

Learning from the Origins: Immigrants' Networks, Political Preferences, and the European Refugee Crisis *

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Abstract

This paper documents a ‘home bias’ in the dynamics of political attitudes and social norms. It shows that 1st- and 2nd-generation immigrants adjust their attitudes and behaviors following the political opinions at the origin. This dynamic adjustment is stronger for less socially integrated immigrants and for those living in regions with more co-ethnics. To advance causality, I leverage the variation in timing and intensity of the 2015 European Refugee Crisis across European origins, and find that political spillovers ‘activate’ during the periods of increased issue salience at the origins. Moreover, cross-border spillovers of the anti-refugee sentiment contribute to the spread of support for right-wing populist parties. Augmenting social survey data with the data from Google Trends and Facebook, I show that (i) elevated attention to events at the origin, (ii) network homophily, and (iii) social media ties are the mechanisms behind these cross-border contagion effects.

Keywords: Immigration Networks, Anti-Refugee Sentiment, Political Spillovers, Far-Right Voting, Integration, Social Media

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1 Introduction

Information, opinions, and values diffuse via social networks. While this is hardly a controversial statement, we still know very little about how social norms and political attitudes are shaped by various ‘peer groups’ - friends, neighborhoods, religious groups, or other groups people identify with. In particular, with the unprecedented rise of global connectivity and cross-border communication over the last decades¹, it becomes natural to wonder how perceptive public attitudes are to information and opinions coming from peer groups abroad. When an autocratic leader gains popular support in his country, how do people living elsewhere but having social ties to that country react? When a country rejects asylum applicants or builds a border wall, does this attitude spill over to social ties across the world?

In this paper, I focus on the most straightforward mechanism that can support these cross-border political spillovers - immigration network. As long as immigrants maintain sufficiently high attention to events in their countries of origin (which I document in this paper), opinion dynamics there may affect immigrants’ own attitudes and behaviors. I test whether such a ‘home bias’ in the dynamics of political attitudes and behaviors exists: whether 1st- and 2nd-generation immigrants adjust their political attitudes following the developments at the origins. Moreover, I explore potential reasons for why such ‘learning from the origins’ may happen. Do origin-country friends, family, and media shift immigrants’ position on salient issues? Or does reactivated identity pressure individuals to adjust to origin-country norms?

To address these and related questions, as a first step, I present a set of descriptive regularities about the co-movements of political attitudes between immigrants and their countries of origin. Using the data from the European Social Survey and the Eurobarometer, I estimate the effects of *changes* in origin-country attitudes on *changes* in the attitudes of immigrants. I find significant spillovers to both first- and second-generation immigrants for many salient issues, including the opposition towards non-Europeans, support for the EU integration and LGBT rights. Importantly, learning from the origins is stronger for immigrants who are less socially integrated into their host communities (as measured by citizenship status, language use at home, and the length of residence), suggesting that improving immigrants’ social integration may limit the spread of political ideology from abroad. Moreover, immigrants living in regions with more co-ethnics receive stronger spillovers, pointing towards (i) the

¹As suggested by the data from Telegeography, the volume of international calls with the US have grown more than 7-fold from the mid 1990s to 2013 (when the volume peaked). Subsequent rise of social media and cheaper cross-border communication tools like Skype substituted for calls and further increased international information flows.

importance of information supply, and (ii) spatial sorting of less integrated immigrants.

To advance causality and dig deeper into the mechanisms of political spillovers from the origins, I zoom into the case of the European Refugee Crisis, one of the most salient events in Europe over the past decade². While recent research has credibly documented that massive immigration and refugee inflows have significant effects on the economic and political landscapes of receiving countries³, we still know very little about whether the events of this salience can create political contagion, spreading from most affected places. This is the first paper that addresses this gap and documents real-time spillovers from origins to immigrants ‘activated’ by salient events.

I use the arrival of refugees into European countries in 2014-2016 - along with the corresponding swings in public opinion across countries and political subgroups, - as a shock to some of the nodes in the international migration network. Testing how 1st and 2nd-generation immigrants respond to these shocks at the origins, I find strong spillovers of (i) opposition towards non-European migration, and (ii) voting for right-wing populist parties. These spillovers activate for time periods - and origin countries - where the Refugee Crisis was particularly salient. To diminish the threat of correlated exposures to the Crisis driving the co-movements in attitudes (see Manski (1993)), I limit the sample of residence countries to those that were less affected by the Crisis (e.g., Poland, Russia, Portugal, or Ireland) and show that my results remain intact. Additional tests find no Crisis-induced spillovers for issues that were not salient at the time, suggesting that the results are driven by attention spikes at the *issue* $\times$ *origin* $\times$ *time* level, and not the overall attention to specific countries⁴.

Importantly, these contagion effects have real consequences in terms of voting for right-wing populist parties. Using the coding of European parties provided by the Chapel Hill Election Survey (CHES) and matching parties that respondents support in the ESS data to CHES classifications, I show that 1st and 2nd-generation immigrants eligible to vote in their host countries are more likely to support right-wing populist parties if opposition towards non-European immigrants in their country of origin intensifies during the Crisis. Quite reasonably, these spillovers to voting behavior are only received by people interested

²According to the Eurobarometer, immigration was a top issue facing the European Union from 2014 to 2017. Moreover, 36% of respondents named immigration as number one issue facing their country at the end of 2015. Immigration remained in the top-3 most important issues until 2018, see Figures A1 and A2.

³See, among others, Dustmann et al. (2019), Steinmayr (2020), Dal Bo et al. (2019), and an overview in Alesina and Tabellini (2021). Reviews by Noury and Roland (2020) and Rodrik (2021) further emphasize the growth of far-right populism and its associations with immigration and refugees, among other factors.

⁴This result is also important as a potential way to distinguish spillovers generated by ethnic identity spikes due to salient events at the origins from spillovers generated by social learning.

in politics, as measured either by self-reported interest or by past voting turnout.

Exploring the mechanisms behind these spillovers, I document (i) the co-movement in attention to the Refugee Crisis between origins and immigrants, (ii) network homophily effects that strengthen learning from the origins, and (iii) social media ties to the origins precipitating spillovers. In particular, using the data from Google Trends on searches for "Refugees" in different languages, I show that immigrants' interest in this topic co-moves with the interest at the origins, and responds to salient events at the origins. For example, search volumes for "Refugees" in German language coming from non-affected countries co-move with search volumes from Germany, and intensify during the salient events (Angela Merkel's speech and Alan Kurdi's death in September 2015, Cologne's assaults in January 2016). Moreover, regions with higher population shares from most affected countries (like Alsace in France, which is heavily German-speaking) pay more attention to the Crisis, relative to other regions in the same host country and other population groups nearby.

Elevated attention to salient events at the origin stimulates learning from like-minded groups there, as suggested by the homophily effects I find. Namely, when I match respondents to their origin-country 'peers' most similar in terms of political affiliation and education, I find the largest spillover coefficients⁵. Moreover, changes in the origin country averages no longer matter once I account for the dynamics of like-minded subgroups at the origins. Thus, the main results are unlikely to be driven by (i) deep-rooted traits shared by all co-ethnics, or (ii) the re-activation of histories common to all people of a given origin or background, such as in Fouka and Voth (2021). Instead, these results point towards the polarizing effects of network homophily that intensify during the Crisis.

Additional evidence for the importance of network connectedness to the origins comes from the data on friendship links on Facebook, see Bailey et al. (2020). Combining this data with the NUTS subnational population shares by country of origin from Alesina et al. (2021), I first confirm that immigrants tend to maintain strong social media ties to their countries of origin: at the NUTS region level, there is almost a one-to-one relationship between population shares by country of origin and friendship links to foreign countries via Facebook. Then I show that immigrants living in regions with stronger Facebook ties to the origins receive significantly stronger spillovers, conditional on the share of co-ethnics in a region. Together with the evidence on homophily in learning from the origins, these results suggest that salient events attract attention of co-ethnics living abroad and stimulate

⁵Importantly, I account for potential co-movements between political or education subgroups over time irrespective of the origin. In other words, I partial out all the variation at the *group* $\times$ *time* level, so the identifying variation comes from *group* $\times$ *time* $\times$ *origin* level.

learning from like-minded groups at the origin. In the era of social media, this process of social learning from like-minded peers located far away is virtually costless, which creates a fertile ground for political contagion.

Contribution to the Literature

This paper contributes to several strands of research. First, it is the literature on cultural persistence and change⁶. Particularly closely related is research employing the so-called *epidemiological approach* to document the importance of immigrants' origins for their preferences, values, and beliefs: see Fernández (2007), Luttmer and Singhal (2011), Galor and Özak (2016). Host country institutions and 'peer groups', however, over generations induce cultural convergence to local norms, as suggested by Giavazzi et al. (2019) in the US context. Within-country 'movers' also show traces of both current and previous residences in, e.g., their food choices, see Atkin (2016) for evidence from India, and brand preferences, see Bronnenberg et al. (2012) for evidence from the US. While it is clear that both local and origin 'fixed effects' matter for the evolution of culture, this paper adds to the picture the 'real time' transmission of attitudes and behaviors over migration networks. I show that *changes* in opinions at the origin matter for *changes* in opinions and behaviors among immigrants⁷.

Second, this paper contributes to a growing literature that explores political and social consequences of migration and refugee inflows. Direct effects of the European Refugee Crisis are explored, among others, in Altındağ and Kaushal (2021) in the context of conservative voting in Turkey, in Hangartner et al. (2019) in the context of hostility towards out-groups in Greece, and in Steinmayr (2020) in the context of transitory vs. more interactive contact with refugees in Austria. This paper shows that salient events of this scale produce contagion effects operating over migration networks. This has broader implications for understanding the spread of populism, anti-globalization backlash, and related phenomena.

Third, this paper contributes to the recent literature on the diffusion of information, ideas, and norms between populations. Barsbai et al. (2017) have shown that immigrants from Moldova exposed to more democratic institutions and values in the West send 'democratic remittances' back to Moldova. Another instance of horizontal diffusion of culture was documented by Miho et al. (2020) in the context of gender norms diffused by German and

⁶(Bisin and Verdier (2000, 2001) provide early theoretical input, stressing the interplay between vertical and horizontal cultural transmission. Current paper focuses on horizontal learning from a specific 'peer group' - co-ethnics in the country of origin. Moreover, this paper measures the relative importance of origin fixed effects (vertical transmission) vs. dynamic spillovers from the origins (horizontal transmission).

⁷Importantly, changes among local networks - e.g., people residing in same region - also matter, but do not cancel out spillovers from the origin.

Chechen deportees in the USSR. Rapoport et al. (2020) have documented that cross-country migration induces convergence in cultural values, mostly due to cultural remittances. Tian et al. (2020) document the transmission of information and social distancing behavior from the US to Mexico via immigration networks during the early Covid-19 pandemic. Burchardi et al. (2019) also show that ancestral composition of the US counties affects the direction of the FDI by local firms, again stressing the information transmission channel. What I add is that immigrants ‘learn from the origins’ real-time during the periods of high issue salience, and update their own political preferences and behaviors based on what they observe.

Finally, this paper relates to the literature on networks and polarization. To my knowledge, only a few papers have explored network effects in the formation of culture, e.g., Dohmen et al. (2012) and Ahern et al. (2014), and this is the first paper that focuses on ‘peer effects’ from origins to immigrants. A closely related research on polarization in social networks also reveals how social learning can be biased and subject to homophily effects: Alcott et al. (2020) provide evidence that social media increases political polarization, and Levy (2021) digs deeper into the mechanisms of these effects by randomizing the exposure to conservative or liberal news on Facebook. Baysan (2021) shows that pre-existing ideological differences can force people to interpret similar information differently, which also increases polarization. This paper builds on these insights and reveals that polarizing events, such as the Refugee Crisis, create contagion effects because immigrants learn from like-minded groups at the origins, likely via social media.

The rest of the paper is organized as follows. Section 2 describes the data and explains the empirical strategy. Section 3 documents some basic regularities about the co-movements of immigrants’ attitudes and that of their countries of origin. Section 4 proceeds to the Refugee Crisis case, and demonstrates that shocks to public opinions at the origin during the Crisis spill over to immigrants’ opinions and voting behaviors. Section 5 analyses the mechanisms behind these effects, focusing on (i) the dynamics of attention to events at the origins, (ii) network homophily effects, and (iii) social media ties. Section 6 concludes.

2 Data and Empirical Strategy

2.1 Data

The dynamics of political attitudes among immigrants and their origins

To measure the dynamics of political attitudes and social norms across European countries and among 1st and 2nd generation immigrants from these countries, I use data from the

European Social Survey (ESS). Its nine rounds conducted between 2002 and 2019 allow me to (i) track the evolution of attitudes, norms, and beliefs across countries and sub-national units, and (ii) identify individuals who, or whose parents, were born outside of the country of current residence (1st and 2nd-gen immigrants). With this data, I explore whether there are spillovers of attitudes from origins to immigrants.

Table 1 below provides summary statistics for the main sample of interest - 1st and 2nd-gen immigrants tracing origins to European countries - and compares immigrants to ‘natives’ (those who, and whose parents, were born in the country of residence). As one can clearly see, for most of the basic demographic variables, except education, immigrants are not significantly different from natives, when pooling all countries together⁸. Among the immigrants, 43% are 2nd-gen immigrants (were born in the country of residence, but parents born outside), and 68% are citizens of their host country. More than a half of all 1st-generation immigrants have resided in their host country for more than 20 years, while 12% have migrated within the last 5 years. Overall, there are almost 30 thousand observations for 1st and 2nd-gen immigrants combined. However, not all of these observations can be used in the main analysis, as some of the origin countries may not be sampled by the ESS in a given round (the *origin* $\times$ *round* panel is not perfectly balanced). In the Appendix, Table B1 shows the distribution of European immigrants’ countries of origins. As one would expect, more populous countries, like Russia and Germany, send more immigrants abroad. Yet, some other countries like Poland, Romania, or Hungary have disproportionately large pools of immigrants relative to their population, indicative of significant waves of emigration⁹.

My main outcome variable is a measure of respondents’ opposition towards non-European migration. The ESS survey question reads "Now, using this card, to what extent do you think [country] should allow people from the poorer countries outside Europe?". The scale is from 1 (allow many) to 4 (allow none)¹⁰. Figure 1 below illustrates the kind of variation

⁸There are, however, important differences between immigrants and natives of a given origin country. For many countries, immigrants tend to be more educated than those who stayed. For example, immigrants from Hungary are older, tend to be more educated, and are less likely to be unemployed than those who stayed in Hungary. Immigrants from Portugal, on the other hand, tend to be younger, and more likely to be unemployed than those who stayed in Portugal. Immigrants from some origins, like Russia, tend to represent earlier cohorts of immigration than from other countries that, e.g., Poland.

⁹In the Supplementary Appendix, I describe the spatial distribution of immigrants from each given country. I compare the spatial distribution in the ESS sample to that based on the Census data for the countries with available data (from Alesina et al. (2021)), and find that the ESS sample represents the spatial distribution of immigrant population well.

¹⁰In the Supplementary Appendix, I use additional questions from the ESS on respondents’ concerns

Table 1: Descriptive statistics, ESS sample: 1st and 2nd-gen immigrants vs. natives

Summary Statistics, Immigrants vs. natives		
	Immigrants	Natives
Age	49.27 (18.08)	48.64 (18.75)
Female	0.56 (0.497)	0.54 (0.499)
Years of Education	12.92 (3.997)	12.26 (4.084)
Unemployed	0.05 (0.217)	0.04 (0.197)
Second gen	0.43 (0.495)	
Citizen	0.68 (0.468)	1.00 (0.0426)
Length of Residence:		
Less than 1 year	0.02 (0.150)	
1-5 years	0.10 (0.301)	
6-10 years	0.11 (0.313)	
11-20 years	0.20 (0.400)	
20+ years	0.57 (0.496)	
<i>N</i>	29450	352439

Standard deviations in parentheses.

across countries and time that I use to document political spillovers from origins to immigrants. Figure 1 suggests that the Refugee Crisis was associated with a sharp deterioration of attitudes towards non-Europeans in some countries, but not in others, contributing to an increase in polarization across countries.

The Refugee Crisis increased political polarization within many countries as well as across countries. Using the 0 to 10 political left-right scale from the ESS, I calculate conditional averages at the *origin* $\times$ *subgroup* $\times$ *time* level to measure how political attitudes diverge across subgroups within countries of origin during the Crisis. As Figure 2 clearly demonstrates, in some countries, the Refugee Crisis induced divergence between left- and right-leaning respondents, with latter often becoming more conservative, and the former - more welcoming of non-Europeans. In some other countries, however, the difference between the dynamics of political left and right is less pronounced. I exploit this *origin* $\times$ *group* $\times$ *time* variation

about economic and cultural impacts of immigration. However, note that since respondents I focus on are themselves 1st or 2nd generation immigrants, questions about immigrants ‘in general’ are harder to interpret in this context. To document broader patterns of how attitudes and beliefs of immigrants and their countries of origin co-move, I explore a wider set of questions from the ESS.

