical model which specifies age and cohort effects at the individual level and period effects at the contextual level (see [Persson et al., 2013](#)). The main reason for the second strategy is that running the regression model on pooled surveys from different election contexts violates general regression assumptions. We also ran these two models and compared them with our HAPC-CCREM. All models estimated generated similar results concerning the cohort and period effects; however, the APC accounting model and model with only periods at the contextual level resulted in stronger estimated age effects than the HAPC-CCREM. The presented results concerning the generational effects are thus not influenced by the choice of modelling strategy. Nevertheless, for theoretical reasons we prefer to present the HAPC-CCREM model results. This is because this model accounts for individuals being simultaneously nested within two types of contexts: (1) the context of an election and (2) the context of being part of a specific generation that shares a common socialization experience. It is more reasonable in the study of turnout to treat generational effects as contextual factors rather than individual-level characteristics.

⁷ Before we ran the HAPC-CCREM models, we performed preliminary model specification analysis. Age and sex effects on turnout were estimated for each country and survey/period separately. The effect of age was curvilinear in all analysed elections; however, both linear and quadratic specifications were not statistically significant in approximately thirty per cent of cases. This allowed us to estimate the fixed effects of age and sex in the HAPC-CCREM models. Moreover, we also tested for random variation of three level 1 slopes across the generations. This analysis showed no significant variation of the regression slopes in three of the four countries. The only exception was the case of gender in Poland. However, to achieve comparability of the HAPC-CCREM models across countries, we varied only the level 1 intercept across the generations and elections.

⁸ In several Hungarian post-election surveys, it is not possible to differentiate between participation in the PR and majoritarian parts of the election.

period of data collection, sex, and country.⁹

For the present analysis, three different reductions of the sample were performed. First, for the Czech and Slovak Republics, we excluded the elections of 1990 because the actual voter turnout was approximately 96 percent and reported turnout in the datasets was even higher. Second, we excluded individuals born before 1921 due to a small number of cases. These individuals were aged 70 or older at the time of the first democratic elections. Their proportions in the sample ranged between 3 and 9 percent in the first elections, and declined steadily over time. Third, for the same reason, we excluded individuals aged 81 or older; their proportion in the sample never exceeded 4 percent and typically ranged between 1 and 2 percent.

We used five-year cohorts to analyse generational effects on turnout. In order to examine the hypotheses, it was necessary to define the different stages of communist regimes and the generations belonging to them that were expected to differ in their socialization experience. Our hypotheses about the existence of several different generations with different levels of voter turnout are presented in the preceding section. Those generations were delineated by historic transitions between regimes (communism vs. democracy) or stages of communist regimes (Stalinism, post-Stalinism, or the post-totalitarian stage).

Political socialization research suggests that the process of primary political learning begins in early adolescence and typically ends when one's basic political orientation has been formed (Easton and Dennis, 1969). Therefore, we consider 15 years as a sufficient minimum age at which the core of one's political identity has been formed (see similar arguments in the recent works of Down and Wilson, 2013; Hadjar and Schlapbach, 2009; Mishler and Rose, 2007). Consequently, generations are defined by year of birth of those who reached the age of 15 during a given period. This is in contrast with almost all studies of generational effects on electoral behaviour (for a typical example, see Franklin, 2004) which defines generations in terms of the age when one is first able to vote and be directly socialized by the electoral process. The reason for our unorthodoxy is that we put more emphasis on general political socialization while other authors put more emphasis on electoral socialization.¹⁰ In order to examine the hypotheses about generational effects on turnout, we clustered the different birth cohorts into the following five generations (see Table 1 for details):

- The WWII generation born in 1930 or earlier
- The Stalinist generation born between 1931 and 1940
- The post-Stalinist generation (born between 1941 and 1950 for the Czech Republic and Slovakia, and between 1941 and 1945 in Hungary)
- The post-totalitarian generation born in the years 1951–1975 for the Czech Republic and Slovakia, between 1946 and 1975 in Hungary, and between 1941 and 1975 in Poland
- The democratic generation which is defined as all those born after 1975

Nevertheless, the existence of clear boundaries between the

generations is unlikely, no matter if different identities formed during the different periods and persisted in later stages of life. Historical changes do not emerge and affect the entire society simultaneously. Similarly, every individual's formative stage may take place at a slightly different age. Therefore, it is advisable to treat these generations more loosely and assume gradual change between the individual five-year cohorts, rather than dramatic change from generation to generation.

3. Analysis of generational effects on voter turnout, 1990–2013

Fig. 1 illustrates the development of turnout in parliamentary elections in all four countries. In terms of turnout trends, one can see two groups of countries. The first group consists of the Czech Republic and Slovakia. In general, voter turnout in these countries has been decreasing from almost universal turnout in the first democratic elections in 1990 and 85 per cent in the 1992 election to levels of about 60 per cent in recent elections. The second group consists of Hungary and Poland. In these countries, the turnout trend is largely constant with only slight variation around an average turnout level across parliamentary elections. Whereas in Hungary turnout oscillates around 65 per cent, in Poland the average turnout rate is below 50 per cent.

