Democracy in Transition: A Micro perspective on System Change in Post-Socialist Societies

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This paper examines how the system change following the collapse of socialism affected the political outlook of citizens by comparing the satisfaction with democracy among several generations of Eastern Europeans. I investigate whether people who were mainly influenced by a socialist upbringing have problems with adjusting to the circumstances of democratic regimes or, alternatively, whether the consolidation of democracy is driven by economic considerations. Using pooled cross-sectional data covering the period from 1990 to 2003, this study employs generalized additive models, which allow the separation of generational differences. The paper obtains strong support for the socialist socialization hypothesis, but also finds evidence that Eastern Europeans' assessment of the economic situation reduces the impact of generational differences on democratic support. This research provides important insights into the micro mechanisms underlying system change from authoritarian regimes to democracy.

Studies of system change from authoritarian to democratic regimes are generally interested in the immediate events, such as coups or social movements, leading to such a transition. However, the period that immediately follows these events seems even more crucial as democratic systems per se are established then. This phase of democratic consolidation represents a significant change for citizens living in former authoritarian countries in terms of their political and social circumstances. During that period, adjustments to this new situation and related to that the acceptance of democratic values by the mass public are essential. Against this background, researchers tried to identify the mechanisms of the successful installation of a democratic political culture in newly transformed political systems, but largely focused on macro-level influences only. In order to address this shortcoming, this study seeks to apply three approaches to the issue of democratic consolidation at the micro level—the socialization, the “modernization” or economic based, and the life-long learning model—which are put to a rigorous empirical test using longitudinal data and an innovative method. The postsocialist societies in central Eastern Europe serve as an example for the successful implementation of democracy here.

Some scholars have argued that strong long-term generational differences will persist in the transition from authoritarianism to democracy as a result of socialization (for former socialist countries, see, e.g., Gibson, Duch, and Tedin 1992; Powers and Cox 1997; Rose and Carnaghan 1995). Among others, Finkel and his colleagues argue for East Germany that “the 45-year socialization process that took place under the East German communist regime successfully instilled a set of values in the populace, emphasizing social and economic equality over unfettered political and market freedom, that is fundamentally incompatible with the liberal democratic arrangements currently in place in the Federal Republic” (2001, 340). Consequently, studies relying on this approach usually conclude that a generational replacement is necessary to establish democratic attitudes among a former socialist mass public (Dalton 1994; Finkel, Humphries, and Opp 2001; Klingemann, Fuchs, and Zielonka 2006; Minkenberg 1993).

In contrast, based on modernization theory, other researchers on democratization assume the emergence and growth of a democratic political culture in former authoritarian societies to be mainly influenced by successfully implementing a market economy. This approach emphasizes the short-term effects arising from the more effective system performance of democratic regimes (Burkhart and Lewis-Beck 1994; Ekman and Linde 2005; Lipset 1959; Miller, Hesli, and Reisinger 1994; Przeworski and Limongi 1997).

Alternatively, it also seems plausible that the establishment of democracy is influenced by both
processes. Put differently, this third approach is based on a life-long learning model, arguing that generational differences are updated by short-term effects, such as the performance of the new regime (Mishler and Rose 2007; Rose and McAllister 1990; Rose, Mishler, and Haerpfer 1998). In order to assess whether long-term political socialization, short-term economic evaluation, or an interaction of the two drive the establishment of a democratic culture in former authoritarian societies, such as those in central Eastern Europe, it is crucial to use an adequate temporal frame. Most previous studies lack a longer time perspective and instead rely on cross-sectional data from the early 1990s. In order to test the socialization hypothesis properly it is necessary to study the democratic attitudes of young Eastern Europeans who were not politically socialized in a world conditioned by the conflict between capitalism and socialism. Fortunately, two decades after the downfall of state socialism it is possible to include this generation in empirical models, but the questions remain: do younger generations view democracy more positively than those that were influenced by Cold War rhetoric? Or is it the case that, after 20 years since the decay of communism, the only force that matters is the economy?

In light of this, this study explores public satisfaction with the democratic system in ten post-socialist countries between 1990 and 2003 by further separating age, cohort, and period (ACP)\(^1\) effects among Eastern European citizens in the context of the end of the Cold War and the establishment of democracy as well as market economies thereafter. Together with standard descriptive statistics and logistic regression, generalized additive models (GAMs) are employed attempting to distinguish ACP effects. A GAM essentially is a semiparametric regression method that is able to model nonlinear cohort effects in attitudes towards democratic system change (Beck and Jackman 1998; Hastie and Tibshirani 1986, 1990; Keele 2008).

\(^1\)An online appendix for this article is available at http://journals.cambridge.org/JOP containing supplemental analyses and notes on variable coding and question wording. All data sets are available online at http://zacat.gesis.org/webview/index.jsp. The final merged data including original and recoded variables used in this article is available at www.anneundorf.net/home/Publications. The R package mgcv was used to estimate the Generalized Additive Models. The terms “cohort” and “generation” are often used interchangeably. A cohort describes a group of people that share the same birth years. Usually cohorts are divided in equal time periods of 10 to 15 years. Generations, on the other hand, are rather characterized by some common historical event. The distinction between several generations is therefore not as strict as in the case of cohorts. For the purpose of my research, I am primarily interested in generations that were and/or are influenced by the events of the Cold War.

