**Supplemental material to**

**“Deindustrialization fosters Ethnonationalism; A comparative Analysis of Ethnonational Parties in Western Europe, 1918-2018”**

This supplemental material has two parts. Part A provides additional information on the selection of cases, operationalizations and data sources. Part B provides additional analyses.

**A Case selection and sources**

*A.1 Selection of ethnonational parties*

The first step is to decide on the politically salient ethnic groups. In order to include only rather prototypical cases, we consulted three datasets on ethnic and national minorities covering Western Europe, and selected only those cases that appeared in at least two instances. The three data sources are the *Encyclopedia of Stateless Nations: Ethnic and National Groups Around the World* (Minahan 2002)*,* Pan and Pfeil’s *Volksgruppen in Europa* (2000)*,* and the *Geo-referencing of Ethnic Groups (GREG)* data (Weidmann, Rød, and Cederman 2010) (see main text). The third row in Table A1 lists these groups.

The second step consists in assessing if the ethnonational category is politically salient. We did so by relying the Ethnic Power Relations dataset (EPR) (see main text) and included all those groups that were considered as politically salient. In order to correct for the fact that the EPR data does not include the period from 1918 to 1944, and misses instances where ethnic minorities have successfully mobilized, we also selected all those with electoral support by an ethnic party that cannot be found in the EPR dataset (see main text). The fourth row in Table A1 lists this information.

As a third criterion we measured group size. For a valid measure of ethnonational party mobilization group size must be of minimal size (see main text). We included groups with at least 50’000 members according to the count of Pan and Pfeil (2000). See the fifth column in Table A1.

As argued in the article, we restrict our sample to movements which achieved minimal levels of mobilization at least once since 1918. This makes sense because we do need variance on the dependent variable and the electoral data for the interwar period only allows to identify all ethnonational parties receiving at least 5% of the votes in one electoral constituency in at least one state–wide parliamentary election (Caramani 2000). The seventh row in Table A1 lists the groups that remain in the sample after considering this criterion.

Finally, the cases of the Faroe Islanders and Greenlanders were excluded because of lack of data.

Table A1: Case selection strategy and classifications

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | Ethnonational group | Group1 | Salient2 | Size3 | Election4 | Sampled | Data5 | Selected |
| Austria | Voralbergians | 0 | -6 | - | - | no | - | no |
| Austria | Croats | 1 | 0 | - | - | no | - | no |
| Austria | Czechs | 1 | 0 | - | - | no | - | no |
| Austria | Hungarians | 1 | 0 | - | - | no | - | no |
| Austria | Slovenes | 1 | 1 | 0 | - | no | - | no |
| Austria | Roma-Sinti | 0 | 0 | - | - | no | - | no |
| Belgium | Flemmings | 1 | 1 | 1 | 1 | yes | yes | yes |
| Belgium | Germans | 1 | 1 | 1 | 1 | yes | yes | yes |
| Belgium | Walloons | 1 | 1 | 1 | 1 | yes | yes | yes |
| Belgium | Luxembourger | 0 | 0 | - | - | no | - | no |
| Denmark | Greenlanders | 1 | 1 | 1 | 1 | yes | no | no |
| Denmark | Faroese | 1 | 1 | 1 | 1 | yes | no | no |
| Denmark | Frisians | 0 | 0 | - | - | no | - | no |
| Denmark | German | 0 | - | - | - | no | - | no |
| Denmark | Scanians | 0 | 0 | - | - | no | - | no |
| Finland | Saami | 1 | 0 | - | - | no | - | no |
| Finland | Ingrians | 0 | 0 | - | - | no | - | no |
| Finland | Karels | 0 | 0 | - | - | no | - | no |
| Finland | Norweigans | 0 | 0 | - | - | no | - | no |
| Finland | Roma | 0 | 0 | - | - | no | - | no |
| Finland | Swedes | 1 | 1 | 1 | 1 | yes | yes | yes |
| France | Alsatians | 1 | 0 | - | - | no | - | no |
| France | Basques | 1 | 1 | 1 | - | no | - | no |
| France | Bretons | 1 | 0 | - | - | no | - | no |
| France | Catalans | 1 | 0 | - | - | no | - | no |
| France | Corsicans | 1 | 1 | 1 | 1 | yes | yes | yes |
| France | German | 0 | - | - | - | no | - | no |
| France | Lothringans | 1 | 0 | - | - | no | - | no |
| France | Occitans | 1 | 0 | - | - | no | - | no |
| France | Flemmings | 1 | 0 | - | - | no | - | no |
| France | Italians | 0 | - | - | - | no | - | no |
| Germany | Danes | 1 | 1 | 0 | - | no | - | no |
| Germany | North Frysians | 1 | 0 | - | - | no | - | no |
| Germany | Sinti-Roma | 1 | 0 | - | - | no | - | no |
| Germany | Sorbs | 1 | 0 | - | - | no | - | no |

