# Learning from the Origins[*]

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**Abstract**

How do political preferences and voting behaviors respond to information coming from abroad? Focusing on the international migration network, I document that opinion changes at the origins spill over to 1st- and 2nd-generation immigrants abroad. Local diasporas, social media, and family ties to the origins facilitate the transmission, while social integration at destination weakens it. Using the variation in the magnitude, timing, and type of origin-country exposure to the European Refugee Crisis of 2015, I show that salient events trigger learning from the origins. Welcoming asylum policies at the origins decrease opposition to non-Europeans and far-right voting abroad. Transitory refugee flows through the origins send abroad the backlash. Data from Google Trends and Facebook suggests elevated attention to events at the origins and communication with like-minded groups as mechanisms. Similar spillovers following the passage of same-sex marriage laws show the phenomenon generalizes beyond refugee attitudes.

**Keywords:** Immigration, Social Networks, Spillovers, Political Attitudes, Integration

**JEL codes:** 015, Z13, D72, D83, P00, J61, F22

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# 1 Introduction

The unprecedented rise of global connectivity and cross-border communications over the last decades provides real-time access to information and opinions from all over the world. How do political attitudes, social norms, and voting behaviors respond to information coming from abroad? Consumption of foreign media, maintaining ties with far-away friends and families, attention to distant events - all these channels can be crucial for the spread of political ideologies and cultural norms from abroad. While the existing literature has documented the role of families, local networks, and local shocks in shaping cultures and behaviors[1], the role of distant networks and events is much less understood.

In this paper, I focus on immigration network as a key driver of cross-border social and political spillovers. Since the share of $1^{st}$- and $2^{nd}$-generation immigrants in many developed countries has reached more than 25-30%, and many of those have voting rights at destination, the dynamics of political preferences among immigrants and their children is crucial for local opinions, election outcomes, and social cohesion. If immigrants maintain sufficiently high attention to events at the origins (which I document in this paper), changes in political opinions can spill over from origins to immigrants and further to locals. Therefore, I ask whether there is a 'home bias' in the dynamics of political opinions: do immigrants adjust their attitudes and voting behaviors following salient developments at the origins? If so, what are the mechanisms behind such spillover effects?

I address these questions in two steps. First, I present a set of stylized facts about the co-movements of political attitudes between immigrants and their countries of origin. Using 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 co-movements for many salient issues, including opposition to non-Europeans, EU integration, LGBT rights, and trust in politicians. Importantly, co-movements with the origins are stronger for immigrants less socially integrated into their host communities, as measured by citizenship, language use, and the length of residence.

Second, to advance causality, I zoom into the case of the European Refugee Crisis, one of the most salient events in Europe over the past decade[2]. There is ample evidence show-

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[1] Fernández and Fogli (2006, 2009), Luttmer and Singhal (2011), Dohmen et al. (2012), Galor and Özak (2016), Bentzen (2019), Aksoy et al. (2020), Giuliano and Nunn (2020), Agostinelli et al. (2020) show evidence for the role of inter-generational transmission, horizontal learning from local networks, and local shocks.

[2] According to the Eurobarometer, immigration was a top-1 issue facing the EU from 2014 to 2017. 36% of respondents named immigration as a top-1 issue for their country in 2015. It remained in top-3 until 2018.

ing that massive refugee inflows can significantly affect cultural and political landscapes of receiving countries[3]. But can the effects of such salient events extend beyond country borders and create political spillovers abroad? While anecdotal evidence abounds[4], we still lack systematic evidence on this matter. I address this gap and document how salient events activate real-time political spillovers through migration networks.

I use data on the inflows of refugees and changes in asylum recognition policies across European countries in 2014-2016, and estimate how $1^{st}$- and $2^{nd}$-generation immigrants respond to origin-country events. As long as immigrants do not affect reception policies back at the origins, the origin-country treatment can be seen as plausibly exogenous. Using the DID and event study models, I find that accepting and hosting significant numbers of refugees at the origins decreases the opposition to refugees and non-Europeans among the diaspora abroad (as compared to people of other origins living in the same country and region). In contrast, transitory migration through the origins (e.g., Serbia or Hungary) makes the expats more conservative. These reactions mirror opinion changes at the origins and are mediated by the activation of opinion spillovers when issue salience is high.

To diminish the threat of correlated shocks creating spurious spillover effects (Manski (1993)), I restrict the sample to immigrants living in countries not directly exposed to the Crisis (e.g., Poland or Spain). Reassuringly, the results are not driven by correlated exposures. Additional tests show (i) that results are not driven by changing migrant composition during the Crisis; (ii) no Crisis-induced spillovers for non-salient topics[5]; (iii) no spillovers from non-origin countries; (iv) robustness to alternative measures of exposure, and (v) robustness to group-specific changes in opinions at the level of education, political ideology, or broad region (e.g., Southern Europe) of origin.

Importantly, spillovers of opinions have real consequences in terms of voting for far-right parties. I match political parties from the ESS to the PopuList dataset (Rooduijn et al. (2019)), and show that favorable refugee policies at the origins decrease support for far-right parties among the diaspora. In contrast, large transitory migration through the origins increases support for far-right parties among the diaspora, by as much as 10-11% in 2015.

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[3]Among others, Dustmann et al. (2019), Steinmayr (2021), Dal Bo et al. (2019), and reviews in Alesina and Tabellini (2021) and Noury and Roland (2020).

[4]Prominent examples of such spillovers include the Hungarian PM Viktor Orban influencing the opinions and voting behaviors of the Hungarian diaspora in Europe during the Refugee Crisis. The influence of Russian media on the attitudes of "Russian Germans" is another famous example. Finally, Donald Trump's anti-refugee stance often relied on the reactions and attitudes of Europeans to the Refugee Crisis of 2015.

[5]No spillovers for topics unrelated to refugees and non-Europeans, suggesting that the results are driven by attention spikes at the $topic \times origin \times time$ level, and not by the overall attention to specific countries.