The Development of Democratic Support in Transitioning Societies

New democracies are not yet as effective as long-established states in delivering the positive aspects of democracies (Gerring et al. 2005). However, so far studies of the democratization process have largely focused on structure and action-related approaches. The former include topics such as the modernization of society, group, and social class division, religious composition, or colonial heritage (see Hearpfer et al. 2009 for an overview). The latter approach focuses on describing and explaining, how democracy was accomplished and consolidated (see, for example, Pridham and Vanhanen (1994) on Eastern Europe). As a result, institutional factors such as the establishment of democratic parties (Diamond and Gunther 2001; O’Donnell, Schmitter, and Whitehead 1986), free elections, and political institutions (Birch 2003; Moser 2001) appear to play an important role in the transition from authoritarian to democratic regimes.

One of the strongest and most consistent factors in the research on the emergence and survival of democracy is the role of the economy (cf. Burkhart and Lewis-Beck 1994; Lipset 1959). Przeworski and Limongi (1997), for example, argue that once democratization has occurred, the democratic regime can only survive in countries above a certain level of economic development. But how does economic wealth and prosperity affect this lasting democratization process? Studies of the link between democratic regimes and economic development usually rely on macro data. Despite their methodological sophistication and important insights for the understanding of the process of democratization, these studies generally overlook an important factor for the introduction and especially the establishment of democracy: mass support of a democratic political culture.

The support of the mass public, most crucially, determines whether a political system is accepted as legitimate or not, which has a major impact on a regime’s propensity to survive (Almond and Verba 1963). However, contrary to established democracies, citizens in these new democracies are influenced by an authoritarian socialization, which might have formed their understanding of politics and even democracy as an ideal. Nevertheless, the issue of socialization of a part (and often a majority) of the populace into an authoritarian regime before the transition to democracy, is largely ignored in the literature (one notable exception is a recent study by Mishler and Rose 2007).
Against this background, the following section provides an overview of democratic consolidation in Eastern Europe by identifying the role of political socialization in democratization. Moreover, the economic performance and the third life-long learning model are also considered.

The Role of Political Socialization on Democratic Consolidation

In contrast to established democracies, other mechanisms are at work in newly transformed authoritarian societies for promoting the acceptance of the new political system. One important difference is the role of political socialization. Citizens in established political systems learn unconsciously to support and accept the system, as they are socialized into it throughout their lives. Early in their adulthood they develop political ideas and attitudes that are supportive and consistent with the system and usually grow up with the belief that democracy is the only possible regime for their country (Mishler and Rose 1996). These attitudes remain in turn as a basis of system support in succeeding life passages (Easton 1965).

Taking political socialization as an important factor influencing system support, the downfall of socialism constitutes an intriguing case. The majority of citizens living in Eastern European countries were socialized into a political system thought to be the only one possible for their country. Nevertheless, political tumult between 1989 and 1991 changed the political and economic systems rapidly and extensively. This situation offers the unique possibility to test the effect of system change on prior political beliefs established by political socialization.

The transformation from one system to another is of course not a new topic in political research. However, the democratic transition in Eastern Europe and elsewhere after the collapse of state socialism differs from, for example, the democratization of fascist regimes after the end of World War II. “Rather than the outright rejection of democratic norms that occurred under fascist regimes, (…) East Europeans were socialized into an ambiguous—almost schizophrenic—mix of democratic and authoritarian values” (Dalton 1994, 474). Therefore it is not surprising that former socialist countries called themselves “democratic” (e.g., the German Democratic Republic) having at least a “rhetorical commitment to democracy” (Dalton 1994, 473).

We can thus expect citizens of former socialist countries to be familiar with the concept of democracy to some extent (cf. Gibson, Duch, and Tedin 1992; Whitefield and Evans 2001). Nevertheless, their understanding of democracy is likely to differ significantly from Western democratic principles—such as majority rule, minority rights, individual liberties, multi-party systems, or representative governments (Dalton 1994; Minkenberg 1993)—in ways which could lead to cognitive dissonance when they are asked to evaluate the current democratic system. We could postulate, for example, that “democratic principles” learned early in life under a socialist regime might not match how democracy actually works today.

Adaptation to new circumstances and in particular Western democratic principles should be easier for those who were not influenced by the socialist regimes, in particular today’s youth. This argument is based on the well-established finding by political socialization research that the impact of historical events is greatest when these events occur in adolescence and young adulthood, as the young adapt much more easily to dramatic changes in society than older generations (Jennings 1989; Jennings and Niemi 1981; Mannheim 1952; Sears and Valentino 1997). Assuming the end of the Cold War to be such an important political event, I argue that younger citizens in East Europe perceive democracy much more positively than older people. Younger people were not influenced by any kind of Cold War rhetoric and, hence, are more likely to share the democratic principles of Western democracies. Evaluating the current political system should be easier for them as their understanding of democracy is consistent with the existing political reality.

Based on the same argument, Powers and Cox (1997, 620) find evidence that the surviving presocialist generation, e.g., people who were socialized before the establishment of communism in the late 1940s, are also more likely to have a positive view of democracy. Most central Eastern European countries had democratic movements before World War II (Berglund, Ekman, and Aarebrot 2004). Based upon political socialization theory this implies that those citizens that were socialized before the introduction of communism should have a more positive attitude to democracy. This consequently suggests a nonlinear relationship between democratic support and birth cohorts.