Table A1: Case selection strategy and classifications (cont.)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | Ethnonational group | Group1 | Salient2 | Size3 | Election4 | Sampled | Data5 | Selected |
| Greece | Albanians | 1 | 0 | - | - | no | - | no |
| Greece | Macedonians | 1 | 0 | - | - | no | - | no |
| Greece | Roma | 1 | 0 | - | - | no | - | no |
| Greece | Turks | 1 | 1 | 1 | 0 | no | - | no |
| Greece | Vlachs | 1 | 0 | - | - | no | - | no |
| Greece | Armenians | 0 | - | - | - | no | - | no |
| Greece | Pomaks | 0 | - | - | - | no | - | no |
| Ireland | Anglican | 0 | - | - | - | no | - | no |
| Italy | Friulians | 1 | 0 | - | - | no | - | no |
| Italy | Sardinian | 1 | 1 | 1 | 1 | yes | yes | yes |
| Italy | Slovenians | 1 | 1 | 1 | 1 | yes | yes | yes |
| Italy | South Tyrolean | 1 | 1 | 1 | 1 | yes | yes | yes |
| Italy | Valdostians | 1 | 1 | 1 | 1 | yes | yes | yes |
| Italy | Albanians | 1 | 0 | - | - | no | - | no |
| Italy | French-Provencales | 1 | 0 | - | - | no | - | no |
| Italy | Rhaetian/Ladins | 1 | 0 | - | - | no | - | no |
| Italy | Roma | 0 | - | - | - | no | - | no |
| Italy | Greeks | 0 | - | - | - | no | - | no |
| Netherlands | Frisians | 1 | 1 | 1 | 0 | no | - | no |
| Netherlands | Jews | 0 | - | - | - | no | - | no |
| Netherlands | Roma | 0 | - | - | - | no | - | no |
| Norway | Finns | 1 | 0 | - | - | no | - | no |
| Norway | Roma | 0 | - | - | - | no | - | no |
| Norway | Saami | 1 | 0 | - | - | no | - | no |
| Portugal | Roma | 0 | - | - | - | no | - | no |
| Portugal | Barranquenho-speakers | 0 | - | - | - | no | - | no |
| Portugal | Mirandes-speakers | 0 | - | - | - | no | - | no |
| Spain | Basques | 1 | 1 | 1 | 1 | yes | yes | yes |
| Spain | Catalans | 1 | 1 | 1 | 1 | yes | yes | yes |
| Spain | Galicians | 1 | 1 | 1 | 1 | yes | yes | yes |
| Spain | Roma | 0 | - | - | - | no | - | no |
| Spain | Spanish Gypsies | 0 | - | - | - | no | - | no |
| Spain | Valencians | 1 | 0 | - | - | no | - | no |
| Spain | Occitans | 0 | - | - | - | no | - | no |

Table A1: Case selection strategy and classifications (cont.)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | Ethnonational group | Group1 | Salient2 | Size3 | Election4 | Sampled | Data5 | Selected |
| Sweden | Finns | 1 | 0 | - | - | no | - | no |
| Sweden | Saami | 1 | 0 | - | - | no | - | no |
| Switzerland | Swiss French/Romands | 1 | 0 | - | - | no | - | no |
| Switzerland | Swiss Italians | 0 | - | - | - | no | - | no |
| Switzerland | Romansch | 1 | 1 | 1 | 0 | no | - | no |
| Switzerland | Jurassiens | 0 | - | - | - | no | - | no |
| United Kingdom | Northern Irish | 1 | 1 | 1 | 1 | yes | yes | yes |
| United Kingdom | Scottish | 1 | 1 | 1 | 1 | yes | yes | yes |
| United Kingdom | Ulster Protestants | 0 | - | - | - | no | - | no |
| United Kingdom | Welsh | 1 | 1 | 1 | 1 | yes | yes | yes |
| Notes: 1Included in two of three datasets; 2Politically salient; 3Minimal size; 4Ever more than 5% in one electoral constituency; 5Data on most important variables available; 6"-" means that case has been excluded to previous criterion. |