Table 2A–D report parameter estimates and model fit statistics for the HAPC–CCREM models estimated on pooled cross-sectional surveys for each country separately. Individual-level explanatory variables are mostly statistically significant ($p \leq 0.05$). The likelihood of voting increases with age and the effect is curvilinear. Being female decreases the likelihood of voting in all countries. However, in Hungary and Slovakia the effects are not significant at the standard levels of statistical significance. These variables have the same effect as in majority of democracies (Blais, 2007; Nevitte et al., 2009; Smets and van Ham, 2013; Wolfinger and Rosenstone, 1980).

Separate analysis for all analysed elections revealed that the curvilinear effect of age is the same across countries and years. This effect was present already at the very first elections. Thus, there is no support for the “resistance thesis” formulated within studies of the political engagement of immigrants (Black, 1982; Black et al., 1987) and also, more generally, by Converse (1969) in his model of the formation of partisanship. The resistance thesis contends that older voters have more trouble to adapt to new contexts as they are used to a different style of politics. Higher turnout among older voters suggests that they were able to transfer their political experience across different political regimes and regime change did not create a hurdle for sustained electoral participation (see also Niemi and Barkan, 1987).

In addition to individual level variables, Table 2A–D also display estimates of cohort and period effects. Cohort effects are also visually presented in the Fig. 2A–D which show estimates of cohort effects (the black diamonds connected by thick curves) averaged over all periods and converted into probabilities of electoral participation. These probabilities are presented with their 95-percent confidence intervals. Fig. 2A–D also have straight horizontal lines which represent the transformed value of the intercept (γ_0) of the regression models given in Table 2A–D. These horizontal lines represent the grand-mean probability of voting of males at the average age¹¹

⁹ Voter turnout is overestimated in all of the datasets used here because of sampling error or misreporting by respondents (Ansolabehere and Hersh, 2012; Belli et al., 1999; Burden, 2000; Karp and Brockington, 2005). Age is linked to the misreporting of electoral participation: older non-voters are more likely to (mis)report participation than younger ones (e.g. Ansolabehere and Hersh, 2012; Dahlberg and Persson, 2014). Nevertheless, we disregard the issue of over-estimation of age effects due to misreporting of turnout in the present analysis.

¹⁰ The difference of three years in our definition of political generations, i.e. 15 vs. 18 years, has negligible effects. The results of the analysis presented here are almost identical to the results we would obtain by defining political generations by the minimum age of 18 (instead of 15) years.

¹¹ As the age variable does not include zero because all respondents interviewed were adults, the model intercept would not have a straightforward interpretation without centring. The variables ‘age’ and ‘age squared’ were therefore centred before analysis. Grand mean centring within each country was used. After centring, the transformed average ‘age’ and average ‘age squared’ are both equal to zero and the intercept (γ_0) represents the probability of voting of males (coded as 0) at the average age (coded as 0).

Table 1
Periodization of birth cohorts, generations and history in post-communist countries and the hypotheses and expectations concerning the electoral participation.

Years of birth	Period of socialization	Generations				Expectations from the hypotheses						
		Czech Republic	Slovakia	Poland	Hungary	H1a	H1b	H2a	H2b	H3	H4	H5
1921–1925	1936–1940	Democratic	Democratic	Authoritarian	Authoritarian	+	NA	NA	NA	NA	NA	++
1926–1930	1941–1945	WW2	WW2	WW2	WW2	NA	NA	NA	NA	NA	NA	++
1931–1935	1946–1950	Stalinist	Stalinist	Stalinist	Stalinist	-	+	-	+	++++	~	++
1936–1940	1951–1955	Stalinist	Stalinist	Stalinist	Stalinist	-	+	-	+	++++	~	+
1941–1945	1956–1960	Post-Stalinist	Post-Stalinist	Post-totalitarian	Post-Stalinist	-	+	-	+	+++	~	+
1946–1950	1961–1965	Post-Stalinist	Post-Stalinist	Post-totalitarian	Post-totalitarian	-	+	-	+	+++	~	+
1951–1955	1966–1970	Post-totalitarian	Post-totalitarian	Post-totalitarian	Post-totalitarian	-	+	+	-	++	~	~
1956–1960	1971–1975	Post-totalitarian	Post-totalitarian	Post-totalitarian	Post-totalitarian	-	+	+	-	++	~	~
1961–1965	1976–1980	Post-totalitarian	Post-totalitarian	Post-totalitarian	Post-totalitarian	-	+	+	-	+	~	~
1966–1970	1981–1985	Post-totalitarian	Post-totalitarian	Post-totalitarian	Post-totalitarian	-	+	+	-	+	~	-
1971–1975	1986–1990	Post-totalitarian	Post-totalitarian	Post-totalitarian	Post-totalitarian	-	+	+	-	+	~	-
1976–1980	1991–1995	Democratic	Democratic	Democratic	Democratic	+	-	NA	NA	NA	NA	-
1981–1985	1996–2000	Democratic	Democratic	Democratic	Democratic	+	-	NA	NA	NA	NA	-
1986–1990	2001–2005	Democratic	Democratic	Democratic	Democratic	+	-	NA	NA	NA	NA	-
1991–1995	2006–2010	Democratic	Democratic	Democratic	Democratic	+	-	NA	NA	NA	NA	-

Note: The periodization is rough and doesn't reflect minor changes within the regimes. The expectations stemming from hypotheses (last six columns) are set for the Czech Republic and Slovakia; for Poland and Hungary, there would be minor changes because of shorter post-Stalinist period and authoritarian regime before the World War Two (WW2).