What are the mechanisms behind learning from the origins? As a first step, I show that immigrants pay increasing attention to events that are salient at the origins using data from Google Trends (GT) on searches in different languages. When salient developments happen at the origins, GT searches in origin-country language spike relative to other language searches on the same subject nearby. For example, in France, searches for "Refugees" in German, but not in Spanish, language spike after Angela Merkel's speech in September 2015 and Cologne assaults in January 2016[6]. When origin-country interest related to refugees picks up, this interest spills over abroad (accounting for locality-specific changes in searches), suggesting a disproportionately high demand for origin-country news during salient events.

When immigrants receive news from the origins, why update own attitudes and voting behaviors following these salient events? Conceptually, there could be two main reasons (see also Bursztyn et al. (2014)): identity/social pressure to comply with changing norms at the origins vs. new information from the origin networks that induces opinion change. In the Appendix, I outline a simple model that illustrates the workings of these two channels. The data shows that immigrants more attached to destination (e.g., citizenship) display weaker updating from the origins, suggesting that identity plays a role. However, I also find evidence for three transmission channels suggesting the importance of cross-border communications.

First, online social media ties: immigrants more tightly connected to the origins via Facebook show stronger co-movement. In contrast, immigrants who consume news via TV receive weaker spillovers. Second, cross-border family ties: immigrants who live at destination together with their parents (thus arguably having fewer ties at the origins) show weaker co-movement with the origins. Finally, immigrants living in regions with larger co-national diasporas show stronger reactions to the origins[7].

Additional evidence supporting the network communication mechanism comes from the patterns of cross-border network homophily. I match respondents to their origin-country peers most similar in terms of political affiliation, and show that most of the spillover comes from like-minded groups. This homophily effect suggests that re-activation of histories or identities common to everyone from a given origin (Ochsner and Rösel (2017) and Fouka and Voth (2021)) is less likely to be the main explanation here. Together with the importance of online social networks, these results suggest that in the era of cost-less access to like-minded groups located far away, there emerges a fertile ground for cross-border political contagion.

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[6]I restrict the sample to search locations not directly exposed to the Crisis. In regions with higher population shares from most affected countries, the spikes in attention are stronger.

[7]The latter is, in principle, consistent with both the communication and the social pressure mechanisms, see also Borjas (1992) and Luttmer and Singhal (2011)

Of course, this does not rule out exposure to like-minded media sources at the origins, which is hard to separate from the influence of like-minded peers.

The 'learning from the origins' phenomenon generalizes both across salient events and across space. First, I show that spillovers from the European Refugee Crisis extend to immigrants located in the US. Second, using the staggered passage of same-sex marriage laws across Europe, I show that these reforms affect LGBT attitudes of the expats abroad.

**Contribution to the Literature**

This paper contributes to several strands of research. First is the literature on persistence and change of preferences, norms and values. The role of inter-generational and horizontal transmission of norms and values has been explored at least since Bisin and Verdier (2000, 2001) and Galor and Moav (2002). In particular, the *epidemiological approach* used in Fernández and Fogli (2006, 2009), Giuliano (2007), Luttmer and Singhal (2011), Galor and Özak (2016), among others, reveled significant effects of origin-country culture and environment on preferences and behaviors of immigrants. Giavazzi et al. (2019) further show that there is an inter-generational convergence to local norms, while Borjas (1992) shows that 'ethnic capital' can slow down this process[8]. The role of local networks affecting the formation of (risk and trust) preferences was shown in Dohmen et al. (2012) and Ahern et al. (2014). Finally, Bentzen (2019), Autor et al. (2020) and Aksoy et al. (2020), among others, document the importance of local salient events: disasters, trade shocks, and new laws. While the role of vertical transmission, local networks and local shocks is well-explored, this paper shows that distant shocks and opinions matter as strongly. It documents that salient events and associated *changes* in opinions at the origins matter for *changes* in opinions at destination.

Second, this paper contributes to the literature on the diffusion of social norms and preferences between populations. The role of migration in diffusing culture and ideas was shown by Barsbai et al. (2017) in the context of 'democratic remittances' to the origins; by Miho et al. (2020) for gender norms exported by German and Chechen deportations in the USSR; by Ochsner and Roesel (2020) in the historical context of Nazi migrants in Austria; and by Burchardi et al. (2019) in the context of the FDI ties of the US firms. Thus, existing literature mostly focused on long-term exchanges of stable cultural norms and ideas via migration[9]. This paper, in contrast, documents real-time learning over pre-existing migration networks triggered by the salient events at the origins. Beach and Hanlon

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[8]Within-country movers also show traces of both current and previous locations in their food choices (Atkin (2016)) and brand preferences (Bronnenberg et al. (2012)).

[9]Rapoport et al. (2020) argue that cross-country migration induces convergence in values, mostly due to cultural remittances. Giuliano and Tabellini (2020), however, show that immigrants affect preferences of

(2022) is probably the closest in this regard, as it shows how a sharp fertility decline in the 19th century Britain produced similar change among culturally British households living elsewhere. Tian et al. (2020) shows that social distancing practices during Covid-19 are remitted back to Mexico from Mexicans in the US.

Third, this paper contributes to a growing literature on the political economy of immigration and refugee inflows[10]. Direct effects of refugees on local attitudes and voting were explored, among others, in Hangartner et al. (2019), Altındağ and Kaushal (2021), Steinmayr (2021), and Ajzenman et al. (2022). Importantly, Steinmayr (2021) shows that conservative reactions were more prevalent in Austrian municipalities experiencing transitory migration, as opposed to municipalities that actually hosted refugees. Similarly, Lebow et al. (2023) find that reactions to Venezuelan refugees were more positive in places that had repeated contact with refugees. What I add is that salient events of this scale not only affect local populations, but are also exported abroad via international migration networks[11].