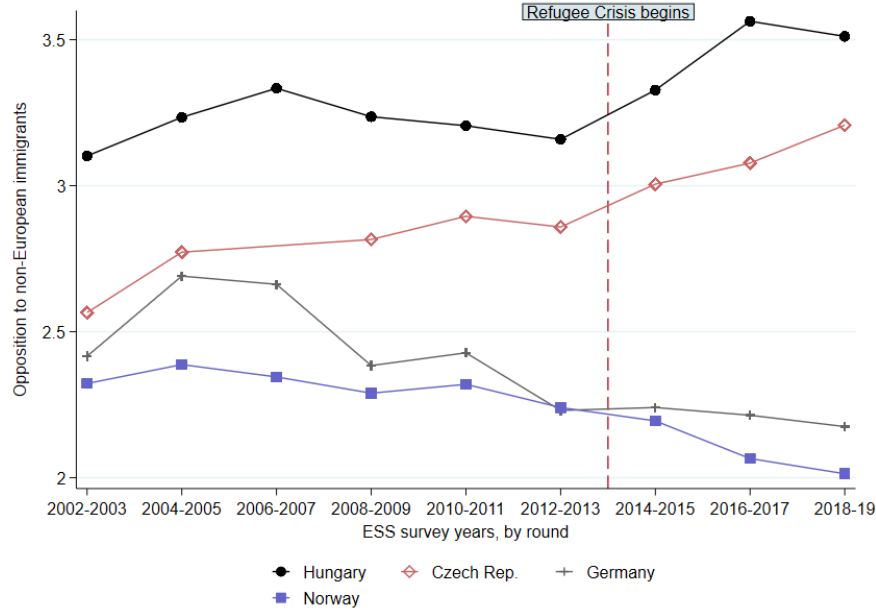


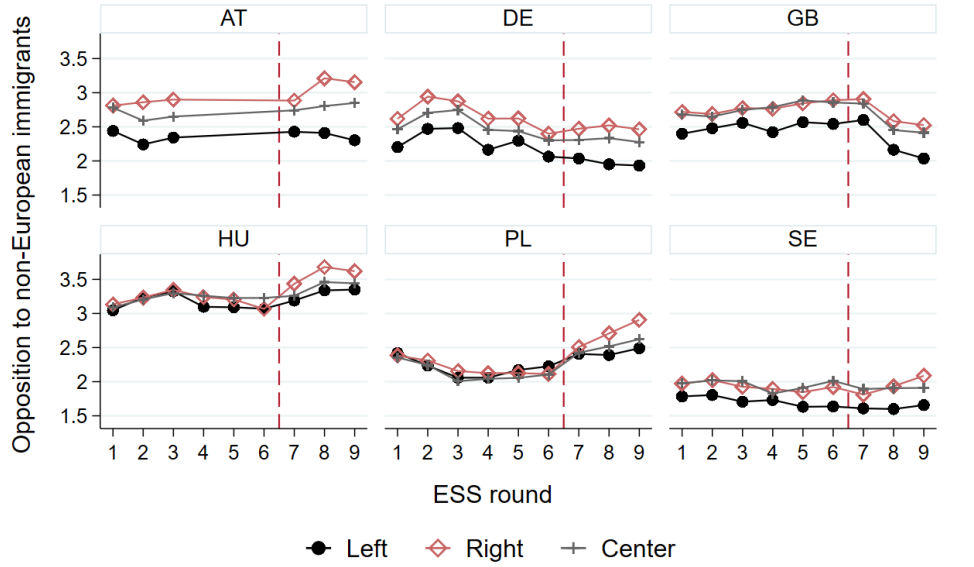
Figure 1: Dynamics of opposition towards non-European immigrants at the origins. Author’s calculations based on the ESS data.

in political attitudes to demonstrate the role of network homophily in ‘learning from the origins’. I test whether immigrants from a given origin pay particular attention and respond to changing political preferences among the like-minded groups at the origin.

In addition to attitudinal measures, I build behavioral measures of political stance and ideology to test whether political dynamics at the origins spills over to immigrants’ behavior. Specifically, I use respondents’ expressed support and voting for political parties, and match parties in the ESS with the classification by the Chapel Hill Expert Survey (CHES). This allows me to build a $\{0,1\}$ measure of political support for right-wing populist parties across countries over time and among immigrants from different origins. Importantly, as the Appendix Figure A3 clearly shows, among immigrants, support for right-wing populist parties and opposition towards non-European migration are strongly positively correlated. While this is not surprising that antagonism towards non-Europeans is correlated with right-wing populist voting, I explore whether an increase in the origin-country sentiment against non-Europeans can affect political dynamics abroad via immigration networks.

The timing of the ESS rounds was such that rounds 1-6 were conducted before the Refugee Crisis. Round 7 was mostly¹¹ conducted during the early stages of the Crisis: in

¹¹Exceptions are Israel, Portugal, and the UK, where significant portions of interviews were conducted in the late 2015.



The Refugee Crisis began between rounds 6 and 7 (marked by the vertical line). Left, Right, and Center political groups are based on the 0 to 10 left-right scale from the ESS, where Left is composed of those with scores from 1 to 4, Center is composed of those with 5, and Right is composed of those with scores from 6 to 10. Each group's size is roughly 1/3 across all rounds.

Figure 2: Dynamics of opposition towards non-European immigrants, by political stance. Author's calculations based on the ESS data.

2014 and the first half of 2015. Round 8 was conducted entirely after the main events of the Crisis, and after the EU-Turkey deal in March 2016 which decreased the numbers of refugees coming along the Eastern Mediterranean route down to almost zero. Figure 3 below overlays the timing of (the majority of interviews in) rounds 6-8 with the dynamics of new asylum applications to Europe overall. This timing of the ESS rounds will be used to code years and survey rounds as pre- or post-Crisis.

For robustness, and to improve on temporal granularity of the analysis, I employ an additional dataset on attitudes and preferences in Europe - the Eurobarometer (EB). Since the analysis with the EB data mostly mimics that with the ESS data, I relegate it to the Appendix part C.

Exposure to the Crisis: refugee inflows, media coverage, and issue salience

I employ three main measures of the extent to which various European countries were 'treated' by the Refugee Crisis: refugee inflows, perceptions of immigration salience, and media attention. The first measure is based on the Eurostat and the UNHCR statistics on refugees and asylum seekers. As one can see on Figure A5 in the Appendix, there is significant variation across time and space in per capita numbers of incoming asylum seekers. Countries

like Germany, Hungary, and Sweden received the highest numbers of applications per capita. Some countries, like Italy, received large inflows of refugees already by the end of 2014. Other countries were affected in 2015, when the Eastern Mediterranean Route became the main entry into Europe. Some other countries, e.g., Czech Republic, Estonia, Portugal, Ireland did not receive almost any refugees in per capita terms throughout the Crisis.

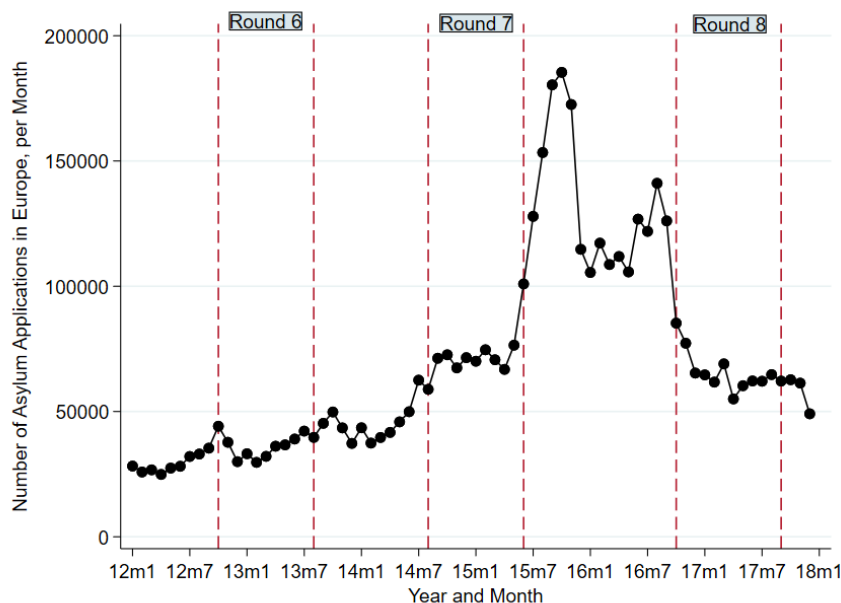


Figure 3: Dynamics of monthly inflows of asylum seekers into the EU, with corresponding ESS survey rounds roll-out. Source: UNHCR, Eurostat, and the ESS.

One important issue with the data on asylum applications, however, is that refugees did not necessarily file asylum applications upon arrival in a given country. Oftentimes, they were just transiting through a country, and this type of exposure to the Crisis will not be adequately measured by the asylum applications figures. The most striking example of this phenomenon is Greece, where, as Figure A5 shows, the numbers of asylum applications remained very low during 2014 and 2015, while in reality, more than a million refugees passed through Greece during the Refugee Crisis. To address this issue I code as ‘treated’ in the Crisis those countries that either (i) received many applications (like Germany and Sweden) or (ii) had refugees transiting through, based on the refugee travel routes provided by the International Organization of Migration (IOM)¹².

While the number of refugees and asylum seekers entering a country is an important measure of country’s involvement in the Crisis, a larger number of refugees relative to a

¹²<https://migration.iom.int/europe/arrivals#content-tab-anchor>

country's population does not necessarily mean that people in a country are particularly concerned about the Refugee Crisis. For any political spillovers to originate from an event, either the public or the media in the origin country need to pay sufficient attention to the event. In other words, the event/issue must be 'salient'. To measure issue salience related to the Crisis at the country-time level, I use two datasets: the Eurobarometer and the GDELT (the Global Database of Events, Language and Tone). The Eurobarometer allows measuring public perceptions of issue salience for a large collection of social and economic issues, including immigration. GDELT, on the other hand, allows tracing issue salience in the media (see also Koch et al. (2020) using similar data from GDELT). Figure 4 illustrates the two measures of attention to the Crisis for several European countries with various degrees of actual refugee inflows. Importantly, issue salience measured via media coverage and issue salience measured via public perceptions follow very similar trends both across and within countries. In particular, there is a very clear spike in attention/salience in the Fall of 2015, when the intensity of refugee inflows were maximal, and when the most salient events of the Crisis happened.

I employ all three types of 'exposure' to the Crisis to show that immigrants receive political and social spillovers from the origins only when the specific issue (of immigration/Refugee Crisis in this case) is particularly salient at the origin. Importantly, all three measures are strongly correlated and yield similar results.

Measuring immigrants' attention and network ties to the origins

One of the key assumptions behind the story of how attitudes and preferences at the origins spill over to immigrants is that immigrants pay attention to events that are salient at the origins. Measuring attention to specific events and countries is complicated because traditional surveys do not collect data on attention to specific countries or events. To circumvent this issue, I leverage Google Trends (GT) data on search intensity in various languages.

I use the search volumes for "Refugees" and related terms in different languages as a proxy for interest in the Refugee Crisis coming from people of various origins. Before describing this data, it is important to note several features of the Google Trends data. First, GT provides search intensity relative to the highest point for a given territory and time. For each search term of topic, the GT index varies from 100 (peak search intensity) to 0 (when search intensity falls below unknown threshold of absolute search count). To make searches comparable over specific search terms, time and space, one needs to keep a 'common denominator' stable - a given search term-territory-time unit needs to remain indexed as 100 (maximum index value) for all search queries compared. For example, for foreign-language searches for "Refugees",

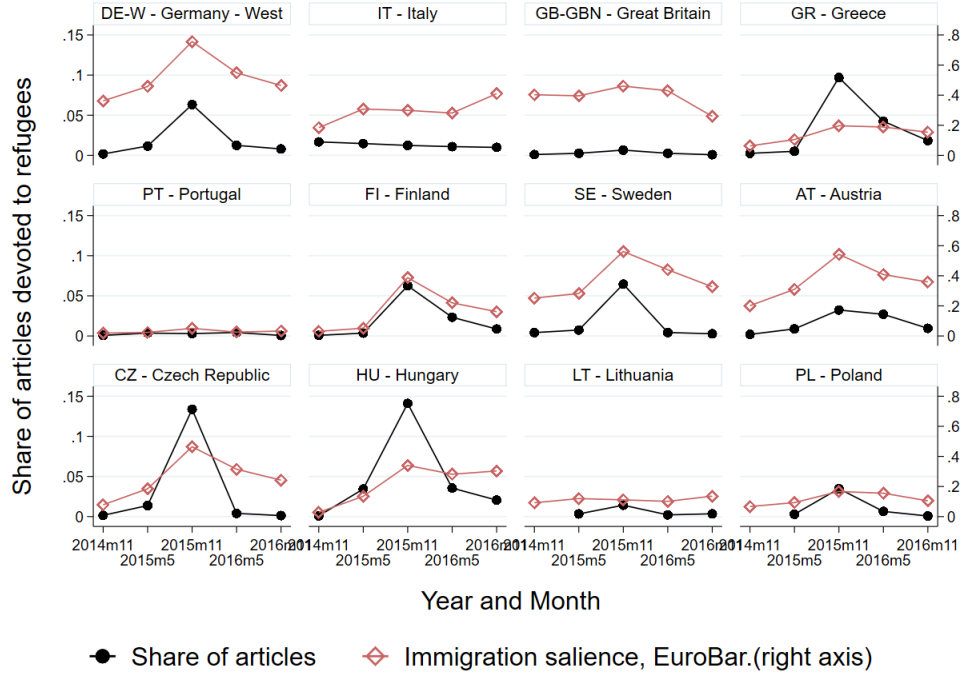


Figure 4: Refugee-related media coverage (GDELT) and immigration salience (Eurobarometer).

the highest value comes from German searches in Denmark in September 2015 - this country-language-time is given a value of 100, and all other values of the GT search index are relative to this one¹³. Second, GT adjusts search index to the overall search volumes coming from a given territory. Thus, assuming that the ‘googling’ per person is relatively stable across countries, one can interpret the GT index in per capita terms. However, GT does not adjust for differences in the linguistic composition across regions and countries. Thus, to make foreign language search indices more comparable, I account for the share of local (country c) population speaking origin o language, $s_{o,c}$ ¹⁴.

Similarly to foreign-language searches, I can measure attention to the topic of "Refugees"

¹³The value of 50 means that the given foreign language term for "Refugees" was half as popular in a given territory-time as was German term for "Refugees" in Denmark in September 2015. Unfortunately, search volumes in some languages coming from outside of linguistic homelands are very low throughout the period, so I had to focus on those languages for which GT provides non-missing data. Data can be missing for two reasons: too few speakers of a given language outside of the linguistic homeland, or too little interest in a topic of "Refugees" by the speakers of this language outside of homeland.

¹⁴Implicitly, I assume here that origin-country population shares across regions remain unchanged. What is important, however, is that they certainly do not change as fast as attention does, which makes the assumption reasonably light.

at the linguistic origins, in the local language. Here, to make searches comparable, all search indices are relative to the search in Austria in September 2015. Search indices are then aggregated at the language level (so, Austrian, German and Swiss are aggregated to a single language level, as are French and Belgian searches, etc.). Figure 5 illustrates the dynamics of interest in this topic for several European languages, combining the dynamics of search intensity at the linguistic origins (on the right) with the dynamics of search intensity in same languages but coming from outside of the linguistic origin countries. As one can clearly see from Figure 5, this proxy for interest in the topic of refugees captures very well the ‘main’ Refugee Crisis of the period, with the peak of interest in 2015, concentrated among German-speakers, both at the origins and abroad. Moreover, the data confirms the spike of interest in the topic of "Refugees" among Russian speakers following the 2014 conflict in Donbass region of Ukraine which resulted in a local outflow of asylum seekers.

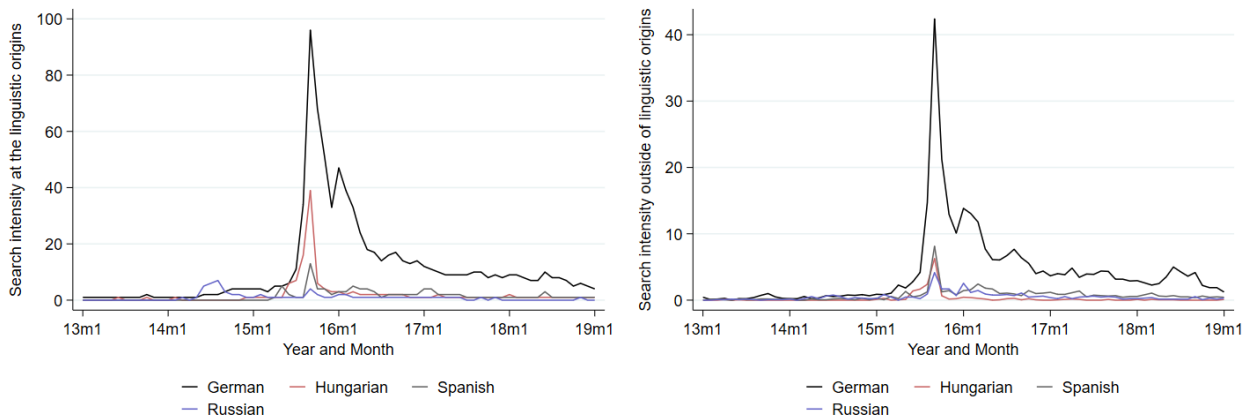


Figure 5: Google Trends search intensity: (left) in selected origin countries, and (right) in these origins’ languages but coming from abroad.

With these proxies for interest at the origins and abroad, it becomes possible to explore whether interest in a given topic outside of the linguistic origin country responds to events and interest at the origin. For example, do people tracing origins to the heavily affected countries (e.g., Germany), but living in less affected countries (e.g., France), pay increase their attention to the event disproportionately more than people tracing origins to less affected countries (e.g., Spain). To illustrate this comparison, the Appendix Figure A6 depicts search volumes for term "Refugees" in German ("Flüchtlinge") and in Spanish ("Refugiados") coming from France. It is clear from the Figure that Spanish- and German-speakers in France are no different in terms of their interest in "Refugees" before 2014, but once the Refugee Crisis begins, German-speakers pay much more attention to the Crisis as compared

to Spanish-speakers, which culminates in more than a 3-fold difference at the peak of the Crisis in September 2015¹⁵.

Similarly, it is possible to explore whether there is a co-movement in demand for information between a given origin and people speaking that origin’s language but living abroad. Figure 5 suggests that such co-movement indeed exists. While this data is suggestive of the existence of disproportionate attention from abroad to more affected origin countries, section 5 explores these questions at a broader scale, combining all languages and counties in Europe for which Google Trends provides sufficiently granular data.

Spikes of attention to salient events at the origins are necessary, but not sufficient to generate spillovers of attitudes and opinions from the origins. The other crucial component is the network through which opinions can travel. To document the role of social networks in transmitting opinions from origins to immigrants, I use Facebook’s Social Connectedness Index (SCI), introduced in Bailey et al. (2018). The SCI gives a measure of social media connectivity between pairs of geographic regions (i, j) based on the number of Facebook friendship links as a share of maximum possible number of links, given the numbers of Facebook users. Formally, $SCI_{i,j} = \frac{Connections_{i,j}}{Users_i \cdot Users_j}$. To show that region-to-country social media ties reflect the ancestral composition of regions, I combine the SCI data with the IPUMS-I Census data (for several European countries) and the data from Alesina et al. (2021). With this data, I first document that sub-national regions with a higher share of people tracing origins to country j are more closely connected to country j via Facebook. Second, I show that spillovers from the origins are stronger for immigrants from country j living in regions with (i) a higher share of people tracing ancestry to country j , and (ii) a higher extent of social media connectivity to country j , *conditional on* the share of people tracing ancestry to j . The latter supports the importance of private networks as transmitters of ideas and opinions from origins to immigrants.

