## Appendix

Communism, Federalism and Ethnic Minorities:

# Explaining Party Competition Patterns in Eastern Europe <br> World Politics. October 2014. 66 (4) 

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## 1 Data

### 1.1 The Chapel Hill Expert Surveys

CHES is an ongoing data project collecting policy and ideological stances of national political parties for all member states of the European Union (EU), excluding Cyprus, Luxembourg, and Malta, as well as 2 additional Western European countries, namely Norway and Switzerland. From 2002 CHES included information on parties from candidate and later EU member countries of eastern Europe, covering overall 14 countries from the region: Bosnia, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Poland, Romania, Serbia, Slovakia and Slovenia.

## Question Wording

The core of the CHES questionnaire relevant for this article consists of three questions 1) general party positioning on the economic left-right, 2) party positioning on the socio-cultural, GAL-TAN dimension, and 3) party positioning on ethnic minority rights. The following question wordings were used:

Economic left-right: Parties can be classified in terms of their stance on economic issues. Parties on the economic left want government to play an active role in the economy. Parties on the economic right emphasise a reduced economic role for government: privatisation, lower taxes, less regulation, less government spending and a leaner welfare state. On a $0-10$ point scale with 0 being extreme left and 10 being extreme right where would you place this party?

GAL-TAN: Parties can be classified in terms of their views on democratic freedoms and rights. 'Libertarian' or 'postmaterialist' parties favour expanded personal freedoms-for example, access to abortion, active euthanasia, same-sex marriage or greater democratic participation. 'Traditional' or 'authoritarian' parties often reject these ideas; they value order, tradition and stability, and believe that the government should be a firm moral authority on social and cultural issues. On a $0-10$ point scale with 0 be-
ing libertarian/postmaterialist and 10 traditional/authoritarian where would you place this party?

Ethnic minorities: position towards ethnic minorities. $0=$ Strongly supports more rights for ethnic minorities ... $10=$ Strongly opposes more rights for ethnic minorities. *Note that the scoring of this variable was reversed in the analyses of the article, in order to measure increasing support for ethnic minority rights.

In addition, the 2006 and 2010 iterations of the survey included a number of question assessing party positions on specific socio-cultural policy issues:

Civil liberties v. law and order: position on civil liberties vs. law and order. $0=$ Strongly promotes civil liberties ... $10=$ Strongly supports tough measures to fight crime.

Social lifestyle: position on social lifestyle (e.g. homosexuality). $0=$ Strongly supports liberal policies ... $10=$ Strongly opposes liberal policies.

Religious principle: position on role of religious principles in politics. $0=$ Strongly opposes religious principles in politics ... $10=$ Strongly supports religious principles in politics.

Immigration policy: position on immigration policy. $0=$ Strongly opposes tough policy ... $10=$ Strongly favors tough policy

Multiculturalism: position on integration of immigrants and asylum seekers (multiculturalism vs. assimilation). $0=$ Strongly favors multiculturalism ... $10=$ Strongly favors assimilation

Urban-rural: position on urban vs. rural interests. $0=$ Strongly supports urban interests ... $10=$ Strongly supports rural interests.

Environment: position towards the environment. (Only asked in 2010) $0=$ Strongly supports environmental protection even at the cost of economic growth $\ldots 10=$ Strongly supports economic growth even at the cost of environmental protection.

Regions position on political decentralization to regions/localities. $0=$ Strongly favors political decentralization ... $10=$ Strongly opposes political decentralization.

International security: position towards international security and peacekeeping missions. (Only asked in 2010) $0=$ Strongly favors COUNTRY troop deployment ... $10=$ Strongly opposes COUNTRY troop deployment.

### 1.2 Eastern European public opinion surveys used

The article uses eight individual level public opinion surveys carried out between 1990 and 2001, in order to assess individual left-right and sociocultural placements. All of the used datasets were obtained from the 'Studies from Eastern Europe', ZACAT data portal of the GESIS Data Archive for the Social Sciences, available at http://zacat.gesis.org. The following datasets and variables were used:

1) Consolidation of Democracy in CEE II; ZA4054; 1997-2001 Includes all available countries with significant ethnic minorities: Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia

V44: "Many people think of political attitudes as being on the "left" or the "right". This is a scale stretching from the "left" to the "right". When you think of your own political attitudes, where would you put yourself?" $1=$ left ... $10=$ right
"Now I'd like you to consider some kinds of action that the government and the authorities sometimes take. For each one, I would like you to tell me whether you approve strongly, approve, disapprove, or disapprove strongly."
V270: The police using force against demonstrators.
V271: The courts giving severe sentences to protestors who disregard police.
V272: The government passing a law to forbid all public protest demonstrations.
V273: The government using troops to break strikes.

V578: Sex, recoded $0=$ male, $1=$ female V580: Age in years V590: What is the highest level of education that you have attained? $1=$ primary or less; $2=$ secondary, incomplete high; $3=$ higher V617: Monthly income compared to average; $1=$ more than average, $2=$ average, $3=$ below average.