Finally, this paper relates to the literature on networks, polarization, and media. Golub and Jackson (2012) show that polarization in opinions is exacerbated by homophily - a tendency to connect to more similar others. Empirically, Halberstam and Knight (2016) and Allcott et al. (2020) show that social media increases political polarization, and Levy (2021) uncovers the mechanisms by randomizing the exposure to conservative or liberal news of Facebook[12]. It is thus well understood that exposure to like-minded news and social echo chambers can increase polarization. This paper suggests that polarizing events and opinions can spread from abroad because of the homophily of cross-border social ties.

The rest of the paper is organized as follows. Section 2 describes the data and documents several stylized facts about political co-movements between immigrants and their countries of origin. Section 3 zooms into the European Refugee Crisis, and shows that origin-country exposure to the Crisis affects opinions and voting behaviors of the expats. Section 4 analyses the mechanisms behind these effects. Section 5 provides generalizations: (i) spillovers from the European Refugee Crisis to the US, and (ii) similar spillovers from the staggered passage of same-sex marriage laws across Europe. Section 6 concludes.

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natives at destination, using the data on historic migration from Europe to the US.

[10]A recent review in Alesina and Tabellini (2021) discusses evidence on economic vs. cultural motives behind the anti-immigration backlash, both recently and historically.

[11]At a local scale, Bratti et al. (2020) and Bredtmann (2022) document spillovers from refugees hosting centers to populist voting in the nearby communities within Italy and Germany, respectively. These findings, however, are unrelated to migration networks, and the mechanisms, generally, remain unclear.

[12]For cross-border exposure to traditional media, DellaVigna et al. (2014), Bursztyn and Cantoni (2016).

# 2 Data and Stylized Facts

In this section, I document broad regularities about political and cultural spillovers from abroad. I show that across a set of topics, countries, years, and several datasets, there is evidence for co-movements of preferences between immigrants and their countries of origin.

## 2.1 Data on political preferences and social norms

To measure the dynamics of political preferences and social norms across European countries and among emigrants from these countries, I use data from the European Social Survey (ESS) and, for robustness, the Eurobarometer (EB). The nine rounds of the ESS conducted between 2002 and 2019 allow me to (i) track the evolution of norms and preferences across countries and population groups over time, and (ii) identify first- and second-generation migrants.

***The sample of interest: 1st- and 2nd-gen immigrants from European countries***

My main sample of interest consists of 1st- and 2nd-gen European immigrants: those who were born in a different European country, or those who were born in the country of residence but whose parent(s) were born abroad. For the 1st-gen immigrants, country of origin is own birth country, and for the 2nd-gens, country of origin is mother's birth country[13].

Table C1 in the Appendix provides summary statistics for 1st- and 2nd-generation immigrants with European origins and compares this group to 'natives' (respondents and their parents born in the country of residence). Immigrants are more likely to have higher education and to be unemployed, as compared to natives. Among immigrants, 35% are 2nd-gen, and 69% are citizens of their host countries. The average number of years since migration is 29, and only 12% have migrated within the 5 years leading up to the survey (so the sample represents long-stay migrants). Immigrants are less likely to identify with the political right and oppose non-European migration into their host countries, as compared to natives.

Table C2 shows the distribution by country of origin. Naturally, more populous countries have larger diasporas abroad. However, countries with significant recent waves of emigration, e.g., Poland or Romania, have disproportionately large pools of immigrants[14].

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[13]Alternative definitions of origins, i.e., based on father's birth country, do not affect the results. Moreover, there are cases where (i) respondents were born abroad, but both parents were born in the current country of residence; or (ii) parents were born in yet another country, different from the respondent's. Removing such cases makes the results stronger. Round 1 of the ESS does not record immigrants' generation of migration, so for the sake of comparability, I restrict the main analysis to rounds 2-9 of the ESS.

[14]Out of 41 thousand observations, about 34 thousands have non-missing main outcome variables.

*Dynamics of political preferences*

To illustrate the idea of co-movement in political preferences between the expats and their origins, I focus on the extent of opposition towards non-Europeans - one of the key outcomes in this paper. The ESS question reads "To what extent do you think [country] should allow people from the poorer countries outside Europe?". The "[country]" stands for respondents' country of residence. The scale is from 1 (allow many) to 4 (allow none).
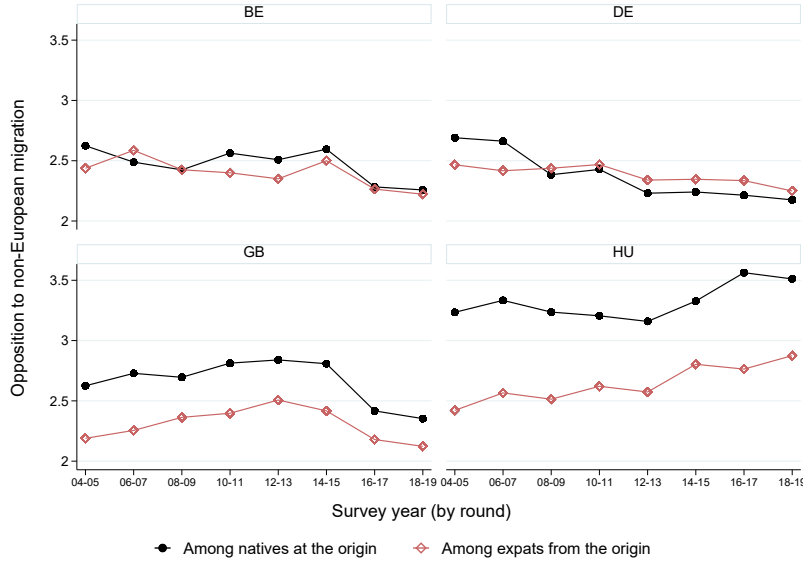


Figure 1: Dynamics of opposition towards non-Europeans, ESS round 2 to round 9.

Figure 1 illustrates the dynamics of opposition to non-Europeans in four countries and among the expats from these countries living elsewhere. A very clear pattern emerges: while the levels may differ, opinion changes among the expats tends to mimic opinion changes at the origins. Figure B1 confirms a strong pattern of co-movement for many countries with at least 5 rounds of data, and Figure B2 shows similar pattern for LGBT attitudes.

