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The Geography of Anti-Immigrant Attitudes across Europe, 2002-2014

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Abstract

Europe has become a major destination for international migrants. By 2015, 34.3 million people living in an EU member state were born outside of the EU-28, and an additional 18.5 million persons had been born in another EU country than the one currently residing in. In this context of a growing foreign-born population, which is now at about 10 per cent of the total European population, xenophobic attitudes against immigrants are generally perceived as having increased over the past decade across Europe. This study explores the extent to which anti-immigrant hostility is spatially dependent and has spread geographically across European regions of that period. Based on data from seven rounds (2002-2014) of the European Social Survey (ESS), analyzed at sub-national (NUTS 2 regions) levels, we identify a significant spatial connectivity of anti-immigrant attitudes by showing that spatially more proximate European regions share similar in trends in anti-immigrant sentiments than we observe between more distant regions. The identification of a spatially dependent diffusion and clustering process of anti-immigrant attitudes has significant bearing for the understanding of the rise and fall of populist movements across Europe and changing electoral support for xenophobic parties across European regions over time.

Keywords: Anti-immigrant attitudes, social impact theory, migration, EU,

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1 Introduction

Immigrants are making up a continuously growing proportion of the European population. In 2014, circa 1.9 million people moved to the EU-28 from non-member State countries, while another 1.8 million migrated to and from another EU Member State. By January 2015, 19.8 million citizens of non-member countries and 34.3 million people born outside of the EU were living in the EU-28 (Eurostat 2016).

Meanwhile, radical right-wing populist parties – with anti-immigration actions at the core of their political agendas – have increased and broadened electoral support across Europe. In the 2014 general election, the *Sverigedemokraterna* became Sweden's third biggest party, securing almost 13 percent of the vote; the *Dansk Folkeparti* in Denmark won 21.1 percent of the vote in 2015, almost doubling its support since the previous 2011 general election and, in 2015, the *Schweizerische Volkspartei* obtained a record 29.4 percent of the vote in Switzerland. As of December 2016, the *Alternative for Germany* (AFD) party has gained representation in ten of the 16 German Federal state parliaments and won 7.1 percent of the votes in the European Parliament elections in 2014. In the same election, The *United Kingdom Independence Party* (UKIP) became the strongest British party winning 26.6 percent of votes. The most recent step in the European rise of populist, radical right parties, is the presidential election in Austria with the candidate of the *Freedom Party Austria* (FPÖ), Norber Hofer, winning 48 percent of votes.

As a consequence of this political shift, partly reinfoced by the portrayal of the so-called European refugee crisis, some European governments have started tightening some of their immigration policies, even in traditionally more open and liberal countries such as Sweden where, on 21 June 2016, the Swedish Parliament adopted legislative changes that introduce a temporary three-year (13-month) residence permit for those granted refugee (subsidiary protection) status and limit remarkably the possibilities of asylum seekers to be reunited with their families. This political backlash seems – at least partly – to be driven by growing perceptions and beliefs that continuing immigrant flows establish a threat to the economic, cultural, and social status quo and future prospects. The Spring 2016 Eurobarometer reports that almost half of Europeans (48 percent) mention immigration as the issue of greatest concern, well ahead of terrorism and the economy.

Although there is no unified theory for public attitudes and opinion on immigration (Price & Oshagan, 1995; Chandler & Tsai, 2001), the literature presents a number of factors potentially driving anti-immigrant sentiments (Rustenbach, 2010). Economic theories for instance, explain opposition to incoming migrants to be shaped by fears about labour market competition (Scheve & Slaughter, 2001; Mayda, 2006) and a growing fiscal burden on public services (Boeri & Brücker, 2005; Hanson, Scheve, & Slaughter, 2007; Facchini & Mayda, 2009). Economists anticipate that natives are more likely to oppose immigrants with similar skills and support inflows of those with skill endowments that complement their own (Scheve & Slaughter, 2001; Mayda, 2006). Economic theory suggests that if governments adjust tax rates to balance their budgets (or adjust per capita welfare benefits while trying to keep tax rates constant), high-income earners are economically more negatively (positively) affected by inflows of unskilled immigrants than low-income earners and, therefore, are expected to be more opposed to (in favour of) low-skilled immigrant inflows (Facchini & Mayda, 2009).

Non-economic explanations emphasize socio-cultural factors, mainly reflecting nativist mind-sets and a high degree of national identification with a strong desire for ethnically homogeneous societies. Hostility to newcomers has been associated with, for instance, an isolationist mentality,

pessimistic evaluations of the current and future state of the economy, and feelings of alienation from mainstream social and political institutions (Espenshade & Hempstead, 1996); racial or cultural prejudice (Gang, Rivera-Batiz, & Yun, 2002; Dustmann & Preston, 2007); beliefs about the size of the immigrant population, cultural and national identities, and a general disposition to trust in other people (Sides & Citrin, 2007); threats to in-group resources and threats to the shared customs and traditions of the society (McLaren & Johnson, 2007); perceived cultural threats especially with regard to the English language (Chandler & Tsai, 2001); or stereotypical beliefs about the work ethic and intelligence of other groups (Burns & Gimpel, 2000).

This study builds on these rather amorphous explanations and contributes a new conceptual angle and empirical perspective on the formation and dissemination of anti-immigrant attitudes. Like other studies before, we hereby identify significant heterogeneity in immigration attitudes across space and time. Immigration attitudes vary significantly across European regions (Markaki & Longhi, 2013; Rustenbach, 2010; Schlueter & Wagner, 2008), which still exist even after controlling for socio-economic differences (Raijman, Semyonov, & Schmidt, 2003). These spatial patterns however seem to change over time, and the present study argues that anti-immigration sentiments are part of a spatial-dynamic diffusion and clustering process by which otherwise similar people living in different European regions tend to vary greatly in their attitudes. Our empirical investigation builds on the propositions of dynamic social impact theory (Latané, 1981, 1996), and finds robust evidence for a prevalent spatial dependence of anti-immigration attitudes across 30 European countries and respective sub-national regions. This explains the existence of multiple regional clusters with relatively strong anti-immigrant attitudes even when controlling for other economic and non-economic factors. We argue that when people form their opinions about immigration and immigrants they are strongly influenced by the (anti-)immigrant attitudes of people around them living in the same or nearby locations. This implies – in terms of Tobler's first law of geography (see e.g. Anselin, 1988) – that (average) immigrant attitudes of people living in one European region are more influenced by attitudes in nearby regions than those in more distant ones – even if nearby regions are on different sides of country borders.

2 Spatial dependence in anti-immigrant attitudes

Previous studies on anti-immigrant attitudes lack, in our view, an important and possibly decisive factor to better understand the evolution and diffusion of anti-immigrant attitudes across time and space: social and spatial proximity to other people with different (immigration) attitudes influence, deliberately or not, how other nearby people may feel and think about an issue such as immigration. This socio-spatial distance between subjects is often ignored in the conceptualisation of social processes of interaction and influence. A notable exception is Latané's theory of dynamic social impact (Latané, 1981, 1996) which emphasises the importance of distance ('immediacy') as a major determinant of social influence. Social influence can hereby be understood as change in people's thoughts, feelings, attitudes, and ultimately, behaviours resulting from interaction with other individuals or groups. Latané's social impact theory proposes that the impact of other people on a target person or population is a function of three factors: the number of others who make up the source, their immediacy or proximity, and the strength or salience of their 'information'. The theory assumes that, although people influence each other in a variety of ways through psychological processes of social interaction, all operate through socio-spatial dimensions of proximity and similarity (1996).

These propositions applied to the process of anti-immigrant sentiments spreading across space and time imply that anti-immigrant attitudes A' of a 'target' population are influenced in a (multiplicative) function as by the strength of the 'source' population's anti-immigrant sentiment A, the (inverse) spatial distance D between source and target populations and the size of the influencing source population, P:

$$A' = f(A, D, P)$$

Latané (1996) assumes that social impact may be attenuated by impediments to the operation of any of the three factors. Individuals are hereby influenced by the majority, i.e. when a large portion of an individual's or a group's reference population holds a particular attitude, it is likely that this individual or group of individuals will adopt it as well. This non-deterministic process is able to describe and predict the diffusion of all sorts of beliefs and attitudes through social systems (Latané, 1996). It is based on the assumption that social structure is the result of individuals influencing each other in a dynamic and iterative way, and people are assumed to be more influenced by people nearby rather than those farther away. This continuous process of mutual influence eventually leads to local clusters and regional patterns of otherwise 'randomly' distributed attitudes and beliefs.

As a result of the non-random spatial distribution of anti-immigrant attitudes we may identify *spatial dependence* of attitudes which corresponds to the importance of spatial proximity in shaping the degree of social influence experienced by a target population. Spatial dependence of anti-immigrant attitudes finds support in a fundamental tendency of people's attitudes on immigration to become spatially clustered.

Our empirical strategy is to identify spatial dependence in anti-immigration attitudes by testing the following hypotheses:

Hypothesis 1: Anti-immigration attitudes are inversely proportional to the distance between European regions.