The dataset does not identify ethnic minorities. To identify a respondent as a member of an ethnic minority, I consider those residents of a country whose mother tongue is the ethnic minority language. Conversely, ethnic majorities are identified as those respondents of a given country whose mother tongue is the majority language. While this is an imperfect operationalization, the close association between ethnicity and language in the studied cases is a reasonable justification. The variable used is V589: "In what language did/do you and your mother communicate with each other?"
2) Bulgarian Post-Election Study; ZA2469; 1991

V69 "Anti-nationalism: $1=$ Anti-nationalism, Unipositioning and self-determination of all ethnic groups ... $11=$ Nationalism, Priority of national the interests, Banner for foreign citizens to buy immovable property, Restriction of rights of minorities" V70: "Free-market state-control: 1=Free market economy, Low taxes on high incomes, Free competition and trade ... 11=State controlled economy, Strongly developed social security system, High taxes on high incomes, Low level of unemployment"
V79: "Ethnic affiliation"
3) Croatian National Election Study; ZA4562; 1995
e41stav: "Usually when talking about politics we tend to use expressions "left" and "right". Circle the number on the scale that reflects your political view. $1=$ left ... $10=$ right"
"Members of various ethnicities often have close mutual relations. What kind of mutual relationships would you accept with the members of the following groups:"
j97bmrod: "What kind of links would you accept with Muslims: Being family members" $1=$ yes, $2=$ no
j97carod: "What kind of links would you accept with Albanians: Being family members" $1=$ yes, $2=$ no

1115nac: Ethnicity
4) Values and Elections Estonia, Latvia, Lithuania; ZA2465; 1992-3

V91: "In political matters, people talk of "the left" and "the right". How would you place your views on this scale, generally speaking?" $1=$ left ... $10=$ right.
V98: ethnic origin
"Society, nation, people, every man have their own different interests. Often situations arise when one has to make a choice. We present you some possible choices and ask you to say whose interests do you prefer. Please find the appropriate answer on the card.
V81: Nation v Personality: "And now: interests of nations development and interests of personality. $1=$ Prefer interests of nation's development in any case; $2=$ Tend to prefer interests of nation's development; $3=$ Consider them equal; $4=$ Tend to prefer interests of personality; $5=$ Prefer interests of personality in any case."
V83: "And one more: interests of society's development and interests of nation's development. 1=Prefer interests of society's development in any case; $2=$ Tend to prefer interests of society's development; $3=$ Consider them equal; $4=$ Tend to prefer interests of nation's development; $5=$ Prefer interests of nation's development in any case.
5) Romanian Parliament (Population) ; ZA2812; 1993

V30: Government Role in the Economy. 1=decide all prices and wages... $5=$ no role
V120: Government should increase law and order: "In your opinion how important is it that the government...? Increase Law and Order" 1 =very important ... $5=$ not important at all.
V170: Gypsy Thermometer: "I'll read the name of the group
and you rate that group using the feeling thermometer. Ratings between 50 and 100 mean that you feel favorable and warm toward that group. Ratings between 0 and 50 mean that you do not feel favorable toward that group and that you do not care too much for it. You would rate a group at the 50 degree mark if you do not feel particularly warm or cold toward that group. If you do not recognize a group just tell me and we will move on to the next one. Gypsy" 0-100
V218: Mixed marriages: "What is your opinion about mixed marriages?" 1=complete acceptance ... $3=$ non-acceptance. V191: Respondent's nationality

## 6) Election Study Serbia (3rd Wave); ZA2903; 1990

V39 Left-right: "Many people place themselves, in regard to politics, in the right wing, center or the left wing. Where would you place yourself?" $1=$ right ... $7=$ left.
V22 Federalism: "What is, in your opinion, the best for Serbia? $1=$ To remain in federal Yugoslavia; $2=$ To remain in confederal Yugoslavia; $3=$ To become an independent sovereign state."
V24 Kosovo: "What is, in your opinion, a solution of the problem of Kosovo?" coded by author as: 1=current or more severe course, $2=$ negotiations.
V11 Nationality: $1=$ Serb, $3=$ other
7) Current Problems of Slovakia; ZA4065; 1999

V58: Left-right: "When talking about politics in our country, the terms 'the right' and 'the left' are often used. Where would you position yourself?" $1=$ definitely left ... $5=$ definitely right. V150: Mind in neighbourhood: The Roma "Please, try to imagine that a member of the following groups became your neighbour. What would your reaction be? Would you mind? The Roma." 1 =would not mind; $2=$ would mind.
V39 "A - "In a democratic society, rights of the minority should also be carefully respected". B - "In a democratic society, the majority has the right to take decisions even to the detriment of the minority" $; 1=$ fully agree with the first statement (A);
$5=$ full agreement with the second statement (B); $3=$ middle. V219: Nationality
8) Slovenian Public Opinion 1992; ZA3528; 1992

V36: Left-right "Many people they think about "left" or "right" political standing... Where would you classify yourself on that scale?" $1=$ left ... 10=right.
"We are interested in the way that you personally are prepared to link to members of different nations and nationalities" $1=$ The closest linkage, the marriage; $2=$ Friendly contacts; $3=$ Good neighbour's relations; $4=$ Good working relations; $5=$ To associate at the minimum; $6=\mathrm{I}$ would avoid them.
V212: Muslims
V213: Albanians

V301: Ethnicity of respondent
Table 1 finally summarizes which variables were used to test left-right and socio-cultural stances across these datasets.