## 2.2   Estimation of co-movement coefficients

To test more rigorously whether and to what extent immigrants mimic origin-country changes in political opinions, I estimate the following model:

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

where $Y_{i,o,c,t}$ is a measure of attitudes/behaviors of (1st or 2nd generation) immigrant $i$ residing in country $c$, tracing ancestry to country $o$, interviewed in period $t$. $Y_{o,t}^{Orig.Av}$ stands

for the average origin-country attitudes in period $t$, and $X'_{i,o,c,t}$ is a vector of individual control variables. I cluster standard errors at the origin country level[15].

The theory outlined in the Appendix gives a natural way to think about the key parameter I estimate in such a model, $\beta_{i,o,t}$, which captures the extent of co-movement between an immigrant and his or her origin country. Namely, equation (10) suggests that $\beta_{i,o,t}$ is (i) positive, (ii) increasing in immigrants' attachment to the origins, and (iii) increasing in the amount and precision of information coming from the origins. This section tests the first hypothesis, while Sections 3 - 5 test the other two hypotheses.

Most importantly, model (1) accounts for the origin FEs $\phi_o$, so the identification of $\beta$ comes from the effect of *changes* in political attitudes at the origins on *changes* in political attitudes among the expats. This model addresses two other issues with estimating 'peer effects', discussed extensively at least since Manski (1993). First, I rely on the exogenous peer assignment (country of origin), which limits concerns about peer selection. Second, spurious peer effects can emerge due to common shocks. To address this issue, I include host-country $\times$ time FEs, $\tau_{c,t}$, which difference out changes in host-country opinions, media exposure, or economic shocks that can produce correlated changes in opinions.

Some of the immigrants may have decided to migrate because of a growing political or cultural distance they felt with the origins. This pattern of selection would suggest that the estimate of $\beta$ can be biased towards zero. However, I do not find any evidence that a larger difference between origins and diasporas weakens the co-movement. Moreover, in Section 4, I show that immigrants follow the like-minded groups at the origins, so even when emigration is driven by political/cultural reasons, this does not prevent learning from the origins.

## 2.3 Co-movements in political attitudes: main regularities

I begin with one of my main variables of interest, opposition towards non-Europeans, and report the estimates of co-movements coefficients $\beta$ from model (1) in Table 1.

In the baseline specification of column (1) that includes origin, destination, and time FEs, a 1-unit increase in the opposition towards non-Europeans at the origin translates into 0.25 units of increase in opposition among the expats from this origin country. Column (2) adds basic individual controls (age and age squared, gender, years of education, marital status, and employment status) with no change to the estimate. Column (3) adds host country changes in attitudes, confirming that co-movements with the origins still matter after accounting

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[15]Similar models in Nekoei (2013), Akay et al. (2017), and Albert and Monras (2022) showed how origin-country macroeconomic conditions affect immigrants' labor supply, happiness, and location choice.

Table 1: Co-movements with the origins: opposition towards non-European immigrants

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| | | | Oppose non-European immigration | | | | |
| Oppose non-Eur. immigr. (origin) | 0.250*** | 0.256*** | 0.211*** | 0.155** | 0.156** | 0.178** | 0.131** |
| | (0.084) | (0.088) | (0.071) | (0.064) | (0.066) | (0.070) | (0.061) |
| Oppose non-Eur. immigr. (local) | | | 0.627*** | | | | |
| | | | (0.063) | | | | |
| Oppose non-Eur. immigr. (origin) x 2$^{nd}$ gen. | | | | | | -0.055 | |
| | | | | | | (0.045) | |
| Observations | 22,273 | 21,282 | 21,282 | 21,282 | 21,282 | 21,282 | 18,470 |
| Adjusted R-squared | 0.114 | 0.144 | 0.150 | 0.152 | 0.164 | 0.164 | 0.180 |
| Origin FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| ESS round FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Country FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Individual controls | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Country x round FEs | No | No | No | Yes | Yes | Yes | Yes |
| NUTS FEs | No | No | No | No | Yes | Yes | No |
| Group x round FEs | No | No | No | No | No | No | Yes |

Outcome variable is an individual-level response to a question "to what extent do you think [country] should allow people form the poorer countries outside of Europe?", with answers ranging from 1 (allow many) to 4 (allow none). Main treatment variable is the country-round average value for the same question asked in respondent's country of origin. Column (3) adds local country-round averages. Column (6) adds an interaction term with whether a respondent is a second-generation immigrant. Column (7) allows for separate shocks for Left-Center-Right political groups, and for (non)tertiary educated groups of respondents. Standard errors, clustered at the level of origin countries, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

for local, potentially correlated dynamics. Column (4) adds host country-by-round FEs to partial out local shocks common to all immigrants in a given host country. Column (5) adds local regional NUTS FEs, and still delivers a highly significant co-movement estimate. Column (6) shows that co-movements in attitudes are very strong for 1st-generation immigrants, and only slightly weaker for children of immigrants. Finally, column (7) accounts for opinion dynamics among political (left-center-right) and educational (tertiary vs. not) subgroups, showing that the results are not driven by selective migration based on education or political leanings. Overall, these results confirm that opposition towards non-Europeans tends to change similarly between diasporas and their origins.