Abbreviations: + means positive effect on turnout; - means negative effect on turnout; ~ means no effect on turnout; NA means no expectations.

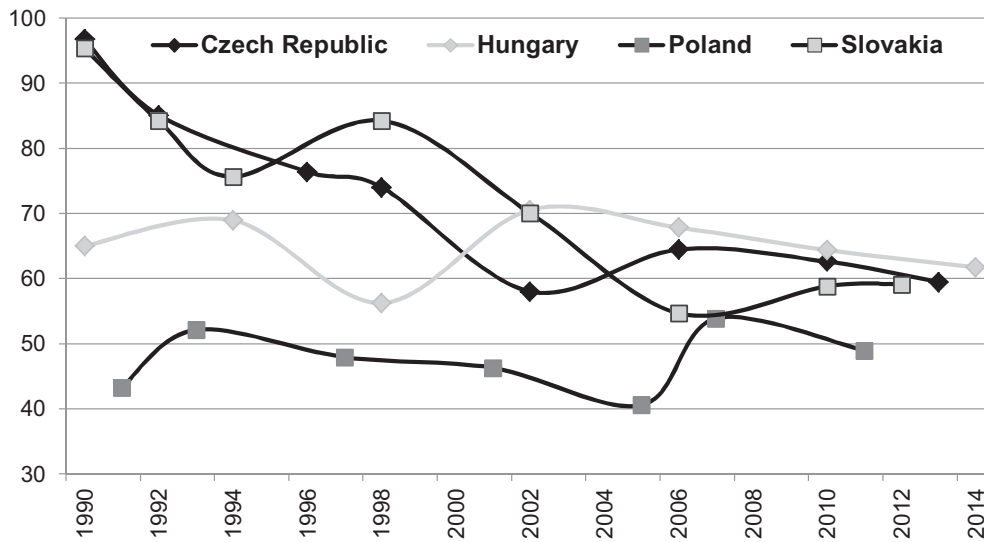


Fig. 1. Voter turnout in parliamentary elections (1990–2013).
Source: Official electoral results from electoral and statistical offices of the countries.

and are plotted to aid the exploration of generational effects. Generally speaking, deviation of the thick curves (representing the estimated cohort effects) from the model intercept indicates the presence of cohort effects. These four figures also include vertical lines which separate generations defined by regime changes and changes within the communist regime so that the hypotheses are more easily evaluated.

As both variance components and estimated random effects in Table 2A–D suggest, the cohort effects are smaller than the period effects in all countries. Cohort effects are very weak in Slovakia, weak in the Czech Republic and Hungary¹² and quite strong in

Poland. For all countries except Poland, variance components indicate that cohorts do not significantly contribute to explaining turnout in parliamentary elections. In general, the results of these analyses disprove most of our hypotheses about generational effects on turnout.

According to the first pair of competing socialization hypotheses, electoral participation in a democratic regime is influenced by early political socialization and the values internalized during this stage of life. The first of these hypotheses (H1a) asserted that individuals socialized in a democratic regime should be more likely to vote in democratic elections than those socialized under communism. The idea is that former voters were socialized into democratic values and norms whereas the latter not. On the contrary, the second hypothesis (H1b) assumes that generations socialized under communism are more likely to vote than those socialized in a democratic regime. This is because those older generations socialised under communism are more inclined to value their right to vote in free elections and appreciate the abolishment of mandatory

¹² This can easily be seen in Fig. 2A, B, and D where pairs of dotted curves representing the 95-percent confidence intervals for generational effects never deviate a great deal from the model intercept. In other words, the model intercepts in these three countries never move outside the area defined by confidence intervals and remain exclusively within. This suggests that the effects of the individual cohorts are not statistically significant.

Table 2a

HAPC-CCREM of electoral participation in parliamentary elections in the Czech Republic.