### 1.3 European Election Study 2009

Furthermore, the article uses the European Election Study 2009 individual level public opinion survey in order to provide additional robustness checks on individual socio-cultural placements. The analysis uses the following variables:
q56: "Immigrants should be required to adapt to the customs of [country]" 1 strongly agree ... 5 strongly disagree.
q67: "Immigration to [country] should be decreased significantly" 1 strongly agree ... 5 strongly disagree.
q64: "Schools must teach children to obey authority." 1 strongly agree ... 5 strongly disagree.
q62: "People who break the law should be given much harsher sentences than they are these days." 1 strongly agree ... 5 strongly disagree.
Table 1: Individual level datasets from eastern Europe


* Countries included are those available with significant ethnic minorities: Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, Slovenia. Bosnia, Croatia, and Macedonia are not available. Since this dataset does not include a variable identifying ethnic minorities, respondents' status as members of the dominant ethnic minority was operationalized through the language used by the respondent to communicate with his/her mother (V589).
Individual datasets from the Czech Republic, Poland and Hungary did not identify ethnic minorities, and thus could not be included.
q102: Male $=1$; female= $2($ recoded male= $0 ;$ female= 1$)$
q103: What year were you born? Used to calculate age.
v200: Education level 1-6
q120: Wealth "Taking everything into account, at about what level is your family's standard of living? If you think of a scale from 1 to 7 , where 1 means a poor family, 7 a rich family, and the other numbers are for the positions in between, about where would you place your family?"
q108: ethnic identifier: "Many people in this country consider themselves to be [national] while others don't. How about you? Do you consider yourself [national] or do you feel you belong to another group? Or do you perhaps see yourself as [national] as well as belonging to this other group?" 1 [national]; 2 other group; 3 [national] and other group. The analysis considers 1 as ethnic majority (coded 0 ); 2 and 3 as ethnic minority (coded 1 ).


## 2 'Axis of competition' as a measure of party competition structure

This section further discusses the 'axis of competition' as a means to summarize and measure the structure of party competition. The axis of party competition has been used as a measure of party system orientation since its introduction by Kitschelt (1994). As the best line of fit in n-dimensional issue space, the axis summarizes the extent to which competition occurs along each dimension. In practice, the axis has been commonly used in twodimensional space, defined as the slope $\beta$ coefficient of a simple regression of one dimension on the other.

The axis of competition provides two theoretically and visually intuitive measures of party competition structure. One is a measure of the extent to which competition occurs along one or the other dimension, captured by the absolute value of the slope coefficient. The other, utilized by this article, is a measure of association between the two dimensions, captured by the sign of the slope coefficient.

This measure is problematic for one main reason. Observations with very steep positive and very steep negative slopes receive highly divergent values on the measure, while in reality, they are quite close to each other. In
cases with very steep axes, a small shift in party positions may change the axis from high negative to high positive values or vice versa. Other measures of dimensional association, such as correlation of the two dimensions, suffer from the same problem, as a high positive and high negative correlation describe an empirically similar phenomenon as a steep positive and a steep negative axis slope.

This article uses the axis of competition, despite its weakness, for three reasons. First, the axis of competition is a system-level measure. By considering the axis slope, but not the intercept, it takes into consideration the relative positioning of parties with respect to each other, while omitting their specific placement in the political space. This relative positioning of parties is critical for the purposes of this article interested in how parties compete relative to each other within a given system. The axis of competition thus provides a comparable measure which is simultaneously sensitive to systemic context. Second, the axis of competition provides a simple and intuitive measure for one of the main purposes of this article - the assessment of whether economically left- versus right-wing parties are socially liberal or conservative - which is captured by the sign of the axis. Finally, the axis of competition has been used in prior research on which this article builds. Kitschelt 1992; Marks et al. 2006; and Vachudova and Hooghe 2009 use the measure of the axis slope to argue for the unique competition pattern in eastern Europe, and it is thus appropriate to use the same measure to qualify their argument.

