Does Where You Live Affect How You Vote?  
An Analysis of Migrant Voting Behavior

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Abstract
Migrants’ political attitudes are often different from those of their compatriots at home. We utilize a unique dataset on votes cast by Czech and Polish migrants in national elections in their home countries to examine three alternative explanations of migrant voting behavior: political re-socialization, economic self-selection and political self-selection. The results indicate that the political preferences of migrants change significantly in the wake of migration as migrants adapt to the norms and attitudes prevailing in the host country. There is little evidence that migrants’ political attitudes are due to self-selection with regard to either their pre-migration political attitudes or economic characteristics.

Keywords: Voting, elections, migration, political resocialization, transition.
JEL Codes: J61, P26, P33, Z13.

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1. Introduction

The act of migrating may have a profound impact on the individual. Migrants often acquire new marketable skills (including, *inter alii*, formal education, work experience and typically foreign-language skills), accumulate physical capital and build up social capital in the form of informal networks, friends and professional relationships. The human, physical and social capital acquired in the foreign country may foster the migrant’s career progression or help her become self-employed (either in the home country or the destination country). Migrants may also find a spouse and bring up their children in the foreign country, especially if they remain there for an extended period or permanently. These aspects of the migration experience have been extensively analyzed in the economics literature. In this paper, we consider yet another impact of migration on the migrant: on their political attitudes and opinions.

Migrants often encounter political, social and cultural norms and attitudes that are very different from, or even in outright conflict with, those prevailing in their home countries. Examples of such differences include democracy, market economy, religious tolerance and secularism and gender equality. This exposure may, in turn, affect the migrants’ norms and attitudes. One possibility is that migrants adopt the norms and attitudes prevailing in the destination country. Conversely, they may reject them and instead become more deeply convinced about the merits of their home-country norms and attitudes. Examples of both afore-mentioned types of outcomes abound. Henry Kissinger, Zbigniew Brzezinski, Madeleine Albright and Arnold Schwarzenegger all reached high-ranking and influential government positions or elected office in the US, despite being immigrants. Recently,
however, immigrant communities are increasingly being criticized for integrating insufficiently and reluctantly (see Huntington, 2004, for a critical assessment of the Hispanic immigrants in the US). Furthermore, the recent bomb attacks in Madrid and London and the riots in Paris (and elsewhere in France) all involved immigrants who were brought up (or even born in) their respective host countries yet who felt acutely alienated from mainstream society.

Clearly, the response of migrants to the political, institutional and social environment in the host country is important. In this paper, we approach this question using data on voting behavior of Czech and Polish migrants who participated in their home countries’ elections. The data used in this paper are therefore akin to a natural experiment: we observe votes cast by migrants from the same country of origin who, at the time of the election in their home country, live in different host countries. By relating the migrants’ voting behavior to the economic, political and institutional characteristics of the destination countries, we can make inferences about the nature of interactions between these characteristics and voters’ political opinions.3 Other studies on the political resocialization of migrants (see below), typically rely on observing migrants’ political attitudes or voting behavior in the host country. More importantly, those studies normally only involve immigrants who earned the right to vote in the host country though naturalization and therefore have shown to be sufficiently integrated into the host country’s society (and often, their integration and loyalty would have been explicitly tested as a precondition for naturalization). In contrast, we analyze voters who have retained their home-country nationality so that they are still able to vote in their home country’s elections. We see this as a distinct advantage of our approach. The range of migrants included in the analysis is wider: some of them may
indeed stay in the host country permanently, but many will not. Importantly, all have become exposed to the norms and attitudes prevailing in the host country (although for varying lengths of time) and this exposure may have left a mark on their own political attitudes.

In most countries, Czechs and Poles are far from being among the most prominent migrant communities. Therefore, whether they successfully integrate into the host-country population or not may be seen as largely irrelevant. This, however, may soon change, at least in Europe. In the wake of the latest EU enlargement in 2004, the old member countries have experienced a large influx of labor migrants from the new member states. The nationals of the new member countries account for 0.4% of the working-age population in the old member countries; their share is especially high in Greece and the UK (0.4% or working age population in both countries), Germany (0.7%), Austria (0.7%) and Ireland (2%). As more countries lift their transitional restrictions on mobility of labor, the share of post-communist countries’ nationals in Western Europe is bound to grow further. The post-communist countries, even though that have recently become EU members, are still undergoing important political and economic changes. The migrants’ political, social and cultural norms and attitudes are correspondingly different from those prevailing in the host countries. Many of the new member states’ migrants are going to settle in Western Europe permanently and their successful integration therefore will be of considerable importance.

The impact of Czech and Polish overseas voters on political developments at home is relatively small: the migrants accounted only for 0.08% and 0.20% of the total number of votes, respectively. With the ongoing and accelerating emigration from these two countries, especially in the wake of their accession to the EU, the role of the migrant voters is bound
to increase. Moreover, the Czech Republic and Poland are not the only countries that allow overseas voting; we chose these two countries primarily because the data on votes from abroad are reported separately from those cast at home. In countries with large diaspora communities, such as Croatia or Italy, the overseas voters can potentially be pivotal for the election result.\textsuperscript{5} Last but not least, returning migrants often play an important role in facilitating political and economic changes in their ancestral countries.\textsuperscript{6}

Our analysis is based on the 2002 Chamber of Deputies elections in the Czech Republic and the 2001 \textit{Sejm} election in Poland (2001).\textsuperscript{7} The votes from abroad differ dramatically from the votes cast at home and they also vary substantially across the destination countries.\textsuperscript{8} In both the Czech Republic and Poland, the election resulted in victories for left-wing parties. Czechs and Poles living abroad, however, overwhelmingly voted for right-wing (and in the case of Poland also religious-conservative) parties. Moreover, this disparity is mainly due to votes cast by migrants in Western Europe, North America and Australia. The voting preferences of Czech and Polish migrants in the former communist countries, the Middle East and North Africa, Latin America and to a lesser extent Asia do not differ overtly from those of the home-country electorates.

This paper considers three possible explanations for these differences. First, migrants may be subject to a selection bias (either due to self-selection or because of the destination countries’ immigration policies) whereby the determinants of which country they migrate to are correlated with their economic characteristics. Second, the choice of destination country may similarly reflect the migrants’ political preferences. Finally, migrants’ political attitudes and preferences may be shaped by the institutional, political and economic environment and the cultural norms and attitudes prevailing in the host country. To assess
the relative importance of these three explanations, the shares of votes cast by migrant voters for each domestic political party are related to variables reflecting the host countries’ level of economic development, recent economic performance, political institutions (such as the level of political and economic freedom and the nature of the political system in place) and social characteristics.9

Besides contributing to our understanding of political integration of migrants, our paper sheds light also on one of the fundamental questions in the voting literature and political science in general: ‘How do voters formulate their political opinions and attitudes?’ The political socialization literature disagrees as to whether one’s political preferences are determined in young age by family environment and upbringing or whether they are continuously shaped and updated by changes in one’s socio-economic characteristics and/or the social, political and institutional environment. Empirical analyses of voting behavior, particularly in established democracies, take the external environment as given and stable over time. One could in principle gain valuable insights on the importance of environmental factors by analyzing changes in political attitudes in countries undergoing radical political and economic transformations (such as the Central and East European countries). Even in such instances, however, all voters are exposed to the same process of change. This paper follows a different approach: we investigate the impact of changes in the external environment on political attitudes by analyzing the voting behavior of migrants in their home-country elections.

The following section compares the voting behavior of Czechs and Poles who voted at home and abroad and describes the data used in the analysis. Section 3 outlines the main theoretical explanations of voting behavior and political socialization, and relates them to
theories of migration. Section 4 describes the methodology employed, and Section 5 presents the results of the analysis. The final section then summarizes the main findings.