	Coefficient	se	z	p-Value
Fixed effects				
Intercept	1.398	0.246	5.67	<0.001
Age	0.019	0.002	12.39	<0.001
Age squared	<0.001	<0.001	-4.92	<0.001
Female	-0.119	0.045	-2.63	0.009
Random effects				
	Coefficient		se	
Cohort				
1921–1925	-0.003	0.040		
1926–1930	-0.020	0.040		
1931–1935	0.004	0.040		
1936–1940	0.045	0.040		
1941–1945	-0.006	0.040		
1946–1950	-0.004	0.040		
1951–1955	-0.042	0.040		
1956–1960	0.011	0.040		
1961–1965	0.007	0.040		
1966–1970	0.011	0.040		
1971–1975	0.015	0.040		
1976–1980	-0.023	0.040		
1981–1985	0.028	0.040		
1986–1990	-0.017	0.040		
1991–1995	-0.006	0.040		
Period				
1992	0.838	0.010		
1996	0.942	0.009		
1998	0.129	0.005		
2002	-0.435	0.007		
2006	-0.257	0.005		
2010	-0.593	0.005		
2013	-0.634	0.005		
Variance components	Variance	se	z	p-Value
Cohort	0.047	0.042	1.102	0.217
Period	0.617	0.167	3.693	<0.001
Model fit				
LL model				-5854.5
N				10,630
AIC				11,721
BIC				11,764

Source: Post-election surveys – Czech Republic (see [appendix](#)).

voting that existed under communism. The estimated cohort effects plotted in [Fig. 2A–D](#) do not significantly deviate from the respective country intercepts because the intercepts lie almost exclusively within the bounds defined by 95% confidence intervals for cohort effects. Consequently, we reject both socialization hypotheses. Only in Poland (see [Fig. 2C](#)) can we observe above-average levels of turnout among generations born after 1986 and socialized in a democratic regime, but they are comparable to those of the Stalinist generation.

In order to account for the possible impact of heterogeneous socialization experiences under the communist regime, the other two socialization hypotheses differentiate between the Stalinist, post-Stalinist, and post-totalitarian stages. First, the generations socialized under post-totalitarianism should be more likely to vote because they were exposed to less intensive ideological propaganda (H2a). This hypothesis, too, was rejected for all countries analysed. Second, the post-totalitarian generation should be less likely to participate in elections (H2b) due to the strong demobilizing effects of having experienced this type of communist regime often characterised by de-politicization of public life, retreat into private life and resignation on public affairs. The hypothesis was rejected for Slovakia, with its overall negligible generational effects on turnout, and for Hungary, with its unsystematic variation in

Table 2b

HAPC-CCREM of electoral participation in parliamentary elections in the Slovakia.

	Coefficient	se	z	p-Value
Fixed effect				
Intercept	1.427	0.213	6.70	<0.001
Age	0.014	0.002	7.39	<0.001
Age squared	-0.001	<0.001	-5.46	<0.001
Female	-0.049	0.060	-0.82	0.412
Random effects				
Cohort				
1921–1925		-0.004		0.028
1926–1930		0.002		0.028
1931–1935		-0.009		0.028
1936–1940		0.008		0.028
1941–1945		0.006		0.028
1946–1950		0.002		0.028
1951–1955		0.001		0.028
1956–1960		-0.011		0.027
1961–1965		-0.003		0.027
1966–1970		0.007		0.027
1971–1975		0.009		0.027
1976–1980		-0.007		0.027
1981–1985		0.006		0.028
1986–1990		-0.006		0.028
1991–1995		-0.002		0.028
Period				
1992		0.507		0.133
1998		0.451		0.064
2002		0.345		0.076
2006		-0.593		0.066
2010		-0.287		0.065
2012		-0.435		0.068
Variance components	Variance	se	z	p-Value
Cohort	0.028	0.089	0.318	0.379
Period	0.457	0.137	3.337	0.002
Model fit				
LL model				-3432.1
N				6,421
AIC				6,876
BIC				6,916

Source: Post-election surveys – Slovakia (see [appendix](#)).

turnout of different generations. Support for this hypothesis was found in Poland and, somewhat less persuasively, in the Czech Republic. In the Czech Republic, the Stalinist generation has the highest turnout, whereas the following two generations socialized under communism have similar levels of turnout. In Poland, members of the Stalinist generation are also most likely to vote, while members of subsequent generations socialized under communism were less likely to vote.

The following two hypotheses are based on the theory of habitual voting which explains electoral participation as learned behaviour. Generations socialized under communism with its compulsory electoral participation should be more likely to vote because they formed a voting habit. Thus, the hypothesis suggests higher levels of turnout among the generations socialized under communism when compared to those socialized after transition to democracy. Moreover, we should see a decline in turnout among cohorts socialized under communism, because the strongest voting habit should have been formed among those with the longest period of socialization into full electoral participation (H3). This hypothesis was rejected for all countries. In accord with the hypothesis, turnout among communist era generations gradually declined only in Poland. However, the electoral participation of communist era generations was not higher than that of younger generations socialized under the post-1989 democratic regime.

The second hypothesis based on the theory of habitual voting

Table 2c
HAPC- CCREM of electoral participation in parliamentary elections in the Poland.