Hypothesis 2: Anti-immigrant attitudes of more populated regions have a stronger effect on attitudes in nearby European regions than on more distant regions.

Hypothesis 3: Anti-immigration attitudes across European regions are spatially dependent, i.e. proximate regions have more similar (average) attitudes, leading to spatial clustering.

3 Empirical analysis

3.1 Empirical model

The empirical investigation of a spatially dependent diffusion and clustering process of anti-immigration attitudes is performed through estimation of the following spatial lag model specification, based on (Plümper & Neumayer, 2010):

$$a_{it} = \rho \sum_{k} w_{ikt} a_{kt} + \beta \boldsymbol{X}_{it} + \gamma_i + \lambda_t + \varepsilon_{it}$$

where a_{it} is the value of the dependent variable in region i at time t, $w_{ikt} a_{kt}$ is the spatially lagged dependent variable, $\boldsymbol{X}_{it}$ is a vector of control variables, and ε_{it} is an identically and independently distributed (i.i.d.) error process. The spatially lagged attitudinal variable is constituted by the product of a block-diagonal row-standardized spatial weighting matrix (w_{ikt}) and a matrix of the

contemporaneous value of the dependent variable in all other regions k (a_{kt}). The degree of connectivity between pairs of regions over the seven time intervals (14 years) of scrutiny is measured by employing the inverse of the (geographical) distance between regions i and k weighted by the population size. Region fixed effects (γ_i) and year fixed effects (λ_t) are also included to account for unobserved spatial heterogeneity (or spatial clustering) and to control for common shocks and common trends.

3.2 Data: Anti-immigrant attitudes across European regions

We have used individual-level data from all seven rounds (2002-2014) of the European Social Survey (ESS) and created from these repeated cross-sectional survey data a panel dataset with the units of observation being sub-national regions (rather than individuals). The ESS is an academically driven cross-national survey that has been conducted since 2002 (at 2-year intervals) across a varying number of EU and non-EU countries. It consists of answers to an hour-long questionnaire on a variety of themes, ranging from subjective well-being to politics and migration. Demographic, socio-economic, political, and attitudinal variables have been generated by aggregating individual-level data at the NUTS2 regional level - based on the 2010 Nomenclature of Units for Territorial Statistics (NUTS) classification scheme - through computation of weighted percentages[1]. The aggregation has accounted for changes in the NUTS classification, such as boundary shifts, mergers and/or splits, which are proposed by the European Commission at intervals of at least three years.

As our measure capturing anti-immigrant sentiments, we have used respondents' answers to three questions that are included in the ESS module 'politics' and have been consistently asked in each of the seven survey rounds. These questions enquire about respondents' preferred levels of immigration and are stated as follows: (a) "*To what extent do you think [country] should allow people of the same race or ethnic group as most [country] people to come and live here?*", (b) "*How about people of a different race or ethnic group from most [country] people?*", and (c) "*How about people from the poorer countries outside Europe?*". Responses are categorised in a 4-point scoring system with 1 representing "allow many to come and live here", 2 "allow some", 3 "allow a few", and 4 "allow none". For each of the three questions, we have constructed an 'anti-immigration' variable, where scores are calculated by the weighted percentage of those who prefer either "allow a few" or "allow none". These three attitudinal variables represent the shares of respondents who oppose (a) immigrants of the same race or ethnic group, (b) immigrants of different race or ethnic group or (c) immigrants from poorer countries outside Europe.

Table 1 reports, for each country in our data set, the number of ESS rounds for which data at the NUTS2 level were available, the number of NUTS2 regions, and the weighted averages of anti-immigrant attitudes for the three attitudinal variables. Although participating in one or more rounds of the ESS survey, we have excluded from our analysis the following countries (and corresponding regions): (1) Israel, Ukraine and Russia, which are not covered by the NUTS and use their own regional classification; (2) Albania, as there were no related data on NUTS distances; (3) Kosovo, which is not a member state, but a potential candidate for EU accession under UNSCR 1244/99; (4) Latvia (ESS round 3), Lithuania (ESS round 4) and Romania (ESS round 3), as data on design weights were not available. Six countries (Cyprus, Estonia, Iceland, Latvia, Lithuania, and Luxembourg) have one NUTS2 region, i.e., their NUTS2 division corresponds to the entire country,

[1] Following the official ESS recommendation, only the design weight, which corrects for the fact that in some countries respondents have different probabilities of being part of the sample due to the sample design used, is applied.

and two of them (Latvia and Romania) appear in only one round due to unavailability of design weights. As a consequence, our sample covers 203 NUTS2 level regions of 28 European countries.

Table 1. Descriptive statistics

Country (1)	ESS rounds (2)	NUTS2 regions (3)	Weighted percentage of NUTS population with anti-immigrant attitudes (standard deviations in parentheses)		
			SAME race or ethnicity (4)	DIFFERENT race or ethnicity (5)	POORER countries OUTSIDE Europe (6)
Austria	6	9	38.53 (12.40)	55.24 (10.07)	56.28 (9.832)
Belgium	3	11	26.08 (7.745)	42.18 (8.525)	44.33 (8.784)
Bulgaria	4	6	24.54 (6.007)	37.12 (6.470)	46.26 (8.388)
Croatia	2	2	35.45 (2.667)	40.50 (3.241)	43.79 (1.927)
Cyprus	4	1	49.34 (20.61)	88.46 (0.936)	91.70 (0.637)
Czech Republic	6	8	51.39 (6.766)	63.24 (8.078)	63.28 (9.493)
Denmark	7	5	17.90 (4.619)	42.46 (7.712)	53.45 (5.986)
Estonia	6	1	34.51 (6.316)	58.66 (6.014)	70.64 (2.905)
Finland	3	5	34.81 (8.800)	50.26 (14.55)	61.20 (13.79)
France	3	21	30.02 (10.01)	43.17 (10.16)	49.84 (10.22)
Greece	3	13	63.27 (14.92)	85.21 (7.713)	85.48 (7.951)
Hungary	7	7	45.67 (9.524)	80.51 (5.543)	84.93 (5.453)
Iceland	2	1	8.321 (2.699)	29.44 (5.754)	28.08 (5.143)
Ireland	6	2	31.45 (9.016)	40.89 (7.409)	44.41 (10.33)
Italy	3	20	30.56 (12.05)	38.80 (13.67)	39.53 (13.31)
Latvia	1	1	44.96 (.)	62.67 (.)	75.50 (.)
Lithuania	3	1	24.19 (4.589)	35.52 (5.962)	49.60 (9.676)
Luxembourg	2	1	37.12 (7.013)	52.70 (1.591)	51.95 (1.285)
Netherlands	7	12	34.80 (7.623)	40.71 (8.772)	47.27 (7.441)
Norway	7	7	21.91 (5.390)	36.62 (8.494)	37.74 (5.613)
Poland	7	16	25.38 (8.329)	35.47 (10.28)	35.30 (11.89)
Portugal	4	5	54.41 (13.23)	60.11 (13.04)	62.80 (9.900)
Romania	1	8	40.37 (10.30)	48.23 (8.157)	50.76 (8.420)
Slovakia	5	4	36.78 (9.541)	47.52 (9.476)	47.73 (11.61)
Slovenia	7	2	29.99 (6.354)	39.57 (6.588)	46.50 (5.581)
Spain	7	19	43.64 (15.20)	47.25 (14.84)	48.23 (15.32)
Sweden	7	8	9.415 (3.557)	13.10 (4.784)	14.34 (4.703)
Switzerland	7	7	17.91 (5.224)	37.67 (8.374)	39.59 (9.191)

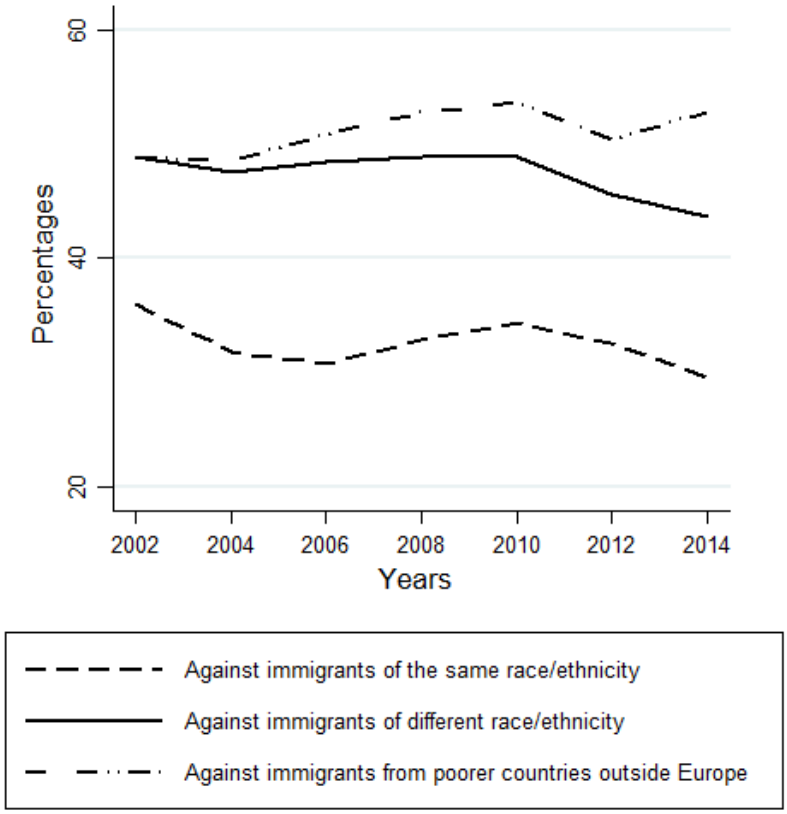
Notes: Standard deviation for Latvia cannot be computed since data were available for only 1 round (due to unavailability of design weights for ESS round 3) and its NUTS2 division corresponds with the entire country.