2. Voting behavior of Czech and Polish migrants

The present-day Czech and Polish emigrant communities are the product of multiple emigration waves. The nature of migration and the underlying motives varied considerably from wave to wave. Both Czechs and Poles participated in the large-scale emigration from Europe during the 19th century although they joined in only at a relatively late stage (during the late 1880’s and early 1890’s). This migration wave laid the foundations for the large Polish diaspora communities in the United States (particularly in the Chicago area), France and elsewhere. The Czech migration flow was much smaller and more dispersed geographically – although it too succeeded in establishing local diaspora communities in some areas of the United States (most notably in Ohio and Pennsylvania). These migrants were mainly unskilled and uneducated economic emigrants. Another large migration wave came with the German occupation of the two countries in the course of the Second World War. In the wake of its occupation by Germany and the Soviet Union, Poland succeeded in evacuating large parts of its Army to the UK, where they participated in the Battle of Britain and subsequently in the invasion and liberation of Europe. After the war, most Polish refugees and members of its armed forces chose to remain in the UK or in the other Western European countries that they helped to liberate, rather than return to Poland which by then was clearly sliding under the domination by the Soviet Union. Czech war-time emigration was more modest, and many of those refugees returned after the war along with
the government in exile (which was also located in London during the war). The communist takeovers (which in took place in 1947 in Poland and in 1948 in Czechoslovakia) led to another major outflow of political refugees, which although diminished, continued throughout the communist period. The last major wave of Czech migration came with the Soviet occupation in 1968 and the subsequent repression.\textsuperscript{11} Poland experienced a similar outflow of political refugees during the early 1980s in the wake of the crushing of the Solidarity movement and the proclamation of the state of emergency in 1981. During the 1980s, the worsening economic conditions in Poland precipitated an increase in emigration motivated primarily by economic considerations. After the end of the communist regime, the lifting of travel restrictions allowed further economic migration from both countries.

The motives for emigrating thus changed considerably over time. Migrants from the earlier waves are less likely to appear in our data, as many have died or relinquished the nationality of their home country. This is particularly the case for the Czech Republic which does not permit dual nationality. The majority of the Czech voters from abroad are therefore likely to be migrants who left their country in the late part of the communist period or after the regime’s end. As Polish law allows dual nationality, the Polish data may also include some of the earlier migrants or their descendants.

Our analysis is concerned with electoral participation of Czech and Polish migrants in the parliamentary elections in June 2002 and September 2001, respectively. A unique feature of the Czech and Polish electoral statistics is that overseas votes are reported separately for each country where voting took place.\textsuperscript{12} Overall, 3,742 Czechs and 26,211 Poles cast their votes in 85 and 90 different countries, respectively. In order to be allowed
to vote, the migrants had to meet a number of formal requirements. Both countries require advance registration and allow only voting in person. Hence, voting by postal ballot or by proxy is not possible. Those who permanently live abroad must register with the embassy or consulate in the country of their permanent residence. Those with permanent residence in the home country, on the other hand, can vote when abroad upon presenting a voter’s card issued by the municipal council in their district of permanent residence. The Czech Republic only allows voting at embassies and consulates. Poland, in contrast, also established a number of polling stations in Polish clubs and émigré associations in countries with large migrant populations (for instance, there were eight polling stations in Chicago and four in New York City) and also within a few large overseas installations of Polish firms (including, for example, the Polish permanent research station in Antarctica).

The country with the largest number of Czech voters is Slovakia with 374 votes (not surprisingly given the common history) followed by the US (285), France (260), Italy (200) and Germany (196). The Polish migrant community is more geographically concentrated, with more than one-quarter of votes arriving from the US (7,061 votes), followed by Germany (2,872), Canada (1,641) and France (1,406). Quite surprisingly, relatively few votes were received from other former socialist countries. Russia, for example, only accounts for 96 Czech and 606 Polish votes.

The number of Czech and Polish migrants who participated in their home countries’ national elections is by no means large. The OECD (2004) SOPEMI report provides information on the stock of migrants from the main origin countries living in the various members of the OECD. While the numbers of Czech migrants are typically too small to warrant a separate entry, the information on the number of Polish migrants is available for
several countries. Comparing these numbers with the number of migrant voters, the fraction of migrants who voted ranges from 0.9% in Germany to 9% in Belgium and 13% in Hungary. Clearly, there is a trade-off between the size of the country and migrants’ electoral participation: many Polish migrants in Germany live far from the nearest embassy or consulate and therefore the cost of voting is too high (besides the embassy in Berlin, Poland allowed voting also at consulates in Cologne, Hamburg, Leipzig, Munich and Stuttgart). While this implies that migrant voters are not a representative sample of the whole migrant population, as long as the decision to participate reflects the distance from the nearest embassy or consulate rather than political preferences, the non-random nature of the data should not bias the results.

The number of migrants participating in the 2001 Polish national election also appears relatively low when compared with other Polish elections for which data on voting from abroad are available: the 2000 presidential election saw the participation of over 57 thousand Polish migrants (0.32% of the total number of votes), and the 2003 referendum on Polish membership in the EU registered nearly 80 thousand votes from abroad, (0.45% of the total).15

Table 1 shows the percentages of votes received by the five main political parties in the Czech Republic from both home voters and from voters living abroad. The most striking difference between the two sets of results is in the support for the Communist Party of Bohemia and Moravia (KSCM), which received 18.55% of the vote in the Czech Republic but only 2.75% from Czech citizens abroad. There is, however, considerable variation across the various destination countries. The communists fared relatively well in the countries of the former Soviet Union (FSU), where they polled 7.4%, closely followed by
6.9% in Central and East European countries and 3.2% in the Middle East and North Africa. In contrast, the communist party did poorly in Asia and North America, receiving only 0.5% of the vote in both regions. Another party for which support among migrant voters significantly deviates from its support at home is the Coalition (which was formed in 2000 as a pre-election coalition of the Christian Democratic Union-Czechoslovak People’s Party (KDU-CSL), Democratic Union (DEU), and Freedom Union (US)).\(^{16}\) While the Coalition only garnered 14.3% of the overall vote in the Czech Republic, it received an impressive 34% of the migrant votes, with support reaching a high of 54.2% in Australia and a low of 17.5% in the FSU countries. The Coalition did well also among voters in Western Europe (42.1%) and Northern America (47.2%).

TABLE 1 ABOUT HERE.

Overall, the results display a considerable disagreement between the Czech home electorate and Czech voters living abroad. If Czechs abroad had their say, the elected government would have been a coalition of right-wing parties rather than a government led by the Czech Social Democratic Party (CSSD) with the Coalition as their junior partner. Similarly, there is also considerable disagreement among migrant voters living in different countries. Czech citizens living in the former communist countries tend to favor left-wing parties, with support for the KSCM being highest in the former Soviet Union and support for the center-left CSSD being highest in Central and East European countries. In contrast, Czechs living in Western democracies tend to support more center-right parties such as the Civic Democratic Party (ODS) and the Coalition. Those residing in Asian and African countries also display higher levels of support for the ODS, while those in Central and
South American countries and North African and Middle Eastern countries tend to support the CSSD.

Table 2 similarly shows the percentage of votes received by the eight main Polish political parties from citizens living abroad, alongside the overall election results of the 2001 election to the Sejm (the lower chamber of the Parliament). The election brought about a dramatic change in the political make-up of the new parliament, with the two incumbent parties (Solidarity Electoral Action (AWSP) and Union of Freedom (UW)) even failing to pass the threshold (5% for parties and 8% for coalitions) required for representation in the parliament. The preferences of Poles living abroad again differ notably from the sentiments of their domestic counterparts, although perhaps not as dramatically as in the Czech case. The main divergences occur, on the one hand, with respect to the winner of the election, the Democratic Left Alliance-Labor Union (SLD-UP) and, on the other hand, in regards the various fringe parties.

TABLE 2 ABOUT HERE.

The 2001 Polish election resulted in a coalition of the Democratic Left Alliance-Labor Union (SLD-UP) and the Polish Peasants’ Party (PSL) although subsequently the PSL withdrew from the coalition, leaving the SLD-UP with a slim parliamentary majority. The SLD-UP\textsuperscript{17} received 41% of the overall vote but only 26% of the migrant votes. Had the migrant votes been the deciding factor, this coalition would not have been viable and a right-of-center government of Citizens’ Platform (PO), Law and Justice Party (PiS) and Freedom Union (UW), would have been more likely.\textsuperscript{18} These three parties received, respectively, 12.7%, 9.5% and 3.1% of the overall vote, compared with 15.9%, 19% and 10% of the migrant votes. The preferences of migrant voters also deviated considerably in
the case of two new radical parties. The *Self Defense of the Polish Republic* (SO), a radical farmers’ movement, fared poorly among Poles living abroad (1.4%) compared to its domestic support (10.2%). The *League of Polish Families* (LPR), a nationalist-Christian based far-right party, received 7.9% of the overall vote but garnered an impressive 17.8% of the vote from Polish migrants. The support for SLD-UP was highest among Poles living in North Africa and the Middle-East (48.9%), closely followed by the former Soviet Union (44.6%), Central and Eastern Europe (44.5%) and Asia (43.6%). In contrast, they derived least support in North America (14%).