2.2 Empirical strategy

To examine the importance of cultural and political spillovers from countries of origin to 1st and 2nd generation immigrants, I estimate a set of Fixed Effects (FE) and Difference-

¹⁵The month with one of the biggest numbers of refugee inflows into Europe, and two salient events that attracted massive attention. Publications of pictures of Alan Kurdi’s dead body on the shores of Turkey when he and his family attempted crossing the sea to Greece, and Angela Merkel’s speech with the famous "Wir schaffen das" ("We can do it") welcoming refugees to Germany in late August. Note that an even clearer difference in attention is observed in January 2016, when following the Cologne’s New Year’s Eve sexual assaults, attention of German-speakers spikes, while there is no reaction from Spanish-speakers.

in-difference (DID) models. I begin by documenting some broad regularities about the origin-to-immigrants political spillovers by estimating a simple model with origin, time, and country of residence FEs. The main variable of interest is the time varying average political attitudes in the country of origin. I estimate the following model¹⁶:

$$Y_{i,o,c,t} = \alpha + \beta \cdot Y_{o,t}^{Orig.Av} + \eta X'_{i,o,c,t} + \phi_o + \tau_{c,t} + \varepsilon_{i,o,c,t} \quad (1)$$

where $Y_{i,o,c,t}$ is a measure of social/political attitudes of (1st or 2nd generation) immigrant i residing in country c , tracing ancestry to country o , interviewed in period t ; $Y_{o,t}^{Orig.Av}$ - corresponding origin-country average attitudes in period t , $X'_{i,o,c,t}$ - vector of individual and other controls, ϕ_o - country of origin FEs, $\tau_{c,t}$ - time $\times$ country of residence FEs, and $\varepsilon_{i,o,c,t}$ - an error term clustered at the origin country level. The goal is to estimate coefficient β , which measures the extent to which a *shock* to social/political attitudes in the country of origin spills over to immigrants from this country. In some specifications, instead of $\tau_{c,t}$ fixed effects, I include a measure of local, host-country changes in political attitudes, $Y_{c,t}^{Loc.Av}$, to show that while local political and social dynamics matters for immigrants' own preferences, changes at the origins matter above and beyond any local (and potentially correlated) dynamics.

Note that model (1) does not focus on the Refugee Crisis, but instead describes a general relationship between the changes of political preferences among immigrants and that of their countries of origin. Most importantly, this design accounts for the origin FEs ϕ_o - something that is not usually possible in the traditional 'epidemiological approach' to culture¹⁷. In (1), the identification of origin-country spillovers comes from the effect of *changes* in the origin political/social preferences on *changes* in the political/social preferences of immigrants.

This research design addresses two additional issues with estimating the so-called 'peer effects' (discussed extensively at least since Manski (1993)). First, any correlation in outcomes between 'peers' can easily emerge due to endogenous choice of peers, without any actual social spillovers¹⁸. The same phenomenon of spurious peer effects may emerge if

¹⁶Earlier works, limited to the US as a single host country, include Nekoei (2013) where the author estimated the effects of origin-country real exchange rate on immigrants' incomes and labor supply. Further work by Akay et al. (2017) focused on Germany and included individual FEs taking advantage of the panel nature of the GSOEP dataset. However, neither political nor cultural contagion effects have been explored before, and neither have been network homophily effects in these spillovers that I estimate in model 2.

¹⁷When one examines the effect of ancestral culture or other ancestral trait on immigrants' culture or behavior (like in, e.g., Fernández and Fogli (2006), Luttmer and Singhal (2011), Galor and Özak (2016)), there emerges an important concern of whether there are unobserved characteristics at the origin country level that correlate with the ancestral culture and thus makes identification less clear.

¹⁸For example, better motivated students may tend to select better motivated friends, which creates a

‘peers’ receive common shocks. Note, however, that neither of these issues apply to the basic set-up in this paper. First, I rely on the exogenous ‘peer’ assignment (country of origin). Second, I account for local shocks in the most flexible way by including the time $\times$ country of residence FEs, $\tau_{c,t}$. These FEs partial out any variation in host-country refugee inflows, media exposure, economic shocks, etc., that can cause correlated changes in attitudes among immigrants and their co-ethnics at the origins¹⁹.

After establishing the existence and significance of political spillovers from the origin, I explore heterogeneity in the strength of these spillovers based on (i) individual characteristics of immigrant respondents (such as citizenship, language use, length of residence, etc.), and on (ii) local regional and origin country characteristics, such as the share of co-ethnics in local population.

Causal effects of the Refugee Crisis, and threats to identification

To advance the identification of the spillover effects, I zoom into the case of the European Refugee Crisis. In a DID-style strategy, I test whether immigrants receive stronger spillovers from the origin when that origin country is ‘treated’ by the Refugee Crisis. Three sources of data allow me to measure ‘treatment’ by the Crisis at the level of origin country over time: (i) share of new asylum applications in local population, (ii) self-reported issue salience, and (iii) share of media articles mentioning refugees. These measures allow me to define ‘treatment’ periods and ‘treated’ origin countries²⁰, and estimate the following model:

$$Y_{i,o,c,t} = \alpha + \beta_1 \cdot Y_{o,t}^{Orig.Avg} \cdot Treated_{o,t} + \beta_2 \cdot Y_{o,t}^{Orig.Avg} + \beta_3 \cdot Treated_{o,t} + \eta X'_{i,o,c,t} + \phi_o + \tau_{c,t} + \varepsilon_{i,o,c,t} \quad (2)$$

where $Treated_{o,t}$ is a $\{0, 1\}$ indicator of whether a given origin country in a given time period is significantly affected by the Crisis. The estimate of β_1 gives the additional spillover from treated origins as compared to non-treated origins and periods.

Importantly, political and cultural co-movements between immigrants and their origin countries may reflect ‘cultural remittances’ - i.e., immigrants affecting culture and beliefs of

correlation between outcomes (say, grades) among peers.

¹⁹Moreover, these FEs partial out the dynamics of an ‘average immigrant’ in a given host country over time, thereby ensuring that what I estimate is the political spillover from a given origin X to an immigrant from X, above and beyond any potential spillovers that X sends to other immigrants.

²⁰There are several cases in which a given country scored high on one dimension of ‘exposure’, but low on the other. For example, Italy received significant number of refugees, but respondents there had relatively low perceptions of immigration salience. Czech Republic, in contrast, did not receive many refugees, but reported high perceptions of immigration salience. In most of the cases, however, the actual refugee inflows and issue salience co-move very closely.

their co-ethnics at the origins, see Barsbai et al. (2017) among others. To make sure that I capture spillovers from countries of origin to immigrants, and not remittances, I exploit the fact that immigrants living in certain host countries did not experience the Refugee Crisis themselves, and hence are unlikely to send any spillovers back to the country of origin (which may actually live through the Crisis). In contrast to some of the earlier research, I focus on *shocks* to political attitudes at the origins - not on exposure to a fixed cultural or political environment - which helps to credibly identify ‘peer effects’ and their direction.

In addition, to examine whether other, less salient issues also get transmitted from countries of origins to immigrants disproportionately during the Crisis, I rely on cross-topic variation in issue salience. I estimate a series of placebo DID models estimating spillovers from origins to immigrants for topics that were not salient during the Crisis. Finding intensification in spillovers across the board of topics may imply that immigrants increase their attention to their origins, irrespective of a particular issue, simply because their origin country is in the news. This may cause attitudes and preferences across all domains to converge to those prevalent at the origins. I do not find such an effect: the only increasingly significant spillover during the Crisis is for the opposition towards non-European migration.

An important concern for many research questions involving the effects of refugee inflows on political/cultural landscape of receiving countries is the endogenous sorting of refugees based on the political and cultural characteristics of their destination countries. In this case, unless there is an exogenous variation in what areas get higher/lower exposure to refugees (see, e.g., Dustmann et al. (2019), Steinmayr (2020), etc.), any non-experimental studies will suffer from issues of selection into treatment. In the current paper, however, the main outcomes are at the level of immigrants living outside of their countries of origin, so this issue of selection is much less of a concern. It is unlikely that there is any effect of a given country’s expats on whether (and how many) refugees settle in this country. Thus, we can consider the extent to which a given origin country is ‘treated’ by the Crisis as exogenous from the immigrants’ standpoint.

Finally, a potential concern to the causal interpretation of political spillovers is that attitudes and behaviors co-move between immigrants and their origins because of recent migration. Namely, suppose that an increase in refugee inflows into a given country has two consequences: (i) an average level of antagonism towards non-Europeans increases, and (ii) those with the most negative attitudes towards non-Europeans emigrate²¹. In such a case,

²¹This is not an unlikely scenario, as was demonstrated in the paper by Boustan (2010) on the ‘white flight’ during the Great Migration the US.

one would observe an increase in antagonism towards non-Europeans both at the origins and among immigrants, other things equal. To make sure that recent migration does not drive the results, I re-estimate the main specifications omitting recent immigrants (those that left their origins at least 3 years before the Crisis began). Main results remain intact.

Testing for homophily effects in learning from the origins

To test whether spillovers of political preferences and attitudes come from groups that are more likely to be associated with a given immigrant, I explore network homophily effects with respect to education and political left-right stance. Specifically, I construct conditional averages of origin-country attitudes that vary at the level of *origin* $\times$ *group* $\times$ *time*, and estimate the following model:

$$Y_{i,o,g,c,t} = \alpha + \beta \cdot Y_{o,g,t}^{Orig.Av} + \eta X'_{i,o,g,c,t} + \phi_o + \tau_{c,t} + \kappa_{g,t} + \varepsilon_{i,c,t,r,g} \quad (3)$$

where $Y_{o,g,t}^{Orig.Av}$ is a measure of average attitudes in the country of origin for subgroup g in period t . Importantly, I identify β controlling for $\kappa_{g,t}$, the overall dynamics of group g . I also estimate this model within a DID set-up analogous to model (2). I begin the homophily analysis focusing on political ideology (left-center-right) spectrum. However, since political ideology itself can respond to the events and opinions surrounding the Refugee Crisis²², I verify that similar homophily effects are observed for education-based subgroups (with or without tertiary education). Among the two, however, spillovers based on ideological homophily are stronger, and once I include the latter in the model, spillovers based on educational homophily cease to matter.

3 Spillovers from the origins

This section documents some basic regularities about political and cultural spillovers from origins to immigrants. It emphasizes several dimensions of heterogeneity of such spillovers at the individual, regional, and origin-country level.

3.1 Basic regularities

I begin by documenting the strength and significance of spillovers for my main outcome variable, the opposition towards non-European immigration. Table 2 reveals strong co-

²²Although, in a supplementary analysis I show that political ideology in terms of self-reported left-right political stance is less fluid and itself does not spill over from origins to immigrants.

Table 2: Spillovers from the origins: opposition towards non-European immigrants

VARIABLES	(1) FE	(2) FE	(3) FE	(4) FE	(5) FE	(6) FE
	Oppose non-European immigration					
Oppose non-Eur immgr. (origin)	0.231** (0.093)	0.231** (0.091)	0.200** (0.077)	0.144** (0.067)	0.137* (0.069)	0.158** (0.074)
Oppose non-Eur immgr. (local)			0.585*** (0.066)			
Oppose non-Eur immgr. (origin) x 2 nd gen.						-0.048 (0.043)
Observations	20,002	19,751	19,751	19,751	19,751	19,739
Adjusted R-squared	0.113	0.142	0.147	0.149	0.160	0.160
Origin FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Country x round FEs	No	No	No	Yes	Yes	Yes
NUTS FE	No	No	No	No	Yes	Yes
Individual controls	No	Yes	Yes	Yes	Yes	Yes

Notes: Outcome variable is the individual response to a question “to what extent do you think [country] should allow people from the poorer countries outside Europe?”, from 1 (allow many) to 4 (allow none). Main treatment variable is the ESS round average answer to the same question in respondent’s country of origin. Origin FE and Time FE ensure that the estimates capture the effects of *shocks* in origin attitudes on *shocks* in immigrants’ attitudes. In column (3) I add the residence country average attitudes. In column (6) I interact origin attitudes with the generation of respondents immigration (1st or 2nd). Robust standard errors, clustered at the level of origin countries, in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

movements in this domain between immigrants and their countries of origin for all ESS counties over the period from 2004 (round 2) to early 2020 (round 9). Namely, column (1) reports the most basic estimate of β coefficient from model 1, and demonstrates that a 1-unit increase in the opposition towards non-European immigration at the origin translates into 0.23 units of increase in corresponding opposition among immigrants from this origin country. Column (2) adds basic individual controls without any change to the estimate. Column (3) adds local (host country) changes in attitudes, and confirms that spillovers from the origin diminish in strength but still matter after accounting for the local dynamics. Column (4) adds country-by-round FEs to partial out any host country shocks that can produce correlated effects between origin and host countries. Column (5) adds local regional NUTS FEs, which is the most restrictive specification, and still delivers a significant spillover effect. Finally column (6) demonstrates that spillover effects are very strong for the 1st-generation immigrants, and only insignificantly weaker for the 2nd-generation immigrants, suggesting that attention to the origins is passed down to children of immigrants²³.

I re-estimate model (1) for a broader set of political preferences and attitudes, and report the estimates of spillover effects in Table 3. I find significant spillovers for a set of issues

²³As I show in the Supplementary Appendix, whether immigrants live together with their parents or not does not matter much for the size of spillovers from their home countries. Thus, it is less likely that attention to the origins persists because respondents co-habit with their parents who are immigrants themselves.

Table 3: Spillovers from the origins: additional outcomes

VARIABLES	(1) FE TrstEUp	(2) FE EUunif	(3) FE ALGBT	(4) FE GenTrst	(5) FE LRSt
Trust EU Parl. (origin)	0.139** (0.064)				
Supp. EU Unif. (origin)		0.184*** (0.052)			
Anti-LGBT (origin)			0.242*** (0.064)		
Generalized Trust (origin)				0.137 (0.081)	
Left-right Stance (origin)					0.073 (0.129)
Observations	18,011	15,866	19,774	20,526	17,649
Adjusted R-squared	0.084	0.068	0.288	0.104	0.046
Origin FE	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes
Country x round FEs	Yes	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes	Yes

Cluster-robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

that were salient over the period the ESS has data for, 2004-2020. Namely, I find significant co-movement between immigrants and their countries of origins for: opposition towards the EU unification, trust towards the EU parliament, opposition towards the LGBT community. However, for arguably more ‘deep’ cultural values, such as interpersonal trust, and political ideology, I do not find significant spillovers²⁴.

3.2 Strength of spillovers: individual, regional, and origin factors

A natural question concerning spillover/contagion effects is who is most susceptible to contagion. To answer this question, I examine which individual characteristics of immigrants make them more likely to receive stronger spillovers from their origins. Focusing on the opposition towards non-European immigrants, Figure 6 reveals that various measures of social integration are crucial for the strength of origin spillovers. Higher levels of social integration - as measured by citizenship, length of residence, and local language use at home - all decrease attention to the origin and the strength of spillover effects. Unemployment also

²⁴In the Supplementary Appendix, I report spillover estimates for the maximum possible set of questions on attitudes, norms and beliefs from the ESS. The main insight remains the same: spillovers are the strongest for issues that were most salient and dynamic during the last decades, and the weakest for more ‘deep-rooted’ values, such as religiosity and family values.

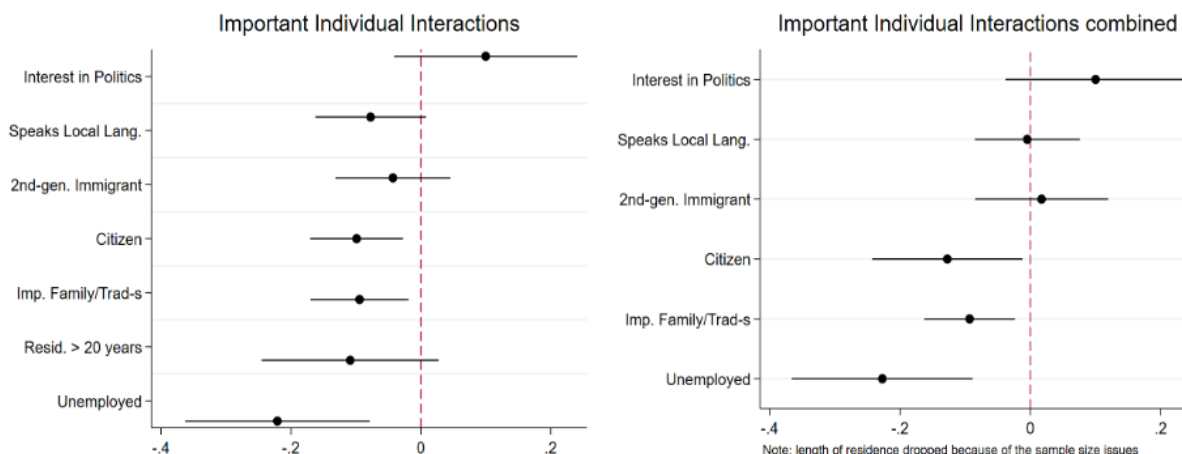


Figure 6: Important individual-level interactions. Role of immigrants' integration into their host societies

weakens spillover effects, potentially because of conflicting attention when there is a pressing need of finding a job. Interestingly, higher importance of family and traditions weakens spillover effects - potentially because of the trade-off between inter-generational (vertical) and network learning, see Bisin and Verdier (2001) and Giuliano and Nunn (2021).

Turning to the characteristics of immigrants' regions of residence, I show that local co-ethnic 'diasporas' affect the strength of spillover effects from the origins. Using the data on subnational (NUTS-2) population shares of various European origins adapted from Alesina et al. (2021), I construct a measure of the size of co-ethnic diaspora at the NUTS-origin pair level. As shown on Figure 7, immigrants living in regions with relatively large shares of co-ethnics receive strong spillovers, while immigrants living in regions with smaller diasporas do not respond to the dynamics of political attitudes at the origins. This finding may suggest either or both of the two mechanisms: that (i) immigrants with a stronger attachment to the origins choose to settle in regions with higher shares of co-ethnics, and/or that (ii) larger share of co-ethnics in the vicinity increases the supply of information and attitudes from the origins²⁵. In the Supplementary Appendix, I show that indeed, immigrants who speak their origin-country language at home, who are less educated, and who migrated more recently - all are more likely to live in NUTS-2 regions with a higher share of co-ethnics, suggesting selection to be part of the story. More detailed data on local interactions between immigrants

²⁵In principle, for any given level of information acquisition from the origins, presence of co-ethnics may also increase the salience and persuasiveness of such information, which can also contribute to a higher spillover effect.

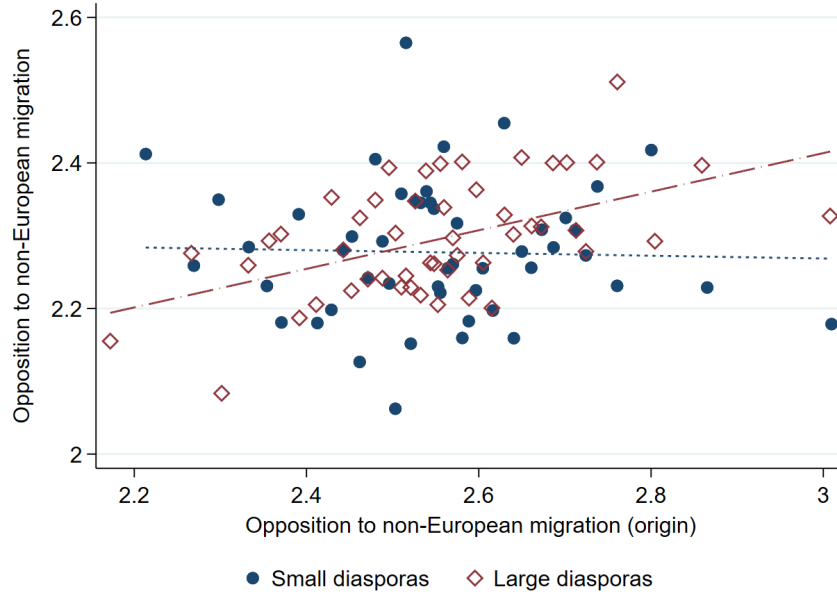


Figure 7: Binscatter plot: size of the co-ethnic diasporas at the NUTS-2 level and the strength of spillovers.

is needed, however, to measure the importance of the information supply story.