Summarizing these arguments, Eastern Europeans who were politically socialized under the communist regime are expected to face difficulties adjusting to the new democratic system. This holds true despite any economic influences. On the other hand, the young generation that—if at all—has only childhood memories of the socialist era, should be particularly positive towards the new democratic system. I therefore
formulated the research hypothesis derived from the socialist socialization model as follows:

**H1:** Despite the economic evaluation, the generation socialized during the Cold War period evaluates the democratic system more negatively than the pre- and post-Cold War generations.

The important argument here is the emphasis on early life or formative experiences. This hypothesis would be falsified if more recent and contemporary experiences that ask “what has society done for me lately?” dominate the picture (Mishler and Rose 1997, 434). The next section discusses the implication of this model on the consolidation of democracy in Eastern Europe.

### Generational Differences and Economic Performance

As indicated above, an alternative stream in the literature claims that generational differences observed in previous empirical studies are solely based on a winner-loser argument. This appears plausible, since a major problem after the introduction of the market economy was low productivity induced by overemployment in planned economies, which led to a changing labor market with fewer jobs available (Orazem and Vodopivec 1995). Younger generations are better equipped to adjust to this changing economic environment than older citizens, who are firmly settled in their profession and social networks. Ekman and Linde therefore argue that “it is likely that losers are more readily found among the older respondents—faced today with poorly developed welfare arrangements and institutions—than among the younger respondents, who following the collapse of communism have gained new opportunities, and objectively could be classified as winners of the transition” (2005, 363). According to this view, the observed differences in system support are driven by performance based evaluations of the new system (cf. Miller, Hesli, and Reisinger 1994).

Adherents of this approach emphasize the constant updating of evaluations of the current political institutions in the light of its performance. In other words, adult experiences are more important than adolescent socialization. Furthermore these generational differences should diminish over time as they are “overwhelmed by the common lesson of contemporary experiences” (Mishler and Rose 2007, 823; cf. Demartini 1985; North 1990).

The importance of the economic situation on political attitudes was previously stressed in research on political behavior in the United States and Western Europe (Clarke, Dutt, and Kornberg 1993; Lewis-Beck 1988). In the same fashion, citizens in post-Communist societies emerge to evaluate the new democratic system “more like bankers than like peasants” (Mishler and Rose 1997, 434). In the case of Eastern Europe then, it seems crucial for the successful consolidation of democracy that citizens feel that they benefit from the transition (Ekman and Linde 2005). Based on these arguments, we can derive the second hypothesis based upon the performance based model:

**H2:** Independent of generational socialization, the more positive the evaluation of the economic situation, the higher citizens’ support for democratic systems.

The socialist socialization and the performance model emphasize different mechanisms and time-perspectives. A third possible mechanism of democratic consolidation is a combined effect of these two. Therefore, the life-long learning model is discussed in the subsequent section.

### Neither . . . Nor—The Life-Long Learning Model of Democratic Transition

The socialization and the performance models are both based on experience. While the former emphasizes early life experiences, the latter focuses on adult events. The life-long learning model integrates the two into one framework. The main argument of this model is that “political lessons are variously reinforced, revised, or replaced over time by later life experiences” (Mishler and Rose 2007, 823; cf. Mishler and Rose 1996; Rose and Carnaghan 1995; Rose and McAllister 1990; Rose, Mishler, and Haerpfer 1998). In contrast to the socialization model, this approach acknowledges the importance of late-life experiences. Furthermore, unlike the performance model, it also recognizes the relevance of early life experiences, which form the basis for later evaluations.

In the case of Eastern Europe, socialist socialization is assumed to have a negative effect on democratic support (**H1**), while economic evaluation has a positive impact (**H2**). Taking these both into account, one can expect that the negative generational differences persist, but will be positively updated based on optimistic economic evaluations. According to the life-long learning model:

**H3:** The better the evaluation of the contemporary economic situation, the smaller are generational differences in the level of democratic support.
The difficulty of analyzing the effect of the communist era on citizens’ political support and testing the three research hypotheses stems from problems of distinguishing between life-cycle or aging and generation effects, as well as the influence of important events or period effects. In order to separate the expected generation or cohort effect based on the socialist socialization model (H1) and its possible interaction with the evaluation of the economy (H3), the next section provides a brief overview of the empirical models used to distinguish between age, cohort, and period effects.

Methods and Data to Distinguish Life-Cycle, Cohort, and Period Effects

Glenn concludes from his research that “the definitive separation of age, cohort, and period effects is not just difficult, but impossible” (2005, vii). Numerous attempts have been made to overcome this problem. The methodological approach presented below provides significant advantages over alternative estimators. The focus of this paper is on cohort effects, while at the same time controlling for life-cycle and period effects. We usually determine a cohort or generation according to the time people were born. Measuring period effects typically implies that every year is considered to be a separate period. Usually, scholars assume that the birth cohort of an individual \( (C_t) \), at a given period \( t \) \( (P_t) \), and age at time \( t \) \( (A_{i,t}) \) are related as follows (Glenn 2005):

\[
C_t = P_t - A_{i,t} \quad [1]
\]

To illustrate this with an example, a person born in the 1970 age cohort \( (C_t) \) was only 20 years \( (A_{90}) \) old in 1990 \( (P_{90}) \) when Communism ended, but by 2003 \( (P_{03}) \) she was already 33 years old \( (A_{03}) \). In order to conclude that somebody has a specific set of attitudes because she was influenced by the nature of times when she came of age (generation effect), we have to compare the attitudes of the 1970 cohort at different ages and time points. When contrasting individuals who were 20 years old in 1990 with those who were 20 in 2003, for example, we start to distinguish between life-cycle and generational effects. The ages are the same but the cohorts are different. Only with this comparison is it possible to conclude that the 1970 cohort has a specific attitude towards democracy that is not just the product of their age.