	Coefficient	se	z	p-Value
Fixed effect				
Intercept	0.755	0.151	5.01	<0.001
Age	0.015	0.002	5.88	<0.001
Age squared	-0.001	<0.001	-5.29	<0.001
Female	-0.297	0.037	-8.02	<0.001
Random effects				
Cohort				
1921–1925		-0.028		0.096
1926–1930		-0.023		0.083
1931–1935		0.101		0.077
1936–1940		0.111		0.078
1941–1945		0.024		0.078
1946–1950		0.072		0.068
1951–1955		0.059		0.067
1956–1960		0.019		0.066
1961–1965		-0.271		0.071
1966–1970		-0.188		0.074
1971–1975		-0.239		0.075
1976–1980		-0.146		0.080
1981–1985		0.056		0.085
1986–1990		0.135		0.097
1991–1995		0.318		0.134
Period				
1991		-0.556		0.053
1993		-0.208		0.052
1997		0.107		0.046
2001		0.119		0.048
2005		-0.112		0.042
2007		0.581		0.051
2011		0.068		0.047
Variance components				
	Variance	se	z	p-Value
Cohort	0.173	0.048	3.600	0.001
Period	0.331	0.091	3.621	0.001
Model fit				
LL model				-8412.2
N				12,618
AIC				16,836
BIC				16,881

Source: Post-election surveys – Poland (see [appendix](#)).

Table 2d
HAPC- CCREM of electoral participation in parliamentary elections in the Hungary (1990–2013).

	Coefficient	se	z	p-Value
Fixed effect				
Intercept	1.091	0.175	6.22	<0.001
Age	0.009	0.002	5.25	<0.001
Age squared	<0.001	<0.001	-3.59	<0.001
Female	-0.043	0.051	-0.84	0.401
Random effects				
Cohort				
1921–1925		-0.019		0.047
1926–1930		0.007		0.045
1931–1935		0.006		0.045
1936–1940		0.036		0.045
1941–1945		0.012		0.045
1946–1950		-0.039		0.044
1951–1955		0.031		0.043
1956–1960		-0.011		0.044
1961–1965		-0.029		0.045
1966–1970		-0.030		0.044
1971–1975		0.009		0.045
1976–1980		0.024		0.046
1981–1985		0.006		0.048
1986–1990		-0.012		0.049
1991–1995		0.010		0.050
Period				
1990		0.013		0.073
1994		0.236		0.053
1998		-0.233		0.055
2002		0.600		0.075
2006		-0.073		0.069
2010		-0.550		0.053
Variance components				
	Variance	se	z	p-Value
Cohort	0.051	0.043	1.175	0.200
Period	0.367	0.109	3.356	0.001
Model fit				
LL model				-4625.5
N				7,861
AIC				9,263
BIC				9,305

Source: Post-election surveys – Hungary (see [appendix](#)).

(H4) assumes no differences in turnout between the generations socialized under communism. Indeed, the generational effects on turnout in Slovakia are generally close to zero. However, in the Czech Republic, Poland, and Hungary, there are some differences in turnout levels between the generations: in Poland, there are even statistically significant differences between birth cohorts. Therefore, we do not have enough evidence to confirm this hypothesis either. These results contradict the conclusions of [Czesnik et al. \(2013\)](#) about the presence of habitual voting in Poland. However, these authors used a different research design and focused on age group differences in the effect of previous voting on current electoral participation.

The last hypothesis completely disregards the impact of the type of political regime on turnout and focuses on how general value change among the young generations depresses turnout. According to this hypothesis (H5), younger generations should have gradually lower turnout levels than the preceding ones. The relatively “flat” generation effects in the analysed post-communist countries do not correspond with the evidence from advanced democracies. Moreover, there is not a decline in turnout among the youngest cohorts. The Polish case contradicts the trend in western democracies of declining youth turnout. Every cohort born in Poland since the late 1970s has a higher probability of voting than older generations. To sum up, the generational patterns found in Western democracies

are not observed in post-communist countries and therefore do not seem to be universal.

All in all, with the exception of Poland, our analyses did not confirm the existence of generational effects on voter turnout in post-communist countries. Moreover, we did not find systematic evidence to confirm any of our hypotheses. It seems that socialization and experience with politics under communist regimes had either (a) non-uniform effects on current electoral participation or (b) had no detectable impact on turnout. This is rather surprising. Random period effects, on the contrary, are much more pronounced than cohort effects in the analysed countries. Moreover, the period effects make a statistically significant ($p < 0.05$) contribution to explaining voter turnout. More generally, period effects in the four post-communist states analysed are much stronger than in countries such as Sweden ([Persson et al., 2013](#)) or the United States ([Yang and Land, 2013](#); [Smets and Neundorf, 2014](#)).