Overall, the evidence presented in this section reveals significant co-movements of norms and attitudes between immigrants and their countries of origin. These co-movements/spillovers are present for a wide range of salient issues. Importantly, immigrants who are less socially integrated into their host communities receive stronger spillovers, suggesting that the lack of social integration of immigrants creates the potential for political contagion effects. Moreover, immigrants residing in NUTS regions with higher shares co-ethnics in local population receive stronger spillovers from the origins, suggesting the importance of information supply and spatial sorting of more ethnically ‘attached’ immigrants into regions with more co-ethnics.

4 Main results: Refugee Crisis and the opposition towards non-European immigrants

In this section, I focus on the European Refugee Crisis as an event that triggers attention to origin countries and generates spillovers of (i) opposition towards non-European immigrants and (ii) voting for right-wing populist parties. Variation in the extent and timing of exposure

Table 4: DID estimates of political spillovers during the Refugee Crisis

VARIABLES	(1)	(2)	(3)	(4)
	FE-DID	FE-DID	FE-DID	FE-DID
	Oppose non-European immigration			
Oppose non-Eur. immigr. (origin)	0.120 (0.156)	-0.011 (0.053)	-0.006 (0.045)	-0.102 (0.085)
Oppose non-Eur. immigr. (origin) x Post-2013			-0.016 (0.054)	-0.070 (0.080)
Oppose non-Eur. immigr. (origin) x Origin Affected	0.075 (0.177)	0.409*** (0.123)	0.148* (0.078)	0.307*** (0.101)
Oppose non-Eur. immigr. (origin) x Post-2013 x Origin Affected			0.213*** (0.060)	0.186** (0.086)
Observations	6,844	11,870	18,714	14,338
Adjusted R-squared	0.163	0.141	0.150	0.144
Origin FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Country_x_round FEs	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes
Sample	Pre-2013	Post-2013	Full	Host NT

Cluster-robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

to the Crisis at the origin and time level allows me to clearly identify political spillover effects.

4.1 DID estimates: Opposition towards non-European immigration

While the results of Table 2 are indicative of significant spillovers from origins to immigrants, it is hard to tell where these effects are coming from, and whether there is a causal interpretation to them. To identify spillover effects ‘activated’ by a particular event - the Refugee Crisis - I employ the DID-type strategy outlined in section 2. Namely, to conduct the DID analysis, I leverage two dimensions of the Refugee Crisis. First, both the inflows of refugees and the salience of immigration have started to increase in 2013 (see Appendix Figures A2 and A1), and remained very high until 2017-2018 (round 9 of the ESS). Second, certain countries - like Greece, Hungary, Italy, Germany, Sweden, and some others - were significantly affected by the Crisis, while other countries, - like Portugal, Ireland, Poland, or Russia, - were not affected to any comparable margin²⁶, see Appendix Figure A5. Thus, I estimate the FE-DID type of a model described earlier in (2), and report the results in Table 4 below.

In Table 4, column (1) demonstrates that there is no significant spillover effect of opposition towards non-European immigrants before 2013. Moreover, there is no difference

²⁶In the Supplementary Appendix, I provide additional checks showing that the results are robust to the one by one exclusion of separate countries from treated and control groups.

between countries to be affected by the Crisis and those not to be affected in the future, which rules out any ‘pre-trends’. Column (2) estimates the same model on the post-2013 period, and shows that there is a very strong and significant spillover from origin countries involved in the Crisis, while there is nothing for non-affected origins. Column (3) reports the estimates from a full-fledged DID model and reveals that, indeed, heavily affected countries during the period of high immigration salience are those that produce strong contagion effects via immigration networks. Note that the size of the spillover coefficient outside of the high-salience period is zero, and in the post-2013 period, the coefficient increases to approximately 0.2. The strength of this effect is significantly larger than the spillover estimated in most demanding specifications of Table 2, when averaged across all countries and time periods. Finally, Table 4 column (4) reproduces the results of column (3) on a sample of residence countries that did not receive many refugees during the Crisis. This safeguards us against the potential risks of correlated exposure effects. Namely, correlated changes in attitudes among immigrants and their origin countries can emerge because immigrants’ residence countries and their origin countries are experiencing similar events. Results in column (4) address this concern and still reveal highly significant and strong spillover effect.

While there are relatively few observations for immigrants at the origin-survey year level, it is still possible to extend the DID analysis from Table 4 to a finer, year-by-year level. Figure 8 shows an event-study graph where year 2012 is set as the last pre-Crisis year. The Figure reports estimates of the interactions $Y_{o,t}^{Orig.Av} \cdot Year_t$, comparing spillover coefficients in each year to that in 2012 (the baseline spillover in the year 2012 is 0.14, and is not significant). One can see from Figure 8 that before 2013, there are no strong spillovers of opposition to non-European immigration. However, starting in 2013 and 2014, there is a clear intensification of spillovers from the origins, and this intensification becomes most significant and pronounced in 2015, the peak of the Refugee Crisis. In the Appendix, Figure A7 shows that there is no intensification of spillovers for non-treated origins.

To further demonstrate the importance of issue salience in generating cross-border spillovers of political preferences, I conduct a series of falsification exercises by estimating spillover coefficients similar to those in Table 4 column (3), but for a broader set of issues and preferences, such as trust in parliament, anti-LGBT attitudes, etc. If the origin-to-immigrants spillover of the opposition towards refugees emerges because of the increased salience of non-European migration at the origin post-2013, one would not expect any significant increase in spillovers of any other (less salient) preferences or social norms. However, if what happens is an increase in attention to the origin country overall, irrespective of specific topics and

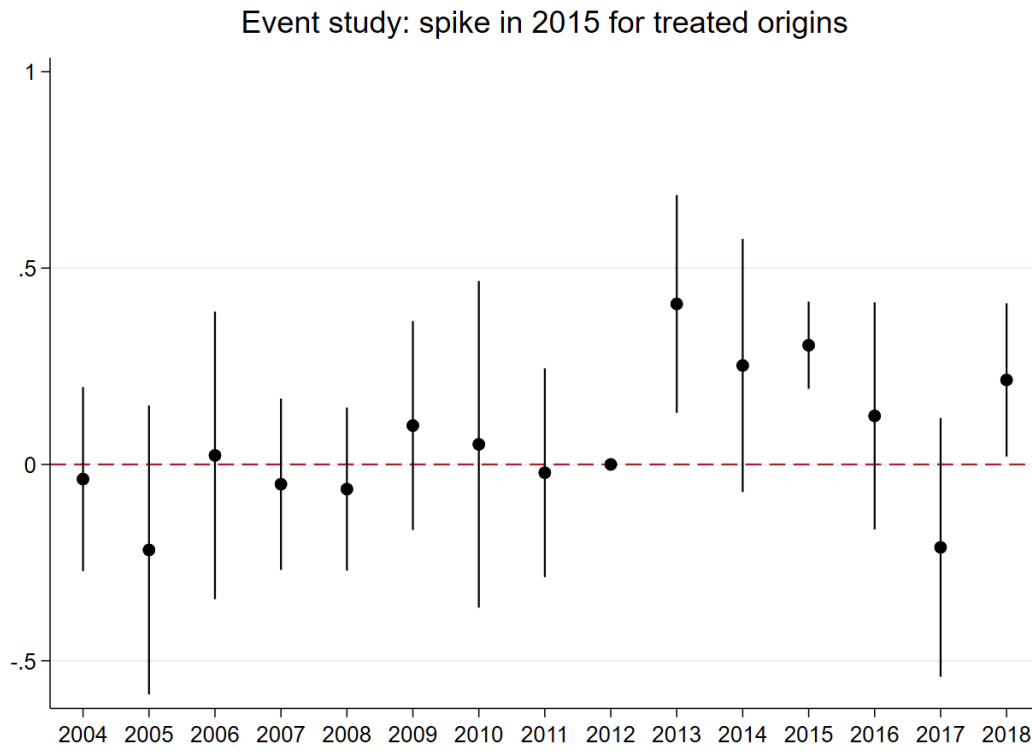


Figure 8: DID spillover coefficients for each survey year, as compared to 2012, the last pre-Crisis year. Treated origin countries.

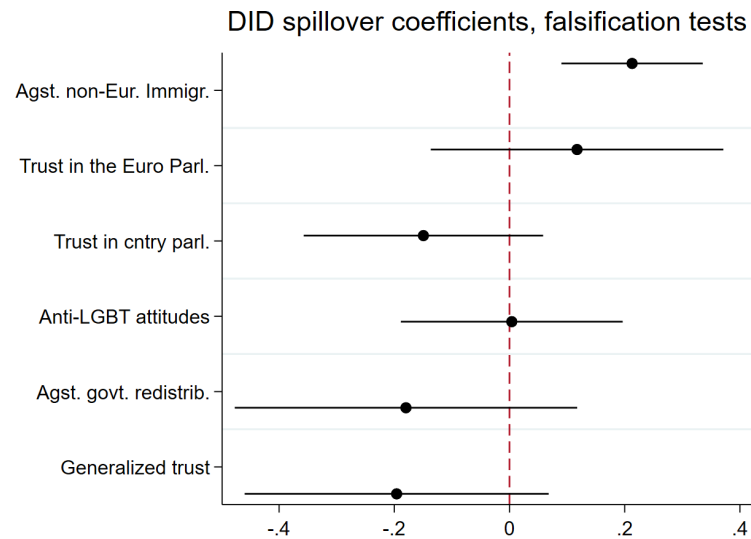


Figure 9: DID spillover coefficients for a broader set of political preferences and social norms.

issues, then one would expect all preferences and social norms of immigrants to converge to that of the origin country. Figure 9 reports estimates of DID spillover coefficients for a broader set of issues, and clearly shows that the only positive and significant spillover during the Refugee Crisis from the most affected countries is for the opposition to non-European immigration. Moreover, for issues such as trust and government redistribution there is a somewhat negative estimate, suggesting that during the Crisis, spillovers for these issues become weaker than usual. One potential explanation for this decrease in the strength of spillovers for other issues is the ‘limited attention’ effect: when a set of issues is more salient, immigrants respond more to origin-country dynamics related to these salient topics, while at the same time responding less to other, less salient changes.

In the Appendix part C, I explore attention and issue salience further. In particular, I use the data from Eurobarometer survey to show that issue salience is itself transmitted to immigrants: when immigration issues become most salient during the Refugee Crisis peak periods, they also become salient among 1st- and 2nd-gen immigrants living in less affected places, supporting the stickiness of attention to the topics salient at the origins. An additional benefit of using the Eurobarometer data is that it allows examining co-movements in attitudes at a higher frequency, as survey rounds are conducted every 6 months. The downside is that questions on attitudes towards non-Europeans appear on a regular basis only starting November 2014 on, preventing me from conducting a full-fledged DID-style analysis.

4.2 Political spillovers affect behavior: Right-wing populist voting

While the fact that opposition towards non-European immigrants spills over from origins to immigrants during the Refugee Crisis is a novel and important mechanism behind attitudinal change and ‘contagion’ of populism, it is not clear whether it maps into actual behavioral outcomes. To test this, I explore whether the increased opposition to non-European immigration at the origins affects voting behavior among expats from these origins. Namely, I test whether 1st and 2nd generation immigrants increase their support for far-right populist parties if their origin country becomes more conservative.

I use data from the Chapel Hill Election Survey (CHES) to classify European political parties by (i) right-wing populist vs. not, and (ii) anti-immigration/anti-Islamic vs not. Then, I match parties from the ESS (respondents specify party preferences and voting last elections) to CHES classifications, and test whether opposition towards non-European immigration at the origin makes eligible immigrants support far-right parties in their countries

Table 5: From opposition to non-European immigration to far-right voting

VARIABLES	(1) FE	(2) FE	(3) FE	(4) FE
	Support right-wing populist party			
Oppose non-Eur. immigr. (origin)	-0.019 (0.027)	0.005 (0.037)	-0.011 (0.069)	-0.043 (0.024)
Interest politics	-0.205*** (0.063)	-0.000 (0.051)	-0.176*** (0.045)	-0.286 (0.181)
Oppose non-Eur. immigr. (origin) x Interest politics	0.091*** (0.026)	0.007 (0.019)	0.079*** (0.019)	0.122 (0.073)
Observations	2,953	4,280	2,037	916
Adjusted R-squared	0.052	0.080	0.048	0.065
Origin FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Host x Time FE	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes
Sample	Post-2013	Pre-2013	Post-2013, treated	Post-2013, not treated

Cluster-robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

of residence. As a sanity check, I first test whether among 1st and 2nd generation immigrants, there is an association between the opposition towards non-European immigration and support for far-right populist parties. In the Appendix, Figure A3 illustrates the conditional correlation, accounting for all the FEs and individual controls from model (1), and demonstrates a very close match between the two phenomena, even among immigrants.

To demonstrate that there are significant spillovers from the political attitudes at the origins to actual voting among immigrants, I report the basic DID estimates in Table 5 below. Importantly, I take into account two additional dimensions at the individual level: (i) how interested respondents are in politics, and (ii) I look at only those immigrants who are eligible to vote in their country of residence.

As one can see from Table 5, column (1), during the period of high immigration salience, those who claim being interested in politics respond to a growing opposition to non-Europeans at the origin by increasing their support for local far-right populist parties. There is no effect for those not interested in politics. Column (2) verifies that there is no spillover to voting behavior outside of the period of high issue salience. Columns (3) and (4) show that spillovers originate only from those countries of origin that were heavily involved in the Crisis.

Overall, this section demonstrates that the dynamics of political preference and social norms at the origin affects the corresponding dynamics of immigrants tracing their roots to these countries, but living elsewhere. Spillovers of antagonism towards non-European im-

migrants intensify during the periods of issue salience (during the Refugee Crisis), and only come from countries heavily involved in the Crisis. Moreover, these spillovers also have meaningful political consequences: growing conservatism at the origin during the Refugee Crisis increases voting for far-right populist parties among immigrants living in other countries. Taken together, this provides new evidence on how populist and anti-immigration sentiment spreads across the world. Next section explores several of the potential mechanisms behind these contagion effects.

5 Mechanisms: attention, network homophily, and social media ties

This section explores the mechanisms behind the observed spillovers of political preferences and social norms from countries of origin to immigrants. First, I document that the ‘necessary condition’ required for any social spillover is satisfied: that during the period of issue salience, immigrants from heavily affected origins pay disproportionately high attention to the Refugee Crisis. Second, I show that network homophily matters in the process of learning from the origins. Namely, the strongest political spillovers come from like-minded groups at the origins, suggesting that learning from origins is likely ‘naive’, driven by reiteration of the same ideas within like-minded groups. Finally, I present some evidence for the importance of social media (Facebook) ties as transmitters of political preferences from countries of origin.

5.1 Google Trends and attention to the Refugee Crisis from abroad

The most basic precondition for immigrants receiving political spillovers from the origins is that immigrants become interested in the same topics that are ‘trending’ at the origins. While this seems reasonable to assume, owing to cultural and information ties between immigrants and their origins, this regularity has not been documented so far. To demonstrate that this is indeed the case in the context of the Refugee Crisis, I leverage Google Trends (GT) data on search intensity for "Refugees" and related terms in different languages to proxy for the interest in this topic by speakers of these languages. I then examine whether searches in a given language coming from outside of the linguistic origin co-move with that at the origin. In other words, I test whether speakers of a given language living outside of their origin country are interested in "Refugees" when and if this topic is salient at the origins.

To fix ideas, let’s consider a simple model of interest in a given topic. Individual i ’s

interest in a topic (Refugees), $InterestRef_{i,o,c,t}$, has a time component - whether a topic is salient at a given point in time - which is captured by time (year-month) fixed effects, τ_t . Moreover, individuals from certain countries of origin may be more concerned about certain topics at any point in time, due to historical or other societal characteristics, which is captured by origin fixed effects, ϕ_o . In addition, the more salient and discussed a given topic is in i 's country of origin, the more likely it is to attract attention of i from abroad. To test for this co-movement in attention, I add to the model the measure of interest in a given at the origin, $InterestRef_{o,t}^{orig}$. In all specifications I control for $s_{o,c}$ - the share of speakers of language o living in country c . Moreover, I partial out local dynamics by including fixed effects at the level of $country \times month$. Overall, I estimate the following event-study type of a model:

$$InterestRef_{c,o,t} = \alpha + \beta_t \cdot InterestRef_{o,t}^{orig} + \psi_{c,t} + \phi_o + \tau_t + s_{o,c} + \varepsilon_{c,o,t} \quad (4)$$

where time variant parameter β_t measures the extent to which interest in "Refugees" co-moves between linguistic origin countries and people speaking this language but living abroad. Positive and significant estimate of β during the peak periods of the Refugee Crisis would lend support to the hypothesis that attention to the Crisis co-moves between immigrants and their origins when the issue is salient.

As a first step, I estimate the bare-bones fixed effects version of model (4) leaving only time, country of search, and origin fixed effects²⁷. I limit the sample of European host countries (where search comes from) to those relatively less affected by the Crisis²⁸, and include in the sample all origin-country languages, for which Google Trends provides sufficient data. In the Appendix, Figure A12 shows the estimates of year-month fixed effects, confirming that, overall, interest from abroad spikes during the key periods of the Crisis. Moreover, by far the largest origin country fixed effect is estimated for searches in German (arguably, the most affected country), while the lowest - for searches in Italian, with Turkish, Romanian, and Bulgarian being just insignificantly higher.

Second, I estimate the full version of model (4) including $InterestRef_{o,t}^{orig}$ - the measure of attention to the topic at the linguistic origin. Figure 10 depicts the estimates of β_t from model (4), including all the fixed effects. As one can clearly see, before the most intense period of the Crisis, and especially before 2013, coefficients are largely not significant and do

²⁷Thus, I estimate the following model $InterestRef_{o,c,t} = \alpha + \psi_{c,t} + \phi_o + \tau_t + s_{r,o} + \varepsilon_{o,c,t}$

²⁸This is done for the same reason as in section 4: in order to limit the concerns that co-movements in interest (or in attitudes, as in section 4) can come from correlated exposures to the Crisis between host and origin countries.

not display any stable pattern - interest in "Refugees" is not correlated across origins and immigrants from these origins living elsewhere. However, once the Refugee Crisis intensifies, and especially in 2015, interest in the Refugee Crisis from abroad follows closely the interest at the linguistic origin.