To test whether this pattern of co-movement between origins and immigrants generalizes to other topics, I re-estimate model (1) for a broader set of political preferences and social norms. The estimates of $\beta$ coefficients on Figure 2 reveal significant co-movements between origins and immigrants for topics that were salient over the last two decades: (i) support for the EU unification, (ii) opposition towards the LGBT rights, (iii) trust in the EU parliament, (iv) trust in local parliaments. For example, if the public in a given country shows declining institutional trust, immigrants from that country living elsewhere also tend to report lower institutional trust, even after accounting for the host-country changes. Another pattern

Co-movement coefficients for various political and cultural values

Estimates of beta coefficients from model (1), specification from Table 1, column (4). Reported are 90% confidence intervals. Coefficients ordered by statistical significance and magnitude.
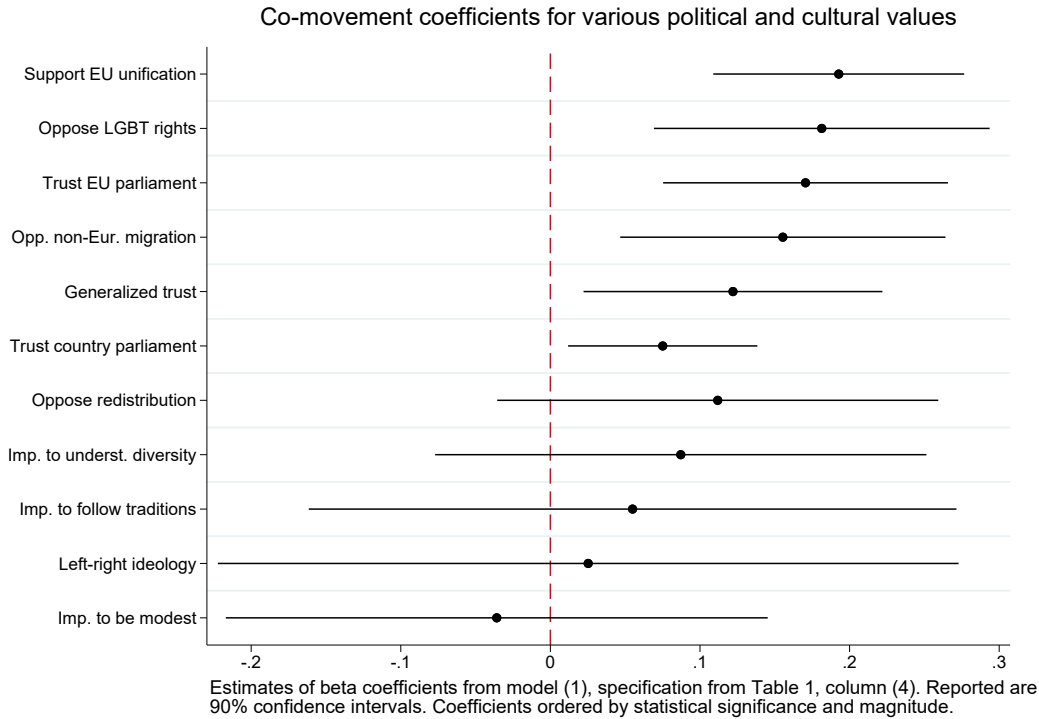
Figure 2: Co-movements between origins and immigrants across a range of topics.

emerging from Figure 2 is that there is no significant co-movement for arguably more stable cultural values, such as the importance of traditions, or valuing diversity[16].

It is important to note that emigration can be a result of growing differences in political preferences between those who emigrated and those who stayed. In the Appendix, B3 shows the estimates of country-specific $\beta$ coefficients for two of the topics analyzed above (opposition to non-Europeans and opposition to LGBT rights), together with the measure of long-term difference between those who left and those who stayed at the origins. While there are large differences between movers and stayers for many countries, these differences in levels do not matter for the extent of co-movement with the origins.

For robustness, I conduct similar analysis with the Eurobarometer (EB) and find identical patterns, as reported in Table D1. Among other things, the EB measures perceptions of issue salience, and I document similar co-movements of issue salience between immigrants and their origins. Moreover, in Section 4.1, I also show that online search behavior displays similar patters.

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[16]It is statistically harder to detect spillovers for slower-moving traits. Thus, insignificant co-movement coefficients can reflect either (i) lack of immigrants' attention, or (ii) lack of identifying variation (or both).

# 3   European Refugee Crisis: learning from the origins

In this section, I focus on the European Refugee Crisis of 2015 to show that salient events at the origins activate cross-border spillovers and affect political preferences and voting among the diasporas. As long as the expats do not affect asylum policies back at home, origin-country exposure can be seen as plausibly exogenous. Using the variation in the magnitude, timing, and type of origin-country exposure to the Crisis, I show that it affects (i) opposition to non-Europeans, and (ii) voting for far-right parties abroad. These effects are mediated by the activation of opinion spillovers during the periods of high issue salience.

## 3.1   Measuring exposure to the Refugee Crisis

My main measures of exposure to the Refugee Crisis are based on the UNHCR data on hosted refugees and asylum recognition policies, and on the International Organization of Migration (IOM) data on transitory migration. Figure 3 shows the timing and magnitude of refugee inflows into Europe along the two main routes. The Central Mediterranean Route via Italy was the first to activate in 2014. The most intense period, however, began in 2015 when more than one million of asylum seekers entered Europe via Turkey and Greece.
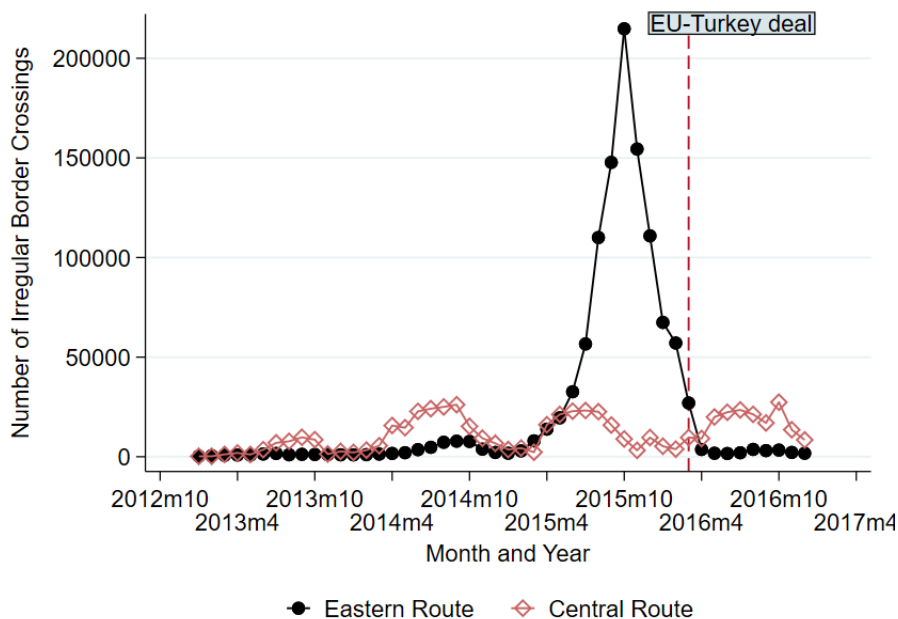