Starting from equation (1), the three effects cannot be identified by survey data at one point in time, since one phenomenon would completely be determined by the remaining two. We are only able to overcome this identification problem by some form of constraint and the use of longitudinal data (Glenn 2005; Scappini 2006). By pooling several surveys taken at different points in time, we can observe the changes, which occur within specific generations over time and compare these to the differences between life-cycle stages.

The data used in the empirical analysis below was obtained by pooling three different data sources. First, the Central and East Eurobarometer series 1 to 8 (CEEB), covering the time period from 1990 to 1997. In addition, the second wave of the study “Consolidation of Democracy in Central and Eastern Europe 1998–2001” (CDCEE) was used. Finally, the Candidate Countries Eurobarometer 2002.2 and 2003.4 (CEEB) were included. Consequently, the final data comprises respondents from different birth cohorts across different ages at 14 different points in time from 1990 to 2003.

In order to estimate generational differences, two empirical models are employed: first, a common categorical approach to measure cohort effects and, second, a more recent approach of nonparametrical modeling (Tilley 2002). The former method requires the division of birth cohorts into distinct subgroups. Conventionally cohorts are grouped into people born within 10 or 15 years of each other. Some have argued that measuring cohort effects using political generations, which were shaped by the same influential events, provides a better alternative (Klecka 1971; Mishler and Rose 2007; Rose and Carnaghan 1995; Tilley 2002).

The division into generations, rather than grouping respondents that share the same birth years, is based on the time of coming of age. Political socialization research suggests that adolescents in the age of

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2The question wording on satisfaction with democracy was slightly different than in the later data sets. It was asked, how satisfied people are with democratic development. It is sensible to use this question for Eastern European countries, as they did not yet have established democracy. As the theoretical focus of this research is on the question how citizens evaluate the democratic political system, one can assume that this question wording is measuring system support in general. The study further used a split sample in 1997, asking half of the respondents about the development of democracy and the other half the original question of the standard Eurobarometer. The questions were merged together (cf. Linde and Ekman 2003).
about 14 or 15 start recognizing the political world (Jennings and Niemi 1981; Mishler and Rose 2007). Hence, taking 1945 as the beginning of socialism in central Eastern Europe and 1990 as its last year, we simply have to calculate backwards in order to separate distinct political generations. Birth cohorts are accordingly divided into those generations that were politically socialized mainly before (born 1930 and before), during (born between 1931 and 1974) and after the Cold War (born 1975 and later). The problem of this crude categorization is of course that the exact year of transitioning between generations is unclear.

A more precise distinction between political generations is difficult, given the comparative approach of this study. For example, the Prague Spring in 1968 marked an important political event during the Cold War. Nevertheless, this event was much less significant within the socialist societies of Poland, Romania, or the former Soviet republics in the Baltic area than in Czechoslovakia per se. As the focus here lies on the shared experience of socialism, we only assume three main generations, while abstracting national differences within the comparative framework. Still, some national variations in the cohort effect of socialist socialization are presented in an online Appendix G.

Further, the use of a second method—Generalized Additive Modeling—allows analyzing the cohort effect without the restriction of predefined groups. This approach measures cohort effects of socialist socialization by modeling the birth year nonparametrically. By doing so, we avoid the presumptive postulation of fixed generations. The two approaches are contrasted in the empirical section below.

**Empirical Analysis**

Before the results of the empirical analysis are presented, the case selection and the conceptualization of the dependent variable “political support” are briefly discussed below. The end of the Cold War marked an event that affected citizens in all former socialist countries in Eastern Europe and central Asia. It is not intended to investigate the socialist socialization effect in each country separately, but rather to establish how citizens in postsocialist societies in general evaluate the performance of democracy. As the research focus is on democratic support, the study only includes those postsocialist countries that are rated clearly as democratic. The Freedom House Index 2003 (the last year of the analysis) characterizes only 10 East European countries as free and democratic.\(^3\) With the assimilation of eight former socialist countries in 2004 and another two in 2007 into the European Union (EU),\(^4\) these 10 central Eastern European countries were further established as stable democracies and market economies. The aim of this paper is to investigate the development of political support until this historical important event, covering the time between 1990 and 2003.

Political support is one of the key factors in the development of a democratic political culture (cf. Almond and Verba 1963; Easton 1965; Norris 1999). The aim is to measure the extent to which citizens support a newly installed democratic system that is conceptualized by using the satisfaction with the way democracy works. It is reasonable to assume that the expression of satisfaction is a suitable indicator of progress in democratic consolidation and the construction of a civil society, as it evaluates the performance of the political system (Hoffbert and Klingemann 2001: 366; cf. Rose, Mishler, and Haerpfer 1998; Norris 1999).