A.2 Operationalizations and sources

The operationalizations of the electoral mobilization of ethnonational parties (dependent variable) and the levels of industrialization (independent variable) are discussed in the main part of the article. Here we describe the operationalization of the control variables. We include several variables:

First, we add variables for the ethnic minority group size in absolute and relative terms. First, we have tried to rely on information on *ethnic* categorization whenever possible. This means that information on cultural attributes has only been used if it could be considered a valid proxy for ethnic self-categorization. We have also tried to rely on census or register data whenever possible. Census data is clearly the most valid available source when it comes to self–classification. In those cases where census data did not provide a reasonable proxy of ethnicity, we used estimates generated from surveys. This is particularly salient in considering the interwar period, during which language spoken was often more–or–less congruent with ethnic belonging. While we rely, whenever possible, on census or register data with ethnic self–classification at its basis, in the cases of the Swedish-speaking minority in Finland and the Catalans and Galician in Spain, we use data on language ability. In the case of the Irish in Northern Ireland, we rely on denomination. As the data from these sources do not produce complete time series, the data has been interpolated.

Second, we use a lagged value of the Polity5 index in order to control for ethnic mobilization as a reaction to state repression.

Third, we control for the electoral system at the level of the territorial concentration of the ethnic group. We distinguish based on the electoral formula between majoritarian (MR), mixed, and proportional (PR) systems. For those cases where data is readily available, we replicate the analysis with a variable for constituency size instead (see Table B.2).

Fourth, we control for the degree of territorial autonomy making use of the Regional Autonomy Index (RAI) put forward by Hooghe, Marks and Schakel (2010). The value for the administrative level with the highest degree of autonomy is selected. For Swedish speakers in Finland, we took the level of the other counties resp. regions than Åland because only a minority of the Swedish speakers live on this island. The data is available for all minority ethnic groups since World War II.

Fifth, we control for European integration with an index put forward by Brancati (2014): ECSC members (1952–56) are coded 1, EEC members (1957–91) 2, EU members (1992-2008) 3, EMU members (1999-2008) 4, and others 0.

Finally, we control for the GDP per capita. Unfortunately, however, for the time period under investigation this data is only available at the national level. Nevertheless, regarding the long time period under investigation this variable will be able to grasp general time trends in economic development of the different countries including the regions under analysis. The descriptive statistics for all variables are given in Table 1 (for the list of sources see Appendix A.2 in the supplemental material).

Table A.2: Sources of variables used in the comparative study

|  |  |  |
| --- | --- | --- |
| Indicator | Sources | Notes |
| Share industry | Guillaume 2005; Hechter 2001; Kacin-Wohinz and Pirjevec 1998; National Statistical Offices; Eurostat regional statistics. | Includes construction.Territorial units: Basque Country and Navarra, Catalonia, Galicia (ESP), Corsica, Pyrénées-Basses/Pyrénées-Atlantiques (FRA), South Tyrol, Sardinia, Aosta Valley, Gorizia-Perenzo-Trieste (ITA), Flanders, Wallony, Liège (BEL), Finland whole country, Northern Ireland whole country, Scotland and Wales (UK). Own elaborations on censuses from Belgium 1930, Spain 1930, and France 1921. |
| Electoral system | Constituency-level Electoral Data Archive CLEA, Riccarand 2000, p.31 for the Valdostians, Wikipedia. | Own elaboration. |
| Polity 5 | Polity5 Project, Political Regime Characteristics and Transitions, 1800-2018 |   |
| Federalism | Hooghe et al. 2016; Shair-Rosenfield et al. 2020. | Values for the level with highest degree of autonomy was taken. |
| National populations | Rothenbacher 2002, Rothenbacher 2005, National Statistical Offices, OECD |   |
| Ethnic groups size natives | Tesnière 1928; Alcock 1970; Salvi 1975; Hundertmark 1980; Kloss and McConnell 1981; Braga 1989; Holzer and Schwegler 1998; Nieminen 2000; Compton 2000; Pan and Pfeil 2000; Pan and Pfeil 2003; Hechter 2001; Schryver 1973; Davies 2007; Statistics Finland; Instituto Vasco de Estadística EUSTAT; Instituto Nacional de Estadística y de Estudios Económicos INSEE; Fondacion Emile Chanoux, Durk Gorter (personal correspondation); Basque Statistical Office; Statical Offices of Catalonia and Galicia. | For case selection (Table 1) the data from Pan and Pfeil was used. For the Basques in Spain no valid estimates until the 1980s are available. Criteria: Flemish (BEL), Germans (BEL), Walloons (BEL): language in census/survey; Swedish (FIN): language in census/register; Basques (FRA): language in census before WWII, ethnicity in survey after; Corsicans (FRA): language in census/official estimations; South Tyroleans (ITA): language in census; Sardinians (ITA): language estimates; Valdostians (ITA): language before WWII, ethnicity in survey after; Basques (SPA): ethnicity in regional census; Catalans and Galician (SPA): language estimate before WWII, language in census after; Irish (NIR): religion in census; Scottish and Welsh (UK): birth 1920, ethnicity in census/survey. |
| GDP per capita  | Bolt, Inklaar, de Jong, and van Zanden (2018) | National units. |