Our analysis reveals that period effects are much stronger in the Czech Republic and Slovakia than in Poland and Hungary. The strength and direction of these period effects follows the development of turnout in each country. In the Czech Republic and Slovakia, turnout has declined from high levels in early 1990s to around 60 per cent in several recent elections, whereas in latter two ones, the turnout jumps around the average level since first

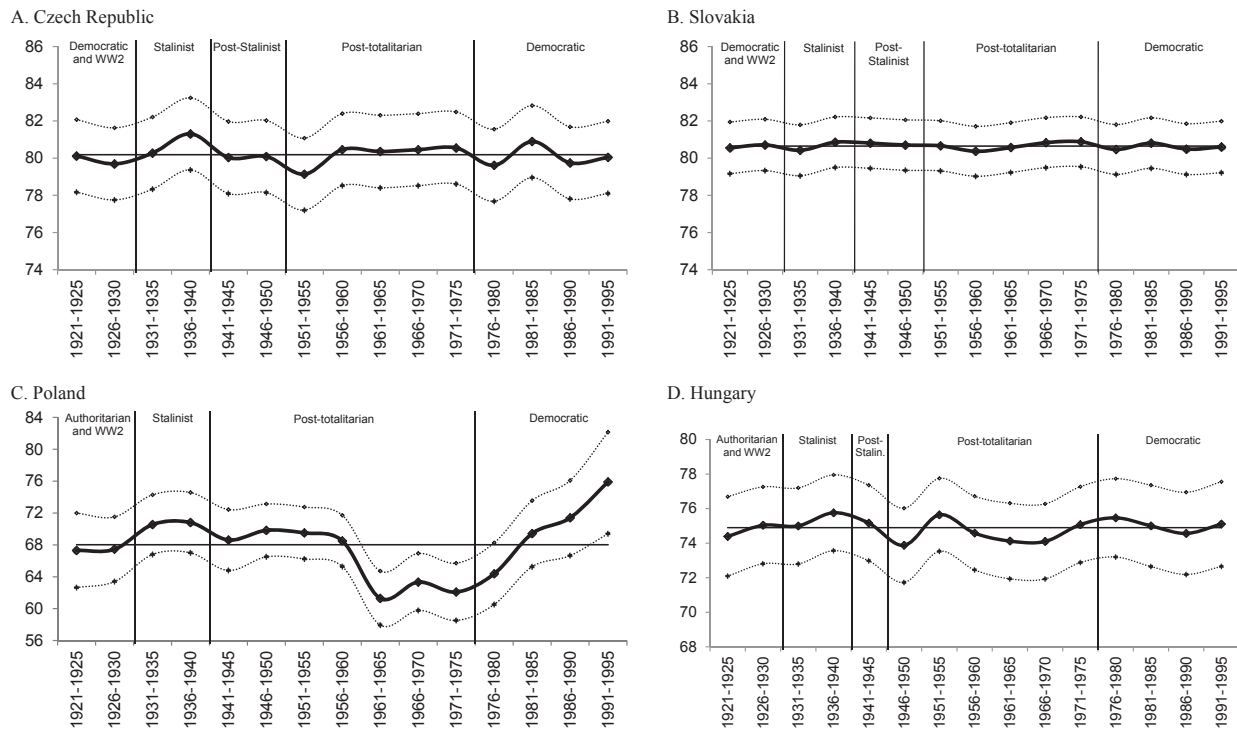


Fig. 2. a–d. Estimated cohort effects and 95-percent confidence intervals for voter turnout model. Notes: The horizontal axis represents cohorts based on years of birth. The bold line represents predicted probabilities of voting for all 15 birth cohorts. These cohort effects are averaged across all democratic elections for each individual cohort in a given country. The thin line parallel to the horizontal axis stands for the model intercept (i.e. the probability of voting for males of average age across all elections in a country). Except for Poland, the transformed model intercepts lie exclusively within the bounds of the 95% confidence intervals for each cohort effect which suggests no significant cohort effects. The vertical lines group birth cohorts into different generations. Source: Post-election surveys (see [appendix](#)); based on the models in [Table 2a–d](#).

elections after transition (see [Fig. 1](#)). A closer inspection of period effects suggests that after controlling for the effect of age and cohorts, period effects in the Czech Republic and Slovakia follow an almost linear pattern of turnout decline, whereas in Poland and Hungary they go up and down reflecting various short-term factors. Thus, there are two different patterns of turnout development in the analysed countries.

4. Discussion and conclusion

The primary goal of this study has been to analyse generational effects on voter turnout in four post-communist countries between the years 1990 and 2013. More specifically, we wanted to find out if socialization under different political regimes and various stages of communist regimes influenced electoral participation in democratic elections after regime change. In this study, we have taken into account how people's voting habits might have been shaped by the specific nature of elections under communism that were characterised by mandatory participation and non-competitiveness. Our research has also been motivated by the idea that turnout among the younger generations is less than older generations because of parallel processes of value change both in advanced democracies and post-communist countries.

Our analyses have focused on four post-communist countries that exhibit two types of the turnout trends in the region: (a) stagnation evident in Poland and Hungary) and (b) decline present in the Czech Republic and Slovakia. Moreover, these four countries had different experiences under communism and have different institutional settings concerning the electoral system and the structure of parliament. Thus, even though analyses presented in this study do not cover the whole post-communist region, we

believe that this limitation doesn't threaten the generalizability of the conclusions on the post-communist region. This is because the four countries analysed exhibit a wide range of variation in turnout post-1989.