Importantly, this co-movement of interest in "Refugees" during the Crisis is much stronger for 'treated' origins - such as Germany, Hungary, and Sweden, as compared to non-treated, such as Russia, Spain, or Poland. In the Appendix, Figure A13 demonstrates the difference between more treated and less treated origins, and confirms that co-movement in interest is much stronger for treated origins during (but not before) the Refugee Crisis.

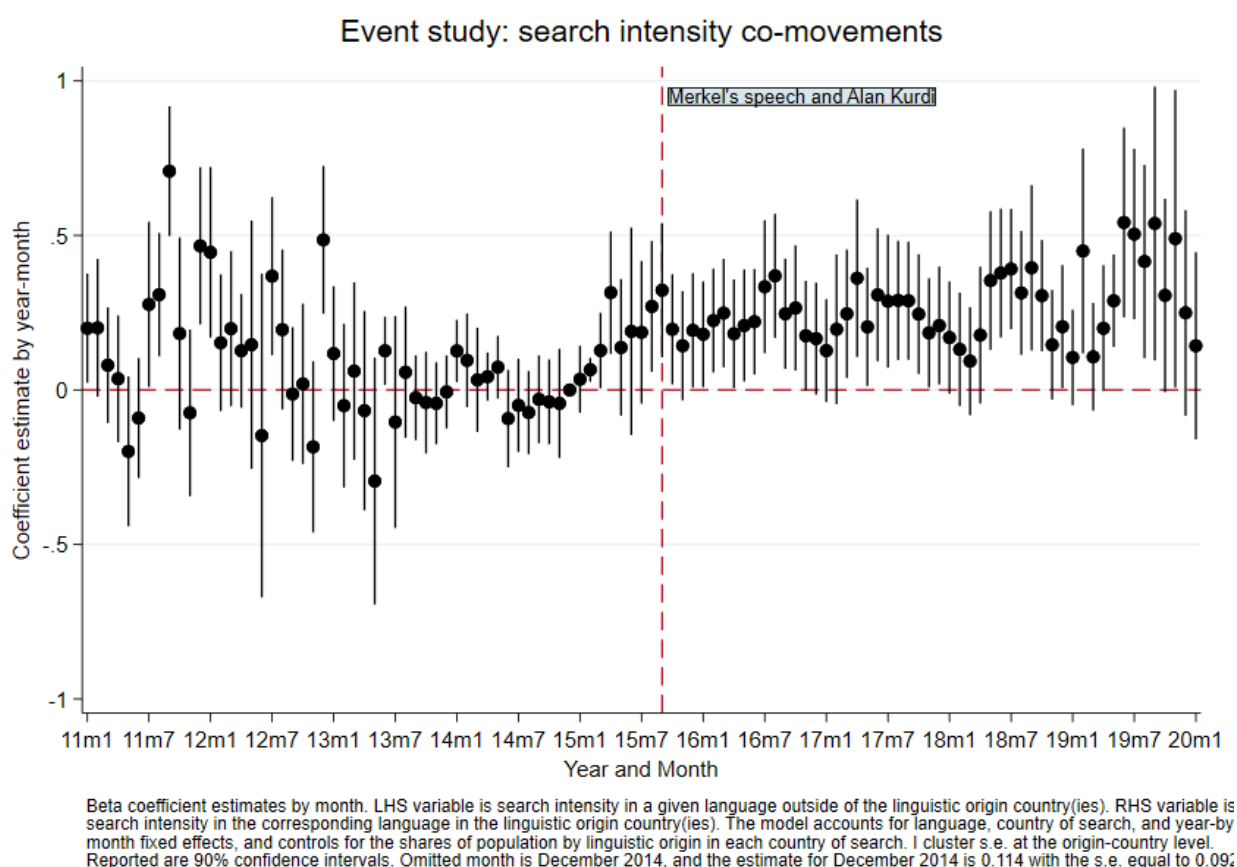


Figure 10: Event study of search intensity co-movement at the linguistic origin and abroad, from 2011 till 2020, all languages and search countries combined.

5.2 Network homophily: learning from like-minded groups

Results in sections 3 and 4 demonstrated that changes in ancestral attitudes have significant spillovers on the attitudes of immigrants living elsewhere. So far, the paper used unconditional average attitudes in the origin countries. However, there are reasons to believe that immigrants might be particularly attentive to and persuaded by origin-country population subgroups to which they feel closer to. In particular, Figure 11 shows that the coefficient on the basic ancestral spillover effect for people identifying as left-leaning politically is very strong for ancestral averages for left-leaning people, but insignificant for other political subgroups (this distinction is also there for local-region attitudes). Same type of homophily effect is observed for education: for people without tertiary education, ancestral spillovers are strong for ancestral averages over people without tertiary education, but absent for people with tertiary education. These network homophily results are especially important given the increasing polarization and, in particular, diverging attitudes towards non-European immigrants, refugees, and the EU integration observed during and after the Refugee Crisis period, see Figure 2. This figure makes it clear that reactions to the Crisis were very different across groups with different political preferences, so, given the importance of network homophily, one should expect that immigrants will react especially strong to the attitudes of like-minded co-ethnics.

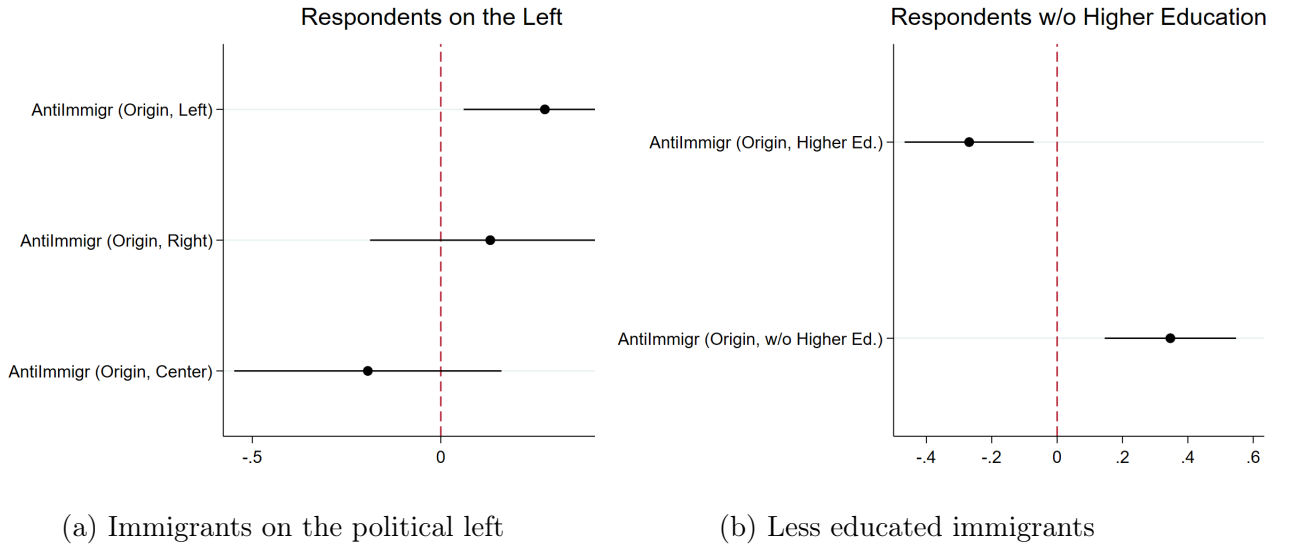


Figure 11: Homophily effects examples: Spillover coefficients by groups of immigrants and groups of natives in origin countries

Guided by these observations of network homophily effects, I construct a new measure

Table 6: Origin country spillovers from similar groups

VARIABLES	(1) FE	(2) FE	(3) FE	(4) FE	(5) DID	(6) DID
	Oppose non-European immigration					
Oppose non-Eur. immigr. (origin group)	0.286*** (0.083)	0.263*** (0.077)	0.211*** (0.071)	0.203*** (0.074)	0.379*** (0.127)	0.445** (0.162)
Oppose non-Eur. immigr. (origin)						-0.208 (0.167)
Observations	17,299	17,112	17,112	17,112	3,661	3,661
Adjusted R-squared	0.136	0.167	0.174	0.186	0.227	0.227
Origin FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Country x round FEs	No	No	Yes	Yes	Yes	Yes
Individual controls	No	Yes	Yes	Yes	Yes	Yes
NUTS FE	No	No	No	Yes	Yes	Yes
Group x round FE	Yes	Yes	Yes	Yes	Yes	Yes
Sample	Full	Full	Full	Full	R7-R8	R7-R8

Cluster-robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

of origin country attitudes, where for each immigrant I define the ‘origin x social’ group, where social groups can be various combinations of political and educational divisions from above (i.e., left-leaning without tertiary education, centrist with tertiary education, etc.). Starting with the simple case of political-only subgroups, Table 6 below reports the results of such analysis, with columns (1)-(4) mirroring those from Table 2. As is clearly seen from these estimates, spillover coefficients are much stronger from these like-minded groups, as compared to spillovers from the average respondent at the origin. Importantly, all the regressions account for group-specific time FEs, which takes care of any shocks in attitudes that, for example, all respondents identifying as right-wing may be experiencing. Column (5) reports estimates from a simple DID analysis around the main events of the Crisis in 2015, similar to ??, and also finds a much stronger spillover than before. Finally, column (6) runs a horse race between average attitudes at the origin and that of respondents’ like-minded subgroup at the origin, revealing that the whole effect of the average disappears once we acknowledge that attention and learning tends to happen in like-minded groups.

These results may be indicative of either or both of the two stories. First, people with similar pre-existing characteristics are exposed to similar information sources and react in similar ways to the information they get. This would mean that, for example, German Americans and Germans on the political left read same newspapers and, after getting same information, adjust their attitudes in a similar way. A second possibility is that more similar people are more likely to interact with each other, and, if they do, are more easily persuaded. I work on discriminating between these two stories in my context.

5.3 Social media ties to the origins

To further underpin the idea that immigrants’ attitudes and behaviors may be affected ‘real-time’ by changes in political preferences at the origin, I show that social media networks between sub-national regions (NUTS-2) and European countries are strongly reflective of origin country composition of these sub-national regions²⁹. Once I establish that, quite intuitively, higher social media friendship links are strongly reflective of migration histories at the regional level, I show that spillover effects are stronger between subnational region-(origin)country pairs that are more strongly connected via Facebook.

I use data from Facebook’s Social Connectedness Index (SCI) to measure bilateral social media ties between locations. Data on population shares by country of origin in European NUTS regions comes from the European Census (IPUMS-I) and Alesina et al. (2021). I test whether regional population shares by country of origin map into the strength of region-to-country social media ties.

Figure 12 shows the correlation between the share of Facebook friendships that users in NUTS region j have with users in country i and the share of population in region j that are immigrants from country i . The strong, positive correlation suggests that sub-national regions in Europe that have a higher share of immigrants from a certain European ancestry also tend to have a significantly higher Facebook connectivity with people from that European country³⁰. Thus, immigrants tend to be disproportionately connected to their origin countries via social media. Given the importance of network homophily effects documented in section 5.2, this lends additional support for the hypothesis that social media networks, known for their echo chambers, may be behind the spillover effects observed during the Refugee Crisis.

To provide further evidence supporting the role of social media as a channel through which attitudes and preferences flow from origins to immigrants, I show that stronger Facebook friendship links with immigrants’ origin countries increase spillover effects from the origins. Importantly, social media ties with the origins matter even after I account for the aforementioned correlation between local ethnic composition and social media ties to the origins. In

²⁹This has been done in the US context in the seminal paper by Bailey et al. (2018), but this has not been shown for Europe due to difficulties obtaining data on ethnic/country of origin population shares at the sub-national level. While Bailey et al. (2020) and the authors’ previous papers discuss the possibility that Facebook friendship links may actually explain who migrates where, I suggest that a reverse effect may be even stronger: ethnic origins of local populations explain where they have social media ties.

³⁰Appendix Figure A14 shows the same correlation with a few outliers, which, however, do not affect neither the slope, nor the significance. If anything, with these outliers, the results are even stronger.

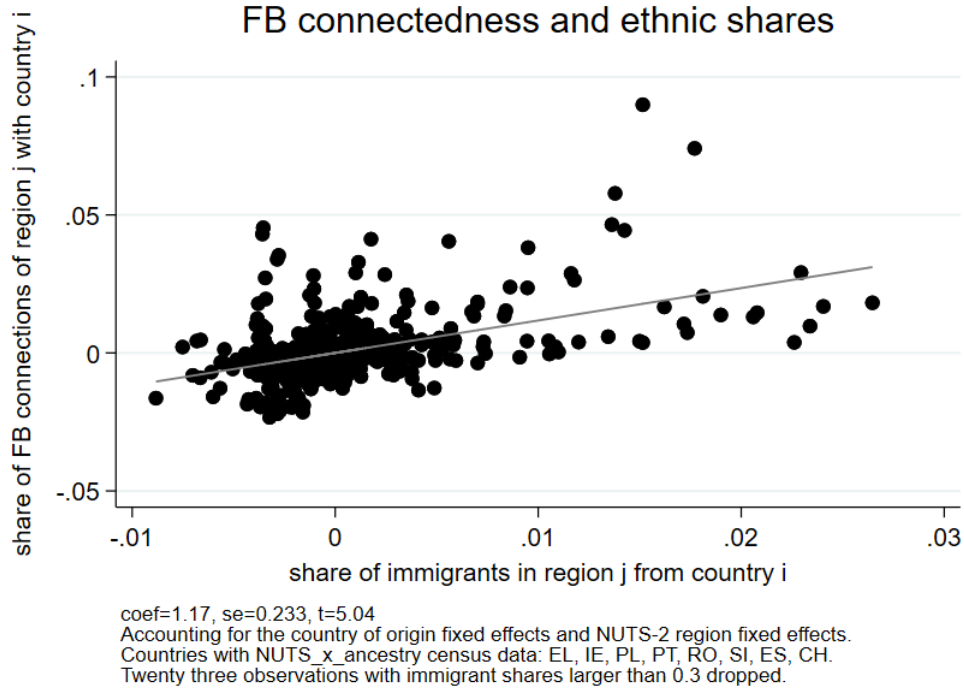


Figure 12: Ethnic shares and Facebook connectivity, 8 European countries, NUTS-2 level, w/o outliers

other words, immigrants residing in NUTS regions that have disproportionately high social media ties to their origin country relative to the share of local population from that origin country, receive stronger spillovers from the origins.

The estimates are presented in Table 7. Column (1) echoes the evidence presented on Figure 7, but with a continuous measure of region's population share from a given origin country. It shows that spillovers from the origins are significantly higher for immigrants residing in regions with larger 'diasporas'. In particular, moving from a region with close to zero co-ethnics to a region with about 4% co-ethnics (one standard deviation change) increases the size of a spillover coefficient two-fold, from 0.09 to 0.18. Column (2) provides similar evidence for the importance of Facebook ties between a given region and a given origin country - stronger region-to-origin social ties increase the strength of spillover effects. For immigrants living in regions less tied to origin countries, spillover effects are zero. However, specification in column (2) does not take into account that a higher Facebook connectedness between a region and a country may simply reflect a higher share of regional population tracing roots to that country. Column (3) shows that the effect of social media ties are stronger than the simple local diaspora effects. Namely, when Facebook friendship shares

Table 7: Social media ties with the origins and the strength of spillover effects

VARIABLES	(1) FE	(2) FE	(3) FE	(4) FE
	Opposition towards non-European immigrants			
Oppose non-Eur. immigr. (origin)	0.094 (0.102)	-0.036 (0.105)	-0.041 (0.109)	0.094 (0.089)
Oppose non-Eur. immigr. (origin) x Pop share origin	2.253* (1.129)		-3.968 (2.508)	
Oppose non-Eur. immigr. (origin) x FB share origin		3.351*** (1.187)	6.068** (2.487)	
Oppose non-Eur. immigr. (origin) x FB over-repres.				4.547** (2.105)
Observations	10,992	8,707	8,359	8,359
Adjusted R-squared	0.139	0.156	0.157	0.157
Origin FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Host x Time FE	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes
Country-pair FE	Yes	Yes	Yes	Yes

The mean value of origin-country population shares across all origins and regions is 0.02 (i.e., 2% of the region's population), while the median is 0.01 (1% of the region's population). The range is from 0 to about 10%, and a standard deviation is about 4%. Thus, in column (1), going from zero co-ethnics in a region to 4% co-ethnics in a region increases the spillover coefficient two-fold, from 0.09 to 0.18. The standard deviation of Facebook friendships in a given origin country is about 5%, so in column (2), going from zero Facebook ties to the origin to a region with 5% Facebook ties to the origin increases the spillover from -0.03 to 0.14 – an even larger effect. Cluster-robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

are included, the size of local diaspora loses significance. For column (4), I construct the measure of disproportionality of Facebook connectedness between a region and a country based on the regional population shares: I run a regression of Facebook friendship shares on local population shares and collect the residuals. The meaning of this measure can be easily seen from Figure 12: region-origin pairs above the fit line are those where Facebook ties are stronger than predicted by population shares alone. Column (4) confirms that regions with stronger Facebook ties to a given origin country than would be expected based on local ethnic shares receive stronger spillovers.

These findings align well with the results on homophily in learning from the origins reported in section 5.2. As was shown in many recent papers, including Alcott et al. (2020), Levy (2021) and others, social media exhibits a high degree of segregation based on political and social views. Thus, the fact that the bulk of the origin-country spillover comes from like-minded groups, and the fact that spillover effects are close to zero for regions not well-connected to the origins via social media, together suggest that social media is likely to be the key mode of transmission of political preferences and social norms from origins to immigrants. Further work on this direction is needed, however, to establish that the dynamics of social

media penetration and an increasing opportunity to stay in touch with the origin-country networks contributes to the spread of certain ideologies across the world and potentially prevents integration of immigrants into their host communities.

6 Conclusion

This paper suggest that there is a large and mostly unexplored dimension of political and social change: ‘real time’ spillovers of political preferences and social norms from countries of origin to 1st and 2nd generation immigrants. In particular, this paper documents significant contagion of (i) opposition towards non-European immigration and (ii) support for far-right populist parties during the European Refugee Crisis of 2014-2016, when issues of non-European immigration were most salient. The broad picture emerging from this paper suggests that salient events attract attention of co-ethnics from abroad who then ‘learn from the origins’: immigrants update their political and social attitudes based on the dynamics of public opinion at the origins.

Importantly, this paper demonstrates that ‘learning from the origins’ is especially strong (i) for immigrants who lack social integration into their host societies; and (ii) between like-minded groups of people (network homophily effect). Given the additional evidence presented in the paper on the importance of social media ties as potential carriers of political attitudes from abroad, these results suggest that in the era of social media, when maintaining attention to origin-country events is virtually cost-less, immigrants update their political attitudes based on the opinion dynamics among like-minded groups at the origin. As indicated by the results on immigrants’ voting behavior, this spread of ideas from the origins may create fertile ground for populist contagion and related phenomena.