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**B Additional analyses**

Figure B.1: Electoral mobilization of ethnonational parties and levels of industrialization, 1918-2018



The ethnic party blocs running in elections today are far from recent inventions. Before World War II members of ethnic minorities were represented by ‘their’ ethnic party in 12 out of 15 cases. In general, the number of ethnic party blocs has remained stable. Most parties regularly ran in elections since the end of WWI (in the case of minorities in Spain, since the Second Republic). Among the 15 ethnic minorities with minimally successful ethnonational parties at one point in history, two ethnonational parties never again achieved more than 5% of the votes in an electoral constituency after WWII. Three of the ethnic minorities, on the other hand, did not mobilize until after WWII. These are the Walloons, the Corsicans, and the Valdostians. The peak of ethnic minorities being represented by ethnonational parties was shortly before and after World War II. It spiked again after the democratization of Spain with the re–entrance of Basque, Catalan and Galician ethnonational parties.

Four groups stand out as having the highest *levels* of ethnic mobilization. These are the Basques in Spain, the Irish in Northern Ireland, the South Tyroleans in Italy, and the Swedish–speakers in Finland. Into the category of intermediate levels of mobilization, we can place the Valdostians in Italy and the Catalans in Spain. We find medium-low levels for the Scottish, the Welsh, the Flemish, and the Galicians. Cases of very low levels of mobilization comprise the Sardinians, and Walloons. The Germans in Belgium and the Slovenes in Italy only mobilized before World War II, while the Corsicans only received electoral support after the 1980s.

A glance at Figure B.1 also shows that the ethnic minority parties did not follow a general *trend*, but followed different paths. Whereas some party blocs show very stable support, we can identify a handful of cases with increasing support and a few cases with decreasing or unstable support. Among the ethnic party blocs with stable levels of support are the Catalans, South Tyroleans and Valdostians. The UK minorities and the Flemish belong to the groups that witnessed an increase in support. The Basques and Catalans in Spain, the Swedish–speakers in Finland, and the Sardinians in Italy can be cited as examples of a decline in ethnic mobilization. Ethnic minority parties which did not achieve support for a prolonged period of time are those representing the Slovenes in Italy, the Germans in Belgium and the Corsicans.

The strongest cases for a negative relationship between levels of industrialization and ethnic party mobilization are the minorities in the UK (Irish, Scottish, Welsh), the Flemish in Belgium, and the Swedish speakers in Finland (see also Table B.1). The most convincing case is probably the one of the Swedish speakers in Finland. In this case both an early period of industrialization—Finland remained a heavily agrarian country until after World War II—went together with a decline in electoral support of the Swedish People's Party while a short period of moderate *re*industrialization in the 1970s was followed by a slight decrease in the party's electoral fortune. The negative relationship between industrialization and ethnic party mobilization is less clear–cut for the Valdostians, Corsicans and Sardinians. It seems to be absent for all the other groups with the expectation of the Basques where the level of industrialization is positively related to ethnic party mobilization.