“Satisfaction with democracy” is generally described as an indicator of support for the way the democratic regime works in practice, not as an indicator for democracy in principle (Canache, Mondak, and Seligson 2001), since this item measures the “support for the performance of the regime, which has to do with what the regime delivers to its citizens and how the government of the day is capable of dealing with important issues” (Linde and Ekman 2003, 396). Asking citizens about the “satisfaction with democracy” is therefore less abstract than the usual question of support for “democracy as the best way of government.” On the other hand, it is also less biased than the support for the current government, which is influenced by partisan feelings and other political attitudes as well (Clarke, Dutt, and Kornberg 1993; Norris 1999).

In the data sets used, respondents were asked how satisfied they are with the way democracy works in their country. They were offered four answer categories, ranging from 1 “very satisfied” to 4 “not at all satisfied.” For the multivariate analysis, this categorical variable was transformed into a dichotomous item (people satisfied with democracy = 1;

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3The countries considered in the analysis are: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia, which are all rated 1 on political rights and 1 or 2 on civil rights, indicating the status “free” according to Freedom House. Other post-communist countries in Eastern Europe and central Asia are rated as only “partly free” or even “not free” and are therefore excluded from the analysis.

4In May 2004, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia joined the EU. Bulgaria and Romania were granted accession in January 2007.
people dissatisfied with democracy = 0). Previous studies have sought to distinguish between citizens having a positive view of the democratic performance and those who are more critical. Thus the primary focus is not on distinguishing whether people are “very” or “fairly satisfied” with democracy.5

**Results**

Before presenting the results of a multivariate analysis it is interesting to look at the cohort effects descriptively. The aim is to establish whether younger cohorts are indeed more positive towards democracy, hence showing higher levels of satisfaction with the new democratic system.

Table 1 presents the proportion of those satisfied with the way democracy works based on evaluations of their own and the national economic situation6

>Table 1 Percentage Satisfied with Democracy (1990–2003)

<table>
<thead>
<tr>
<th></th>
<th>Pre-Cold War Generation</th>
<th>Cold War Generation</th>
<th>Post-Cold War Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Economic Evaluation</td>
<td>19.80</td>
<td>18.61</td>
<td>25.55</td>
</tr>
<tr>
<td>Positive Economic Evaluation</td>
<td>48.64</td>
<td>43.09</td>
<td>49.51</td>
</tr>
<tr>
<td>Overall</td>
<td>33.35</td>
<td>31.61</td>
<td>43.31</td>
</tr>
</tbody>
</table>

5Sample divided on the median value of 1.75 in those evaluating the economic situation as negative respectively positive; 6Pre-Cold War Generation: born 1930 and before; Cold War generation: born between 1931 and 1974; Post-Cold War generation: born 1975 and later.

Across all time periods. Citizens are divided into the three different generations, introduced above. Although the analytical scope of Table 1 is certainly limited, we see that the post-Cold War generation is generally more positive towards the political system than the other two older generations. One out of two respondents of the post-Cold War generation who positively evaluate the economic situation, also has an optimistic view about the way democracy works. As argued in the economic performance model, this generation is assumed to have benefited the most from the system change, which would explain their overall positive assessment of the economic situation. The differences in evaluation of democracy between each generation based on the same economic evaluation are rather small. The main cleavage seems to be based on the assessment of the economy. The difference in the level of satisfaction with democracy between economic optimists and pessimists is nearly 30% for the pre-Cold War generation and about 24% for the post-Cold War generation.

In the light of these results, one could conclude that the evaluation of the economic situation seems to affect democratic support much more strongly than do generational differences. However, the problem of these descriptive analyses is that they are incapable of controlling for other covariates, particularly age and period effects. Furthermore, it is plausible that the “satisfaction with democracy” indicator is influenced by country-level effects (Canache, Mondak, and Seligson 2001; Wells and Kriekhaus 2006).

In order to test the three research hypotheses by further correctly accounting for important control mechanisms and contextual effects, the next step is to estimate a logistic regression model to predict the probability of being satisfied with the way democracy works. The models presented in Table 2, regress the post- and pre-Cold War generation on the satisfaction with democracy (reference
Further and most importantly, these models control for the age of respondents and the year the survey was conducted. The advantage of measuring the period effect by including year-dummies is twofold. First, we do not need to assume a linear relationship between time and democratic support (a linear increase of satisfaction with democracy over time). Second, as several data sets were pooled together, the inclusion of year dummies accounts for survey specific effects. The inclusion of country fixed effects has the same purpose. In order to isolate the socialization effect it is necessary to control for other covariates that might affect the evaluation of the current democratic regime. Hence, the regression models include years of schooling, a measure of political sophistication, as well as gender, unemployment, and town size to account for economic deprivation.  