This paper also underscores the importance of immigrants’ social and political integration into their host countries, as contagion effects are observed only for poorly integrated immigrants. In a related paper, I explore whether the rise of social media and other cheap communication tools allows immigrants to substitute their local, host-country ties with their previous origin-country ties, and thus hurts the prospects of social integration.

Further research needs to shed more light on the mechanisms behind these cultural and political cross-border spillovers: how much of such effects are attributed to family ties vs. media attention? Do people in the age of modern ICTs learn from distant places as actively as they do from places and events nearby? These and related questions may enrich the research on socialization, cultural and political change, and integration of immigrants.

References

- Ahern, Kenneth R., Ran Duchin, and Tyler Shumway**, “Peer Effects in Risk Aversion and Trust,” *Review of Financial Studies*, 2014, 27 (11), 3213–3240.
- Akay, Alpaslan, Oliver Bargain, and Klaus Zimmermann**, “Home Sweet Home? Macroeconomic Conditions in Home Countries and the Well-Being of Migrants,” *Journal of Human Resources*, 2017, 52 (2), 351–373.
- Alesina, Alberto and Marco Tabellini**, “The Political Effects of Immigration: Culture or Economics?,” *Harvard Business School Working Paper*, 2021, 79 (21-069).
- Altındağ, Onur and Neeraj Kaushal**, “Do refugees impact voting behavior in the host country? Evidence from Syrian refugee inflows to Turkey,” *Public Choice*, 2021, 186 (1), 149–178.
- Atkin, David**, “The Caloric Costs of Culture: Evidence from Indian Migrants,” *American Economic Review*, 2016, 106 (4), 1144–1181.
- Bailey, Michael, Johnston Drew, Dominic Kuchler Theresa Russel, Bogdan State, and Johannes Stroebe**, “The Determinants of Social Connectedness in Europe,” in “Aref S. et al. (eds) Social Informatics. SocInfo 2020. Lecture Notes in Computer Science,” Vol. 12467 2020.
- , **Ruiqing Cao, Theresa Kuchler, and Johannes Stroebe**, “The Economic Effects of Social Networks: Evidence from the Housing Market,” *Journal of Political Economy*, 2018, 126 (6), 2224–2276.
- Barsbai, Toman, Hillel Rapoport, Andreas Steinmayr, and Christoph Trebesch**, “The Effect of Labor Migration on the Diffusion of Democracy: Evidence from a Former Soviet Republic,” *American Economic Journal: Applied Economics*, 2017, 9 (3), 36–69.
- Bisin, Alberto and Thierry Verdier**, “"Beyond the Melting Pot": Cultural Transmission, Marriage, and the Evolution of Ethnic and Religious Traits,” *Quarterly Journal of Economics*, 2000, 115 (3), 955–988.
- and —, “The Economics of Cultural Transmission and the Dynamics of Preferences,” *Journal of Economic Theory*, 2001, 97 (2), 298–319.

- Bronnenberg, Bart, Jean-Pierre H. Dubé, and Matthew Gentzkow**, “The Evolution of Brand Preferences: Evidence from Consumer Migration,” *American Economic Review*, 2012, 102 (6), 2472–2508.
- Burchardi, Konrad B., Thomas Chaney, and Tarek A. Hassan**, “Migrants, Ancestors, and Foreign Investments,” *The Review of Economic Studies*, 2019, 86 (4), 1448–1486.
- Dal Bo, Ernesto, Frederico Finan, Olle Folke, Torsten Persson, and Johanna Rickne**, “Economic Losers and Political Winners: Sweden’s Radical Right,” 2019, p. 44.
- Dohmen, Thomas, Armin Falk, David Huffman, and Uwe Sunde**, “The Intergenerational Transmission of Risk and Trust Attitudes,” *The Review of Economic Studies*, 2012, 79 (2), 645–677.
- Dustmann, Christian, Kristine Vasiljeva, and Anna Piil Damm**, “Refugee Migration and Electoral Outcomes,” *The Review of Economic Studies*, 2019, 86 (5), 2035–2091.
- Fernández, Raquel**, “Women, Work, and Culture,” *Journal of the European Economic Association*, 2007, 5 (2), 305–332.
- **and Alessandra Fogli**, “Fertility: The Role of Culture and Family Experience,” *Journal of the European Economic Association*, 2006, (4), 552–561.
- Fouka, Vasiliki and Hans-Joachim Voth**, “Collective Remembrance and Private Choice: German-Greek Conflict and Behavior in Times of Crisis,” *Mimeo*, 2021.
- Galor, Oded and Ömer Özak**, “The Agricultural Origins of Time Preference,” *American Economic Review*, 2016, 106 (10), 3064–3103.
- Giavazzi, Francesco, Ivan Petkov, and Fabio Schiantarelli**, “Culture: persistence and evolution,” *Journal of Economic Growth*, 2019, 24, 117–154.
- Hangartner, Dominik, Elias Dinas, Moritz Marbach, Konstantinos Matakos, and Dimitrios Xefteris**, “Does Exposure to the Refugee Crisis Make Natives More Hostile?,” *American Political Science Review*, 2019, 113 (2), 442–455.
- Luttmer, Erzo F. P and Monica Singhal**, “Culture, Context, and the Taste for Redistribution,” *American Economic Journal: Economic Policy*, 2011, 3 (1), 157–179.
- Manski, Charles F.**, “Identification of Endogenous Social Effects: The Reflection Problem,” *The Review of Economic Studies*, 1993, 60 (3), 531.

- Miho, Antonela, Alexandra Jarotschkin, and Ekaterina Zhuravskaya**, “Diffusion of Gender Norms: Evidence from Stalin’s Ethnic Deportations,” *SSRN Working Paper*, 2020.
- Nekoei, Arash**, “Immigrants’ Labor Supply and Exchange Rate Volatility,” *American Economic Journal: Applied Economics*, 2013, 5 (4), 144–64.
- Noury, Abdul and Gerard Roland**, “Identity Politics and Populism in Europe,” *Annual Review of Political Science*, 2020, 23 (1), 421–439.
- Rapoport, Hillel, Sulin Sardoschau, and Arthur Silve**, “Migration and Cultural Change,” *CESifo Working Paper No. 8547*, 2020, p. 57.
- Steinmayr, Andreas**, “Contact versus Exposure: Refugee Presence and Voting for the Far-Right,” *The Review of Economics and Statistics*, 2020, pp. 1–47.
- Tian, Yuan, Maria Esther Caballero, and Brian Kovak**, “Social Learning along International Migrant Networks,” 2020.

Appendix

A. Figures

QA5 What do you think are the two most important issues facing the EU at the moment?
(% - EU)

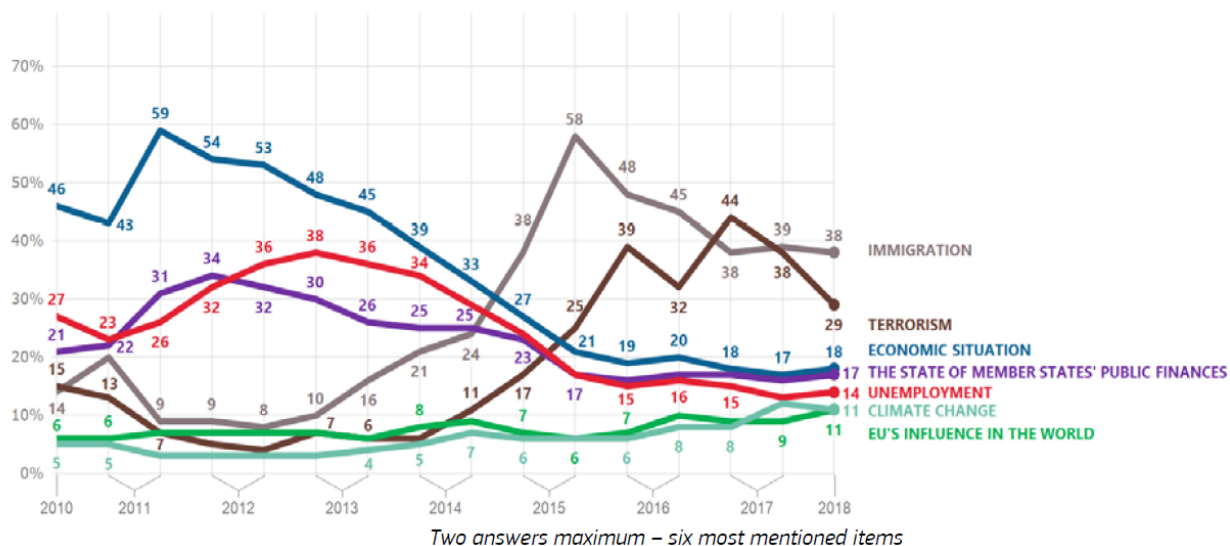


Figure A1: Most important issues facing the EU, average across respondents in all EU countries. Source: Eurobarometer Report 2018

QA3a What do you think are the two most important issues facing (OUR COUNTRY) at the moment?
(% - EU)

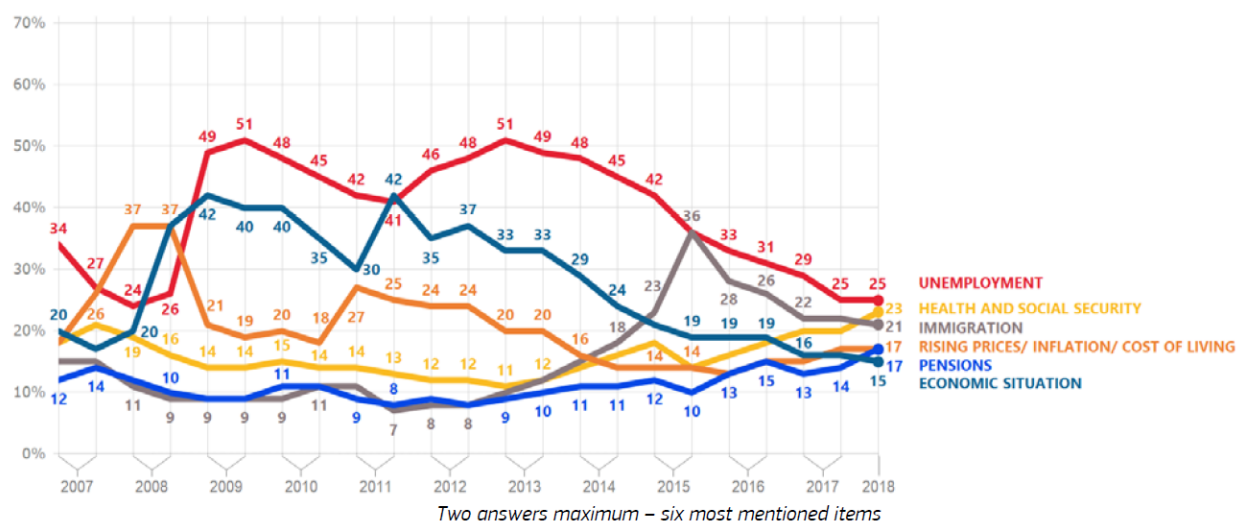


Figure A2: Most important issues facing respondents' country, average across respondents in all EU countries. Source: Eurobarometer Report 2018

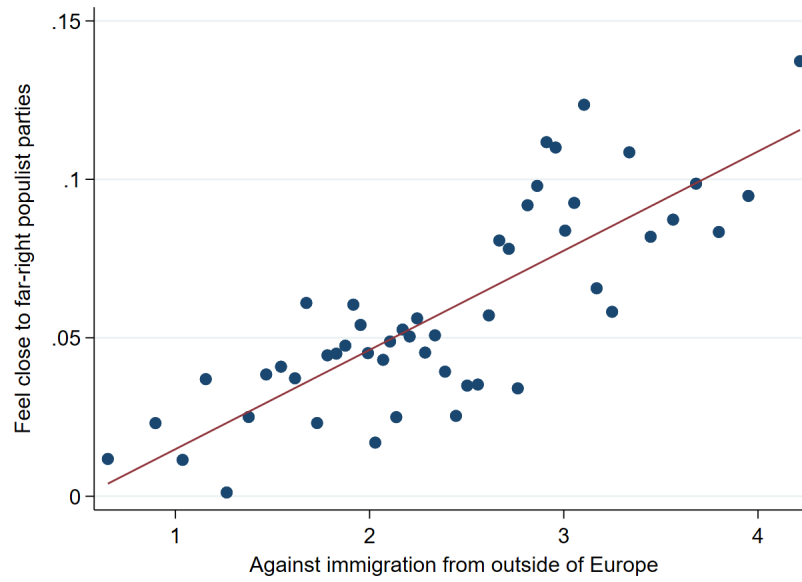


Figure A3: Binscatter: opposition to immigration from outside of Europe and voting for far-right parties among eligible European immigrants, controlling for the origin, destination, and time FEs and individual characteristics.

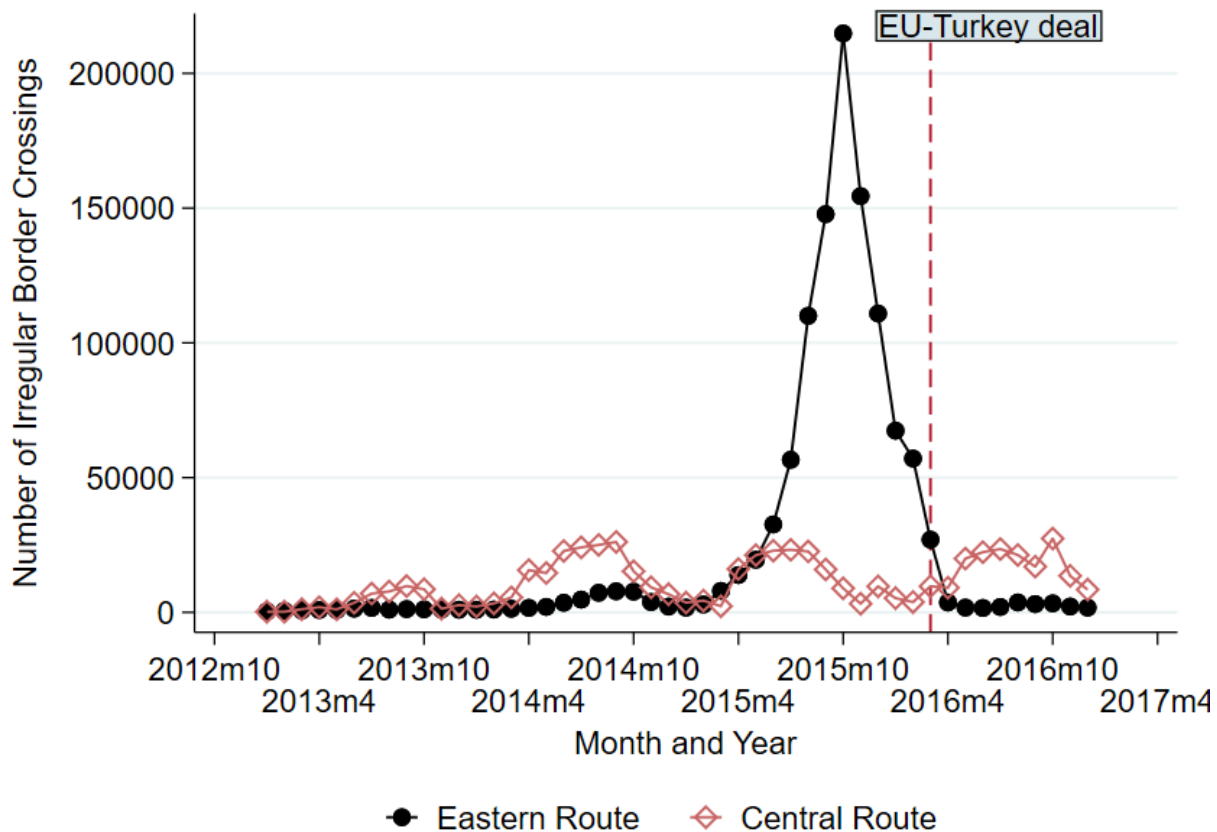


Figure A4: Irregular border crossings along the Eastern Mediterranean sea route. Source: Frontex

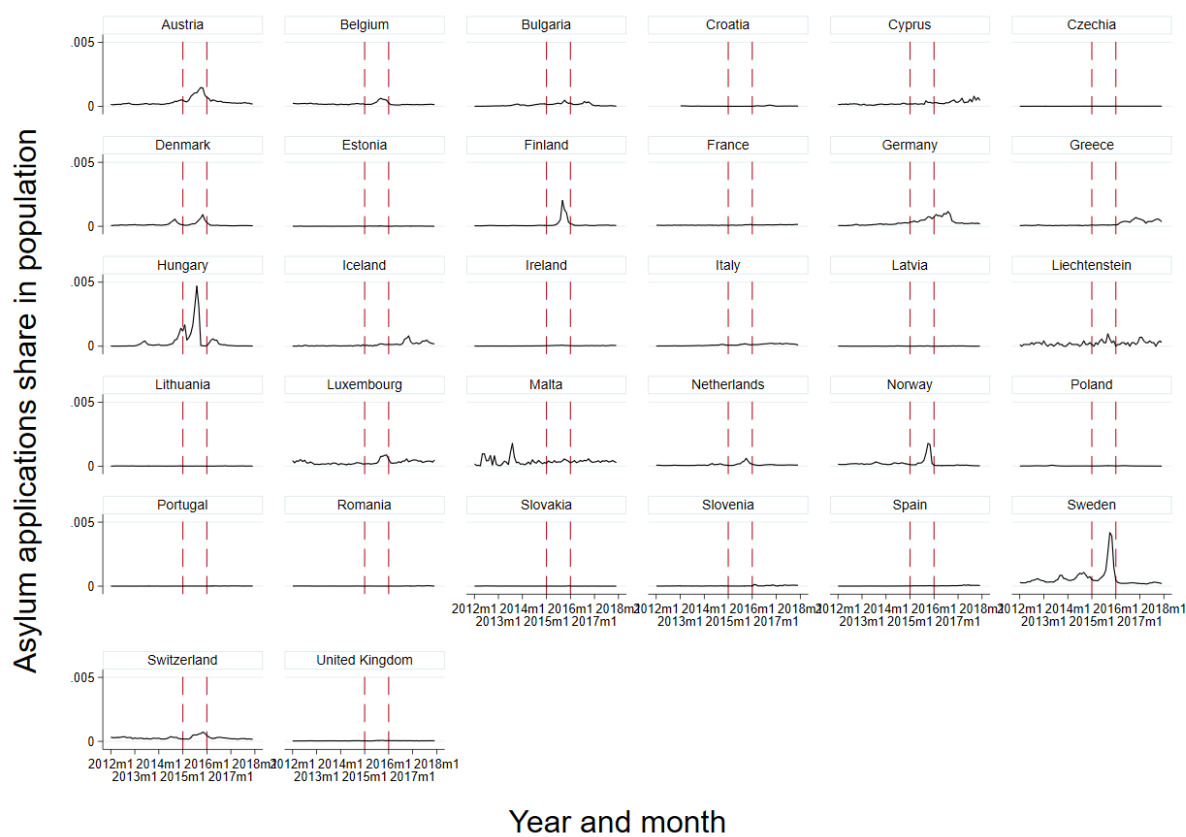


Figure A5: Asylum seekers share in population by country of asylum and month. Year 2015 is enclosed between two vertical red lines for comprehension purposes.