**B.1 Within-case analyses**

Table B.1: Averages and changes in the Relative Index of Ethnic Party Mobilization (RIEPM), 1918-2018

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Country | Ethnic group | Average | Change last-first election period1 | Average growth rate2 | Correlation with share industry |
| Italy | South Tyroleans | 0.93 | 0.26 | 0.00 | 0.34 |
| Finland | Swedes | 0.93 | -1.00 | -0.01 | -0.82 |
| United Kingdom | Irish | 0.71 | 0.91 | 0.11 | -0.62 |
| Spain | Basques | 0.58 | 0.10 | 0.03 | 0.46 |
| Spain | Catalonia | 0.40 | -0.23 | 0.03 | 0.25 |
| Italy | Valdostians | 0.40 | 0.24 | -0.17 | -0.53 |
| Belgium | Flemish | 0.15 | -0.05 | 0.24 | -0.72 |
| United Kingdom | Scottish | 0.14 | 0.42 | 0.62 | -0.86 |
| United Kingdom | Welsh | 0.11 | 0.20 | 0.68 | -0.83 |
| Spain | Galicians | 0.09 | -0.19 | -0.37 | 0.34 |
| France | Corsicans | 0.07 | 0.32 | 0.45 | -0.28 |
| Belgium | Walloons | 0.04 | 0.05 | 0.12 | -0.20 |
| Italy | Sardinians | 0.04 | -0.13 | -0.42 | -0.08 |
| Belgium | Germans | 0.03 | 0.00 | -0.72 | 0.23 |
| Italy | Slovenes | 0.02 | -1.26 | - | -0.20 |
| Note: 1Includes election periods without candidacy or vote share below 5% in all constituencies; 2In order to avoid division by zero election periods without candidacy or vote share below 5% in all constituencies their REIMP has been recoded to 0.01. |

**B.2 Two-way fixed effects**

Table B.2: Two-way fixed effects regressions on electoral mobilization of ethnonational parties

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | Model without control variables | Model with control variables | Model with federalism | Model with raw data |
| Share industry scale | -0.0467\*\* | -0.0426\*\* | -0.0119 |  |
|  | (0.0142) | (0.0149) | (0.0208) |  |
| Share industry raw |  |  |  | -0.00510\*\*  |
|  |  |  |  | (0.00159)  |
| Control variables | No | Yes | Yes | Yes |
| Regional authority index | No | No | Yes | No |
| Observations | 243 | 243 | 192 | 231  |
| Ethnic groups (Panels) | 15 | 15 | 15 | 15  |
| R2 within | 0.197 | 0.307 | 0.292 | 0.344  |
| Note: Dependent variable: Relative index of Ethnic Party Mobilization (RIEPM); Control variables: . All models are calculated with panel fixed effects and robust standard errors; \* p<0.05; \*\* p<0.01; \*\*\* p<0.001. |

**B.3 Different time lags**

If we assume path dependency, we might also argue that the effect of deindustrialization on ethnic mobilization is not only simultaneous—as the composition hypothesis suggests—but also lagged. We test whether our results are robust to lagging the independent variable in Table B.3 of the supplemental material.

Table B.3: Time-series regression analyses on electoral mobilization of ethnonational parties with lagged independent variable

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
| Share industry scale t0 | -0.0455\*\* |  |  |  |   |
| (0.0141) |  |  |  |   |
| Share industry scale t-1 |  | -0.0280+ |  |  |   |
|  | (0.0148) |  |  |   |
| Share industry scale t-2 |  |  | -0.0312\* |  |   |
|  |  | (0.0152) |  |   |
| Share industry scale t-3 |  |  |  | -0.0259+ |   |
|  |  |  | (0.0156) |   |
| Share industry scale t-4 |  |  |  |  | -0.0400\*  |
|  |  |  |  | (0.0157)  |
| Observations | 243 | 221 | 205 | 190 | 178  |
| Ethnic groups (Panels) | 15 | 15 | 15 | 15 | 15 |
| R2 within | 0.137 | 0.104 | 0.096 | 0.080 | 0.078  |
| Note: Beta-coefficients with panel correct standard errors in parenthesis; All models are calculated with panel fixed effects and robust standard errors; + p<0.1 \* p<0.05; \*\* p<0.01; \*\*\* p<0.001. |