### Table 2 Logistic Regression and GAM on Satisfaction with Democracy (1990–2003)

<table>
<thead>
<tr>
<th>Birth Cohorts</th>
<th>Logits</th>
<th>OR</th>
<th>Logits</th>
<th>OR</th>
<th>Logits</th>
<th>OR</th>
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<tbody>
<tr>
<td>Post-CW (1975 and later)</td>
<td>.369*** (.031)</td>
<td>1.447</td>
<td>.291*** (.034)</td>
<td>1.34</td>
<td>.981*** (.099)</td>
<td>2.67</td>
</tr>
<tr>
<td>Pre-CW (before 1930)</td>
<td>.320*** (.033)</td>
<td>1.377</td>
<td>.154*** (.035)</td>
<td>1.17</td>
<td>-.088 (.090)</td>
<td>0.92</td>
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<tr>
<td>Economic Evaluation</td>
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<td></td>
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<tr>
<td></td>
<td>1.147*** (.015)</td>
<td>3.15</td>
<td>1.172*** (.017)</td>
<td>3.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction Effects</td>
<td>Post-CW * Econ Eval</td>
<td></td>
<td>-.320*** (.044)</td>
<td>0.73</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Pre-CW * Econ Eval</td>
<td></td>
<td>.134** (.047)</td>
<td>1.14</td>
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<tr>
<td>Control Variables</td>
<td>Age</td>
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<td>-.008*** (.001)</td>
<td>0.992</td>
<td>.001 (.001)</td>
<td>1.00</td>
<td>.001 (.001)</td>
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<td></td>
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<tr>
<td></td>
<td>Years of Education</td>
<td></td>
<td>.017*** (.003)</td>
<td>1.01</td>
<td>.005† (.003)</td>
<td>1.01</td>
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<tr>
<td></td>
<td>Women</td>
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<td></td>
<td>-.155*** (.016)</td>
<td>0.856</td>
<td>-.123*** (.017)</td>
<td>0.88</td>
<td>-.124*** (.017)</td>
<td>0.88</td>
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<tr>
<td></td>
<td>Unemployed</td>
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<tr>
<td></td>
<td>-.266*** (.027)</td>
<td>0.776</td>
<td>-.120*** (.030)</td>
<td>0.89</td>
<td>-.124*** (.030)</td>
<td>0.88</td>
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<tr>
<td></td>
<td>Town Size</td>
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<tr>
<td></td>
<td>Rural Community</td>
<td></td>
<td>-.026 (.020)</td>
<td>0.978</td>
<td>.010 (.022)</td>
<td>1.01</td>
</tr>
<tr>
<td></td>
<td>City / Capital</td>
<td></td>
<td>-.075*** (.020)</td>
<td>0.928</td>
<td>-.071** (.022)</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>Country Dummies*</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Intercept</td>
<td></td>
<td>-.16**</td>
<td>-2.65***</td>
<td>-2.70***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of Observations</td>
<td>75,192</td>
<td>69,994</td>
<td>69,994</td>
<td></td>
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<tr>
<td></td>
<td>Proportional Reduction in Error</td>
<td>.009</td>
<td>.012</td>
<td>.015</td>
<td>.036</td>
<td>.017</td>
</tr>
<tr>
<td></td>
<td>McFadden’s R²</td>
<td></td>
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<tr>
<td></td>
<td>AIC (df)</td>
<td>92,335</td>
<td>79,268</td>
<td>79,204</td>
<td>79,204</td>
<td>79,204</td>
</tr>
</tbody>
</table>

(Significance: † p ≤ 0.1; * p ≤ 0.05; ** p ≤ 0.01; *** p ≤ 0.001)

Note: Entries for logistic regression are logit estimates, corresponding robust standard errors (in parentheses) and odds ratios (OR).

*Birth cohorts: Reference category are those born between 1930 and 1974. 
†Year dummies: Reference category is 2003. 
Town Size: Reference Category are small and mid-sized town with more than 2000 and up to 50,000 inhabitants. 
Country dummies: reference category is Czech Republic. 

It would be preferable to include other control variables, which are, however, not available. Still, some additional analyses, presented in online Appendix D, using the data of the study “Consolidation of Democracy in Central and Eastern Europe” (1998–2001) including (1) a variable on the support for the current government, as well as whether a respondent believes (2) that corruption became worse under the current government, and (3) that the economic situation improved. Concerning the main interest of my study, the cohort effect, as well as the interaction effect between the post-Cold War generation and the economic evaluation remain highly significant, even after controlling for government satisfaction. In sum, as these supplementary analyses confirm the overall findings of the paper, it is believed that the results would hold in the overall model if it would be possible to include more covariates. Also note that the results presented below are not sensitive to any covariates used in the empirical models. Step-wise exclusion did not alter the main effects pertaining to generational differences and economic evaluation.
Model 1 represents the socialist socialization model by only including the ACP effects and the control variables. Model 2 further considers the economic evaluation index. If the performance based model is correct this should diminish the cohort effect as democratic support is solely driven by economic considerations. Model 3, finally, also incorporates an interaction term between political generations and economic evaluations. Note that in particular Model 3 tests the life-long learning model.

Turning first to the socialist socialization hypothesis ($H1$), Model 1 confirms the findings of the descriptive statistics. The logistic regression on satisfaction with democracy clearly illustrates that the post-Cold War generation is significantly more inclined to be satisfied with the way democracy works in their country, even after controlling for important covariates including age and time. Based on odds-ratios, people born 1975 and later are about 1.5 times more likely than the generation socialized mainly during the Cold War to positively evaluate the performance of the current democratic regime. Citizens socialized before the introduction of socialism also appear to have a higher propensity to be content with the political system. The categorization of the cohort effect in Model 1 demonstrates the expected non-linear cohort effect, which supports the socialist socialization hypothesis ($H1$). However, the fit of the model is fairly poor. There is basically no proportional reduction in error between a null model, and the model containing ACP effects. Although the cohort effect is highly significant, overall this seems to only provide a marginal contribution to explaining satisfaction with democracy.