Figure 3: Irregular border crossings along the two main routes. Based on Frontex data.
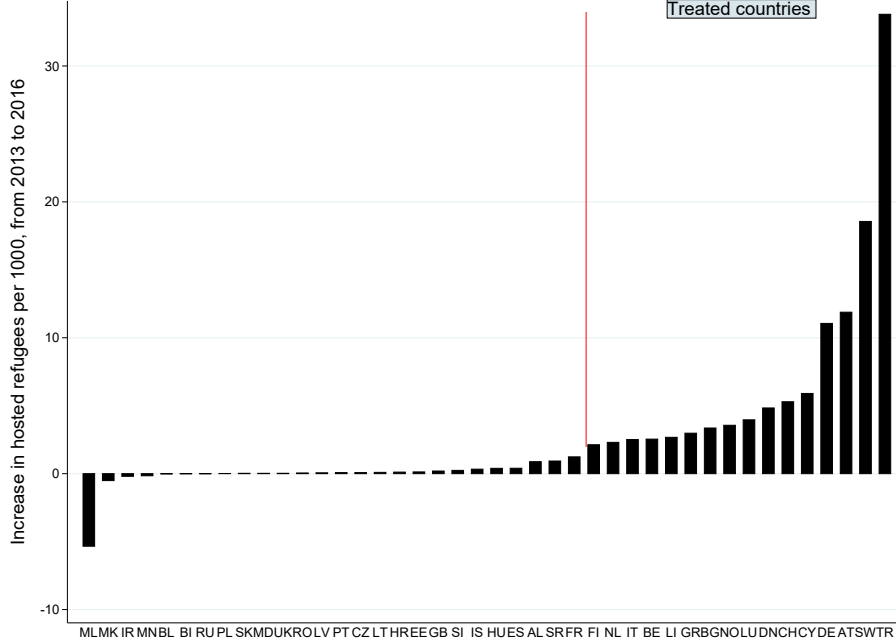
Figure 4: Increase in hosted refugees per capita, from 2013 to 2016. Based on UNHCR data.

Figure B4 in the Appendix shows more detailed country × time variation in asylum populations per capita and asylum recognition policies (application rejection rates), highlighting the effect of the 2014-2016 Refugee Crisis. Using this data, I calculate changes in per capita refugee populations from the end of 2013 (just before the Crisis) to the end of 2016 (after the main events of the Crisis), and display it on Figure 4. Clearly, many countries hosted close to zero refugees during the Crisis, especially compared to those with the biggest increase in hosted refugees (Turkey, Sweden, Austria, Germany, etc.). Because of this clear division, I code countries as Asylum-treated if the increase is above the European average of approximately 2 hosted refugees per 1000[17]. More formally:

$$Asylum_o = \begin{cases} 1 & \text{if } \Delta R_{o,2013-2016} \geq \Delta R_{EUR,2013-2016} \\ 0 & \text{if } \Delta R_{o,2013-2016} < \Delta R_{EUR,2013-2016}, \end{cases} \quad (2)$$

where $R_{o,t}$ is the number of hosted asylum seekers and refugees per capita at the end of year $t$ in country $o$, and $R_{EUR}$ stands for European average. This measure distinguishes between countries that accepted and hosted refugees during the Crisis and those that did not. In my analysis, I use both the continuous origin-country Asylum increase, and the binary measure.

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[17]The results are robust to moving the cutoff, e.g., including France or excluding Finland from the category of Asylum-treated. Importantly, the increase in hosted refugees per capita is uncorrelated with pre-Crisis opposition to non-Europeans, see Figure B5 in the Appendix.

The second measure captures asylum reception policies more directly and is based on a drop in asylum rejection rates from before the Crisis (2005-2013) to 2014-2016. Figure 5 shows the distribution of rejection rates drops across countries. A larger drop in rejection rates during Refugee Crisis corresponds to a more welcoming asylum policy. And indeed, Figure B6 in the Appendix shows that countries coded as Asylum-treated display a much larger drop in rejection rates during the Crisis.
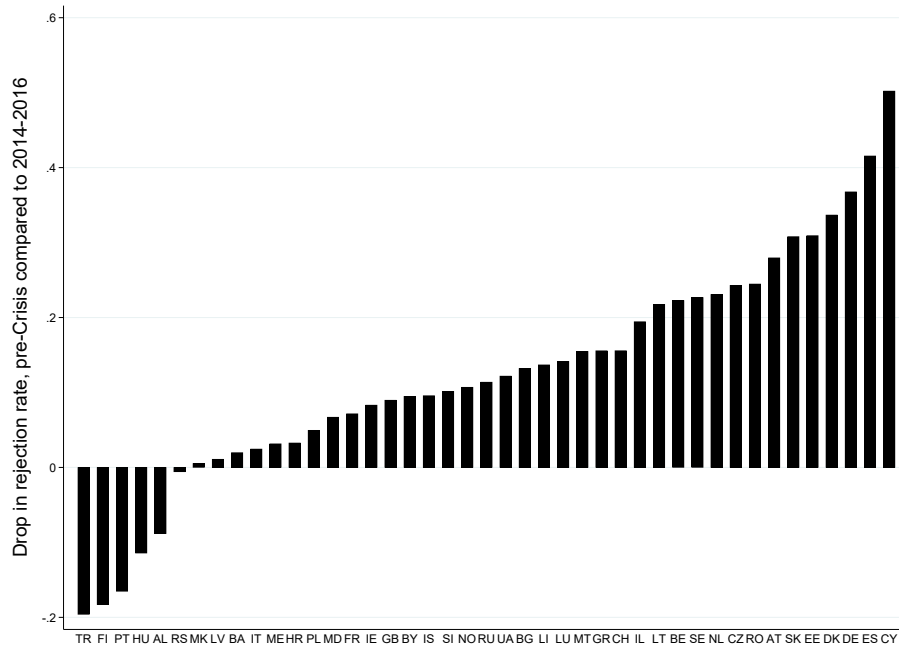


Figure 5: Drop in asylum application rejection rates, from 2005-2013 to 2014-2016.