In most European countries, preferences over immigration levels seem heavily contingent upon the type of (potential) immigrants. For instance, the regionally weighted percentage of survey respondents in Cyprus and Hungary expressing negative attitudes against immigrants is about 39 and 35 percentage points, respectively, lower when referring to immigrants of *same* race (Column 4) than if asked about immigrants of *different* ethnicity (Column 5). The difference is even more pronounced when opinions concern immigrants from poorer countries outside Europe (Column 6): here about 92 percent of survey respondents in Cyprus and 85 percent of those in Hungary display negative attitudes in terms of a preference for lower immigration levels of these groups. Hostility seems less dependent on those categories of immigrants in the cases of Portugal, Spain, or Sweden. For instance, the average share of respondents in Spain opposing inflows of migrants of the same race or ethnicity is nearly the same as the average share of those opposing immigrants of different race or ethnicity or from poorer countries outside Europe. Overall, Sweden appears as the most immigrant-friendly country in the sample, with only 9.41 (13.10) per cent of respondents reporting a preference for lower levels of immigrants of the same (different) race or ethnic group.

As a measure of cross-regional variation in anti-immigrant attitudes over time, columns (4)-(6) of Table 1 report also respective standard deviations (in parentheses). Attitudes towards immigrants of the same race or ethnicity appear remarkably heterogeneous in Cyprus, Greece, and Spain, but more clustered around the average in Croatia, Iceland, and Sweden. In Greece, for instance, the percentage of respondents showing hostility to immigrants of the same race or ethnicity oscillates between a 33.56 (*Δυτική Μακεδονία* in 2004) lower bound and a 90.51 (*Βόρειο Αιγαίο* in 2004) upper bound. Attitudes towards immigrants of different race or ethnicity or towards immigrants from poorer countries outside Europe, instead, appear more dispersed around the weighted average in Finland, Italy, and Spain, but rather consistent in Croatia, Luxembourg, Cyprus, and Sweden. In Sweden, for instance, the share of those opposing immigrants of different race or ethnicity ranges between 4.25 (*Mellersta Norrland* in 2014) and 23.62 (*Småland med öarna* in 2004) percent. Minimum and maximum values for each country and by type of immigrants are reported in Table A.III in the Appendix.

Over time, Europeans have become slightly more favourable towards migrants between 2002 and 2014 contrary to what the past and current state of the economy, nature of some recently adopted (restrictive) migration policies, and growing support for far-right political parties and media portrayals would suggest. Figure 1 provides an overall picture of the trends in anti-immigrant attitudes by type of immigrants in Europe.

Figure 1. Anti-immigrant attitudes in Europe, 2002-2014.



Notes: The vertical axis represents the percentage of anti-immigrant population in Europe and the horizontal axis indicates the respective period of time (year) for which the indicator was analysed.

Except for a modest upward trend between 2006 and 2010, presumably reflecting the underlying global financial meltdown and the subsequent European sovereign debt crisis, the percentage of Europeans opposing immigrants of the same (different) race or ethnicity as (from) the majority has dropped by almost 7 (5) percentage points between 2002 and 2014. Conversely, opposition to immigrants from poorer countries outside Europe has moderately but continuously increased: the percentage of Europeans who felt that a few or none of these migrants should be allowed to come to their countries has increased from 48 per cent in 2002 to 52 per cent in 2014.

Table 2 summarizes variations in anti-immigrant attitudes at the country level. Focusing on the countries where data was collected in both 2002 and 2014, only Ireland, Czech Republic and the United Kingdom have become more negative towards immigrants of the same race or ethnicity. Particularly, the percentage of Irish opponents has risen by about 14 percentage points between 2002 and 2014, while that of Czechs has almost doubled over the same period, reaching 41 per cent in 2014, and that of the British has increased by 2.4 percentage points. When asked about immigrants from poorer countries outside Europe, Belgian, Danish, Dutch, Polish, Slovenian, Spanish, and Swiss respondents have been expressing increasingly hostile views, too. Variations have been quite remarkable in the case of Switzerland, where the share of immigration opponents has increased by more than 15 percentage points in 2014 relative to 2002, and rather moderate in all the remaining countries, where the rise in opposition has ranged between 3 and 9 percentage points.

The negative trend in Ireland, particularly during the period 2008-2012, might be reflective of its dramatic socio-economic situation, characterized by a significant decline in GDP growth and a concurrent sharp increase in unemployment causing massive protests and rallies. Portugal, another Eurozone member state who was severely affected by the sovereign debt crisis, with unemployment rates leaping to 16 per cent in 2012 and GDP growth rates plummeting to minus 4 per cent in 2012 (World Bank 2017), has also been showing increasingly more hostile attitudes towards migrants between 2008 and 2012. Spain represents a noticeable exception: despite very high unemployment, which went up to more than 24 per cent in 2012 from 11 per cent in 2006 (World Bank 2017), and negative or stagnating GDP growth between 2010 and 2012 (World Bank 2017), the percentage of Spanish people who felt that none or only a few immigrants should be allowed to come to their country has actually diminished considerably between 2008 and 2012, thus questioning the common belief that economic conditions are an unequivocal driver of attitudes towards immigrants.

Table 2. Country-level variation over time in anti-immigrant attitudes between 2002 and 2014.

Country	Differences in anti-immigrant attitudes		
	SAME race or ethnicity	DIFFERENT race or ethnicity	POORER countries OUTSIDE Europe
(1)	(2)	(3)	(4)
Austria	-23.6245	-15.9955	-9.4132
Belgium	-0.6011	0.8247	9.4245
Czech Republic	13.8909	19.9311	24.2363
Denmark	-5.1564	-6.1887	5.1215
France	-9.0299	-7.9937	-1.2587
Germany	-15.9208	-20.5395	-10.2446
Hungary	-4.6681	-6.5321	-2.6104
Ireland	20.7505	13.7875	22.5987
Netherlands	-7.3111	-8.2656	4.1195
Norway	-12.3136	-19.8426	-6.2712
Poland	-0.3279	-1.3446	3.8284
Portugal	-19.5977	-14.2328	-9.5040
Slovenia	-8.5694	-8.1515	4.2695
Spain	-5.6160	-0.0977	1.8166
Sweden	-5.5183	-9.2184	-2.1799
Switzerland	-1.6821	6.3135	17.4325
United Kingdom	2.3820	-5.8137	6.5293

Notes: The table reports only the countries where data was available both in 2002 and in 2014. Figures for Belgium, France, Germany, and the United Kingdom are obtained after averaging anti-immigrant attitudes at the NUTS1 level.

Shifting the focus of our investigation to the sub-national level, several patterns are worth highlighting. Table A.IV in the appendix reports variations in anti-immigrant attitudes across all European NUTS2 regions where data were available in both 2002 and 2014.

Over this time period, all Austrian states but Kärnten, known as the stronghold state of the anti-immigrant FPÖ party, have been displaying greater openness to immigrants. In Salzburg, for example, the percentage of those with negative attitudes towards immigrants of different race or ethnicity has fallen by almost 30 percentage points, down from 68.20 per cent in 2002 to 38.26 per cent in 2014. Likewise, after years of strong hostility with percentages of anti-immigrant population ranging between 50 and 80 per cent, Portugal has undergone a marked shift towards more favourable attitudes in 2014, concordant with the recorded post-crisis recovery on the labour market and the country's return to economic growth. On the contrary, all Czech regions have become more opposed to inflows of migrants, regardless of their race, ethnicity, or country of origin. Swiss regions have followed this negative trend too, mainly regarding immigrants of different race or ethnic group or from poorer countries outside Europe as unwelcome.