As a next step, Model 2 therefore includes the economic evaluation index. A likelihood ratio test indicates that the explanatory power of Model 2 is significantly higher than Model 1, testing only the socialist socialization hypothesis ($p < .001$). This model further confirms a strong positive effect of the economic evaluation index on democratic satisfaction. According to the performance model ($H2$) the nature of the times a respondent grew up should not matter. However, it does since the curvilinear cohort effect remains highly significant.

In order to test the observed relation between cohort effects and economic evaluations further, Model 3 includes an interaction effect of the two variables to examine their joint effect on democratic satisfaction. The main effect of the post-Cold War generation remains significant. The interaction with economic evaluation, however, has a suppressive effect on the dependent variable. Figure 1 illustrates this relationship clearly, as it plots the marginal effects of the post-Cold War generation (compared to the Cold War generation) on democratic satisfaction depending on their economic evaluations. If respondents assess their own and the national economic situation rather negatively, we find strong generational differences between the post-Cold War and the Cold War generation. The better the evaluation of economic conditions, the smaller the inter-generational distinction. This effect is illustrated by the negative slope of the interaction effect. The 95% confidence intervals further exemplify that the difference between the two generations is insignificant for high economic satisfaction respondents.

Summarizing the findings of the multivariate logistic regression, it is apparent that the economic situation is an important factor influencing citizens’ satisfaction with democracy. Nevertheless, generational differences seem to persist. The interaction effect, illustrated in Figure 1, clearly demonstrates that socialization (into different political generations) and the economic performance of the new political system have a joint effect on the level of democratic satisfaction.

Nonetheless, the problem up to this point is the relatively arbitrary distinction between political generations. Even if cut-off birth years, which group respondents in different political generations, are
derived from political socialization theory, they are still only assumptions. In reality the transitions between pre-, post- and Cold War generations are seamless. In order to model the cohort effect more accurately, generalized additive models (GAMs) are applied to account for the expected nonlinearity between birth cohorts and a positive evaluation of the democratic regime. GAMs allow the modeling of unique effects for each birth cohort, which permits the main independent variable to be estimated nonparametrically. The advantage of this method over normal descriptive graphs of the variables in question is the inclusion of control variables. These are added in a linear, parametric way, as done in multivariate logistic regression presented in Table 2. The form of such a mixed GAM is defined by (Beck and Jackman 1998; Hastie and Tibshirani 1986, 1990):

\[ \gamma_i = \alpha + \sum_{j=1}^{k} S_j(x_{ij}) + \sum_{l=1}^{m} \beta_l(Z_{i,l}) + \varepsilon_i \quad [3] \]

where \( \gamma_i \) is the value of the dependent variable (e.g., democratic satisfaction) for respondent \( i \), \( \alpha \) represents the intercept, \( k \) stands for the number of independent variables \( x \) (e.g., birth year) that are modeled nonparametrically by a smoothing function \( S_j(\cdot) \). The second part of the equation signifies the standard linear regression with \( m \) as the numbers of independent variables or covariates \( Z \) that are weighted with some parameter \( \beta_l \), while \( \varepsilon_i \) represents the stochastic disturbance, which is independent from \( x_j, E(\varepsilon_i) = 0 \), and \( \operatorname{var}(\varepsilon_i) = \sigma^2 \), and \( i = 1, \ldots, n \).

The important part of this statistical model is the inclusion of the smoothing function \( S_j(x_{ij}) \) for every value of \( x_{ij} \). "Smoothing is an important tool for nonparametric regression, addressing one of the simplest yet most fundamental questions in data analysis: "what is our best guess of \( \gamma \), given \( x ?"\)" (Beck and Jackman 1998, 602).\(^8\) The expected nonlinear cohort effect (measured using birth year) is estimated by a smooth functions and an interaction term between birth year and economic evaluation. It is further possible to control for important covariates, such as those previously included in Table 2 (find the estimates that are comparable to linear estimation parameters in the online Appendix F). Below I replicate Model 2 and Model 3. The only exception is that the cohort effect is modeled continuously rather than assuming predefined generations. Unlike in the models presented above, it is necessary to categorize the age variable, as using age and birth year simultaneously in the same model induces severe multicollinearity.

One major difference to conventional linear or nonlinear models, such as ordinary regression methods is the lack of numerical display. GAM uses graphical methods to interpret the nonparametric component \( S_j(\cdot) \). Using these, it is possible to reveal the nature of any estimated nonlinearity in the relationship between—as in this study—socialization processes captured by the birth year and the dependent variable “satisfaction with democracy,” holding constant the other covariates in the model. Standard errors and confidence regions are calculated and plotted, providing a guide as to whether the fitted function is distinguishable from a linear fit, or increasing or decreasing in \( x_j \) (Beck and Jackman 1998; Hastie and Tibshirani 1986, 1990).