Note than main entry countries, Greece and Italy, did not host so many refugees and did not display especially welcoming asylum policies. One of the reasons is that the majority of asylum seekers were only transiting through on their way to Northern European destinations. As was shown in Steinmayr (2021) and Ajzenman et al. (2022), exposure to transitory migration can generate a stronger backlash as compared to hosting refugees. Thus, one can hypothesize that transitory origin-country exposure can create more negative contagion effects abroad. To capture differences in the predominant mode of exposure to the Crisis (transit vs. stay), I use data from the IOM on the numbers of transit migrants, see Figure B7 in the Appendix for details[18]. I code countries as Transit-treated if the number of hosted refugees in 2014-2016 is less than half of the number of asylum seekers who entered the

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[18]For countries not shown on this Figure, the IOM does not record transit migration, as most irregular migrants apply for asylum in countries like Germany, Sweden, Netherlands, etc.

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country in that period (i.e., if among those who entered the country, the majority did not stay). The following countries are thus coded as transit countries: Greece, Croatia, Hungary, Italy, Northern Macedonia, Serbia, and Slovenia[19].

*Measures of salience and attention to the Crisis*

To measure the salience of Refugee Crisis at the origins, I use two additional sources. One is the Eurobarometer survey, which presents respondents with a large list of social and economic issues and asks to select up to two issues that are most salient for the country at the moment[20]. I calculate the share of respondents that select immigration as one of the most salient issues at each point in time.

Second, I use media coverage data from the GDELT (the Global Database of Events, Language and Tone, see also Koch et al. (2020)) database to calculate the share of articles that mention refugees. Figure B8 in the Appendix shows the dynamics of immigration salience, media attention, and applications for asylum, confirming that these three measures co-move quite closely, with a peak in the second half of 2015 for most exposed countries[21].

## 3.2 The Refugee Crisis: causality and threats to identification

To see whether and how strongly origin-country exposure to the Refugee Crisis affects political preferences and voting among the expats, I employ the Difference-in-Differences (DID) and event study strategies. Namely, I test whether emigrants from origin countries that accepted and hosted refugees change their political attitudes and behaviors differently from people of other origins living nearby. I begin with the following simple 2x2 DID model:

$$Y_{i,o,c,t} = \gamma \cdot Asylum_o \cdot Post_t + \eta X'_{i,o,c,t} + \phi_o + \tau_{c,t} + \varepsilon_{i,o,c,t}, \tag{3}$$

where $Y_{i,o,c,t}$ stands for political preferences of immigrant $i$ living in country $c$, originating from country $o$, and interviewed in period $t$. My main outcomes are (i) opposition towards non-European migration, and (ii) voting for far-right parties. $Post_t$ is an indicator variable that takes the value of 1 for years 2015 and after (results are robust to using the post-2014 indicator). $Asylum_o$ takes the value of 1 for origin countries that hosted significant numbers

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[19]Transitory migration through Albania, Bosnia, and Montenegro was negligible up until 2017-2018.

[20]The Eurobarometer question is "What do you think are the two most important issues facing (OUR COUNTRY) at the moment?", and the list includes topics like Economic Situation, Crime, Inflation, Unemployment, Immigration, Terrorism, Housing, Health, and so on.

[21]The exceptions are Greece, Italy, and a few other countries, where as discussed above, applications for asylum were low, but transit migration was high.

of refugees during the Crisis, as defined in 2. An alternative measure, as explained above, is based on the openness of asylum recognition policies, i.e., a drop in asylum rejection rates. Parameter $\gamma$ captures the main treatment effect: differential change in political preferences between (1st- or 2nd-gen) immigrants coming from Asylum vs. non-Asylum origins.

The identification assumption behind this approach is that origin country exposure to the Crisis is orthogonal to pre-Crisis dynamics of political preferences among the expats, conditional on fixed differences across origins, $\phi_o$, and local dynamics, $\tau_{c,t}$. One potential violation of this assumption could happen if diasporas abroad affected reception policies back at the origins, reflecting changing political preferences among the diaspora. Specification with lags and leads explicitly tests for such pre-trends:

$$Y_{i,o,c,t} = \sum_{\tau=2004}^{2019} \gamma_\tau \cdot Asylum_o + \eta X'_{i,o,c,t} + \phi_o + \tau_{c,t} + \varepsilon_{i,o,c,t}, \tag{4}$$

I verify that there are no significant pre-trends in political preferences of the expats, so origin-country exposure can be seen as plausibly exogenous for the expats[22].

To make sure that I capture spillovers from origin to immigrants, and not the other way around[23], I use the fact that immigrants living in host countries that did not experience the Refugee Crisis are more likely to receive, rather than to send, political cross-border spillovers[24]. This strategy, together with destination × time FEs, $\tau_{c,t}$, also safeguards against the concern of correlated shocks creating spurious spillovers, see Manski (1993).

Additionally, the Refugee Crisis at the origins can induce emigration, changing the composition of migrants abroad and thus creating a spurious effect of origin-country exposure on the average attitudes among the expats. For example, if an inflow of refugees into a country produced backlash towards non-Europeans and made those with the most negative reactions leave the country, then the average opposition towards non-Europeans could have increased both at the origins and among the expats, without any opinion change among non-recent migrants. To address this concern, I omit those migrants who left their origins during or just before the Crisis. The results remain intact.

