ONLINE APPENDIX

**Measuring polarization**

The index introduced by Esteban and Ray (1994) measures the ‘distance’ between groups on a given characteristic. Beugelsdijk and Klasing (2016: 524) adapt this fraction index by defining the different groups of a society through the possible answers that can be given to a question and the distance between groups through the difference in the corresponding answer codes. The corresponding relative size of each group is given by the share of the sampled population that chooses a given answer category. It follows that the “polarization index is 0 when all respondents give the same answer (perfectly homogeneous values), takes positive values otherwise, and reaches a maximum when a society has two equal groups with strongly opposing viewpoints” (Beugelsdijk & Klasing 2016: 524). Esteban and Ray’s (1994) measure is expressed as follows:

“where and , respectively, denote the conditional mean of the attribute of interest in group i and the share of the population holding it (and correspondingly for group j); n denotes the number of different groups in the population; and α ≥ 0 captures the degree of polarization sensitivity” (Beugelsdijk & Klasing 2016: 524). Thus, setting α to 0, our polarization index very highly correlates with Esteban and Ray’s index at the regional level (table 1).

Appendix Table 1: Macro correlations of polarization indices (Pearson’s R)

|  |  |  |  |
| --- | --- | --- | --- |
|  | P(Reg) Immigration | P(Reg) Inequality | P(Reg) Homosexuality |
| P(Esteban&Ray)  Immigration | **0.928**\*\*\* | 0.061ns | 0.341\*\*\* |
| P(Esteban&Ray)  Inequality | 0.017ns | **0.897**\*\*\* | -0.157\*\*\* |
| P(Esteban&Ray)  Homosexuality | 0.275\*\*\* | -0.156\*\*\* | **0.933**\*\*\* |

*Note: \*p ≤ 0.05; \*\*p ≤ 0.01; \*\*\*p ≤ 0.001. Source: ESS 2002–2014.*

**Variables**

Appendix Table 2: Variables

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Operationalization** | **Min** | **Max** |
| ***Macro units (Nuts-II regions)*** | |  |  |
| Regional public opinion polarity | Per attitudinal dimension: (1) Two variables, one per direction of orientation, average value coded zero. (2) Regional mean for both variables. (3) Multiplication of regional means per attitude dimension. | Polarity (homosexuality) | |
| 0.01 | 0.67 |
| Polarity (cultural threat) | |
| 0.17 | 2.04 |
| Polarity (economic inequality) | |
|  |  | 0.33 | 0.37 |
| ***Micro variables (individuals)*** | |  |  |
| Non-electoral political participation | There are different ways of trying to improve things in [country] or help prevent things from going wrong. During the last 12 months, have you done any of the following? Have you taken part in a lawful public demonstration? | 0 [no] | 1 [yes] |
| Homosexuality | Gay men and lesbians should be free to live their own life as they wish. | 1 [agree strongly] | 5 [disagree strongly] |
| Cultural threat | Would you say that [country]’s cultural life is generally undermined or enriched by people coming to live here from other countries? | 0 [cultural life undermined] | 10 [cultural life enriched] |
| Economic inequality | The government should take measures to reduce differences in income levels. | 1 [agree strongly] | 5 [disagree strongly] |
| Homosexuality\_extreme | The two outermost extreme scale values on the left and on the right end of issue dimension (dummy). | 0 [moderate] | 1 [extreme] |
| Immigration\_extreme | The two outermost extreme scale values on the left and on the right end of the issue dimension (dummy). | 0 [moderate] | 1 [extreme] |
| Income\_extreme | The two outermost extreme scale values on the left and on the right end of the issue dimension (dummy). | 0 [moderate] | 1 [extreme] |
| Ideological extremism | The two outermost extreme scale values on the left and on the right end of the left–right dimension (dummy). | 0 [moderate] | 1 [extreme] |
| Political interest | How interested would you say you are in politics? | 1 [not at all interested] | 4 [very interested] |
| Politically informed (media consumption) | 1. On an average weekday, how much of your time watching television is spent watching news or programmes about politics and current affairs (on television)? 2. *Analogously*: Reading newspaper and listening to radio. | 0  [no time at all] | 7  [more than 3 hours] |
| Party affiliation | Is there a particular political party you feel closer to than all the other parties? | 0 [no] | 1 [yes] |
| Age | years | 14 | 123 |
| Sex | female (0); male (1) | 0 | 1 |
| Education | About how many years of education have you completed, whether full-time or part-time? Please report these in full-time equivalents and include compulsory years of schooling. | 0 | 56 |
| Subjective household income | Which of the descriptions on this card comes closest to how you feel about your household’s income nowadays? | 1 [finding it very difficult on present income] | 4 [living comfortably on present income] |
| Urbanization | Which phrase on this card best describes the area where you live? | 0 [a farm or home in the countryside] | 1 [a big city] |
| Paid work | Have done within 7 days: paid work | 0 [not marked] | 1 [marked] |
| Religiosity | How religious are you? | 0 [not at all religious] | 10 [very religious] |

**Multi-level regressions**

Appendix Table 3: Public opinion polarization and protest participation I



*Note: Unstandardized coefficients; \*p ≤ 0.05; \*\*p ≤ 0.01; \*\*\*p ≤ 0.001. Source: ESS 2002–2014.*

Appendix Table 4: Public opinion polarization and protest participation II



*Note: Unstandardized coefficients; \*p ≤ 0.05; \*\*p ≤ 0.01; \*\*\*p ≤ 0.001. Source: ESS 2002–2014.*

Appendix Table 5: Public opinion polarization and protest participation III



*Note: Unstandardized coefficients; \*p ≤ 0.05; \*\*p ≤ 0.01; \*\*\*p ≤ 0.001. Source: ESS 2002–2014.*

Appendix Table 6: Public opinion polarization and protest participation IV



*Note: Unstandardized coefficients; \*p ≤ 0.05; \*\*p ≤ 0.01; \*\*\*p ≤ 0.001. Source: ESS 2002–2014.*

Appendix Table 7: Public opinion polarization and protest participation V



*Note: Unstandardized coefficients; \*p ≤ 0.05; \*\*p ≤ 0.01; \*\*\*p ≤ 0.001. Source: ESS 2002–2014.*