In Spain, internal (Castile-Leon, Castile-La Mancha, and Madrid), north-western (Galicia and Cantabria), and eastern (Catalonia and Valencian Community) regions have generally been moving towards more positive attitudes about immigrants, while north-eastern (Navarre, La Rioja, and Aragon) and southern (Andalusia and region of Murcia) regions have increased their opposition to further immigration. In this context various geographical clusters have emerged, with geographically more proximate regions appearing to share stronger similarities in trends of anti-immigrant attitudes than more distant ones. For example, Castile-Leon and Castile-La Mancha have been initially displaying extremely hostile attitudes towards migrants but, from 2010 onwards, contrary to what rising unemployment rates and declining per capita GDP would suggest, have been characterized by increased openness, with shares of opponents declining between 13 and 27 percentage points. Conversely, in Extremadura, Andalusia, and Region of Murcia, people's willingness to allow migrants to enter their regions dropped drastically between 2002 and 2014. Particularly, in Extremadura, the percentage of those unwilling to accept further inflows of immigrants of different race or ethnicity rose by more than 25 percentage points, from nearly 27 per cent in 2002 up to almost 53 per cent in 2014.

In Hungary, there appears a pattern of anti-immigrant attitudes clustered at the higher NUTS1 hierarchical level. Against trends in media coverage, Észak-Magyarország, Észak-Alföld, and Dél-Alföld, which are comprised in the Alföld és Észak NUTS1 region, as well as Közép-Dunántúl and Nyugat-Dunántúl, which are part of the Dunántúl NUTS1 region, have become more open to inflows of immigrants over the period 2002-2014. Drops in anti-immigrant sentiments, however, have been modest; in 2014, on average, three out of four Hungarians were still unwilling to allow immigrants of different race or ethnicity and migrants from outside-Europe poorer countries to come to their regions. Facing high level anti-immigrant attitudes already in 2002, the Közép-Magyarország region has seen further increases in hostile attitudes towards immigrants between 2002 and 2014, with the percentage of anti-immigrant population reaching 91 per cent in 2014, a 7.35 percentage point increase compared to the already high figures recorded in 2002.

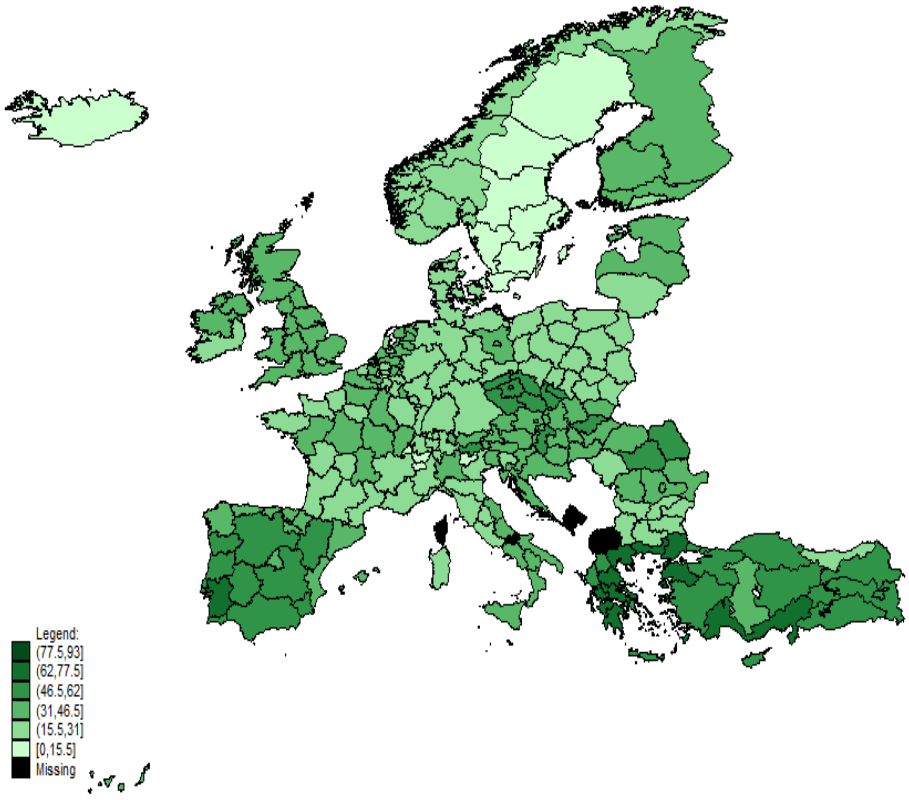
Slovenia shares a similar attitudinal trend towards more benevolence regarding the inflow of immigrants of the same or different race or ethnicity as some neighbouring regions, i.e., the Hungarian Nyugat-Dunántúl in the northeast, the Croatian Kontinentalna Hrvatska and Jadranska Hrvatska in the south and southeast, and the Austrian Burgenland and Steiermark in the north.

Conversely, the percentage of Slovenians with favourable attitudes to migrants from poorer countries outside Europe has declined by almost 4 percentage points in 2014 relative to 2002. A similar trend in bifurcating attitudes, i.e., more negative towards migrants from poorer countries outside Europe and more positive towards migrants of the same or different race or ethnic group, has also characterized most of the regions in Poland and Netherlands. Particularly in Poland, exceptions concern the mid-north and eastern regions, where people's unwillingness to allow further migrant inflows has increased remarkably between 2002 and 2014 regardless of the migrant's category, and the north-western and north-central regions, where the opposite variation has occurred. Interestingly, all regions of the Nordic countries have consistently been displaying changes towards more favourable attitudes towards any type of immigrants.

Figures 2 and 3 provide an illustration of region-specific distribution of negative attitudes towards immigrants of the *same* race or ethnicity (Figure 2) and immigrants of *different* race or ethnicity (Figure 3)[2]. Important to note is that the map in Figure 3 is markedly darker than the one in Figure 2 which indicates the fact that attitudes towards immigrants of the *same* race or ethnicity as the host country's majority population appear generally less negative than those towards immigrants of *different* race or ethnicity. Also, anti-immigrant attitudes tend to vary across regions within the same country. In Spain, for instance, the average percentage of respondents with negative attitudes towards immigrants of different race or ethnicity is noticeably high in *Castilla y León*, but rather moderate in *Cataluña, Comunidad Valenciana, Islas Baleares*, and some Northern regions such as *Principado de Asturias, Cantabria,* and *Comunidad Autónoma del País Vasco*. Similarly, in France, the average percentage of those preferring lower levels of immigration of different race or ethnicity fluctuates between 31 and 46.5 percent in all regions but *Limousin*, *Burgundy*, and *Champagne-Ardenne*, where opposition to these immigrant flows is significantly stronger. Furthermore, anti-immigrant attitudes seem to be clustered in some contiguous European (NUTS2) regions, which suggests that, by and large, spatially more proximate regions exhibit greater similarities in average anti-immigrant attitudes than more distant regions.

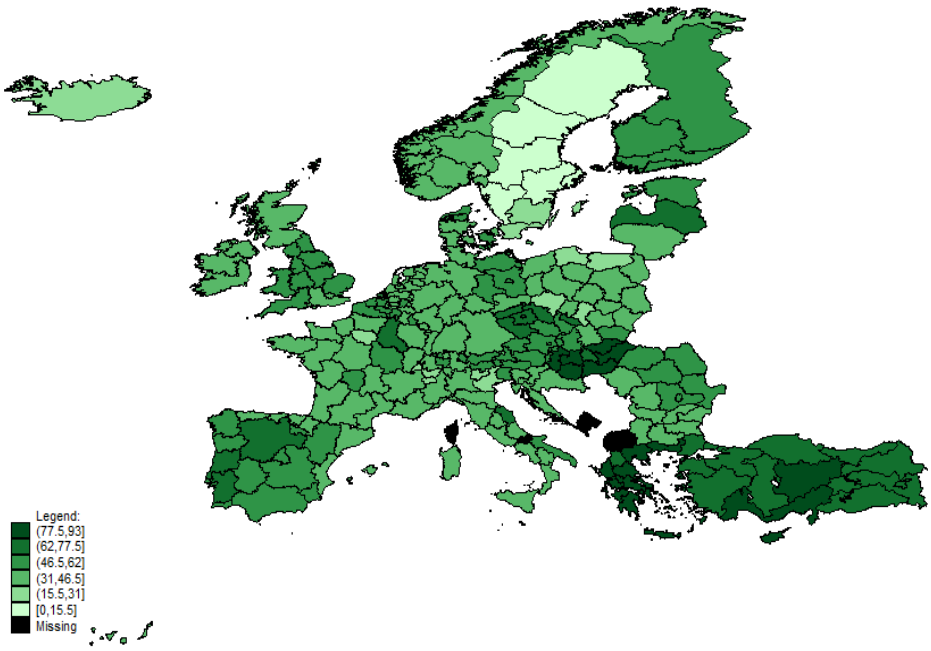
[2] We also draw a map that depicts average attitudes towards immigrants from poorer countries outside Europe -Figure A.I of the Appendix. Patterns do not seem to differ much from those of Figure 3.

Figure 2. Geography of anti-immigrant attitudes towards migrants of the SAME race or ethnicity



Notes: Lichtenstein, Montenegro, Macedonia, and Malta - black-highlighted - do not participate in the ESS survey. There are missing data also for the French *Corsica* region. Only data for one round are available for the following: 5 Italian regions (*Molise*, *Provincia Autonoma di Trento*, *Provincia Autonoma di Bolzano*, *Emilia-Romagna*, *and Marche*), and all the regions of Romania and Latvia (due to unavailability of design weights for ESS round 3). Since the ESS provides no NUTS2 level classification for Germany, Turkey, and United Kingdom, the related averages are computed based on NUTS1 data. Please refer to Table A.I in the appendix for a detailed description of the ESS rounds in which each NUTS2 region takes part.