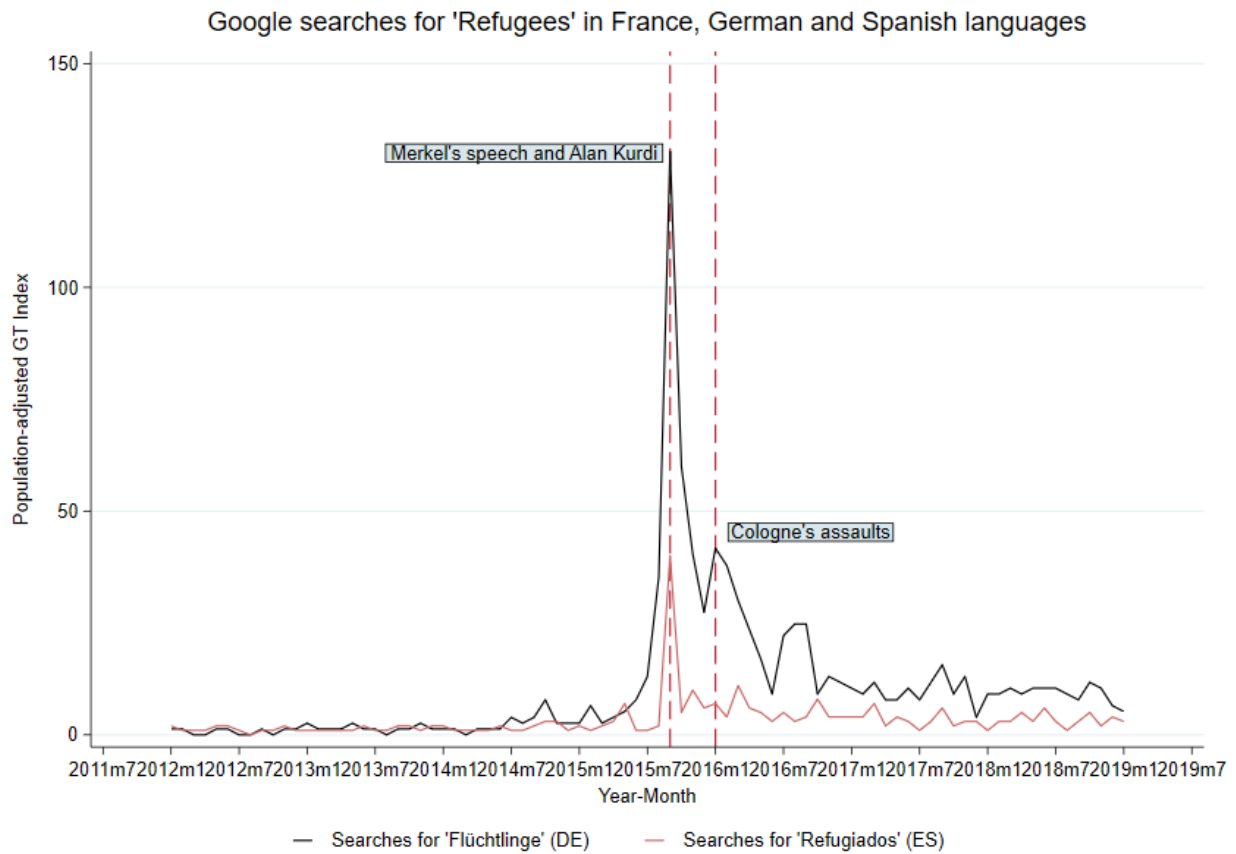


Figure A6: Google Trends search intensity of Flüchtlinge (DE) and Refugiados (ES) in France (adjusted for differences in population shares of German- and Spanish-speakers in France).

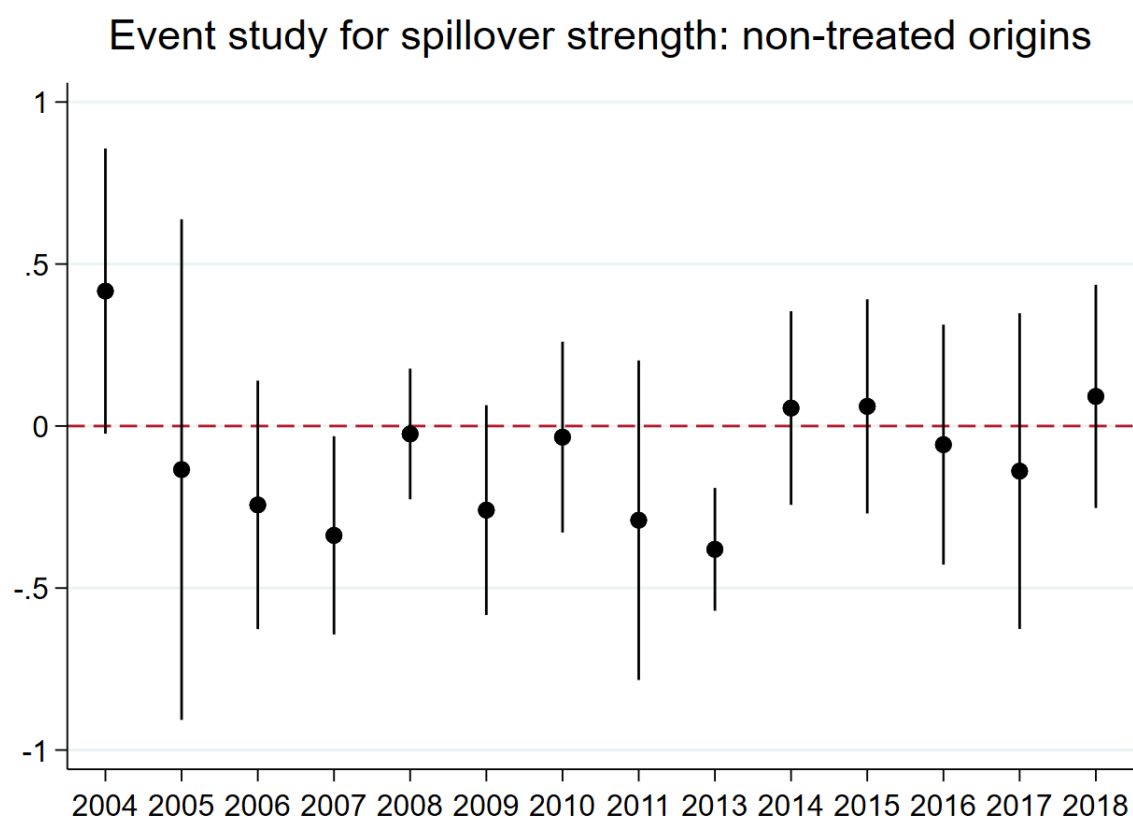


Figure A7: DID spillover coefficients for each survey year, as compared to 2012, the last pre-Crisis year. Non-treated origin countries.

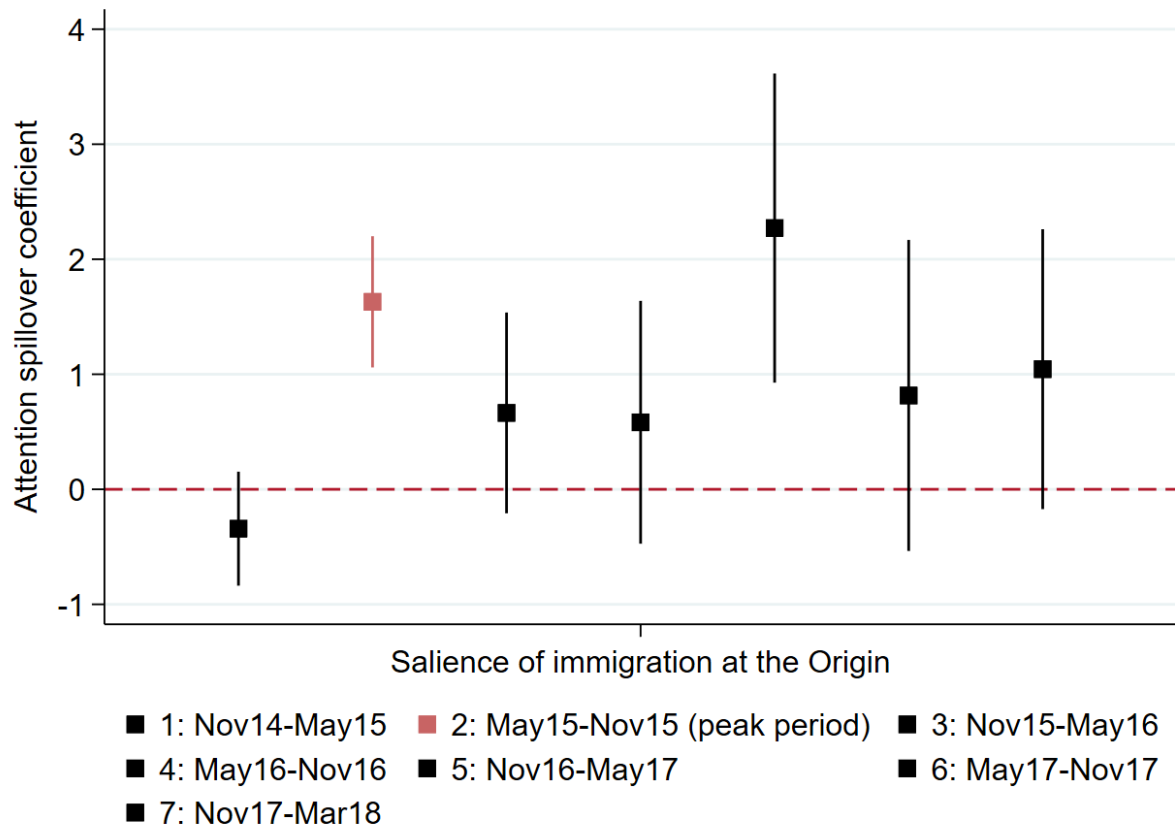


Figure A8: Co-movements in the perceptions of issue salience among immigrants and their co-ethnics at the origins. Origins with high refugee inflows.

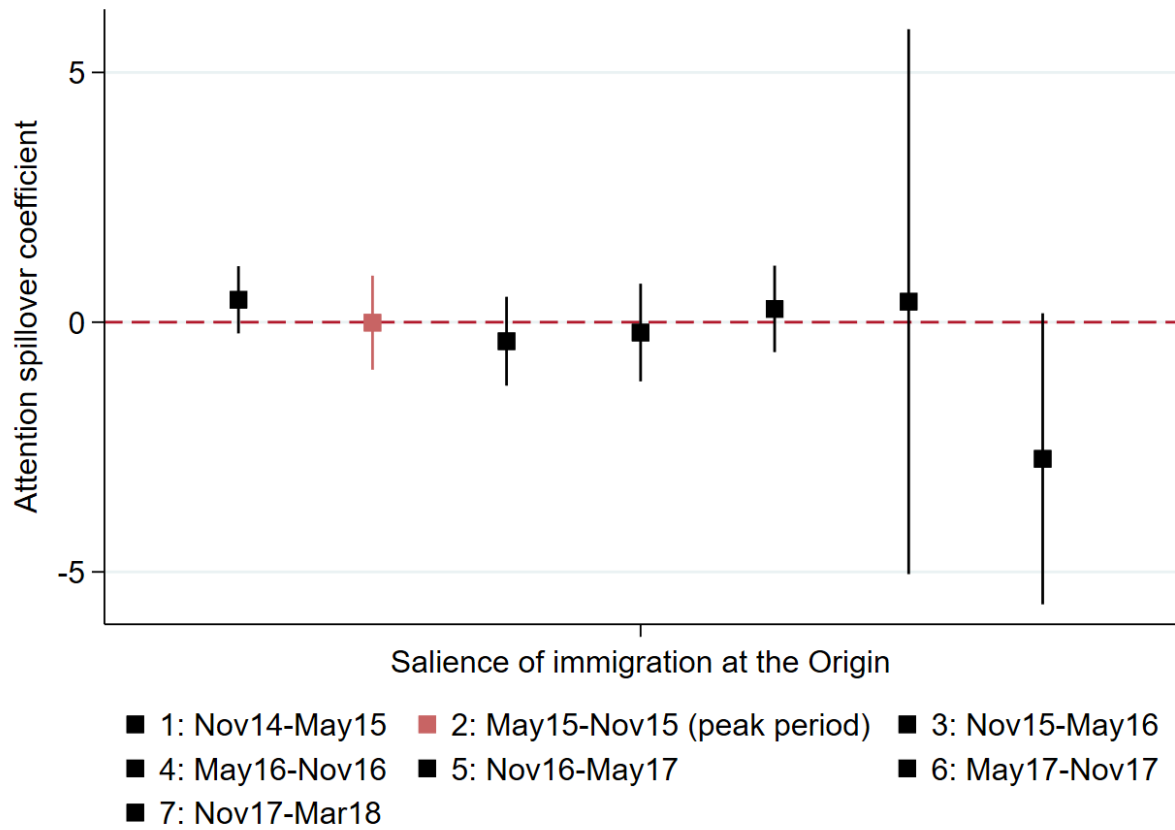
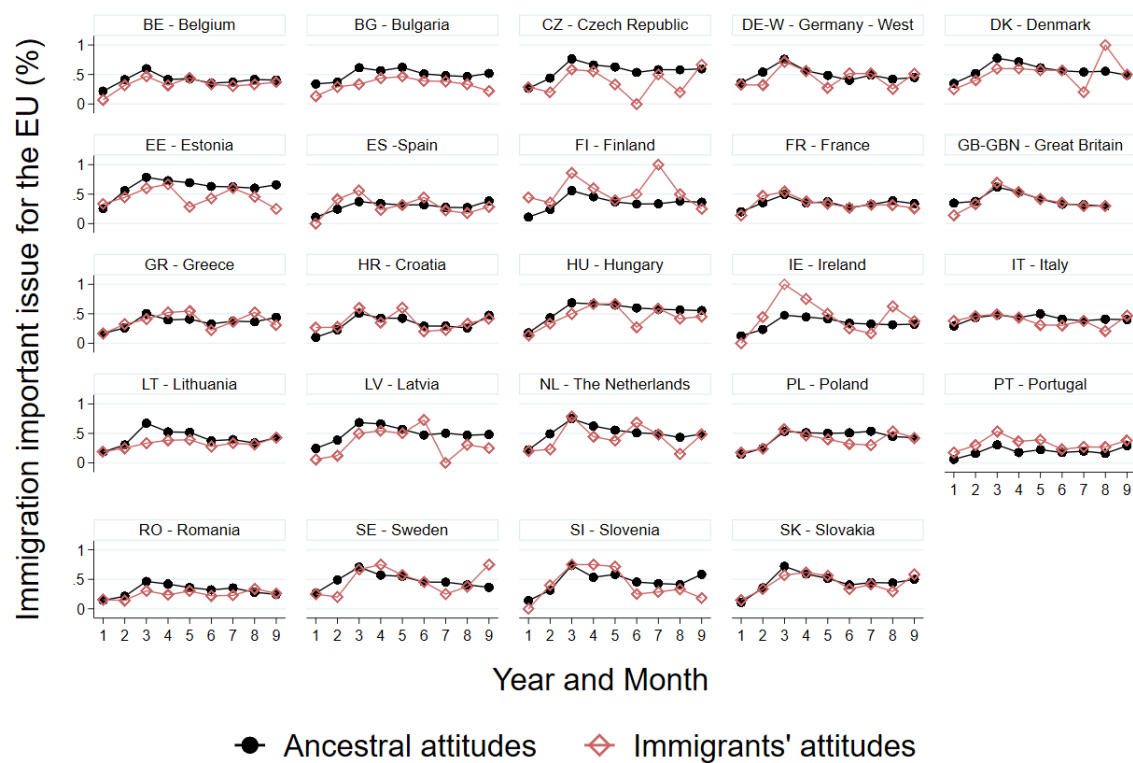


Figure A9: Co-movements in the perceptions of issue salience among immigrants and their co-ethnics at the origins. Origins with low refugee inflows.



Graphs by ancestry

Figure A10: Co-movement of the attitudes of immigrants and their countries of origin (whether immigration into the EU is a major issue).

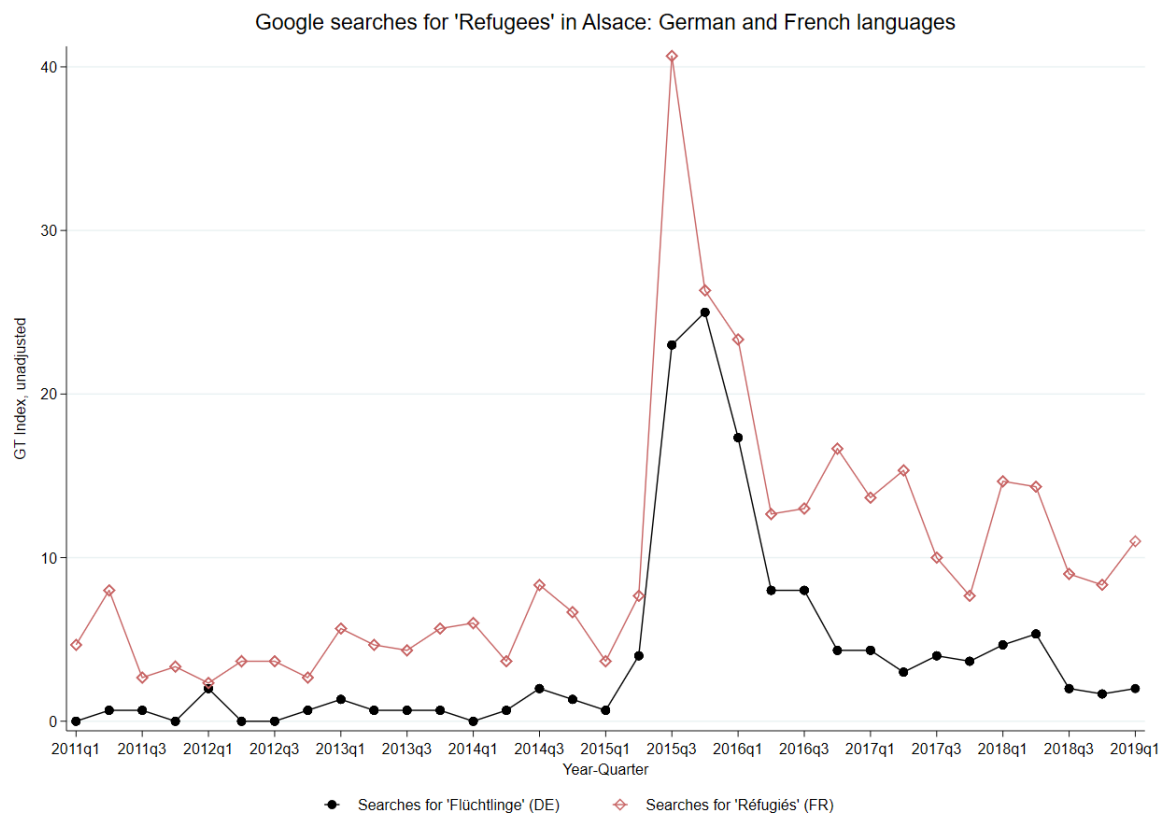


Figure A11: Relative search intensity of Flüchtlinge (DE) vs. Réfugiés (FR) in Alsace, France. Population share of German-speakers in Alsace is approximately 20%, which corresponds to the pre-Crisis ratio of search volumes.