3. Theories of voting, political socialization, and migration

The economic theory of voting builds on the seminal contribution of Downs (1957) who applied rational choice theory to voting behavior. Downs posited that individuals vote in order to maximize their expected utility, given the information available to them at the time of the election. A number of factors can enter the voters’ utility function (and these factors may enter with different weights across voters and/or across time). Nannestad and Paldam (1994) differentiate between the economic and political components of the voters’ utility function. The economic component stands for indicators of voters’ material well-being associated with voting for a particular party. Rational voters support parties expected to implement policies that are favorable to them and will increase their welfare. The political component corresponds to the utility which voters derive from ideology, religion, patriotic feelings and even racial, ethnic or linguistic identification. Naturally, all else being equal, a voter will support a party that stands for values similar to his own.
Given that migrant voters live outside the jurisdiction of their national government, economic considerations are likely to bear less on their voting behavior; concern for friends and family back home or the expectation of return to their home country notwithstanding.\textsuperscript{19} Therefore, political factors and altruistic motives are likely to play a more important role for migrant voters.

While political systems and institutions are generally very slow to change, the changes experienced by migrants are often dramatic. Therefore, by relating migrants’ votes to political and institutional variables in a large number of destination countries, we can infer how the external environment conditions the formation or transformation of a migrant’s political values, beliefs and voting behavior, a process known in the political-science literature as \textit{political re-socialization}.

The literature on the formation of political attitudes is vast; the two main conflicting theories are the Social Psychological model and the Rational Choice model. The social psychological theorists (Campbell \textit{et al.}, 1960) tend to emphasize parental influences\textsuperscript{20} and downplay the role of short-term factors, while the rational choice theorists (Downs 1957) stress the continuous incorporation of new information into the cumulative evaluations of various parties. \textit{Political re-socialization} can be defined more in terms of the rational choice hypothesis, whereby migrants incorporate information about the new political environment into their decision sets.

While several studies have analyzed the voting behavior of migrant communities in the national elections of the destination country, none to date have examined the impact of the new political, social and cultural environment on the voting behavior of migrants participating in elections in their country of origin. Examining voting behavior among those
who move across states in the US, Brown (1988) finds that if the new political environment differs from the old one, both voting behavior and party identification tend to become similar to those in the *new* state. However, research by Black *et al.* (1987) on the political adaptation of immigrants to Canada finds that the country of origin does not exert a strong influence on post-migration political adaptation. Finifter and Finifter (1989) find that both past party identification and political ideology influence the political adaptation of American emigrants in Australia.\(^{21}\) Finally, drawing on pre-election poll data for both native Israelis and immigrants from the former communist countries who live in Israel, Nannestad, Paldam and Rosholm (2003) examine the speed at which migrants’ opinions converge to those of native voters in evaluations of the economic competence of the government. They find very little difference between the two groups, suggesting that migrants quickly adopt the economic evaluation patterns of the natives.

A question of crucial importance for our study is whether migrant voters adopt the norms and attitudes prevailing in the host country or whether the very choice of destination country is in fact determined by the migrants’ original political attitudes. Clearly, correlation between institutional and political variables and voting behavior is not indicative of causality. Migrants are likely to differ from non-migrants in many aspects, as is evident from the fact that typically only a small fraction of a country’s population migrates. For instance, migrants may be more entrepreneurial and respond more readily to economic opportunities. However, to ascribe the variation in migrants’ voting behavior across countries to self-selection, a theory explaining why different countries should attract different types of migrants is needed.
The traditional migration theory emphasizes earnings differentials (see Todaro 1969, and Harris and Todaro 1970) and, as such, it can be applied to predict the size and direction of migration flows but not the migrants’ socio-economic characteristics or political attitudes. Borjas (1987 and 1991, building on Roy 1951), in contrast, argues that migration decisions also depend on the distribution of earnings in the alternative destinations. Accordingly, highly skilled and productive workers move to countries with widely dispersed earnings, as that is where their skills yield the highest return. In contrast, unskilled workers are more likely to choose destinations with relatively egalitarian distribution of earnings, as their low productivity is less penalized in those countries. In the context of our analysis, this implies that blue-collar and less productive white-collar workers would gain most from moving to highly egalitarian countries such as continental Western Europe or Scandinavia. Conversely, migrants choosing to move to countries with relatively unequal wage distribution, such as Russia or Brazil, should be predominantly highly skilled and entrepreneurial. Rich countries with high income inequality, such as the US, constitute an intermediate case: the higher average wages should attract low-skilled workers and the high skill premium should fuel high-skilled migration.

Political motivations may be another source of self-selection of migrants, and indeed many dissenters and political refugees left the Czech Republic and Poland during the communist period. Migrants who moved to communist countries at that time were in principle more likely to be left leaning (or at least relatively complacent about the regime prevailing in the Soviet Bloc countries), while the dissenters and refugees were likely to be right leaning. There seems little reason for political factors to weigh heavily in migration decisions after 1990, as political repressions ceased in both countries in the wake of the
collapse of the communist regime. Therefore, inasmuch as the pre-1990 emigrants remained abroad and retained their original nationality, one can expect more left-wing (and in particular pro-communist) voters in post-communist countries and more right-wing (and possibly also social democratic) voters in Western countries.

4. Methodology

The principal variable of interest in this analysis is the proportion of votes, $V_{ij}$, that party $j$ receives from voters living in country $i$. Therefore, the data display two specific properties: the individual observations lie between 0 and 1 and the proportion of votes received by all parties sum to one. The majority of voting studies to date use ordinary least squares (OLS). Yet, as argued by Jackson (2001) and Tomz et al. (2002), OLS is inappropriate for analyses of elections in multiparty systems as it does not satisfy either of the above-mentioned restrictions. In particular, OLS can result in predicted vote shares that are negative or exceed 1 (that is, 100%). To avoid this, we transformed the vote shares, $V_{ij}$, into the following logit form:

$$
\log \left( \frac{V_{ij}}{1-V_{ij}} \right)
$$

The resulting dependent variable is unbounded (that is, it can take values between $-\infty$ and $\infty$) but is not defined for vote shares of either 0 or 1. As there are several zero observations in the data, especially for the communist party, we added 0.001 to all vote shares before performing the logit transformation.

All regressions are estimated using the Seemingly Unrelated Regression (SUR) model. SUR is a special case of generalized least squares, which jointly estimates a set of
equations, one for each party, with cross-equation constraints to allow for the possibility that the residuals are correlated across parties. This takes account of the adding-up constraint inherent to electoral data: if one party has a large positive residual in one constituency (i.e. support for that party is high due to reasons not accounted for by the regression), the others will necessarily have small or negative residuals for that observation. Estimating a system of seemingly unrelated regressions yields more efficient estimates than estimating them separately, especially as the correlation among the errors rises and the correlation among the independent variables falls (Greene, 2000). SUR is also particularly efficient when the independent variables differ from one equation to the next. Overall SUR is more appropriate and no less efficient or convenient than estimating individual OLS equations for each party (Tomz et al. 2002).

The analysis is based on votes cast by Czech and Polish migrants in 85 and 90 countries, respectively. Countries in which less than 10 migrants voted were omitted from the analysis. This issue only arose in the case of Czech data where 19 countries were dropped. A number of countries were dropped also due to missing data on some of the explanatory variables used in the analysis (see below), so that the final sample sizes were 54 for the Czech Republic and 66 for Poland. Since the number of migrant voters in individual countries differs considerably, regressions were estimated using the number of votes cast in each country as analytic weights. This effectively assigns greater weight to countries with a relatively large number of votes, ensuring that the results are not crucially shaped by a few observations with a dozen or so votes. As the dependent variable in the analysis is the average of all votes cast by migrants in a particular country, without analytic
weights OLS would treat all observations as equally important, regardless of the number of votes.

As there are no preceding theories to prescribe which factors may influence migrant voting behavior, the analysis follows a somewhat agnostic approach: we relate migrant votes to a wide array of explanatory variables selected so as to account for the three alternative hypotheses of migrant voting behavior:

1. Political re-socialization: Migrants adapt to the norms and attitudes prevailing in the host country. According to this hypothesis, higher support for liberal and democratic parties and lower support for left-wing and especially former communist parties should be observed in countries with a greater extent and longer tradition of democracy and a market economy. Similarly, the voting preferences of migrants may be correlated with the prevailing political attitudes (captured by the political orientation of the government) and/or economic conditions in the host country.

2. Economic self-selection (Roy-Borjas model of migration): Highly skilled and educated individuals are more likely to migrate to countries with a high degree of income inequality. Given that highly skilled, educated and entrepreneurial individuals tend to support right-wing parties\textsuperscript{23}, income inequality should be positively correlated with support for right-wing parties and negatively correlated with support for left-wing and former communist parties.