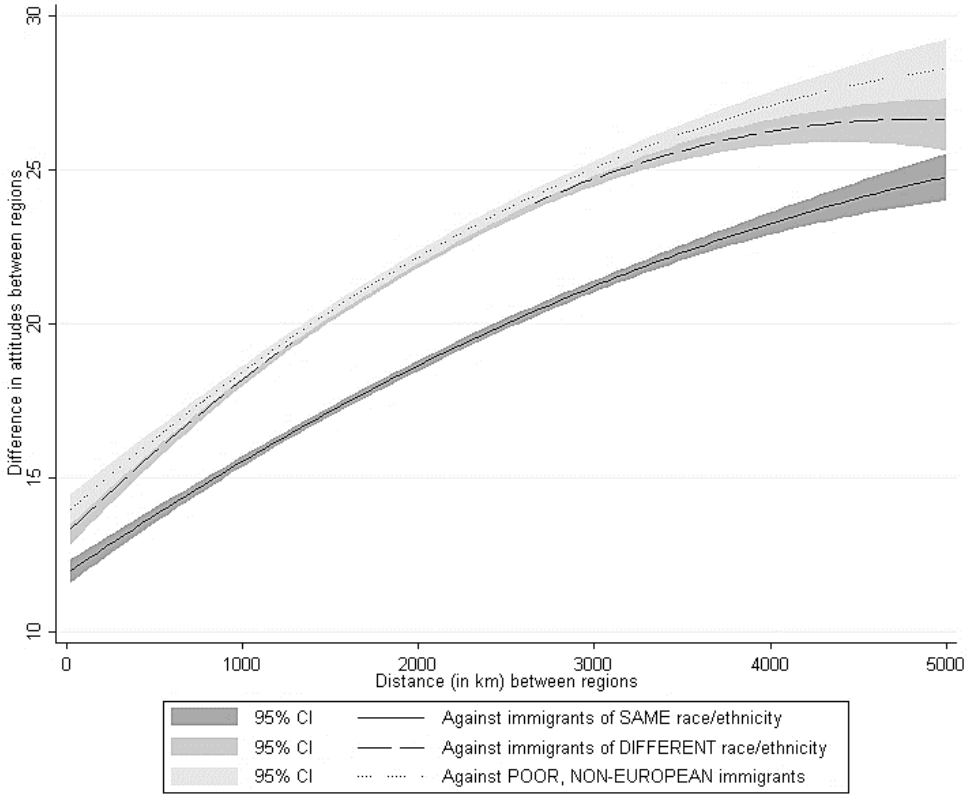
Figure 3. Geography of anti-attitudes towards immigrants of DIFFERENT race or ethnicity



Notes: Lichtenstein, Montenegro, Macedonia, and Malta - black-highlighted - do not participate in the ESS survey. There are missing data also for the French Corsica region. Only data for one round are available for the following: 5 Italian regions (Molise, Provincia Autonoma di Trento, Provincia Autonoma di Bolzano, Emilia-Romagna, and Marche), and all the regions of Romania and Latvia (due to unavailability of design weights for ESS round 3). Since the ESS provides no NUTS2 level classification for Germany, Turkey, and United Kingdom, the related averages are computed based on NUTS1 data. Please refer to Table A.I in the appendix for a detailed description of the ESS rounds in which each NUTS2 region takes part.

In order to explore this hypothesis further, we compute for each of the three 'groups' of immigrants the 'bilateral' difference in the percentage of respective NUTS2 populations that have anti-immigrant attitudes and regress these non-linearly against the distance between NUTS2 regions. Figure 4 displays the three fitted lines with 95 percent confidence intervals. They all indicate a positive association between the distance (in km) between regions and the 'gap' in anti-immigrant attitudes. Interestingly, differences between European regions in negative attitudes against immigrants from poorer countries outside Europe are more marked than those towards immigrants of the same or a different race/ethnicity.

Figure 4. Size of attitudinal gaps across European regions by distance



Notes: Differences in attitudes between NUTS2 regions are expressed in absolute terms.

3.3 Data: Control variables

In order to control for other factors that the immigrant attitudes literature has identified, we use the weighted percentages of respondents at NUTS2 regions who (i) are born in the country where the interview took place (*native*); (ii) live in a rural area by choosing the response option "country village" or "farm or home in countryside" (*rural*); (iii) are highly interested in politics (*politics*); (iv) deem it important to live in secure and safe surroundings (*safety*); (v) have high levels of interpersonal trust (*trust*); (vi) are male (*male*); and (vii) have completed more than nine years of education, with nine years denoting the typical cumulative duration of ISCED level 1 plus ISCED level 2 (*education*).

We have further included in the analysis the weighted average of respondents' age (*age*). Data on the unemployment rates among persons aged 15 and over (*unemployment*), as well as data on distances between NUTS2 regions involved in the creation of spatial weighting matrices and spatial lag variables, are drawn from the EUROSTAT regional statistics database. Tables A.I in the Appendix reports some descriptive statistics on these variables: about 93 percent of the respondents is not foreign-born; about 43 percent live in a rural area; 83.5 percent assign great importance to live in safe and secure surroundings; and slightly less than half of the respondents declare a high interest in politics and more than three-quarters have completed more than nine years of education.

Education is anticipated to positively influence attitudes towards immigrants via economic and non-economic channels. From an economic perspective, if assumed that the host country's labour market cannot absorb immigrants by altering its output mix, an inflow of unskilled migrants raises the

supply of unskilled labour relative to other factors of production, which drives upwards skilled wages and downwards unskilled ones. Consequently, people are expected to favour immigrants with skill endowments that are dissimilar to their own. That is, more (less) educated people are expected to be more (less) supportive of unskilled immigrants (Scheve & Slaughter, 2001; Mayda, 2006). From a rather non-economic perspective, however, education is expected to have a positive impact on attitudes towards immigrants through improving the opportunities to know foreign cultures, facilitating the creation of cosmopolitan social networks, promoting higher levels of racial tolerance, and favouring more critical habits of thought (Case, Greeley, & Fuch, 1989; Espenshade & Calhoun, 1993; Citrin, Green, Muste, & Wong, 1997; Burns & Gimpel, 2000; Chandler & Tsai, 2001;Hainmueller & Hiscox, 2007, 2010).

Interest in politics is expected to favour more positive attitudes towards immigrants via its correlation with higher education and involvement in society (Rustenbach, 2010). People with high levels of interpersonal trust are also expected to have positive attitudes as they "may be more likely to overcome the uncertainty associated with the unknown and either establish relationships with immigrants or simply trust that the differences will not have negative consequences" (Rustenbach, 2010). Living in rural areas is expected to be associated with heightened opposition to immigrants: unlike in big cities, rural areas offer less economic and social opportunities, therefore attracting fewer migrants, which makes it less likely for their inhabitants to have contact with members of other groups and, consequentially enhancing opportunities for prejudice to arise (Allport, 1954, Pettigrew, 1998; Markaki & Longhi, 2013). Living in a region or country characterised by more unfavourable economic conditions, e.g., higher levels of unemployment, is also expected to increase hostility to newcomers. Similarly, attaching greater importance to living in a secure and safe neighbourhood is expected to be associated with stronger anti-immigrant attitudes as immigrants might be perceived as source of uncertainty, instability and insecurity and, potentially, more prone to take part in illegal activities (Rustenbach, 2010).