Our analyses have demonstrated different strengths in generational effects on turnout across the four post-communist countries studied. These effects are most pronounced in Poland, weak in the Czech Republic and Hungary, and practically non-existent in Slovakia. The total effect of generations varied between countries, suggesting that it would be difficult to identify supporting evidence for any of the theories examined in this paper. Moreover, we were unable to find any systematic evidence to support any of the hypotheses tested. Socialization in the communist regime has not resulted in lower or higher turnout when compared to socialization in democratic regimes. Moreover, the generations socialized under different stages or types of communism exhibit various levels of turnout where it is difficult to find any systematic pattern.

We find partial support for the argument that individuals socialized in the Stalinist era are more likely to vote than those socialized in subsequent stages of the communist regime. This is especially true in Poland. In the Czech Republic and Hungary, the generation of Stalinism is also more likely to vote, while subsequent generations exhibit lower, but varying levels of turnout. These results lend limited support to the theory of political demobilization in later stages of the communist regime. [Pop-Eleches and Tucker \(2013\)](#) found similar effects of these later stages in terms of civic participation and membership in community organizations. Since the patterns of the relationship between turnout and cohorts were far from linear, we found little support for the expectations of habitual voting theory which suggests that compulsory voting in a communist regime should increase one's likelihood to vote. These

findings are in contrast with existing evidence of habitual voting in Poland (Czesnik et al., 2013).

Besides the focus on generational effects on turnout in post-communist countries, this article also makes a number of other contributions to the academic literature on post-communist politics and the study of electoral participation more generally. The absence of evidence for a uniform pattern of generational effects in the Czech Republic, Slovakia, Hungary, and Poland suggests that experience with communism has not had an impact on turnout in post-communist countries. However, strong generational effects found in Poland suggest that further research should explain why there are generational effects on turnout in Poland, but not elsewhere. More specifically, the analyses presented in this study reveal that the generation of Poles born between 1961 and 1975 (and socialized in late 1970s and in the 1980s) are much less likely to vote in post-communist elections than all other generations in Poland. This specific generation's mean expected turnout is approximately 6 percentage points lower than the average for all Poles. This pattern did not occur in any other country analysed. It is highly probable that the lower turnout among this generation can be explained by the specifics of Polish history. In the 1980s, Poles were confronted with martial law, but also with the success of the Solidarity trade union and boycotts of communist era elections (see footnote 3). It remains to be determined in future work if these appeals influenced turnout via negative attitudes toward elections or had a lasting impact via the learned habit of non-participation. In any case, such a study would make an important contribution to knowledge of the role of historic events on voter turnout.

Moreover, generational effects on turnout in post-communist countries have a different direction and strength than those we can observe in established democracies. In post-communist countries, there are little or no generational effects. And if there are any (as in Poland), the youngest generation turns out in higher numbers than the rest of population. Therefore, generation change does not make an important contribution to decline in voter turnout in post-communist countries. In established democracies, generational effects on turnout are strong where younger generations participate less and generational change is considered to be one of the primary causes of turnout decline (Bhatti and Hansen, 2012a; Blais et al., 2004; Blais and Rubenson, 2013; Franklin, 2004; Wass, 2007). For example, generation change is estimated to be responsible for 5 of the total 8 percentage points decline in Canada (Blais et al., 2004), and for 3 out of the 5 percentage point fall in turnout in European Parliament elections (Bhatti and Hansen, 2012a). The patterns seen in the post-communist Europe are different and warn us against quick generalizations about the sources of turnout decline in current democracies.

Similar turnout levels of young and old generations in post-communist countries opens up important question about what makes post-communist young generations different from those in Western democracies. Or alternatively, the source of this similarity may come from demobilized older generations which participate in elections less than their western counterparts. However, comparison of the age gaps between young and old age groups for both western and post-communist countries (Wattenberg, 2007: 97–108; see also Smets, 2012: 414–417) reveals that this is not the case. Patterns of age gaps in post-communist countries resemble those of average western European country: stable or slowly growing (the ratio between young and elderly 1.1:1 or 1.2:1; at the levels of the Netherlands, Germany, or Sweden). More generally, this suggests that future research should focus on the differences between young generations in post-communist and western European countries.

In addition, age and period effects observed in the Czech

Republic, Slovakia, Hungary, and Poland seem to correspond with those found in established democracies. The association between age and turnout has been curvilinear since the first democratic elections in 1989/1990. Thus, there is no support for the argument that older voters have trouble in accommodating to new ways of doing politics. Additionally, period effects are the main source of the turnout change in post-communist countries. However, there is almost no literature that explains the sources of those period effects and turnout decline in post-communist countries. It seems that economic hardship is not the cause (Pacek et al., 2009). Future research should explore if the sources of period effects are country-specific or have a general cause, and if the period effects on turnout observed stem from negative evaluations of parties and corruption or something else.

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Appendix 1. Data sources

The data used in this article were collected from several national sources. The minimum age of the target population was lower than 18 years in some surveys. The sample sizes reported in this appendix represent only eligible voters, i.e. respondents at least 18 years old at the time of election.

Czech Republic

1992 – Omnibus monthly survey of public opinion (n = 805).