3. Political self-selection: Migrants located in former socialist countries should display stronger support for left-wing, and especially former communist parties, than those in Western democracies, and vice versa for right-wing parties.
To test the *political re-socialization hypothesis*, we include a number of institutional, political and socio-economic indicators characterizing the host countries. These include, first, various measures of democracy: indexes of civil liberties and political freedom (compiled and reported by the Freedom House), and the fraction of years between 1972 and 2001 in which the country was classified by the Freedom House as free, partially free or not free. Second, measures of economic freedom (reported by the Fraser Institute) as captured by the following sub-indexes: size of government, legal structure and security of property rights, sound money, foreign trade liberalization, and regulation.\(^{24}\) Third, various measures of economic development, such as GDP per capita (as of 2000 in thousands of US dollars), the growth rate and inflation rate in 2000. Fourth, characteristics of the political environment as captured by an indicator of the political orientation of the government (left-wing, centrist/mixed, right-wing, autocratic or ethnically/religiously dominated) and the nature of the political system (strong or weak presidential or parliamentary).\(^{25}\) The Gini index of income inequality is included to account for the *skill-based economic self-selection hypothesis* in line with the Roy-Borjas model. Finally, the *political self-selection hypothesis* is accounted for by including a number of regional dummy variables in all the regressions.\(^{26}\)

Differentiating between the political self-selection and political resocialization hypotheses is not straightforward, as many former socialist countries have low levels of democracy and are still rather far from having attained a working market economy. There are, however, important differences among the former communist countries. Some, most notably the new EU member countries, have made great progress in political and economic liberalization since the end of communism, while others have either remained at an
intermediate level (e.g. Russia, Serbia and Montenegro or the countries in the Caucasus) or have reverted back to repressive and autocratic regimes (Belarus and the Central Asian Republics). Moreover, several developing countries (e.g. Iran, Democratic Republic of Congo or Egypt) have similar levels of democracy and/or economic freedom as the former communist countries without ever having had a communist past. During the communist period, when we expect most of the migration motivated by political self-selection to have occurred, it made little difference whether one migrated to Belarus or Russia, Serbia or Slovenia, Romania or Slovakia, Viet Nam or North Korea. By 2001/2002 however, such migrants will have found themselves in dramatically different political and economic environments. Similarly, while the democratic environments in, for example, Austria and Hungary or Slovenia and Italy were dramatically different before the fall of communism, presently these countries enjoy a similar degree of democracy (although they do not have the same tradition of democratic regime). The regional dummies should capture the similarities that various groups of countries share in terms of political legacies, whereas the indicators of democracy and economic freedom should account for the differences in their present-day conditions.

There is a non-negligible correlation between some variables (for example, developed countries tend to display relatively high degrees of both economic freedom and democracy). Therefore, the coefficient estimates may change substantially depending on what other variables are included in the model. In addition, given that we have only limited a priori expectations about which particular host country characteristics influence migrant voting behavior, we apply the general-to-specific procedure to determine which factors are robust. This procedure starts off by estimating a general unrestricted regression
specification, including all possible explanatory variables, which is then tested against more parsimonious models (nested within the general model), repeating the testing-down procedure until no further variables can be excluded. The result is a model that is less complex than the general model but nonetheless contains all the relevant information. Hoover and Perez (1999) show that in most cases (on average 80%), the general-to-specific procedure succeeds in identifying the true data-generating model or a closely related model (i.e. one that encompasses the true model but contains additional irrelevant variables that the procedure fails to eliminate). We implemented the procedure manually, repeating the step-wise testing-down procedure until the exclusion tests became significant at least at the 10% level (we choose this moderate threshold in view of the relatively small number of observations).  

A potential criticism of our analysis is that it is carried out using aggregate data (average vote shares) rather than individual-level survey data or actual individual votes. This could result ecological fallacy, that can arise when using aggregate data to make inferences about the individual determinants of individual behavior (see King, 1997). An example often analyzed in the literature is the electoral support for the Nazis in the 1930 and 1932 elections in Germany (see King, 2005, and O’Loughlin, 2000). Using regional distribution of various socio-economic groups to explain regional patterns of Nazi support in a regression analysis may yield incorrect insights about individual patterns of support. For example, a positive correlation between the Nazi vote and unemployment can either imply that the unemployed were more likely to vote for the Nazis or that other voters in high-unemployment areas were Nazi supporters (even if the unemployed themselves were not).
Ecological fallacy thus arises when important individual-level information is lost by aggregating the data. This, however, is not the case in our analysis. We study the relationship between the individual voting behavior of migrants and the aggregate institutional, political and economic environment in the destination country. The variables of interest therefore are necessarily measured at the aggregate level, regardless of whether we use them to explain aggregate or individual voting data. Since we do not investigate individual-level determinants of migrant voting behavior, no relevant information is lost by using aggregate rather than individual data. Having suitable individual survey data, nevertheless, would allow us to extend our analysis to account for past voting behavior (before migrating) and thus to discriminate better between self-selection and political re-socialization. However, given the very specific nature of our data (migrants from a single origin country residing in a multitude of destination countries and participating in the origin-country election), it would be virtually impossible to collect individual data that would be reliable and reasonably representative of the migrant-voters population.

5. Determinants of migrant votes

This section presents the results of the empirical analysis of migrant votes in two recent Czech and Polish parliamentary elections. As discussed in the preceding section, we start by estimating the most general unrestricted model, which is gradually slimmed down until all insignificant variables are dropped. The analysis is performed using two alternative indexes of democracy (both compiled by the Freedom House) that measure two different aspects of democracy: civil liberties (freedom of expression and association, religious and
educational freedom) and political rights (universal franchise, organization of free elections with participation open to all groups within society). The two indexes are very closely correlated (the correlation coefficient across the countries in our sample is 0.94). To avoid multicollinearity, we estimate two models for each country, one including the civil liberties index and one with the political rights index, rather than including both indexes in parallel as we do with the remaining variables.

The migrant votes are regressed on a number of host country institutional, political and economic characteristics, a measure of income inequality, and a number of regional dummies (with Western Europe being the omitted category), so as to control for the three alternative hypotheses of migrant voting behavior. In addition, two country specific dummies were included. First, the votes from Italy include also those from the Czech and Polish consulates in the Vatican, a large fraction of which was probably cast by clergymen and theology students. As their political attitudes may significantly differ from those of the rest of the electorate, especially with respect to support for Christian-Democratic parties, a dummy for Italy was included. Second, the US has a large number of Polish immigrants, who were often allowed to retain their Polish nationality after acquiring US citizenship.29 This potentially makes the American-Polish immigrant community different from Polish migrants in other countries, as many have lived in the US for many years, or may even have been born there, and probably keep much looser contacts with the ancestral country. Furthermore, as members of a relatively large and geographically concentrated community, American Poles are more likely to retain their own unique identity (which may be different from that in present-day Poland) than migrants living in other countries where they are less numerous and more dispersed. Therefore a US dummy is included in the Polish regressions.
Although the Czech migrant population in the US appears neither particularly large nor geographically concentrated, for the sake of comparability we included the US dummy also in the Czech regressions.

Tables 3 and 4 present the final results for those explanatory variables that survived the elimination by the general-to-specific procedure. We analyze the votes cast for five Czech and seven Polish political parties. The results for each party are reported in separate tables labeled A-E in the Czech regressions and A-G in the Polish regressions. Applying the general-to-specific methodology greatly reduces the number of explanatory variables. The system of equations estimated with Czech migrant votes started off with 130 explanatory variables (i.e. five parties with 26 explanatory variables included for each party), from which 78 and 74 have been eliminated as they are not statistically significant in the regression with civil liberties and political rights, respectively. For Poland, the corresponding ‘drop-out’ rate is even higher: 147 and 130 variables out of a total of 196 (again, the total refers to the total number of explanatory variables per system of equations, with seven political party equations and 28 explanatory variables per equation). Furthermore, the extent of this attrition differs considerably across parties and also depending on which index of political freedom is used.