Table 2. Spatial dependence in sentiments against immigrants

VARIABLES	Against immigrants of the **SAME** race or ethnic group **AS** majority population			Against immigrants of **DIFFERENT** race or ethnicity **FROM** majority population			Against **POOR**, **NON-EUROPEAN** immigrants		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SPATIAL LAG		0.480***	0.874***		0.504***	0.792***		0.431***	0.981*
		(0.181)	(0.246)		(0.163)	(0.272)		(0.118)	(0.568)
Native	-0.0573	-0.0961	-0.106	0.223***	0.189**	0.165*	0.282	0.288	0.311
	(0.109)	(0.110)	(0.108)	(0.0839)	(0.0861)	(0.0919)	(0.191)	(0.190)	(0.194)
Male	-0.0186	-0.00436	0.0115	0.0871	0.0981	0.120	0.0470	0.0324	0.0201
	(0.0907)	(0.0899)	(0.0896)	(0.0820)	(0.0814)	(0.0808)	(0.0659)	(0.0640)	(0.0653)
Age	0.102	0.233	0.231	0.0589	0.176	0.254	0.227	0.205	0.105
	(0.160)	(0.183)	(0.181)	(0.155)	(0.164)	(0.176)	(0.176)	(0.175)	(0.193)
Rural	0.0996**	0.106**	0.0846**	0.168***	0.179***	0.167***	0.114***	0.121***	0.107**
	(0.0410)	(0.0420)	(0.0421)	(0.0420)	(0.0427)	(0.0446)	(0.0404)	(0.0407)	(0.0418)
Politics	-0.390***	-0.403***	-0.423***	-0.307***	-0.310***	-0.334***	-0.228***	-0.220***	-0.232***
	(0.0814)	(0.0798)	(0.0796)	(0.0696)	(0.0676)	(0.0670)	(0.0814)	(0.0803)	(0.0806)
Safety	-0.00316	0.00939	-0.0120	0.150*	0.167**	0.147*	0.124*	0.143*	0.127*
	(0.0812)	(0.0801)	(0.0830)	(0.0799)	(0.0804)	(0.0816)	(0.0741)	(0.0757)	(0.0762)
Trust	-0.178***	-0.158**	-0.166**	-0.205***	-0.186***	-0.183***	-0.151*	-0.146*	-0.156**
	(0.0627)	(0.0643)	(0.0690)	(0.0638)	(0.0639)	(0.0667)	(0.0768)	(0.0764)	(0.0779)
Education	-0.0856*	-0.0300	-0.0262	-0.0434	-0.00398	0.0155	0.0139	0.00214	-0.0430
	(0.0516)	(0.0506)	(0.0495)	(0.0517)	(0.0497)	(0.0533)	(0.0534)	(0.0525)	(0.0531)
Unemployment	-0.0134	0.0600	0.0427	0.0717	0.128	0.180	0.152	0.153	0.133
	(0.120)	(0.117)	(0.120)	(0.107)	(0.103)	(0.109)	(0.115)	(0.116)	(0.124)
Constant	61.77***	36.31**	28.04*	22.88**	-8.312	-21.06	7.995	-12.67	-28.57
	(12.69)	(15.50)	(16.11)	(10.50)	(14.51)	(18.44)	(20.96)	(21.61)	(35.13)
Observations	930	930	930	930	930	930	930	930	930
R-squared	0.122	0.133	0.153	0.142	0.153	0.173	0.082	0.094	0.110
Number of id	201	201	201	201	201	201	201	201	201
Unit fixed effects	yes	yes	yes	yes	yes	yes	yes	yes	yes
Period fixed effects	no	no	yes	no	no	yes	no	no	yes
NUTS level	2	2	2	2	2	2	2	2	2

Notes: Standard errors (clustered at NUTS level) in parentheses: *** p<0.01, ** p<0.05, * p<0.1. Weighting matrix row standardized with inverse distance as weight

4 Results

Table 2 reports estimation results of equation (1), regressing the percentage of respondents who express anti-immigrant attitudes towards immigrants of the *same race* or ethnic group as the majority population (Columns 1-3); immigrants of *different race* or ethnic group from majority population (Columns 4-6); and, immigrants from *poorer countries* outside Europe (Columns 7-9). The first model specifications (Columns 1, 4, and 7) include only NUTS level-2 fixed effects and ignores spatial dependence considerations. The spatial lag variable is then included in the other specification with additional period fixed effects in Columns (2), (5), and (8).

The estimated coefficients of the spatial lag variable, which was defined as the percentage of NUTS 2 populations in all other European regions weighted by the (inverse) distance between regions, are all positive and statistically, significantly different from zero. This indicates a significant spatial connectivity of anti-immigrant attitudes: more proximate European regions, in terms of geographic distance, are found to exhibit greater similarity in trends of anti-immigrant attitudes than more distant regions. These estimates corroborate the implications of the dynamic social impact theory: people tend to be more influenced by their immediate neighbours than those further away, which "gives rise to local patterns of consensus in attitudes, values, practices, identities and meanings…[and] can lead initially random distributions of social attributes to become clustered in space and correlated, with less popular elements becoming consolidated or reduced in frequency but surviving in minority subgroups" (Latané, 1996).

The row-standardization of the weighting matrix allows interpretation of the estimated coefficients of the spatial lag variable as the approximate strength of spatial interconnectedness (Plümper & Neumayer, 2010): a one percentage point increase in the percentage of respondents with anti-immigrant attitudes against immigrants of the *same* race or ethnicity as the majority population in spatially more proximate regions is estimated to raise the percentage of respondents with similar anti-immigrant attitudes in the reference region by 0.480 percentage points (Column 2), holding all other independent variables constant. The degree of spatial dependence becomes even stronger when period fixed effects are accounted for or when employing negative attitudes towards immigrants of *different* race or ethnicity as dependent variable (Column 5). For instance, a one percentage point increase in the percentage of those who oppose further inflows of immigrants of different race or ethnicity in spatially closer regions is associated with a rise in the percentage of those sharing similar adverse immigrant attitudes in the region under consideration by 0.504 percentage points (Column 5).

Political interest and interpersonal trust turn out to be strong and robust predictors of anti-immigrant attitudes. Both variables exhibit negative and statistically significant estimates that remain robust across all alternative model specifications. Being (quite or very) interested in politics and more prone to trust others appear both linked to more tolerant attitudes towards *any* types of immigrants: a one percentage point increase in the share of people who are interested in politics -versus those who are not- or a same-magnitude increase in the share of those with high levels of interpersonal trust -versus those who think that carefulness is never enough when dealing with other people- are associated, respectively, with a 0.403 or 0.158 percentage point fall in the share of people showing negative attitudes towards immigrants of the same race or ethnicity (Column 2), holding all other

control variables constant. The size of the effect of a one percentage point increase in the share of people interested in politics on the share of people having anti-immigrant sentiments declines though when shifting the focus of the analysis to immigrants of different race or ethnicity or to immigrants from poorer countries outside Europe, but goes up again when year fixed effects are included in the model specification.

A possible explanation for the negative sign characterizing the relationship between political interest and anti-immigrant attitudes lies in the positive correlation (see cross-correlations in Table A.II in the Appendix) between political interest and higher levels of education: people with a remarkable interest in politics are more likely to display favourable attitudes towards immigrants for the same reasons as educated people do. Indeed, education 'improves the opportunities to encounter diverse social groups and cultural lifestyles, exposes members to more universalistic and cosmopolitan cultural traditions, and institutionalizes written communication that extends one's experiences beyond reference groups. In this way, education relativizes strong commitments to specific in-groups that control members' self-identifications and that tend to create "prejudiced" cognitions and attitudes toward non-members and out-groups' (Case, Greeley, & Fuch, 1989). Hainmueller and Hiscox (2007) refer to the same argument to explain the finding that people with higher education and skills are more likely to favour immigration regardless of the skill attributes of the immigrants, in contrast with the predictions of the labour-market competition hypothesis that anticipate people's opposition to immigrants with similar skills to their own and people's support for immigrants with different skill levels.

Granting greater importance to living in safe and secure surroundings seems to foster animosity towards immigrants of different race or ethnicity and towards immigrants from non-European poorer countries, but not towards immigrants of the same race or ethnicity. On average, immigrants from non-European poorer countries are more likely to be less educated, to have poorer employment prospects and to face higher barriers to economic and social integration and thus, are more likely to engage in illegal (informal) activities. The fear of potentially increasing illegality associated with inflows of this type of immigrants might ease the formation of anti-immigrant sentiments among people who deem it critical to live in a secure and safe place relative to people who are not much or not at all concerned about security issues. Particularly, we estimate that a one percentage point increase in the share of those who value highly living in a secure and safe area (versus those who value it less) is associated with a 0.143 percentage point increase in the share of those opposing inflows of immigrants from poorer countries outside Europe (Column 8). Immigrants who are culturally or ethnically different from the host region's majority population seem to be perceived as sources of social instability and insecurity, at least more so than immigrants with similar racial or ethnic backgrounds, which may explain the existence (absence) of a positive relationship between attributing higher importance to living in a secure and safe place, and having negative attitudes towards immigrants of a different (same) race or ethnicity.

Cross-regional variation in anti-immigrant attitudes is also partly captured by the share of people living in rural areas. The estimated coefficients are all positive, highly significant, and robust across alternative specifications: for instance, a one percentage point increase in the percentage of people living in a rural area corresponds to a 0.179 increase in the percentage of people opposing

higher levels of immigrants of different race or ethnicity than the majority population (Column 5). Noteworthy is also the (positive) effect of the native variable on average attitudes towards immigrants of a *different* race or ethnicity but not when attitudes refer to immigrants of the *same* race or ethnicity as the country's majority population. Overall, socio-cultural and ethnic considerations appear to weigh more than economic concerns in the formation of negative attitudes towards immigrants.

5 Conclusion

Perceptions and beliefs that immigrants pose a threat to the economic, cultural, and social status quo and future prospects of the majority population have, reportedly, been playing a critical role across Europe over the past decade. European societies and institutions seem to be challenged by an increasing trend in immigration, but even more by the broadening electoral support for far right and populist parties across Europe. This trend may not only challenge the foundation and integration of the 'European project', but it has already led to some political backlash in terms of a tightening of immigration policies across Europe - even in some of the more welcoming countries. Drawing upon data from seven rounds (2002-2014) of the European Social Survey (ESS), we have performed an empirical investigation of the drivers of inter-regional differences and variation in attitudes towards three different types of immigrants: those of the same race or ethnicity, different race or ethnicity, or from poorer countries outside Europe. Our findings suggest that people who have a more marked interest in politics and a greater tendency to trust others appear associated with more tolerant attitudes towards immigrants. People who attribute greater importance to living in safe and secure surroundings and having domicile in rural areas are found to be associated with growing hostility towards further immigrant flows.