This survey was conducted by the Institute for Public Opinion Research of the Czech Statistical Office (IVVM) in June 1992 using quota sampling.

1996 – Comparative Study of Electoral Systems Module 1 Survey (n = 1229). This post-election survey was conducted by the Centre for Empirical Research (STEM) in June 1996 using two-stage sampling (primary stage: random stratified sampling; secondary stage: quota sampling).

1998 – Omnibus monthly survey of public opinion (n = 2035). This survey was conducted by the Institute for Public Opinion Research of the Czech Statistical Office (IVVM) in July 1998 using quota sampling.

2002 – Czech Election Study 2002 (CSES Module 2; n = 944).

This post-election survey was conducted by the Public Opinion Research Center (CVVM) in June–July 2002 using quota sampling.

2006 – Czech Election Study 2006 (CSES Module 3; n = 2002).

This post-election survey was conducted by the Public Opinion Research Center (CVVM) in June 2006 using quota sampling.

2010 – Czech Election Study 2010 (CSES Module 3; n = 1857).

This post-election survey was conducted by the Public Opinion Research Center (CVVM) in May–June 2010 using quota sampling.

2013 – Czech Election Study 2013 (n = 1653). This post-election survey was conducted by the Public Opinion Research Center (CVVM) in October–November 2013 using quota sampling.

Hungary

1990 – International Social Survey Programme - Role of government II (n = 977). This survey was conducted by the Social Research Informatics Center (TARKI) in May 1990 using two-stage random sample.

1994 – Hungarian Post-Election Study 1994 (n = 2096). This post-election survey was conducted by Median Opinion & Market Research in May 1994 (between the two election rounds) using non-random sample of respondents from three pre-election surveys.

1998 – Comparative Study of Electoral Systems Module 1

Survey (n = 1525). This post-election survey was conducted by Median Opinion & Market Research in May 1998 (between the two election rounds) using two-stage sampling (primary stage: random stratified sampling; secondary stage: random sampling).

2002 – Comparative Study of Electoral Systems Module 2 Survey (n = 1200). This post-election survey was conducted by Median Opinion & Market Research in April 2002 (between the two election rounds) using two-stage sampling (primary stage: random stratified sampling; secondary stage: random sampling).

2006 – Comparative National Election Project III – Hungary 2006 (n = 1033). This post-election survey was conducted in April–May 2006.

2010 – European Social Survey 5 – Hungary 2010 (n = 1516). This survey was conducted by Hungarian Gallup Institute in October–December 2010 using stratified two-stage random sampling. Poland

1991 – Polish General Social Survey 1992 (n = 1637). This survey was conducted by the Department of Scientific Research of the Polish Sociological Association in April–May 1992 using multi-stage random sampling.

1993 – Polish General Social Survey 1994 (n = 1598). This survey was conducted by the Center of Field Research (ORBS) at the Institute of Philosophy and Sociology in May 1994 using multi-stage random sampling.

1997 – Polish National Election Study 1997 (CSES Module 1; n = 2003). This post-election survey was conducted by the Public Opinion Research Center (CBOS) in September–October 1997 using multi-stage random sampling.

2001 – Polish National Election Study 2001 (CSES Module 2; n = 1794). This post-election survey was conducted by the Public Opinion Research Center (CBOS) in September–October 2001 using multi-stage random sampling.

2005 – Polish National Election Study 2005 (CSES Module 3; n = 2402). This post-election survey was conducted by the Public Opinion Research Center (CBOS) in September–October 2005. The sample consists of two parts. The bigger part (2000 respondents) was selected using stratified random sampling. The other part (402 respondents) was selected using quota sampling.

2007 – Polish National Election Study 2007 (CSES Module 3; n = 1817). This post-election survey was conducted by the Partner in Business Strategies (PBS) in November 2007 using multi-stage stratified random sampling.

2011 – Polish National Election Study 2011 (n = 1903). This post-election survey was conducted by the Public Opinion Research Center (CBOS) in October–November 2011.

Slovakia

1992 – Omnibus monthly survey of public opinion (n = 396). This survey was conducted by the Institute for Public Opinion Research of the Czech Statistical Office (IVVM) with collaboration of the Slovak Statistical Office in June 1992 using quota sampling.

1998 – Current Problems of Slovakia (n = 1759). This survey was conducted by the Focus agency in January 1999 using quota sampling.

2002 – International Social Survey Programme - Family and changing gender roles III (n = 1133). This survey was conducted by the Institute for Public Opinion Research at the Statistical Office of Slovak Republic in September–October 2002 using quota sampling.

2006 – Post-election survey (n = 1002). This survey was conducted by the Focus agency (for the Institute for Public Affairs) in July 2006.

2010 – Comparative Study of Electoral Systems Module 3 Survey (n = 1203). This post-election survey was conducted by TNS SK in June–July 2010 using multi-stage stratified random sample.

2012 – Omnibus survey of public opinion (n = 989). This survey was conducted by the Focus agency (for the Institute for Public Affairs and the Institute for Sociology of the Slovak Academy of Sciences) in June 2012 using quota sampling.

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