In order to demonstrate that the results testing H5, presented in figure 4 in the article, are not an artifact of the axis of competition measure, I re-ran the analysis removing Croatia - the one case with a steep axis that switches axis signs between 2007 and 2010 due to small party change. I also re-ran the analysis removing Croatia, as well as the observations with the steepest axes: Hungary in 2010, Slovenia in 2006 and 2010, and Serbia in 2007. Please note that the original analysis, as well as the robustness checks, exclude all observations from 2002. This is because the 2002 CHES data do not provide a measure of ethnic minority rights support. The analyses, summarized in table 9 below, yielded substantively unaltered results, providing statistically significant support for H5.

## 3 The structure of the socio-cultural dimension in CHES data

This section addresses the relationship between party positions on ethnic minority rights issues and other socio-cultural preferences. The correlation between ethnic minority rights positions and the general socio-cultural placement, measured by the GAL-TAN question in CHES, is 0.62 in eastern Europe, and 0.82 in western Europe. While the association is clearly stronger in the west, the association in the east is by no means weak. There are two likely reasons why the correlation is stronger in the west. First, the east is expected to have overall lower levels of ideological association than the west. Second, and more important, the ethnic minority question may have a different meaning in the west. When asked in the west, a question on ethnic minorities is generally understood as a question concerning nonEuropean ethnics that arrived to Europe in recent immigration waves, and is thus closely related to an immigration question, which is at the core of noneconomic competition in western Europe today. This is supported by the fact that the correlation between ethnic minority support and immigration policy in the west (as measured in CHES) is 0.90 .

The embeddedness of party positions on ethnic minority rights within other socio-cultural issues in eastern Europe is apparent from factor analyses of social issues.

Table 2: The structure of socio-cultural dimension in CHES

|  | East <br> 2010 | West <br> 2010 | East <br> 2006 \& 2010 | West |
| :--- | :---: | :---: | :---: | :---: |
| Ethnic minorities | 0.8101 | 0.9268 | 0.8136 | 0.9230 |
| Regions | 0.5352 | 0.1537 | 0.4587 | 0.1908 |
| Urban rural | 0.6185 | 0.5393 | 0.5622 | 0.5791 |
| International security | 0.3597 | -0.3329 | - | - |
| Environment | 0.4910 | 0.8545 | - | - |
| Multiculturalism | 0.9246 | 0.9527 | 0.9158 | 0.9436 |
| Immigration | 0.9252 | 0.9534 | 0.9003 | 0.9358 |
| Religion in politics | 0.7201 | 0.7863 | 0.6826 | 0.8005 |
| Social lifestyle | 0.8907 | 0.9282 | 0.8785 | 0.9245 |
| Civil liberties | 0.9263 | 0.9523 | 0.8998 | 0.9456 |
| Eigenvalue | 5.5767 | 6.2175 | 4.8852 | 5.3794 |
| Proportion | 0.7926 | 0.7981 | 0.8675 | 0.8637 |

Table 2 presents results of principal factor analyses of the socio-cultural issue items across eastern and western Europe, and different iterations of CHES. The table underscores the close association between ethnic minority rights and other socio-cultural issues. In both eastern and western Europe, the socio-cultural issues in CHES produce one factor with eigenvalue over 1. This factor explains almost $80 \%$ of the variance in the case of CHES 2010 , and over $86 \%$ of the variance from the combined CHES 2006 and 2010 data. Ethnic minority rights is among the items that load most strongly on the latent factor. The latent factors, constructed from the principal factor analyses summarized in table 2, are very highly correlated with the general GAL-TAN measure. The correlation coefficients between the four presented factors and GAL-TAN range from 0.939 to 0.946 . These findings suggest that while not a sole ingredient, the ethnic minority rights issue is a central component of the socio-cultural dimension in both eastern and western Europe.

## 4 Political space in eastern Europe

The following figures summarize party placements in two-dimensional political space across the fourteen studied cases. Each figure presents the axis of competition, depicted as the line of best fit. The axes are the $\beta$ coefficients from a simple OLS regression of economic left-right positions of parties on their socio-cultural (TAN-GAL) positions available from CHES data. These regressions weight each party by its vote share in order to reflect the assumption that larger parties have greater formative effect on party competition.


Figure 1: Structure of Party Competition \#1














Poland 2002






## 5 Supporting information and robustness checks



Figure 3: Socio-Cultural Placement of Parties across Communist Federations

Note: CHES data. The statistical insignificance of the federal center is partly caused by data availability, as the CHES dataset does not contain information on Russian parties. The federal center thus consists only of the Czech Republic and Serbia.