The main contribution though of this study is the application of dynamic social impact theory (Latané, 1981, 1996) on the analysis of attitudes towards immigrants. We hereby test the existence of spatial dependence between cross-regional attitudes towards immigrants. This empirical specification has allowed us to test the concepts of immediacy and closeness in space to investigate the extent to which hostility against immigrants is dependent on spatial distance between European regions, which may ultimately lead to a diffusion of anti-immigrant attitudes across Europe at sub-national levels. Our empirical results provide evidence for the existence of a significant spatial connectivity of anti-immigrant attitudes at sub-national levels, with spatially more proximate regions exhibiting greater similarity in anti-immigrant attitudes than more distant regions. We argue hereby that people's attitudes about immigration are influenced by the local and regional environment, which is the people they are surrounded by and are exposed to. This implies, in accordance with Tobler's first law of geography and in the spirit of Latané's social impact theory, that immigrant attitudes in one region are more influenced by respective attitudes in nearby regions than to those of more distant ones.

The identification of a spatially dependent process in the diffusion and clustering of anti-immigrant attitudes has significant bearing for understanding the rise and fall of populist movements across Europe and changing electoral support for xenophobic parties across European regions over time. Clustering of populations with anti-immigrant attitudes however may not only be influenced by xenophobic populations living in nearby regions or the presence of factors that facilitate anti-immigrant attitudes such as economic hardship or isolated social environment, but also by internal

migration or 'sorting' processes themselves. People with more liberal attitudes may move to regions with a greater presence of like-minded others, while those with more nativist attitudes may do the same. This may lead, at least to some extent and only in the long term, to a 'population re-sorting' along attitudinal categories creating spatially more homogenous clusters of anti-immigrant populations. A test of this hypothesis however was beyond the scope of this study as information on bilateral migration patterns at European regional levels is currently not available.

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7 Appendix

Table A.I Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Against	968	33.4726	15.98163	0	90.51095
Against1	968	45.83544	18.64441	4.255319	100
Against2	968	48.61974	18.99491	3.389831	100
Spatial lag	1,421	33.23874	2.396844	29.83285	36.79096
Spatial lag 1	1,421	44.47651	1.984666	40.67886	46.31334
Spatial lag2	1,421	47.03021	2.01708	43.736	49.84954
Native	968	92.75795	7.121267	40	100
Rural	968	42.61945	17.28151	0	100
Age	968	46.77397	3.383874	29.5	62.82043
Politics	968	43.1909	14.85082	0	81.81812
Safety	951	83.52905	11.03606	49.46236	100
Trust	968	41.5417	19.21568	0	85.71429
Male	968	47.58323	6.192728	21.16788	79.9999
Education	968	74.29525	14.93425	6.900541	100
Unemployment	946	9.096512	5.717083	1.7	37

Notes: Against, Against1, and Against2 stand for, respectively, hostile attitudes toward: immigrants of the same race or ethnicity; immigrants of different race or ethnicity; immigrants from poorer countries outside Europe.

Table A.II Cross-correlation matrix of independent variables

	Spatial lag	Spatial lag 1	Spatial lag 2	Native	Male	Age	Rural	Politics	Safety	Trust	Education	Unemployment
Spatial lag	1											
Spatial lag 1	0.9033	1										
Spatial lag 2	0.0900	0.3708	1									
Native	0.1204	0.0937	-0.0418	1								
Male	-0.0289	-0.0267	0.0413	0.0095	1							
Age	-0.2045	-0.2120	0.0246	0.0048	-0.1199	1						
Rural	-0.0158	-0.0313	-0.0288	0.1136	0.0587	0.0545	1					
Politics	-0.0713	-0.0743	-0.0127	-0.2301	0.0608	0.0959	0.0308	1				
Safety	0.0575	0.0309	-0.0876	0.1997	-0.1596	-0.0499	0.0246	-0.5142	1			
Trust	-0.0635	-0.0537	0.0120	-0.2641	0.2051	0.0305	0.0391	0.5339	-0.6238	1		
Education	-0.2049	-0.1570	0.0622	0.0793	0.0469	-0.2850	-0.1801	0.2526	-0.2516	0.2700	1	
Unemployment	-0.1656	-0.1443	-0.0170	0.0641	-0.0003	-0.0756	-0.0681	-0.3868	0.3756	-0.4262	-0.2223	1

Table A.III Shares of respondents with negative attitudes towards different types of immigrants: minimum and maximum values

Country	SAME race or ethnic group AS majority population (%)		DIFFERENT race or ethnicity FROM majority population (%)		POOR, NON-EUROPEAN immigrants (%)	
	min	max	min	max	min	max
Austria	9.470515	61.28499	35.0001	73.54405	36.09479	75.43353
Belgium	10.90909	38.78788	24.84848	55	23.52941	58.10811
Bulgaria	12.76446	36.84607	24.84145	48.07301	27.26233	63.82492
Croatia	32.24566	37.82449	36.84845	44.50996	41.25259	45.40312
Cyprus	19.79928	65.54482	87.53981	89.65228	91.03249	92.49519
Czech Republic	29.07005	65.88235	41.50642	77.99463	42.24012	81.06996
Denmark	7.671957	25.33333	26.13636	54.54546	40	62.06896
Estonia	27.9703	41.52542	53.05771	65.74966	67.51291	75.16376
Finland	14.28572	46.15385	14.28572	65.36797	21.42857	73.37663
France	13.62862	60.73896	25.65278	71.13403	26.15017	76.56126
Greece	33.56643	90.51095	64.33566	100	60.83916	100
Hungary	28.04878	63.01369	65.51251	91.07143	72.68923	95.85147
Iceland	6.412865	10.22928	25.37316	33.51064	24.44714	31.72043
Ireland	19.51385	48.91304	28.04637	54.82625	32.20013	67.81759
Italy	0	58.82353	18.156	80	9.589787	61.11111
Latvia	44.96232	44.96232	62.67094	62.67094	75.49667	75.49667
Lithuania	19.13127	28.08853	29.29548	41.17854	41.4284	60.2831
Luxembourg	32.16367	42.08145	51.57658	53.82599	51.03729	52.85389
Netherlands	18.93947	60.86935	22.72732	65.21693	34.35111	68.85246
Norway	12.11272	33.69275	18.64406	51.11111	26.8292	49.25836
Poland	6.549333	46.56887	16.46777	63.40131	11.95619	69.15652
Portugal	23.22219	75.78402	31.30437	89.60327	40.52925	87.03473
Romania	21.37715	51.80929	32.73195	58.44526	33.83326	62.65541
Slovakia	13.57143	51.39268	24.28572	63.1639	27.46479	73.95315
Slovenia	23.21792	43.19899	29.44785	50.81967	38.41167	55.02512
Spain	0	85.32906	12.82749	85.32906	12.82749	100
Sweden	2.884616	17.52577	4.255319	23.62637	3.389831	29.41177
Switzerland	8.583691	32.24662	19.17426	52.73445	18.8404	67.34694

Table A-IV NUTS2-level over time variation in anti-immigrant attitudes between 2002 and 2014.