The key question of interest is which variables survive the testing-down procedure and what does that tell us about the validity of the three hypotheses formulated in the preceding section. The evidence is least favorable for the economic self-selection hypothesis, which posits that host-country income inequality is correlated with migrants’ skills: highly skilled
migrants choose high-inequality destinations, while those with low skills prefer more egalitarian societies. Correspondingly, votes for right-wing parties should be positively correlated with income inequality while those for left-wing parties should display a negative correlation. To test this motive for migration, the Gini coefficient was included among the explanatory variables. However, the general-to-specific procedure eliminated it completely from the regressions with Czech migrant votes. In the Polish regressions, income inequality survived the testing-down and is correlated with votes for the SLD-UP (coalition of the Party of Democratic Left and the Union of Labor) and the PiS (Law and Justice) parties only. The expected pattern is only confirmed for the PiS, which being a right-wing party derives greater support from countries with high income inequality. The votes for the SLD, however, are also positively correlated with income inequality (in the regression with political rights), contrary to the hypothesis. For all the remaining parties, the indicator of income inequality was eliminated by the testing-down procedure.

Several of the regional dummy variables survive to the end, thus potentially indicating support for the political self-selection hypothesis. This hypothesis stipulates that support for left-wing and post-communist parties should be stronger, and support for right-wing parties weaker, in the former communist countries. The opposite should hold for Western democracies, i.e. support for left-wing parties should be lower compared to support for right-wing parties. The evidence, however, is at best mixed. While many of the regional dummies are eliminated by the general-to-specific procedure, when they do remain, they frequently appear with the wrong sign. In particular, the support for the KSCM (Czech Communist Party) is not any higher in the former communist countries than in Western Europe or in Anglo-Saxon countries (in fact, the only regional variable that survives the
testing down for the Communists is the dummy for Italy where is appears with a negative coefficient). In addition, contrary to the political self-selection hypothesis, the CSSD (Czech Social Democrats) draws significantly fewer votes from Central/Eastern Europe and the former Soviet Union. Similarly, the Polish SLD-UP fared poorly in the former Soviet Union, whereas it fared well in the US. The results are similarly mixed for the right-wing parties. Among Czech parties, the ODS (Civic Democratic Party) draws less support in Central/Eastern Europe, as predicted by the hypothesis, but the opposite is true for the KDU-US (coalition of Christian Democrats and Union of Freedom). Among Polish migrant voters, the AWSP (Solidarity Electoral Action) fared well in the former Soviet Union despite its deep anti-communist roots – and poorly in the US. The support for the UW (Union of Freedom) is low in the Anglo-Saxon countries and especially in the US, despite its liberal pro-market nature. Only the PO (Citizens’ Platform) received fewer votes from the former Soviet Union, as predicted by the hypothesis. Surprisingly, the support for the LPR (extreme-right League of Polish Families) is strong in Central/Eastern Europe, the former Soviet Union and also in the US.

In contrast to the two self-selection hypotheses, the evidence with respect to the political resocialization hypothesis is more encouraging. We account both for the extent of democracy (measured with the Freedom House indexes of civil liberties and political rights) and the tradition of democracy (measured as the fraction of years between 1972 and 2001 that the country was classified by the Freedom House as free or partially free) in the host countries. The latter may be important as it distinguishes countries that democratized recently from those that espoused a high degree of democracy for decades. The effect of democracy on migrant votes is mixed: it is positively significant and hump-shaped for
every Czech political party (with the maximum effect attained at an intermediate level of
democracy), apart from the KDU-US\textsuperscript{31}, for either one or both of the civil liberties/political
rights indexes. In the Polish regressions, high levels of democracy are positively related to
votes for the AWSP, PiS and LPR, negatively related to votes for SLD-UP and UW, and U-
shaped for the PO. However, the impact of the tradition of democracy is generally
consistent with the hypothesis: countries with a longer tradition of full or moderate
democracy show less support for the left-wing parties – CSSD and KSCM – and stronger
support for the right-wing parties – KDU-US, UW, PO and, somewhat surprisingly, given
its extremist nature, also LPR.

The results obtained with the various sub-indexes of economic freedom are mixed but
again reveal some consistencies. Most notably, migrants in countries with less pervasive
regulation are more likely to vote in favor of right-wing parties – ODS, KDU-US, AWSP,
UW, PO and LPR than left-wing parties – CSSD, KSCM and SLD-UP. The estimated
effects of the other sub-indexes are more mixed, often with one or two sub-indexes
appearing significant and with signs opposite to that of the regulation sub-index.\textsuperscript{32} Due to
this, the joint impact of economic freedom is in fact weaker than it would appear if only the
regulation sub-index was considered. Nonetheless, comparing the sizes of the estimated
coefficients for the various sub-indexes, the impact of economic freedom appears clearly
positive for the KDU-US, AWSP, UW and LPR, and negative for SLD-UP.\textsuperscript{33}

The impact of economic development, measured by GDP per capita, is similar to that of
economic freedom: migrants in richer and more advanced countries show greater support
for right-wing parties (KDU-US, UW and PiS), at the expense of left-wing parties (CSSD
and KSCM). This pattern appears somewhat less robust as it is only obtained for a subset of
parties. In contrast to economic development, the results for economic performance (economic growth and inflation), while appearing significant for some parties, are mixed and do not conform to a clear-cut pattern across parties and the two countries. Czech migrants in high-inflation countries show greater support for left-wing parties, CSSD and KSCM, than for ODS, but this pattern is not replicated in the Polish data. The weak and mixed results for economic performance variables should not come as surprising. Typically, the literature on economic voting finds that voters punish governments for bad economic performance by voting for the opposition and reward them for good performance by reelecting them. However, the host country’s economic conditions have little relevance for passing a verdict on the competence of the government in the migrants’ home country.

Similarly, variables reflecting the nature of the political environment in the host country, that is political orientation of the government and the type of political system (parliamentary, strong presidential or weak presidential), frequently appear significant. However, it is difficult to identify a systematic pattern in the results. Some of the results defy expectations. For example, the KDU-US, UW and PO, being all right-of-center parties, do well among migrants who live in countries with left-wing governments, whereas the CSSD does poorly in such countries. For other parties, the pattern is more in line with expectations: the UW also does well in countries with a centrist or mixed government, while the PiS and LPR do poorly in countries with either centrist/mixed or left-wing government. Therefore, while the political environment seems to have an effect on migrants’ political preferences, the precise nature of this effect is not very clear. Overall, the results provide more consistent support for the political-resocialization hypothesis than
for either the political or economic self-selection hypotheses, suggesting that migrants’
political attitudes and behavior are indeed influenced by their new environment.

6. Conclusions

This paper analyzes the voting behavior of Czech and Polish migrants who participated
in their countries’ national elections by casting their votes from abroad. Evidence from
these elections indicates that the voting behavior of migrants differs substantially from that
of their compatriots at home. Moreover, the preferences of migrants vary significantly also
across the various host countries. In this paper, we consider three alternative hypotheses
that could potentially explain these differences: political re-socialization (i.e. migrants
gradually adopt the norms and values prevailing in the host country and this influences their
political preferences), economic self-selection (migrants move to countries where the
payoff to their human capital is highest), and, finally, political self-selection (migrants’
political attitudes before migration determine the choice of destination countries).

The analysis considers a wide range of potential determinants of migrant voting
behavior. To determine which factors robustly affect votes from abroad, the general-to-
specific methodology is applied to a long list of potential explanatory variables. This
method reduces the general unrestricted model to a more parsimonious one, containing only
significant variables. The results of the slimmed-down model provide little or no support
for the two self-selection hypotheses. In contrast, there are strong indications that migrants’
voting behavior is indeed shaped by the institutional environment prevailing in the host
country. In particular, right-wing parties tend to fare well, and left-wing parties poorly,
among migrants living in countries with a long tradition of full or partial democracy and/or
a greater extent of economic freedom. Similarly, right-wing parties derive more support from migrants living in economically advanced countries, while the opposite holds true for left-wing parties. The results, however, are more mixed and less clear-cut in regards the impact of economic performance (growth and inflation) and the political environment (i.e. political orientation of the incumbent government, and whether the political system is presidential or weakly/strongly presidential).

These findings highlight an important and previously unexplored aspect of migration: its impact on the migrants’ political attitudes and, in turn, on political developments in their home countries. This effect is likely to occur even in countries that do not allow their nationals living abroad to vote. Much of migration flows is temporary: migrants stay in the foreign country for up to several years but eventually return to their home country. In countries with large diaspora populations such as Italy, Mexico or Albania (and, increasingly, the new member states of the EU), the impact of migrants on political developments back home therefore can be significant. Given that migrants typically go from less developed to developed countries rather than the other way around, migration may thus help spread liberal norms and attitudes across countries.
Notes

1. See, for example, Stark (1991), Lalonde and Topel (1997), Razin and Sadka (1997), and the contributions collected in Zimmermann and Constant, eds. (2004).

2. Born, respectively, in Germany, Poland, Czechoslovakia, and Austria.

3. While the academic literature failed to explore this topic so far, a recent novel by the Czech émigré writer Milan Kundera depicts some of the political and cultural conflicts encountered by returning emigrants; see Kundera (2002).