Table 3: Summary of the Determinants of Competition Axis Slope

| Country | Communist <br> federal <br> priphery | Ethnic <br> minority <br> from federal <br> center | Politically <br> salient <br> ethnic <br> minority | Left party <br> ethnic <br> minority <br> support | Right party <br> ethnic <br> minority <br> support | Axis of <br> Competition <br> slope |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Bulgaria | no | no | Turks | 5.07 | 5.80 | 0.51 |
| Czech Rep | no | no | none** | 4.68 | 4.17 | 0.17 |
| Hungary | no | no | none** | 6.12 | 5.09 | 2.26 |
| Lithuania | yes | no | Poles | 6.45 | 5.59 | 0.53 |
| Macedonia | yes | no | Albanians | 4.80 | 4.00 | -1.13 |
| Poland | no | no | none** | 6.71 | 5.19 | 0.77 |
| Romania | no | no | Hungarians | 4.32 | 4.57 | 0.66 |
| Serbia | no | no | Albanians | 5.00 | 7.52 | 1.33 |
| Slovakia | yes | no | Hungarians | 3.88 | 5.15 | 0.18 |
| Bosnia | yes | yes | Serbs | 9.17 | 3.54 | -0.72 |
| Croatia | yes | yes | Serbs | 8.20 | 6.74 | 0.1 |
| Estonia | yes | yes | Russians | 6.76 | 2.95 | -0.24 |
| Latvia | yes | yes | Russians | 8.74 | 3.98 | -0.09 |
| Slovenia | yes | yes | Serbs | 7.48 | 5.08 | -0.8 |
| Mean |  |  |  | 6.24 | 4.95 | 0.25 |
| SD |  |  |  | 1.70 | 1.23 | 0.88 |

Author's calculations based on CHES.

* Axis slope is the slope coefficient from a simple OLS regression between economic leftright and social conservative-liberal (TAN-GAL), weighted by party vote share, averaged over observed years.
${ }^{* *}$ While there are ethnic minorities present, they are not politically significant.

Table 4: Predicting Left- and Right-Wing Party Ethnic Minority Support (OLS and HLM)

|  | OLS with cluster SE Ethnic Minority Support | HLM Ethnic Minority Support |
| :---: | :---: | :---: |
| Left-Right Placement | $\begin{gathered} \hline \hline 0.340^{* *} \\ (0.126) \end{gathered}$ | $\begin{gathered} \hline \hline 0.340^{* * *} \\ (0.099) \end{gathered}$ |
| Minority from Communist Federal Center | $\begin{gathered} 4.192^{* *} \\ (1.423) \end{gathered}$ | $\begin{gathered} 4.192^{* * *} \\ (1.032) \end{gathered}$ |
| Left-Right * Minority | $\begin{gathered} -0.919^{* * *} \\ (0.282) \end{gathered}$ | $\begin{gathered} -0.919^{* * *} \\ (0.187) \end{gathered}$ |
| National Communism | $\begin{aligned} & 0.693^{*} \\ & (0.358) \end{aligned}$ | $\begin{gathered} 0.693 \\ (0.807) \end{gathered}$ |
| Patrimonial Communism | $\begin{aligned} & -0.585 \\ & (0.336) \end{aligned}$ | $\begin{aligned} & -0.585 \\ & (1.082) \end{aligned}$ |
| Year Free | $\begin{gathered} 0.037 \\ (0.032) \end{gathered}$ | $\begin{gathered} 0.037 \\ (0.041) \end{gathered}$ |
| GDP per capita PPP | $\begin{aligned} & -0.000 \\ & (0.000) \end{aligned}$ | $\begin{aligned} & -0.000 \\ & (0.000) \end{aligned}$ |
| District Magnitude | $\begin{gathered} -0.008^{* *} \\ (0.003) \end{gathered}$ | $\begin{aligned} & -0.008 \\ & (0.005) \end{aligned}$ |
| Constant | $\begin{aligned} & -68.923 \\ & (64.065) \end{aligned}$ | $\begin{aligned} & -68.923 \\ & (82.689) \end{aligned}$ |
| Observations <br> $R^{2}$ <br> Number of groups | $\begin{gathered} 195 \\ 0.140 \\ 14 \end{gathered}$ | 195 <br> 14 |
| Robust standard errors in parentheses${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,^{*} \mathrm{p}<0.1$ |  |  |
| Partial slopes: <br> Left-right in countries with minorities from federal center: -0.578** (0.254) Left-right in countries with other minorities: $0.340^{* *}$ (0.126) |  |  |
| Supporting statistical evidence for figure 2 in the article, including replication using a hierarchical linear model (HLM). |  |  |