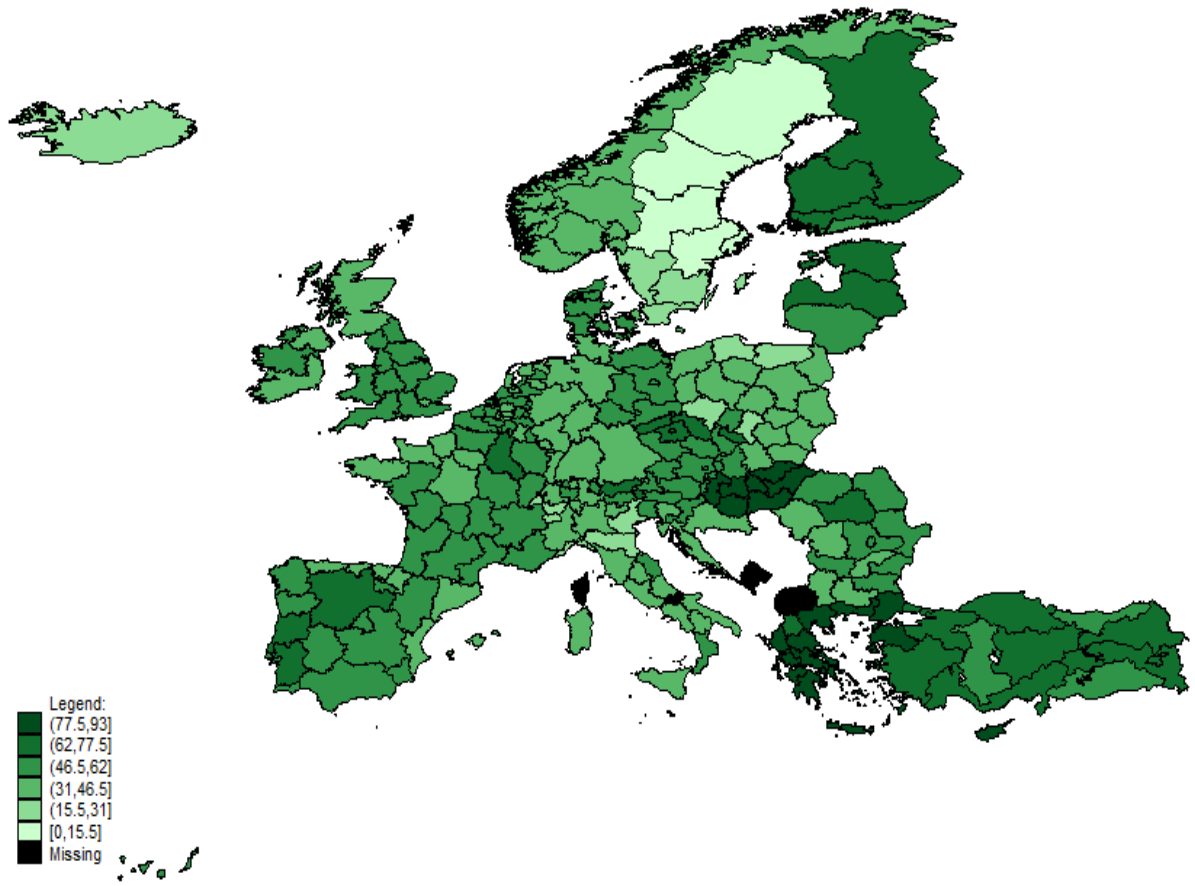
Countries (1)	NUTS2 regions (2)	Differences in anti-immigrant attitudes		
		SAME race or ethnicity (3)	DIFFERENT race or ethnicity (4)	POORER countries OUTSIDE Europe (5)
Austria	Burgenland	-26.8076	-13.8756	-20.0757
	Niederösterreich	-25.4578	-22.8441	-13.3425
	Wien	-27.2857	-17.2802	-9.7520
	Kärnten	-5.8386	2.9890	5.4895
	Steiermark	-31.4815	-19.2317	-5.2681
	Oberösterreich	-9.357	-10.6941	0.770
	Salzburg	-47.9769	-29.9489	-25.0969
	Tirol	-20.1841	-17.0049	-14.2397
	Vorarlberg	-18.2313	-16.0691	-3.2034
Czech Republic	Prague	33.4299	35.0368	36.1149
	Střední Čechy	17.8664	25.3618	32.3314
	Jihozápad	8.0703	11.5200	11.9736
	Severozápad	3.9078	19.0426	27.3258
	Severovýchod	7.0255	15.7043	20.6822
	Jihovýchod	5.9959	12.5611	23.4438
	Střední Morava	14.8994	19.4754	18.9767
	Moravskoslezsko	19.9327	20.7468	23.0419
Denmark	Hovedstaden	-9.5711	-14.0006	-0.5565
	Sjælland	-4.3409	-8.6973	1.4211
Hungary	Közép-Magyarország	9.6540	1.5139	7.3524
	Közép-Dunántúl	-19.6998	-8.8960	-5.9621
	Nyugat-Dunántúl	18.9661	-10.7196	-12.3017
	Dél-Dunántúl	-9.7083	1.0833	4.1282
	Észak-Magyarország	-8.2073	-4.3443	-7.5412
	Észak-Alföld	-13.2033	-8.2906	1.7233
	Dél-Alföld	-10.4778	-16.0714	-5.6720
Ireland	Border, Midland and Western	29.3992	17.8228	27.036
	Southern and Eastern	12.1019	9.7522	18.1614
Netherlands	Groningen	-6.7954	-5.6269	2.6960
	Friesland	-15.5909	-17.7115	-12.4130
	Drenthe	-9.7707	-18.6175	4.3292
	Overijssel	-0.9285	-3.5034	5.3754
	Gelderland	-5.5288	-8.3383	3.8768

	Flevoland	-6.7679	-11.6151	3.1693
	Utrecht	-8.7632	-11.2885	4.3444
	North Holland	-5.8921	-6.7396	2.9062
	South Holland	-14.9537	-14.3608	-0.3771
	Zeeland	4.4756	11.0158	21.1583
	North Brabant	-15.1510	-16.8618	-3.8903
	Limburg	-2.0665	4.4609	18.2581
Norway	Oslo og Akershus	-7.0944	-18.2798	-4.4491
	Hedmark og Oppland	-12.4812	-24.2636	-10.5682
	Sør-Østlandet	-12.8863	-19.3487	-3.4875
	Agder og Rogaland	-11.164	-16.8826	-2.3868
	Vestlandet	-13.7467	-21.5036	-12.0303
	Trøndelag	-17.6247	-24.3389	-5.5673
	Nord-Norge	-11.1981	-14.2809	-5.4092
Poland	Łódzkie	-1.1237	-2.6450	9.1564
	Mazowieckie	-5.5159	-8.4867	3.8972
	Małopolskie	-6.7205	-8.4656	6.0568
	Śląskie	0.4123	-0.8502	6.7620
	Lubelskie	3.1176	8.3946	11.9448
	Podkarpackie	2.0759	-4.8014	10.1267
	Świętokrzyskie	-14.8186	-13.8861	-15.9196
	Podlaskie	18.0602	6.5849	15.4171
	Wielkopolskie	0.6963	-0.3003	-1.7626
	Zachodniopomorskie	-15.2496	-9.7799	-8.6422
	Lubuskie	14.5854	9.7950	20.5212
	Dolnośląskie	-0.3503	-2.0959	6.7415
	Opolskie	2.9209	1.2990	-4.3479
	Kujawsko-Pomorskie	3.7697	11.1336	6.9619
	Warmińsko-Mazurskie	8.6963	7.8844	5.7409
	Pomorskie	-15.8032	-15.2943	-11.3993
Slovenia	Vzhodna Slovenija	-13.1136	-6.9620	4.0349
	Zahodna Slovenija	-4.0251	-9.3410	4.5041
Spain	Galicia	-20.2701	-23.4279	-22.8004
	Asturias	23.7097	25.7505	25.5948
	Cantabria	-38.4904	-17.7475	-20.6675
	Basque Community	12.087	15.7974	21.6080
	Navarre	10.6492	8.3038	-2.6387
	La Rioja	-12.5337	16.4376	1.7650

	Aragon	3.8802	5.30917	-0.8328
	Madrid	-16.5802	-13.4126	-9.4367
	Castile-Leon	-12.9401	-22.0957	-13.4935
	Castile-La Mancha	-26.9609	-25.6161	-27.7201
	Extremadura	33.0141	25.3460	32.3816
	Catalonia	-11.1012	-5.2412	-5.4433
	Valencian Community	-32.4152	-26.9613	-25.1313
	Balearic Islands	19.4046	28.5075	18.5669
	Andalusia	10.3982	13.4507	9.1058
	Region of Murcia	12.1108	24.3820	14.0684
	Canary Islands	-1.3203	-10.6717	-10.3515
Sweden	Stockholm	-1.8871	-4.569	-3.0586
	Östra Mellansverige	-6.2973	-8.8899	-1.3905
	Småland med öarna	-1.9260	-6.3004	-0.7353
	Sydsverige	-7.1741	-10.9369	-1.4369
	Västsverige	-7.2846	-11.1906	-1.8589
	Norra Mellansverige	-12.2963	-15.3020	-8.0399
	Mellersta Norrland	-6.3323	-10.0304	2.1889
	Övre Norrland	-0.94851	-6.5271	-3.1085
Switzerland	Genferseeregion	-0.1239	7.2485	12.4604
	Espace Mittelland	0.6978	5.5059	12.1804
	Ostschweiz	-8.9454	-3.2154	12.4472
	Zentralschweiz	-1.5782	9.1600	29.7141
	Tessin	8.3347	13.7465	24.4893

Notes: The table reports only the NUTS2 regions where data were available both in 2002 and in 2014.

Figure A.1 Average attitudes towards immigrants from POORER countries OUTSIDE Europe



Notes: Lichtenstein, Montenegro, Macedonia, and Malta - black-highlighted - do not participate in the ESS survey. There are missing data also for the French *Corsica* region. Only data for one round are available for the following: 5 Italian regions (*Molise*, *Provincia Autonoma di Trento*, *Provincia Autonoma di Bolzano*, *Emilia-Romagna*, *and Marche*), and all the regions of Romania and Latvia (due to unavailability of design weights for ESS round 3). Since the ESS provides no NUTS2 level classification for Germany, Turkey, and United Kingdom, the related averages are computed based on NUTS1 data. Please refer to Table A.I in the appendix for a detailed description of the ESS rounds in which each NUTS2 region takes part.