Figure 2 illustrates such a smooth function of the nonlinear cohort effect on democratic satisfaction controlling for other covariates, such as age and period effects, as well as the other control variables included in the logistic regression models presented in Table 2. Complementary to Model 2 above, I include the performance of the economy to test whether the cohort effect remains significant. As Figure 2 clearly shows, the predicted non-linear relationship between birth cohorts and a positive approval of democracy is strong. The propensity to be satisfied with the new democratic political system is negative for those born between the late 1930s and early 1970s. These birth cohorts were highly influenced by the socialist regimes between 1945 and 1990. On the other hand, those born later than 1970 have a sharply increasing probability of positively evaluating the performance of democracy. It is hence possible to distinguish a “post-Cold War generation,” even without any prior assumptions about generational categories.

In this model, the effect of the economy remains highly significant (\( \beta = 1.142 \), see online Appendix F). This finding suggests that neither socialist socialization (\( H1 \)) nor economic performance (\( H2 \)) as such adequately predict satisfaction with democracy. If the former is correct economic performance should not matter, but it still does. On the other hand, if the latter is correct, we should not observe the strong cohort effect present in Figure 2. This confirms the finding of the multivariate logistic regression in Table 2. Building on this allows us to test the interaction between the generations and their economic evaluations using a nonparametric approach to further investigate the lifelong learning model (\( H3 \)).

\(^8\)Please refer to the online Appendix E to see more on the GAM estimation procedures.
Figure 3, replicating Model 3, accordingly illustrates the interaction effect of birth cohorts and the evaluation of the economic situation by plotting the predicted probabilities of being satisfied with the way democracy works. The surface of this interaction graph confirms the predicted socialist socialization effect, as the curvilinear cohort effect exemplifies. Furthermore, the more positive respondents assess the economy, the higher their approval of the democratic regime. Most interesting, however, is the upper part of the interaction surface. The curvilinear cohort effect seems to "flatten out," as citizens become more and more positive about the economic situation. This finding again confirms the strong joint effect of generations and economic evaluations.

**Discussion and Conclusions**

The collapse of socialism constitutes a remarkable event in the history of Europe and represents an intriguing case for studying the underlying mechanisms of democratic transitions. The aim of this research was to explore how the political, economic, and social changes affect the outlook of citizens of former socialist regimes. As a result, this paper ties in with research that was mainly conducted at the beginning of the 1990s, yet only covered a comparably short duration after the end of communism. Several studies confirmed the existence of "socialist socialization" for those people that were mainly influenced by the Cold War rhetoric of the socialist regimes. Other researchers rejected the lasting effect of generational differences in the consolidation of democracy and rather emphasize the importance of a successful economic transition for the development of a democratic political culture in the former socialist societies. My aim was therefore to shed light on this debate by testing these two rival hypotheses and their possible interaction, utilizing a longer time period than most previous research across several democracies in central Eastern Europe.

The empirical models presented here clearly uncover a lasting cohort effect after the democratic transition in the 1990s even if we control for the assessment of the national and private economic situation. Economic evaluation consistently has a strong effect on democratic satisfaction as well. Both mechanisms appear influential for the development of democratic support in the new democratic systems in central Eastern Europe. The main finding of this research is that socialist socialization does not matter
very much if the economic situation is good, since the Cold War generation evaluates democracy largely the same way as other generations. However, it is possible that a severe and prolonged slump engendered by the current economic crisis could reignite these divisions, as that generation could in principle recall the comparatively strong economic security of the socialist era.

My results confirm traditional modernization theory. The better off people are, the more supportive they are of the political system. Lipset already argued that “the more well-to-do a nation, the greater the chances that it will sustain democracy” (1959, 75). Voters that are economically well off are likely to be satisfied with their personal living, which they seem to further tribute to the overall system as well. This relationship is well-documented. However, my study illustrates that adding socialization processes in a new democracy to the discussion of “modernization” strengthens such arguments. We can take the socialization in authoritarian regimes as a suppressing factor in the development of a democratic political culture. However, prospering economies diminish this negative “shadow of the past.”

From a more general perspective then, political socialization is an important factor in the process of democratic consolidation and should not be underestimated. Citizens in newly established democracies do not “unconsciously” learn about their political system and the way democracy works. Instead, they have to “actively learn” about it. It seems that the most persuasive argument for accepting the new democratic system is a flourishing economy. If people are well off, they seem to be less inclined to turn back to their old system. Hence, taking these results to other countries in transition to democracy than former socialist societies, it seems important to acknowledge that some remnant of the authoritarian regime will persist in the mass public well beyond the political changeover. Nevertheless, this point could be challenged as the length of the regime might affect the strength and even the existence of a lasting cohort effect. The socialist system lasted for a long period. Future research should hence investigate and compare the socialization effect in other transitioning societies except those in postsocialist countries in central Eastern Europe.

References


I am indebted to Tobias Böhmelt, Jan van Deth, and his chair members, Bernhard Miller, Martin Elff, Kaat Smets, Daniel Stegmueller, and in particular Paul Whiteley for useful comments on earlier drafts. This article was partly written during a visit at the Mannheim Centre of European Social Research and would have not been possible without the financial support of the Friedrich-Ebert Foundation.

Manuscript submitted 2 June 2009
Manuscript accepted for publication 11 February 2010

The prospering of the economy is likewise supported by the introduction of democratic institutions, such as the rule-of-law or effective property rights (cf. Bueno de Mesquita and Root 2000; Przeworski and Limongi 1993).


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