Table 5: Estimating socio-cultural party positions

|  | OLS Socio-cultural placement (liberal-conservative) | HLM Socio-cultural placement (liberal-conservative) |
| :---: | :---: | :---: |
| Ethnic minority support | $\begin{gathered} -0.617^{* * *} \\ (0.146) \end{gathered}$ | $\begin{gathered} -0.534^{* * *} \\ (0.077) \end{gathered}$ |
| Religious principles | $\begin{gathered} 0.315^{* *} \\ (0.107) \end{gathered}$ | $\begin{gathered} 0.418^{* * *} \\ (0.077) \end{gathered}$ |
| Ethnic * Religious (interaction) | $\begin{gathered} 0.059 * * \\ (0.024) \end{gathered}$ | $\begin{gathered} 0.045^{* * *} \\ (0.013) \end{gathered}$ |
| Economic Left-Right | $\begin{gathered} -0.321^{* * *} \\ (0.052) \end{gathered}$ | $\begin{gathered} -0.345^{* * *} \\ (0.037) \end{gathered}$ |
| National Communism | $\begin{aligned} & -0.120 \\ & (0.306) \end{aligned}$ | $\begin{aligned} & -0.259 \\ & (0.634) \end{aligned}$ |
| Patrimonial Communism | $\begin{aligned} & -0.235 \\ & (0.651) \end{aligned}$ | $\begin{aligned} & -0.410 \\ & (0.921) \end{aligned}$ |
| Year free | $\begin{aligned} & -0.005 \\ & (0.027) \end{aligned}$ | $\begin{gathered} 0.000 \\ (0.030) \end{gathered}$ |
| GDP per capita | $\begin{gathered} -0.000 \\ (0.000) \end{gathered}$ | $\begin{aligned} & -0.000 \\ & (0.000) \end{aligned}$ |
| District magnitude | $\begin{gathered} 0.000 \\ (0.002) \end{gathered}$ | $\begin{gathered} 0.001 \\ (0.004) \end{gathered}$ |
| Constant | $\begin{gathered} 18.552 \\ (55.209) \\ \hline \end{gathered}$ | $\begin{gathered} 7.649 \\ (60.754) \\ \hline \end{gathered}$ |
| $N$ | 194 | 194 |
| $R^{2}$ | 0.790 |  |
| Loglikelihood |  | -273.667 |
| AIC | 587.045 | 571.335 |
| BIC | 619.723 | 610.549 |
| Number of groups | $14$ | 14 |

Supporting statistical evidence for figure 3 in the article, including replication using a hierarchical linear model (HLM). Socio-cultural placement (dependent variable), ethnic minority support, religious principles, and economic left-right are all measured on 0-10 scales. OLS model includes cluster corrected standard errors in parentheses. HLM model includes standard errors in parentheses.

| Table 6: Predicting the Axis of Competition (OLS and HLM) |  |  |
| :--- | :---: | :---: |
|  | OLS with cluster SE <br> Axis Slope | HLM <br> Axis Slope |
|  |  |  |
| Right-Left Difference | $0.308^{* *}$ | $0.308^{* * *}$ |
| in Ethnic Minority Support | $(0.103)$ | $(0.084)$ |
| National Communism | $-0.601^{* *}$ | -0.601 |
|  | $(0.254)$ | $(0.521)$ |
| Patrimonial Communism | $-2.701^{* * *}$ | $-2.701^{* * *}$ |
|  | $(0.672)$ | $(0.821)$ |
| Year Free | -0.043 | -0.043 |
|  | $(0.025)$ | $(0.030)$ |
| GDP per capita at PPP | $-0.000^{* * *}$ | $-0.000^{* * *}$ |
|  | $(0.000)$ | $(0.000)$ |
| District Magnitude | -0.005 | -0.005 |
|  | $(0.004)$ | $(0.004)$ |
| Constant | $91.691^{*}$ | 91.691 |
|  | $(50.472)$ | $(59.195)$ |
| Observations |  |  |
| $R^{2}$ | 25 | 25 |
| Number of groups | 0.598 |  |

Robust standard errors in parentheses

$$
{ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1
$$

Supporting statistical evidence for figure 4 in the article, including replication using a hierarchical linear model (HLM). See section 6 for details concerning parties included in Right-Left difference calculation.

Table 7: Predicting Individual Positioning on Left-right and Civil liberties (HLM)

|  | Left-right | Left-right | Civil liberties | Civil liberties |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  | $0.178^{* * *}$ |  |
| Minority from | $-1.166^{* * *}$ |  | $(0.040)$ |  |
| Federal Center $\dagger$ | $(0.100)$ |  |  | $0.129^{* *}$ |
| Other |  | $0.641^{* * *}$ |  | $(0.063)$ |
| Minority $\ddagger$ |  | $(0.184)$ |  | -0.058 |
| Female | 0.110 | 0.015 | -0.017 | $(0.036)$ |
|  | $(0.076)$ | $(0.099)$ | $(0.030)$ | $-0.003^{* * *}$ |
| Age | -0.002 | $-0.012^{* * *}$ | 0.001 | $(0.001)$ |
|  | $(0.002)$ | $(0.003)$ | $(0.001)$ | $0.143^{* * *}$ |
| Education | $-0.182^{*}$ | 0.137 | $0.128^{* * *}$ | $(0.041)$ |
| category 2 | $(0.110)$ | $(0.112)$ | $(0.042)$ | $0.260^{* * *}$ |
| Education | -0.008 | $0.304^{*}$ | $0.202^{* * *}$ | $(0.062)$ |
| category 3 | $(0.125)$ | $(0.160)$ | $(0.049)$ | 0.009 |
| Income | $0.229^{* * *}$ | $0.337^{* * *}$ | $-0.140^{* * *}$ | $(0.042)$ |
| category 2 | $(0.083)$ | $(0.110)$ | $(0.033)$ | 0.021 |
| Income | 0.199 | $0.600^{* * *}$ | -0.064 | $(0.075)$ |
| category 3 | $(0.148)$ | $(0.195)$ | $(0.063)$ | 0.068 |
| Constant | $5.642^{* * *}$ | $5.455^{* * *}$ | $-0.170^{*}$ | $(0.092)$ |
| Observations | $(0.269)$ | $(0.246)$ | $(0.095)$ | 2,364 |
| Number of groups | 2,471 | 1,918 | 2,930 | 3 |