5. Indeed, it appears that Italian overseas voters were crucial in securing a majority in the Senate for Romano Prodi’s centre-left Union in the 2006 parliamentary election. The Italians abroad, who were allocated six Senate seats, voted overwhelmingly for Prodi, thus helping give him a majority of two Senators. Without the votes from abroad, Prodi would have won in the Chamber of Deputies but Berlusconi would have carried the Senate, leading to a political paralysis.

6. Probably the best known example, are the “Chicago Boys”: a group of Chicago-educated economists who conceived and carried out the economic reforms in Chile under Pinochet. Argentinean reform effort of early 1990s, similarly, was lead by US-educated economists: Domingo Cavallo (Harvard) and Roque Fernandez (Chicago). Émigré advisors played an important role in the design and execution of Czechoslovak and Polish reform programs: Jan Svejnar (United States) for the former and Stanislaw Wellisz (United States), Stanislaw Gomulka and Jacek Rostowski (both from the United Kingdom) for the latter. Finally, the current presidents of Latvia and Lithuania, Vaira Vike-Freiberga and Valdas Adamkus, respectively, are both former political refugees who spent most of their adult lives in emigration (in Canada and the US, respectively) and only returned after the Baltic countries seceded from the Soviet Union.
7. Both countries have a bi-cameral parliament, with the Chamber of Deputies and Sejm, respectively, being the lower chamber, complemented by the Senate. The Chamber of Deputies and Sejm are elected by proportional vote whereas the Senate is elected by direct vote.

8. The results of voting, both at home and abroad, are discussed in greater detail in the following section.

9. A fourth possible determinant of migrant voting behavior are the policies proposed by the various parties that directly affect migrants, such as citizenship issues, protection of their rights to property left behind in the home country, social security, or the treatment of their families. However, inasmuch as there is no discrimination based on migrants’ host countries, this factor can help explain the difference between voting preferences of migrants and voters in the home countries but not the variation across host countries. Therefore, we do not consider this explanation in this paper.

10. By the end of the World War II, the Polish armed forces in the West were nearly 200 thousand strong (see http://www.answers.com/topic/polish-contribution-to-world-war-ii).

11. Approximately 150,000 Czechs and Slovaks fled to the West after the Prague Spring (see http://archiv.radio.cz/history/history14.html).


13. We have no information on the number of votes cast by permanent residents and temporary visitors; hence we cannot distinguish genuine migrants from tourists or short-term visitors.

14. The higher share of Polish migrant voters is due to a number of different factors: first, in recent history, Poland experienced several episodes marked by relatively high emigration (see below); second, during the communist period, Poland had a less restrictive attitude towards foreign travel than Czechoslovakia; third, Poland offered its migrant voters a greater density of polling stations than the Czech Republic; and finally, Poland has a more liberal attitude to dual nationality than the Czech Republic, such that Poles who have acquired another country’s nationality often remain Polish citizens.
15. No comparable data are available for the Czech Republic as the 2002 election was the first and so far the only election that allowed voting from abroad. In contrast to Poland, Czech electoral law does not allow voting from abroad in referenda.

16. Originally called *The Quad Coalition*, it also included the Civic Democratic Alliance (ODA). The ODA later left this grouping, and eventually withdrew from the election altogether.

17. The SLD has its roots in the original Polish Communist Party but, unlike the Czech KSCM, it has shed its communist heritage and transformed into modern socialist party.

18. These three parties in fact jointly fielded candidates in the election to the Senate, the upper chamber of the Polish Parliament.

19. Even if migrant voters’ decisions are affected also by economic considerations due to altruistic concerns or because they expect to return in the future, their voting behavior is likely to be shaped by economic developments back home rather than those in the country where they currently live. Yet, we might find a significant effect if, for instance, migrants in high-inflation countries perceive anti-inflationary policies as important also for their home country, and accordingly vote for parties that they expect to be tough on inflation.

20. Alford, Funk and Hibbing (2005a, b) go even further by arguing that political attitudes are in fact inherited.


22. Tomz et al. (2002) report that out of nineteen articles analyzing multiparty election data published in leading political science journals between 1996-2000, eighteen used OLS.

23. The patterns of support for the various parties in the post-communist countries are discussed, for example, by Fidrmuc (2000a, b), Doyle and Fidrmuc (2003), and Tucker (2001).

24. The bivariate correlations of the various sub-indexes are reported in an unpublished appendix (available upon request). Initially, we also used the Polity Democracy Index and the Heritage Foundation’s Economic Freedom Index but the results were similar. Later, we only continued the analysis with the Freedom House and Fraser indexes as they have better country coverage.
25. Data definitions and sources are discussed in greater detail in an unpublished appendix.

26. Common-border dummies and distance from capital to capital (as measured by www.geobytes.com/CityDistancetool.htm) were also included, however they are only significant when the regional variables are not included.

27. For an explanation and assessment of this methodology, see Hoover and Perez (1999) and the references cited therein. Granto (1991) discusses the application of the general-to-specific modeling in political science.

28. At each step, the least significant variable for each party was tested and eliminated. As a general rule, only variables whose significance was no more than 30 percentage points off the least significant one were tested at each step, so that, for example, if the lowest significance level was 50%, variables that appeared with up to 20% significance level were included in the exclusion test.

29. The US is not the only country that allows dual nationality. However, the US case seems exceptional in view of the size and concentration of the Polish emigrant community.

30. The results for the general unrestricted models are reported in an unpublished appendix (available upon request).

31. For KDU-US, the pattern appears U-shaped with the minimum attained at the political rights index equal to 0.05. As the index ranges between 0 and 10, the impact of political rights on votes for this party is effectively positive.

32. The various sub-indexes of economic freedom are moderately strongly correlated with each other (correlation coefficients between 0.51 and 0.66), with the exception of the size of government, which is essentially uncorrelated with the other sub-indexes (correlation coefficients range between –0.32 and 0.20).

33. For these parties, either regulation is the only sub-index that remains significant after the general-to-specific procedure, or it dominates, in absolute value, the coefficients obtained for the other sub-indexes.

34. Note that finding a strong impact of the political orientation of the host country’s government on migrant voting behavior could be interpreted also as evidence in favor of the political self-selection hypothesis. One would need information of the migrants voting histories to differentiate between political self-selection and political resocialization. Given that the results are mixed, this problem does not arise in our case though.
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### Table 1 Czech election results 2002

<table>
<thead>
<tr>
<th>Political Parties</th>
<th>CSSD %</th>
<th>KSCM %</th>
<th>ODS %</th>
<th>Coalition %</th>
<th>ODA %</th>
<th>Others %</th>
<th>No. of Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Results</strong></td>
<td>30.12</td>
<td>18.55</td>
<td>24.51</td>
<td>14.28</td>
<td>0.51</td>
<td>12.04</td>
<td>4,757,884</td>
</tr>
<tr>
<td><strong>Results from Abroad</strong></td>
<td>25.33</td>
<td>2.75</td>
<td>27.71</td>
<td>33.99</td>
<td>1.71</td>
<td>8.50</td>
<td>3,742</td>
</tr>
<tr>
<td>Former Soviet Union</td>
<td>37.79</td>
<td>7.37</td>
<td>25.35</td>
<td>17.51</td>
<td>2.30</td>
<td>9.68</td>
<td>217</td>
</tr>
<tr>
<td>Central and East European</td>
<td>30.28</td>
<td>6.90</td>
<td>28.03</td>
<td>25.35</td>
<td>0.99</td>
<td>8.45</td>
<td>710</td>
</tr>
<tr>
<td>Western Europe</td>
<td>20.72</td>
<td>1.20</td>
<td>26.95</td>
<td>42.07</td>
<td>1.32</td>
<td>7.75</td>
<td>1,588</td>
</tr>
<tr>
<td>Asia</td>
<td>19.25</td>
<td>0.53</td>
<td>39.57</td>
<td>24.60</td>
<td>2.67</td>
<td>13.37</td>
<td>187</td>
</tr>
<tr>
<td>North Africa and Middle-East</td>
<td>44.96</td>
<td>3.17</td>
<td>24.78</td>
<td>15.85</td>
<td>1.15</td>
<td>10.09</td>
<td>347</td>
</tr>
<tr>
<td>Sub-Sahara Africa</td>
<td>17.89</td>
<td>1.05</td>
<td>35.79</td>
<td>32.63</td>
<td>5.26</td>
<td>7.37</td>
<td>95</td>
</tr>
<tr>
<td>Australia</td>
<td>8.47</td>
<td>1.69</td>
<td>27.12</td>
<td>54.24</td>
<td>1.69</td>
<td>6.78</td>
<td>59</td>
</tr>
<tr>
<td>Central and South America</td>
<td>32.74</td>
<td>1.79</td>
<td>23.81</td>
<td>27.98</td>
<td>3.57</td>
<td>10.12</td>
<td>168</td>
</tr>
<tr>
<td>Northern America</td>
<td>14.29</td>
<td>0.54</td>
<td>28.30</td>
<td>47.17</td>
<td>2.70</td>
<td>7.01</td>
<td>371</td>
</tr>
</tbody>
</table>

**Notes:** The party acronyms stand for Czech Social Democratic Party (CSSD), Communist Party of Bohemia and Moravia (KSCM), Civic Democratic Party (ODS), Coalition of Christian Democratic Union-Peoples Party of Czechoslovakia, Union of Freedom and Democratic Union (Coalition), and Civic Democratic Alliance (ODA).