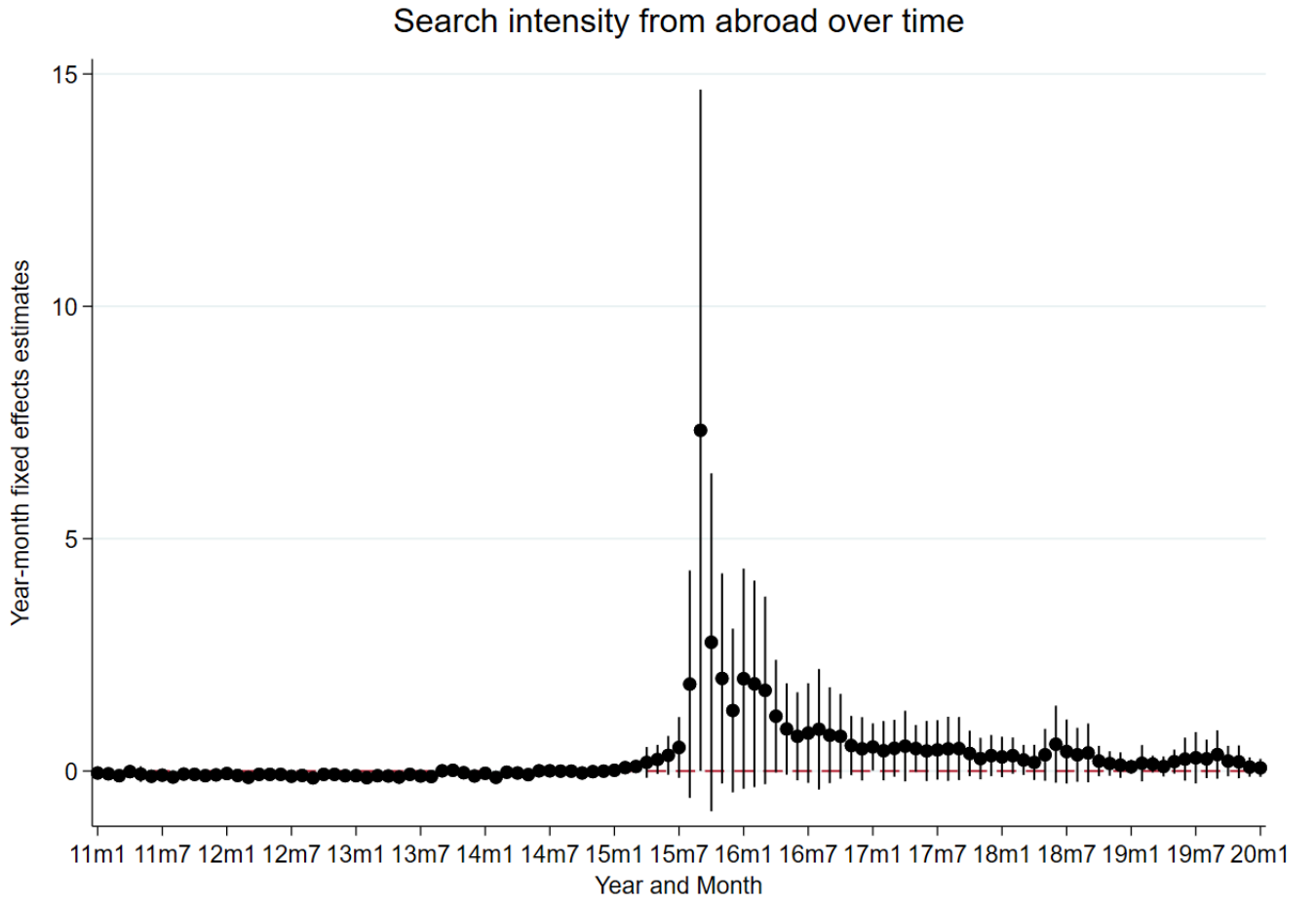


Figure A12: Year-month fixed effects estimates for attention to the topic of "Refugees" from abroad. Reported coefficients are the estimates of τ_t from the model $InterestRef_{o,c,t} = \alpha + \psi_c + \phi_o + \tau_t + s_{o,c} + \varepsilon_{o,c,t}$. The omitted month is December 2014.

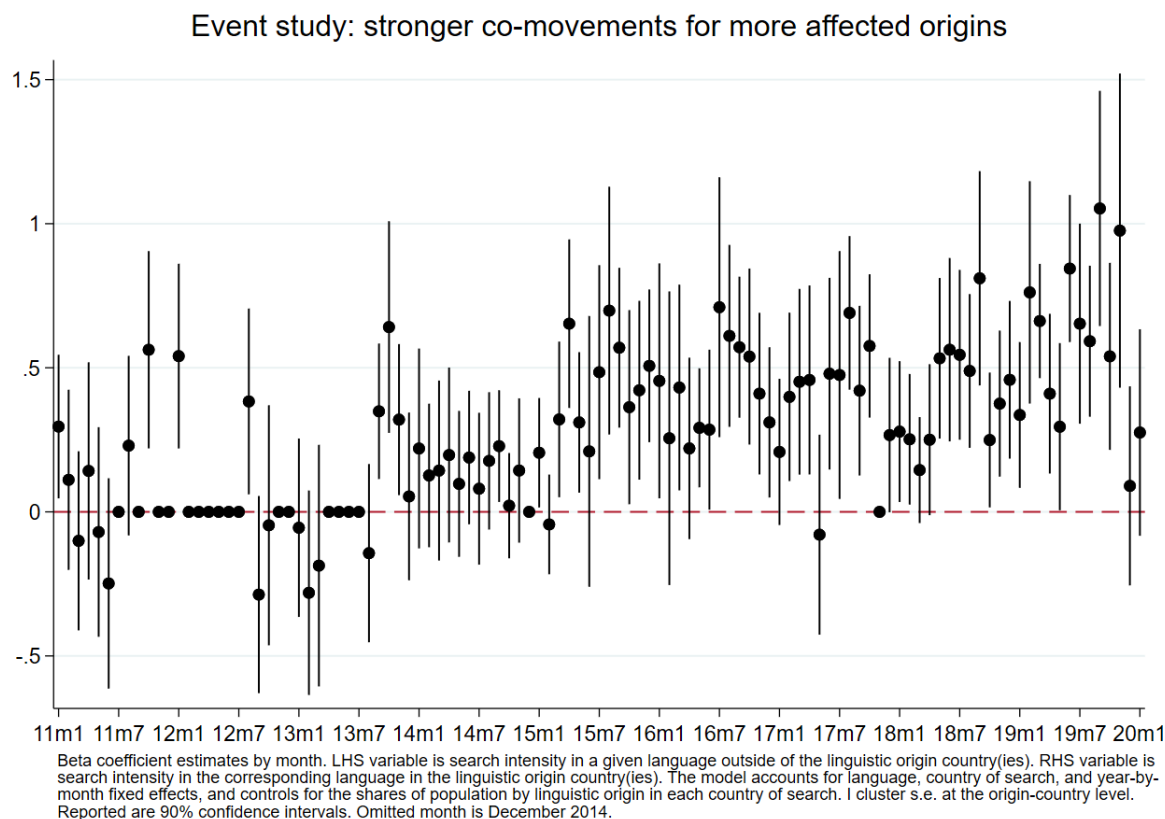


Figure A13: Event study of search intensity from 2011 till 2020. Omitted month is December 2014. LHS is search in a given language outside of the origin-country. RHS is search in this language at the origin. Coefficients show the difference between treated and non-treated origins.

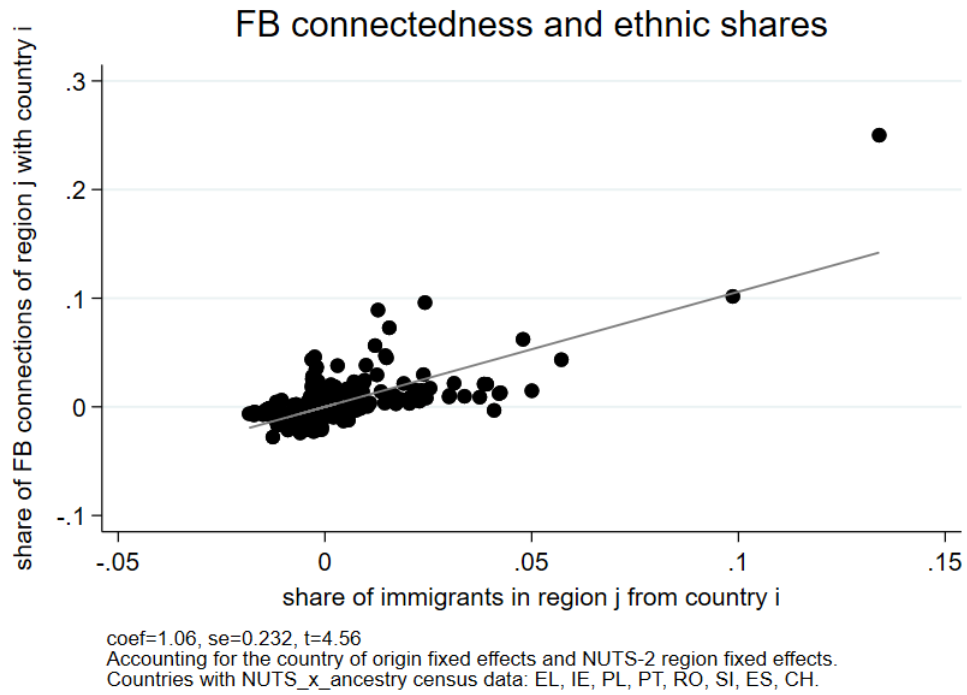


Figure A14: Ethnic shares and Facebook connectivity, 8 European countries, NUTS-2 level

B. Tables

Table B1: Origin countries of 1st and 2nd gen immigrants in the ESS sample

Immigrants' origin countries		
Country of origin:	Number of observations	Share among all immigrants
Austria	547	0.019
Belgium	323	0.011
Bulgaria	360	0.012
Cyprus	33	0.0011
Czech Republic	552	0.019
Germany	2461	0.084
Denmark	241	0.0082
Estonia	130	0.0044
Finland	641	0.022
France	1115	0.038
Greece	331	0.011
Croatia	588	0.020
Hungary	566	0.019
Ireland	406	0.014
Israel	25	0.00085
Iceland	49	0.0017
Italy	1686	0.057
Lithuania	321	0.011
Luxembourg	25	0.00085
Latvia	198	0.0067
Montenegro	39	0.0013
Netherlands	500	0.017
Norway	206	0.0070
Poland	2480	0.084
Portugal	844	0.029
Romania	1476	0.050
Russia	6515	0.22
Serbia	381	0.013
Slovenia	141	0.0048
Slovakia	668	0.023
Spain	563	0.019
Sweden	257	0.0087
Switzerland	124	0.0042
Turkey	1643	0.056
Ukraine	1788	0.061
United Kingdom	1229	0.042
<i>Total</i>	29452	1

C. Political spillovers in the Eurobarometer data

There are two issues with the ESS data which I address using the Eurobarometer (EB) dataset. First, in the ESS, for each country, the rounds are 1.5-2 years apart from one another, and for most countries, the most salient events of the Crisis in the Fall of 2015 happen to be in between rounds 7 and 8. This makes it harder to explore the effects of specific sub-periods of the Crisis. In contrast, the EB rounds are administered every 6 months, which allows me to look at the dynamics within the Crisis period. Second, the ESS does not allow measuring respondents' perceptions of immigration salience as compared to other economic and political issues. The EB data, in contrast, has a rich set of economic and political issues which respondents code as salient or not in a given round³¹. Issue salience is one of the ways to quantify the extent of public exposure to the Refugee Crisis.

One of the key assumptions behind the interpretation of the main results in the paper as social spillovers from origins to immigrants is that immigrants pay attention to opinions and attitudes at the origins. This is where the Eurobarometer (EB) data becomes most useful, as it has questions on the perceived salience of a collection of issues, including immigration. In this section, I show that immigrants indeed monitor public perceptions of issue salience at the origins, and adopt similar perceptions themselves.

This result in its most basic form is illustrated on Figure A15, which shows the collection of DID estimates of how origin-country salience of immigration spills over to immigrants from this origin living in other European countries. One can clearly see that there is a positive and significant estimate during the peak of the Crisis (Summer to Fall 2015), while no significant 'attention spillovers' in other periods. In the Appendix, Figures A8 and A9 estimate similar DID models separately for 'treated' and 'non-treated' origin countries, based on the numbers of refugees they received. Importantly, immigrants do not react to perceptions of salience at the origin country if the origin was not actually experiencing a significant inflow of refugees. Thus, the whole 'salience spillover' effect documented on Figure A15 comes entirely from origin countries that actually received many refugees.

Appendix Figure A10 illustrates this idea country by country, and allows one to see both dimensions (time of salience and place of salience) playing a role. Clearly, there is a very close co-movement between the perceptions of immigration salience between expats and co-

³¹The drawback of the EB data is that questions on attitudes towards immigrants appear on a regular basis only starting November 2014 on. This precludes me from conducting a full-fledged pre- vs. post Crisis analysis on the EB sample. I still explore the variation within the Crisis, however, as well as contrast within-Crisis periods to post-Crisis periods.

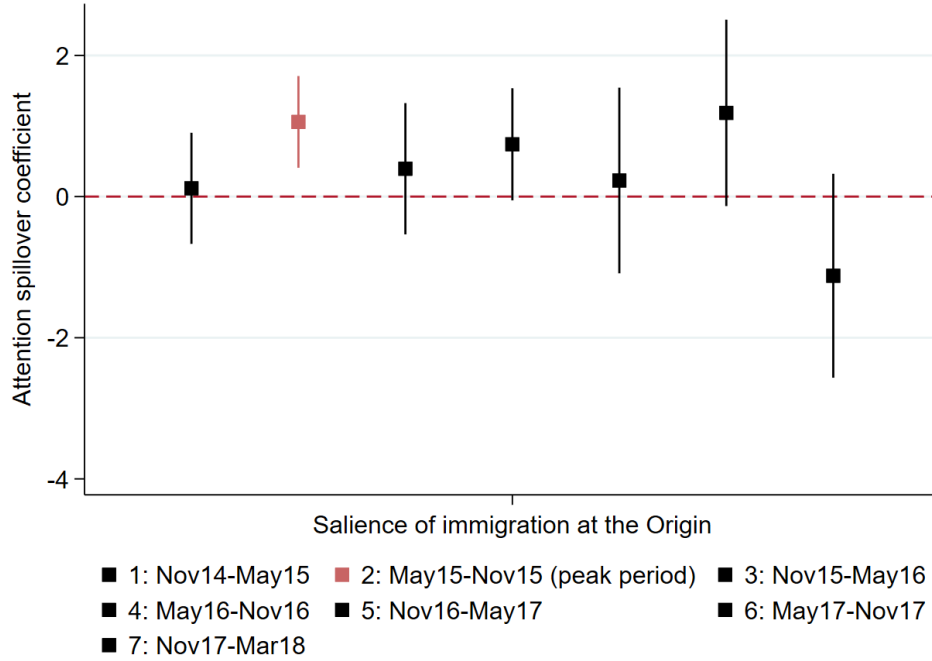


Figure A15: Co-movements in the perceptions of issue salience among immigrants and their co-ethnics at the origins.

ethnics at the origins. Moreover, during the EB rounds 1 to 4 (correspond to Nov 2014, May 2015, Nov 2015 and May 2016) the co-movement in issue salience is the closest. In the subsequent periods, once the Crisis is over, immigrants do not agree with the perceptions of issue salience prevalent at the origin that much. Moreover, it is evident that for less-affected places - like Czech Republic, Estonia, Ireland, Lithuania, etc. - the co-movement is much weaker overall. This evidence supports the key assumption we need to interpret the results we get in terms of network spillovers: that during the periods of increased issue salience, immigrants pay attention to attitudes and concerns of their co-ethnics at the origins, and perceive similar issues as salient.

An additional benefit of the Eurobarometer data is that its rounds are sampled at a much higher frequency of about 6 months in between rounds. The downside, however, is that questions about the attitudes towards non-European immigrants began to appear only from November 2014 on - a time period already well into the Refugee Crisis. For this reason, it is hard to conduct a clear pre- and post-Crisis analysis in the spirit of Table 4. Nonetheless, in the Appendix Table B2, I report basic results from estimating model (1) on the EB data, focusing again on opposition towards immigration from outside of the EU. Columns (1) to

(7) replicate some of the main specifications estimated above with less frequent data from the ESS, and find very similar results, confirming the existence and significance of political spillovers from the origins. Moreover, columns (8) and (9) use lagged attitudes at the origin to insure against the reverse direction of spillovers, still showing very strong and significant results. Overall, it is reassuring to find similar results from a completely different dataset.

Table B2: Eurobarometer: spillovers of opposition towards non-EU immigrants

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Attitudes towards immigrants from outside of the EU								
Immigr. Outs EU (ancest)	0.476*** (0.094)	0.478*** (0.096)	0.458*** (0.106)	0.490*** (0.137)	0.298** (0.128)	0.543** (0.228)	0.547* (0.285)		
Immigr. Outs EU (host)			0.442* (0.222)	0.431* (0.215)					
(lag 1) Immigr. Outs EU (ancest)								0.309** (0.139)	0.407** (0.180)
Observations	5,420	5,366	5,366	5,366	5,366	1,562	1,156	4,738	1,351
Adjusted R-squared	0.084	0.101	0.102	0.123	0.130	0.191	0.106	0.108	0.199
Ancestral FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Host Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NUTS FE	No	No	No	Yes	Yes	Yes	No	No	Yes
Host_x_round FE	No	No	No	No	Yes	Yes	Yes	No	Yes
Sample definition	Full	Full	Full	Full	Full	Host not treated	May15- May16	Full (lag)	Host not treated (lag)

Cluster-robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1