Robust standard errors in parentheses

$$
{ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1
$$

Replication of results presented in table 1 in the article using hierarchical linear models (HLM).
Consolidation of Democracy in Central and Eastern Europe II dataset
Left-right measure is a direct left-right self-placement (V44)
Civil liberties variable is a principal factor obtained from four items (V270, V271, V272,
V273; Cronbach's $\alpha=0.75$ ) assessing the acceptance of repressive measures on the part of the government, ranging from conservative to liberal.
$\dagger$ Dummy variable comparing ethnic minorities from federal centers to ethnic majorities in their countries.
$\ddagger$ Dummy variable comparing other ethnic minorities to ethnic majorities in their countries.

Table 8: Robustness check of H3: individual positioning on civil liberties and tolerance

|  | Federal peripheries <br> with minorities <br> from federal center | Countries with <br> other minorities |
| :--- | :---: | :---: |
| Ethnic minority | $0.289^{* * *}$ |  |
|  | $(0.032)$ | $0.171^{* * *}$ |
| Female | $-0.043^{*}$ | $(0.032)$ |
|  | $(0.025)$ | $-0.037^{* *}$ |
| Age | $-0.008^{* * *}$ | $(0.015)$ |
|  | $(0.001)$ | $-0.005^{* * *}$ |
| Education | $0.076^{* * *}$ | $(0.000)$ |
|  | $(0.010)$ | $0.066^{* * *}$ |
| Wealth | 0.017 | $(0.007)$ |
|  | $(0.011)$ | $0.022^{* * *}$ |
| Constant | -0.047 | $(0.007)$ |
| Country dummies | $(0.068)$ | $-0.421^{* * *}$ |
| Observations | yes | $(0.045)$ |
| $R^{2}$ | 2,581 | yes |

Robustness check of the results presented in table 1 in the article using OLS. European Election Study 2009.
The dependent variable tapping preferences on civil liberties and tolerance is a principal factor obtained from four items concerning views on: immigrant assimilation (q56); immigration policy (q67); teaching children to obey authority (q64); and giving harsher criminal sentences (q62). Cronbach's $\alpha=0.66$. The variable ranges from conservative to liberal.
These results are further supported by means tests on the individual variables.

Table 9: Robustness Checks of Analyses of H5

|  | $(1)$ <br> Axis Slope | $(2)$ <br> Axis Slope | $(3)$ <br> Axis Slope |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
| Right-Left Difference | $0.366^{* * *}$ | $0.297^{* *}$ | $0.181^{* *}$ |
| in Ethnic Minority Support | $(0.097)$ | $(0.115)$ | $(0.075)$ |
| National Communistm | -0.254 | $-0.603^{*}$ | -0.075 |
|  | $(0.279)$ | $(0.307)$ | $(0.495)$ |
| Patrimonial Communism | $-2.173^{* * *}$ | $-2.500^{* * *}$ | -0.778 |
|  | $(0.541)$ | $(0.781)$ | $(0.984)$ |
| Year Free | -0.028 | -0.053 | $-0.061^{*}$ |
|  | $(0.029)$ | $(0.037)$ | $(0.030)$ |
| GDP per capita at PPP | $-0.000^{* * *}$ | $-0.000^{* * *}$ | -0.000 |
|  | $(0.000)$ | $(0.000)$ | $(0.000)$ |
| District Magnitude | $-0.009^{*}$ | -0.004 | -0.002 |
|  | $(0.005)$ | $(0.006)$ | $(0.004)$ |
| Constant | 60.644 | 111.737 | $124.341^{*}$ |
|  | $(57.344)$ | $(73.264)$ | $(60.745)$ |
| Observations |  |  |  |
| $R^{2}$ |  | 25 | 23 |
|  |  |  |  |
|  |  | 0.598 | 0.661 |

Replication of analyses of H5 presented in table 6 above, using OLS with cluster SE.
Model 1 considers ethnic support difference between only major left and right parties. See section 6 below for details.
Models 2 and 3 use same ethnic support difference measure as original analyses in table 6.

Model 2 excludes Croatia, due to its switch in axis sign between 2007 and 2010.
Model 3 excludes Croatia, as well as the observations with the steepest axes: Hungary in 2010, Slovenia in 2006 and 2010, and Serbia in 2007.
Note that all models exclude all 2002 observations due to missing data on ethnic minority preferences in that year.