1 Includes votes from abroad.

**Source:** Czech Statistical Office.
Table 2 Polish parliamentary election results 2001

<table>
<thead>
<tr>
<th>Political Parties</th>
<th>SLD-UP %</th>
<th>AWSP %</th>
<th>UW %</th>
<th>SO %</th>
<th>PiS %</th>
<th>PSL %</th>
<th>PO %</th>
<th>LPR %</th>
<th>Others %</th>
<th>Total Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Results&lt;sup&gt;1&lt;/sup&gt;</td>
<td>41.04</td>
<td>5.60</td>
<td>3.10</td>
<td>10.20</td>
<td>9.50</td>
<td>8.98</td>
<td>12.68</td>
<td>7.87</td>
<td>1.02</td>
<td>13,017,929</td>
</tr>
<tr>
<td>Results from Abroad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Former Soviet Union</td>
<td>25.98</td>
<td>7.37</td>
<td>10.02</td>
<td>1.37</td>
<td>19.04</td>
<td>1.90</td>
<td>15.88</td>
<td>17.84</td>
<td>0.60</td>
<td>26,200</td>
</tr>
<tr>
<td>Central and East Europe</td>
<td>44.49</td>
<td>5.28</td>
<td>10.02</td>
<td>1.58</td>
<td>11.02</td>
<td>2.54</td>
<td>18.21</td>
<td>5.86</td>
<td>1.00</td>
<td>2,405</td>
</tr>
<tr>
<td>Western Europe</td>
<td>25.65</td>
<td>9.54</td>
<td>12.88</td>
<td>1.45</td>
<td>17.55</td>
<td>1.55</td>
<td>18.28</td>
<td>12.66</td>
<td>0.45</td>
<td>10,651</td>
</tr>
<tr>
<td>Asia</td>
<td>43.56</td>
<td>5.81</td>
<td>19.96</td>
<td>0.18</td>
<td>7.99</td>
<td>1.63</td>
<td>18.87</td>
<td>1.63</td>
<td>0.36</td>
<td>551</td>
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<tr>
<td>North Africa / Middle-East</td>
<td>48.93</td>
<td>1.98</td>
<td>12.69</td>
<td>2.39</td>
<td>8.81</td>
<td>2.55</td>
<td>17.87</td>
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<td>1.32</td>
<td>1,214</td>
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<tr>
<td>Sub-Saharan Africa</td>
<td>29.37</td>
<td>12.21</td>
<td>19.80</td>
<td>1.65</td>
<td>8.91</td>
<td>3.63</td>
<td>19.80</td>
<td>3.30</td>
<td>1.32</td>
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<td>Australia</td>
<td>27.15</td>
<td>10.60</td>
<td>10.60</td>
<td>1.55</td>
<td>27.15</td>
<td>0.44</td>
<td>11.26</td>
<td>11.04</td>
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<tr>
<td>Central/South America</td>
<td>26.33</td>
<td>11.47</td>
<td>16.32</td>
<td>1.29</td>
<td>10.18</td>
<td>3.55</td>
<td>22.46</td>
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<tr>
<td>Northern America</td>
<td>13.97</td>
<td>5.53</td>
<td>4.87</td>
<td>1.22</td>
<td>26.96</td>
<td>1.83</td>
<td>11.85</td>
<td>33.31</td>
<td>0.46</td>
<td>8,702</td>
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</table>

Notes: The party acronyms stand for Coalition of Democratic Left and Union of Labor (SLD-UP), Solidarity Electoral Action (AWSP), Union of Freedom (UW), Self defense of the Polish Republic (SO), Law and Justice (PiS), Polish People's Party (PSL), Citizens' Platform (PO), and League of Polish Families (LPR).

<sup>1</sup> Includes votes from abroad.

Source: Polish Central Electoral Commission.
Table 3 Czech Republic: General-to-Specific results

<table>
<thead>
<tr>
<th></th>
<th>A. Civic Democratic Party (ODS)</th>
<th>B. Czech Social Democratic Party (CSSD)</th>
<th>C. Communist Party of Bohemia and Moravia (KSCM)</th>
<th>D. Coalition KDU-US</th>
<th>E. Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Civil Liberties</td>
<td>Political Rights</td>
<td>Civil Liberties</td>
<td>Political Rights</td>
<td>Civil Liberties</td>
</tr>
<tr>
<td>Civil/Political Freedom</td>
<td>0.114*** (0.037)</td>
<td>0.443*** (0.114)</td>
<td>0.470** (0.213)</td>
<td>0.275*** (0.080)</td>
<td>1.698*** (0.450)</td>
</tr>
<tr>
<td>Civil/Political Freedom Squared</td>
<td>~</td>
<td>-0.043*** (0.010)</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Fraction Years Free</td>
<td>~</td>
<td>~</td>
<td>-1.417** (0.693)</td>
<td>-2.080*** (0.805)</td>
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</tr>
<tr>
<td>Fraction Years Partially Free</td>
<td>~</td>
<td>~</td>
<td>-1.639*** (0.591)</td>
<td>-2.532*** (0.622)</td>
<td>~</td>
</tr>
<tr>
<td>EF: Size of Government</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>EF: Legal/Property Rights</td>
<td>~</td>
<td>~</td>
<td>0.444*** (0.133)</td>
<td>~</td>
<td>1.022*** (0.250)</td>
</tr>
<tr>
<td>EF: Foreign Trade</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>EF:Sound Money</td>
<td>-0.136*** (0.037)</td>
<td>-0.099*** (0.038)</td>
<td>~</td>
<td>0.181* (0.102)</td>
<td>~</td>
</tr>
<tr>
<td>EF: Regulation</td>
<td>~</td>
<td>0.180*** (0.063)</td>
<td>-0.369*** (0.117)</td>
<td>-0.293*** (0.115)</td>
<td>~</td>
</tr>
<tr>
<td>GDP per capita (US$ thousands)</td>
<td>~</td>
<td>~</td>
<td>-0.058*** (0.021)</td>
<td>-0.046*** (0.016)</td>
<td>~</td>
</tr>
<tr>
<td>Inflation [%]</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Gov.: Left wing</td>
<td>~</td>
<td>~</td>
<td>-0.375* (0.198)</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Gov.: Centrist or mixed</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Gov.: authoritarian</td>
<td>0.774** (0.322)</td>
<td>~</td>
<td>2.050*** (0.556)</td>
<td>2.376*** (0.534)</td>
<td>~</td>
</tr>
<tr>
<td>Parliamentary</td>
<td>0.255** (0.105)</td>
<td>0.374*** (0.109)</td>
<td>-0.507*** (0.202)</td>
<td>-0.298* (0.170)</td>
<td>~</td>
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</tbody>
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Table 3 Continued