Table 10: Robustness Checks of Analyses of H1

|  | OLS with cluster SE <br> Ethnic Minority Support | HLM <br> Ethnic Minority Support |
| :--- | :---: | :---: |
| Left-Right Placement | $0.268^{* *}$ | $0.260^{* *}$ |
|  | $(0.122)$ | $(0.125)$ |
| Minority from Communist | $5.145^{* * *}$ | $5.074^{* * *}$ |
| Federal Center | $(0.949)$ | $(1.016)$ |
| Left-Right * Minority | $-1.035^{* * *}$ | $-1.024^{* * *}$ |
| National Communism | $(0.165)$ | $(0.175)$ |
|  | $0.791^{* *}$ | 0.489 |
| Patrimonial Communism | $(0.301)$ | $(0.507)$ |
|  | 0.343 | -0.286 |
| Year Free | $(0.325)$ | $(0.611)$ |
|  | -0.025 | -0.033 |
| GDP per capita PPP | $(0.025)$ | $(0.024)$ |
|  | -0.000 | -0.000 |
| District Magnitude | $(0.000)$ | $(0.000)$ |
|  | $-0.004^{*}$ | -0.003 |
| Constant | $(0.002)$ | $(0.003)$ |
|  | 52.530 | 71.497 |
| Observations | $(49.408)$ | $(49.006)$ |
| $R^{2}$ |  |  |
| Number of groups | 186 | 186 |

Replication of analyses of H1 presented in table 4 above, with observations (parties) weighted by their vote share.
Partial slopes:
Left-right in countries with minorities from federal center: -0.767*** (0.113)
Left-right in countries with other minorities: $0.268^{* *}$ (0.122)

## 6 Party types

When testing H5, the article distinguishes between left- and right-wing parties. Left parties are defined as those belonging to socialist, social democratic or communist party families. Right-wing parties are defined as those belonging to liberal, conservative or Christian democratic party families. The measure of Right-Left ethnic minority support difference subtracts leftwing party ethnic minority support from right-wing party ethnic minority support, averaged over country and year, while weighting each party by its vote share. Table 11 summarizes all included parties in the analyses reported in table 6. Parties considered as major in the robustness checks reported in table 9 are marked with an asterisk $\left({ }^{*}\right)$.

Table 11: Party Types

| Country Party | Country Party | Country Party |
| :--- | :--- | :--- | :--- | :--- |


|  | Left-Wing |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Bosnia | SDP* | Latvia | PCTVL* | Poland | SLD* |
| Bulgaria | KzB* | Latvia | LSDSP | Poland | SDPL |
| Croatia | SDP* | Latvia | SC* $^{*}$ | Romania | PSD* |
| Czech Rep | CSSD* | Lithuania | LSDP* | Serbia | SPS* |
| Czech Rep | KSCM | Lithuania | FRONT | Slovakia | KSS |
| Estonia | SDE | Macedonia | SDSM* | Slovakia | Smer* |
| Estonia | EK* |  |  | Slovenia | ZLSD/ SD* |
| Hungary | MSzP* |  |  |  |  |

Right-Wing

| Bosnia | HDZ BiH | Hungary | Fidesz-M* | Romania | PC |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Bosnia | SBiH | Hungary | KDNP | Romania | PD |
| Bosnia | SDA* | Hungary | MDF | Romania | PD-L* |
| Bosnia | SDS | Hungary | SzDSz | Romania | PNL* |
| Bulgaria | DPS | Latvia | LC | Serbia | DSS* |
| Bulgaria | DSB | Latvia | LPP | Serbia | G17+ |
| Bulgaria | GERB* | Latvia | NA | Serbia | LDP |
| Bulgaria | NDSV* | Latvia | TB-LNNK | Serbia | SPO |
| Bulgaria | ODS | Latvia | TP* | Slovenia | LDS |
| Bulgaria | RZS | Latvia | V* $^{*}$ | Slovenia | NSI |
| Croatia | HNS | Latvia | ZRP* | Slovenia | SDS* |
| Croatia | HSLS | Lithuania | DP | Slovenia | SLS |
| Croatia | HSS | Lithuania | LD | Slovenia | SLS-SMS |
| Croatia | HDZ* | Lithuania | LiCS | Slovenia | Zares |
| Croatia | IDS | Lithuania | NS | Slovakia | KDH |
| Croatia | IDS-DDI | Lithuania | TS* | Slovakia | SaS |
| Czech Rep | KDU-CSL | Macedonia | LDP | Slovakia | SDKU-DS* |
| Czech Rep | ODS* | Macedonia | VMRO-DPME* | Slovakia | SF |
| Czech Rep | SNK-ED | Poland | PD |  |  |
| Czech Rep | TOP09 | Poland | PiS* |  |  |
| Czech Rep | VV | Poland | PO* |  |  |
| Estonia | ER* | Poland | SD |  |  |
| Estonia | IRL | Poland | UW |  |  |