<table>
<thead>
<tr>
<th></th>
<th>A. Civic Democratic Party (ODS)</th>
<th>B. Czech Social Democratic Party (CSSD)</th>
<th>C. Communist Party of Bohemia and Moravia (KSCM)</th>
<th>D. Coalition KDU-US</th>
<th>E. Others</th>
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<tbody>
<tr>
<td></td>
<td>Civil Liberties</td>
<td>Political Rights</td>
<td>Civil Liberties</td>
<td>Political Rights</td>
<td>Civil Liberties</td>
</tr>
<tr>
<td>Central/Eastern Europe</td>
<td>-0.423***</td>
<td></td>
<td>-1.089***</td>
<td>-1.315***</td>
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</tr>
<tr>
<td></td>
<td>(0.146)</td>
<td></td>
<td>(0.412)</td>
<td>(0.433)</td>
<td></td>
</tr>
<tr>
<td>Former Soviet Union</td>
<td>~</td>
<td>~</td>
<td>-1.942***</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>(0.630)</td>
<td></td>
<td>(0.630)</td>
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<td></td>
</tr>
<tr>
<td>South East Asia</td>
<td>0.680***</td>
<td>~</td>
<td>-0.902***</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>(0.230)</td>
<td></td>
<td>(0.363)</td>
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<tr>
<td>Middle East/North Africa</td>
<td>~</td>
<td>~</td>
<td>-2.592***</td>
<td>-1.184**</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>(0.654)</td>
<td></td>
<td>(0.533)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central/Latin America</td>
<td>~</td>
<td>-0.445**</td>
<td></td>
<td></td>
<td>~</td>
</tr>
<tr>
<td></td>
<td>(0.211)</td>
<td></td>
<td>(0.150)</td>
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<td></td>
</tr>
<tr>
<td>Anglo-Saxon</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Italy</td>
<td>-0.609***</td>
<td>-0.476**</td>
<td>-1.031***</td>
<td>-1.117***</td>
<td>-2.260***</td>
</tr>
<tr>
<td></td>
<td>(0.192)</td>
<td>(0.206)</td>
<td>(0.344)</td>
<td>(0.334)</td>
<td>(0.795)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.883***</td>
<td>-1.651***</td>
<td>0.130</td>
<td>-0.357</td>
<td>-9.762***</td>
</tr>
<tr>
<td></td>
<td>(0.249)</td>
<td>(0.428)</td>
<td>(0.908)</td>
<td>(0.844)</td>
<td>(2.285)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.400</td>
<td>0.410</td>
<td>0.529</td>
<td>0.515</td>
<td>0.526</td>
</tr>
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</table>

Notes: Number of observations is 54. Standard errors are in parentheses. Estimated using a Seemingly Unrelated Regression (SUR) model and applying the General-to-Specific procedure. Analytic weights are applied using the total number of votes per country. A dummy for Italy is added because votes from Italy also include those from the Vatican. Significance levels are indicated as 1% (***) or 5% (**) and 10% (*). The Breusch-Pagan test of independence indicates that we can reject the null hypothesis of independence of the residuals across the equations in each of the Polish and Czech regressions. Therefore, OLS estimates would be inconsistent and the choice of SUR is justified.

Breusch-Pagan Test of Independence

<table>
<thead>
<tr>
<th></th>
<th>Civil Liberties</th>
<th>Political Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \chi^2(10) )</td>
<td>36.30***</td>
<td>36.98***</td>
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</table>
Table 4 Poland: General-to-Specific results

<table>
<thead>
<tr>
<th>A. Coalition of Democratic Left and Union of Labor (SLD-UP)</th>
<th>B. Solidarity Electoral Action (AWS)</th>
<th>C. Union of Freedom (UW)</th>
<th>D. Law and Justice (PiS)</th>
<th>E. Citizens’ Platform (PO)</th>
<th>F. League of Polish Families (LPR)</th>
<th>G. Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Civil Liberties</td>
<td>Political Rights</td>
<td>Civil Liberties</td>
<td>Political Rights</td>
<td>Civil Liberties</td>
<td>Political Rights</td>
<td>Civil</td>
</tr>
<tr>
<td>Civil/Political Freedom</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Civil/Political Freedom Squared</td>
<td>-0.005*** (0.002)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Fraction Years Free</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>2.009*** (0.389) ~ 1.702*** (0.394) ~ ~</td>
</tr>
<tr>
<td>Fraction Years Partially Free</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>EF: Size of Government</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>EF: Legal/Property Rights</td>
<td>~</td>
<td>-0.112*** (0.033)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>0.064* (0.037) ~ 0.211** (0.091) ~ ~</td>
</tr>
<tr>
<td>EF: Foreign Trade</td>
<td>~</td>
<td>0.178*** (0.047)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>EF: Regulation</td>
<td>-0.296*** (0.055) ~ 0.421*** (0.039)</td>
<td>0.235*** (0.083) ~ 0.245*** (0.083) ~ 0.366*** (0.078) ~ 0.334*** (0.077) ~ ~</td>
<td>~</td>
<td>0.083** (0.043) ~ 0.482*** (0.083) ~ 0.373*** (0.123) ~ ~</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP Growth [%]</td>
<td>~</td>
<td>~</td>
<td>-0.186*** (0.045) ~ -0.199*** (0.046) ~ ~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>GDP per capita (US$ thousands)</td>
<td>~</td>
<td>~</td>
<td>0.015* (0.009) ~ 0.018** (0.009) ~ 0.023*** (0.006) ~ ~</td>
<td>~</td>
<td>~</td>
<td>-0.058*** ~ -0.045*** (0.018) ~ (0.012)</td>
</tr>
<tr>
<td>Inflation [%]</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
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<tr>
<td>Gini Index</td>
<td>~</td>
<td>0.014** (0.006)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>0.018*** (0.007) ~ ~</td>
</tr>
<tr>
<td>Gov.: Left wing</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Gov.: authoritarian</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Gov.: Centrist or mixed</td>
<td>0.296*** (0.077) ~ 0.383*** (0.076)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Gov.: ethnic/religious</td>
<td>0.401** (0.185) ~ 0.613*** (0.214)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>
### Table 4 Continued

<table>
<thead>
<tr>
<th></th>
<th>A. Coalition of Democratic Left and Union of Labor</th>
<th>B. Solidarity Electoral Action (AWSP)</th>
<th>C. Union of Freedom (UW)</th>
<th>D. Law and Justice (PiS)</th>
<th>E. Citizens’ Platform (PO)</th>
<th>F. League of Polish Families (LPR)</th>
<th>G. Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Civil Liberties</td>
<td>Political Rights</td>
<td>Civil Liberties</td>
<td>Political Rights</td>
<td>Civil Liberties</td>
<td>Political Rights</td>
<td>Civil Liberties</td>
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<tr>
<td>Weak presidential</td>
<td>~</td>
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<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Parliamentary</td>
<td>0.313***</td>
<td>(0.081)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>-0.304**</td>
<td>(0.128)</td>
</tr>
<tr>
<td>Central/Eastern Europe</td>
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<td>~</td>
<td>~</td>
<td>~</td>
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<td>~</td>
</tr>
<tr>
<td>Former Soviet Union</td>
<td>~</td>
<td>-0.706***</td>
<td>(0.196)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>~</td>
<td>-0.794***</td>
<td>(0.239)</td>
<td>~</td>
<td>~</td>
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<tr>
<td>Middle East/North Africa</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>South East Asia</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Central/Latin America</td>
<td>~</td>
<td>-0.692***</td>
<td>(0.190)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Anglo-Saxon</td>
<td>-0.216**</td>
<td>(0.097)</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>-0.702***</td>
<td>(0.135)</td>
</tr>
<tr>
<td>United States</td>
<td>0.366***</td>
<td>(0.116)</td>
<td>~</td>
<td>-0.567***</td>
<td>-0.545***</td>
<td>-1.043***</td>
<td>-1.310***</td>
</tr>
<tr>
<td>Italy</td>
<td>-1.331***</td>
<td>(0.129)</td>
<td>~</td>
<td>-1.516***</td>
<td>1.760***</td>
<td>1.830***</td>
<td>~</td>
</tr>
<tr>
<td>Constant</td>
<td>1.011***</td>
<td>(0.304)</td>
<td>0.742*</td>
<td>-3.477***</td>
<td>-3.516***</td>
<td>-3.840***</td>
<td>-4.503***</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.856</td>
<td>0.865</td>
<td>0.509</td>
<td>0.513</td>
<td>0.747</td>
<td>0.793</td>
<td>0.705</td>
</tr>
</tbody>
</table>

**Notes:** Number of observations is 66. Standard errors are in parentheses. Estimated using a Seemingly Unrelated Regression (SUR) model and applying the General-to-Specific procedure. Analytic weights are applied using the total number of votes per country. A dummy for Italy is added because votes from Italy also include those from the Vatican. Significance levels are indicated as 1% (***) 5% (**) and 10% (*). The Breusch-Pagan test of independence indicates that we can reject the null hypothesis of independence of the residuals across the equations in each of the Polish and Czech regressions. Therefore, OLS estimates would be inconsistent and the choice of SUR is justified.

**Breusch-Pagan Test of Independence**

<table>
<thead>
<tr>
<th>Civil Liberties</th>
<th>Political Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2(21) = 77.13***$</td>
<td>$\chi^2(21) = 80.51***$</td>
</tr>
</tbody>
</table>

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