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[22]The number of refugees that a given country receives is of course an endogenous outcome that balances the demand for asylum (preference for richer and more tolerant places) with the supply of asylum (e.g., rejection rates, political statements in receiving countries). However, as long as these forces are orthogonal to pre-Crisis dynamics of opinions among the expats, the origin-country exposure to the Crisis is as good as random, accounting for fixed differences across origins (income, tolerance levels, etc.).

[23]The paper by Barsbai et al. (2017) has documented 'cultural remittances': immigrants can affect culture and politics at the origins due to exposure to alternative cultures and preferences at destinations.

[24]For example, one would compare changes in political preferences of a German immigrant (Asylum origin) and a Polish immigrant (not-Asylum origin) living in the same region of Spain (non-affected destination).

Moreover, I test whether the type of origin-country exposure (transit vs. asylum) matters for how the expats react to origin-country events: I substitute $Asylum_{o,t}$ with $Transit_{o,t}$ indicator. In some specifications, I estimate their effects together. Moreover, to make control units more comparable, I test for the effects of asylum/transit exposure relative to their geographical neighbors from control group. One example would be to compare the dynamics of political preferences of immigrants from Hungary (Transit-treated) and those from neighboring Czech Republic and Slovakia (control).

## 3.3 Main DID and event-study estimates

I begin with a simple 2x2 DID model which shows how hosting refugees at the origins in 2014-2016 affects political preferences abroad. In an event-study model, I show that there are no significant pre-trends, and that spillover effects are the strongest during the Crisis's peak years of 2015-2016. Moreover, the type of exposure matters: transitory migration through the origins has the opposite (negative) effect abroad as compared to Asylum treatment.

### When country of origin hosts refugees

Table 2 reports the DID estimates of how origin-country asylum treatment during the Crisis affects the opposition towards non-Europeans among the expats abroad.

Table 2: DID estimates of origin-country asylum treatment

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| | | | | Oppose non-European immigration | | | |
| Origin Asylum-treated x Post2015 | | -0.134*** | -0.131*** | -0.117*** | -0.095* | -0.168*** | -0.110*** |
| | | (0.039) | (0.032) | (0.037) | (0.046) | (0.053) | (0.032) |
| Asylum (per capita increase) x Post2015 | -0.005* | 0.000 | | | | | |
| | (0.002) | (0.002) | | | | | |
| Observations | 32,021 | 32,021 | 32,021 | 28,195 | 17,911 | 15,459 | 31,414 |
| Adjusted R-squared | 0.126 | 0.127 | 0.155 | 0.159 | 0.170 | 0.127 | 0.155 |
| Origin FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Country x round FEs | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Individual controls | No | No | Yes | Yes | Yes | Yes | Yes |
| Sample | Full | Full | Full | No transit origins | Controls neighbors | Host not treated | No recent migrants |

Outcome variable is an individual-level response to a question "to what extent do you think [country] should allow people form the poorer countries outside of Europe?" with answers ranging from 1 (allow many) to 4 (allow none). Main treatment variable is the origin-country treatment status interacted with the post-2015 dummy. Treatment definition is based on the increase in hosted refugees per capita from 2013 to 2016. In columns (1) and (2), I also include continuous treatment variable – per capita increase in hosted refugees from 2013 to 2016. Column (3) adds individual controls (age, age squared, gender, education, marital status, employment status). Column (4) removes from the control group origin countries with large transit refugee flows. Column (5) only retains neighbors of Asylum-treated origins in the control group. Column (6) retains only those respondents who currently reside in host countries that are not treated (asylum or transit). Column (7) omits immigrants who left their origins after 2012. Standard errors, clustered at the level of origin countries, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Column (1) uses the basic specification from model (3) and begins with a continuous origin-country asylum exposure, as per Figure 4. It shows that the more refugees (per capita) an origin country hosts during the Crisis, the lower becomes the opposition towards non-Europeans among the expats abroad. Column (2) shows that the whole effect is driven by the difference between groups of countries - those who hosted virtually zero refugees during the Crisis vs. those who hosted non-negligible numbers of refugees. Column (3) adds individual controls (gender, age, age squared, education, marital status and employment status), and confirms that these variables do not affect the results[25]. Quantitatively, the estimate from column (3) corresponds to approximately a 14% decrease in reporting a negative attitude towards non-Europeans, relative to the pooled pre-Crisis mean.

In the subsequent specifications, I account for several important identification concerns. Columns (4) and (5) ensure that control units are more comparable to treatment units: first, I remove from the control group those origin countries that had significant transitory migration. Second, I only retain control origins that neighbor treated origins. Results remain almost intact. Column (6) only retains those immigrants who live in host countries that are not themselves exposed to the Crisis (neither hosting refugees, nor having large transitory migration), thereby addressing the issue of potentially correlated exposures to the Crisis. If anything, the effect of the Crisis becomes stronger, suggesting that learning from the origins is more important when there is less local information (consistent with the model in Appendix A). Column (7) addresses the concern that Crisis-induced migration might have changed the composition of expats and thus produced a spurious spillover effect. I drop all post-2013 migrants and show that the results are not driven by selective migration.

To show that there are no significant pre-trends between immigrants from origins to be treated and those not to be treated in the future, I estimate a dynamic DID model (4) and report yearly estimates on Figure 6. The absence of significant pre-Crisis differences between expats from different origins suggests there is no selection into treatment based on characteristics of the expats (origin-country treatment status can be seen as plausibly exogenous). The effect of hosting refugees at the origins is most pronounced in 2015, the peak year of the Refugee Crisis: immigrants from origin countries that accepted and hosted refugees were 0.2 units less negative towards non-Europeans than comparable immigrants

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[25]There are meaningful effects of these characteristics: e.g., better education corresponds to lower opposition to non-Europeans, while unemployment tends to increase it. Importantly, differential changes in opinions among different groups (low vs. high education, or political Left vs. Right) do not explain much of the origin-country treatment effect. Thus, differences in reactions to the Crisis among the expats are not driven by the fact that some origins tend to have more tolerant or more educated expats than others.
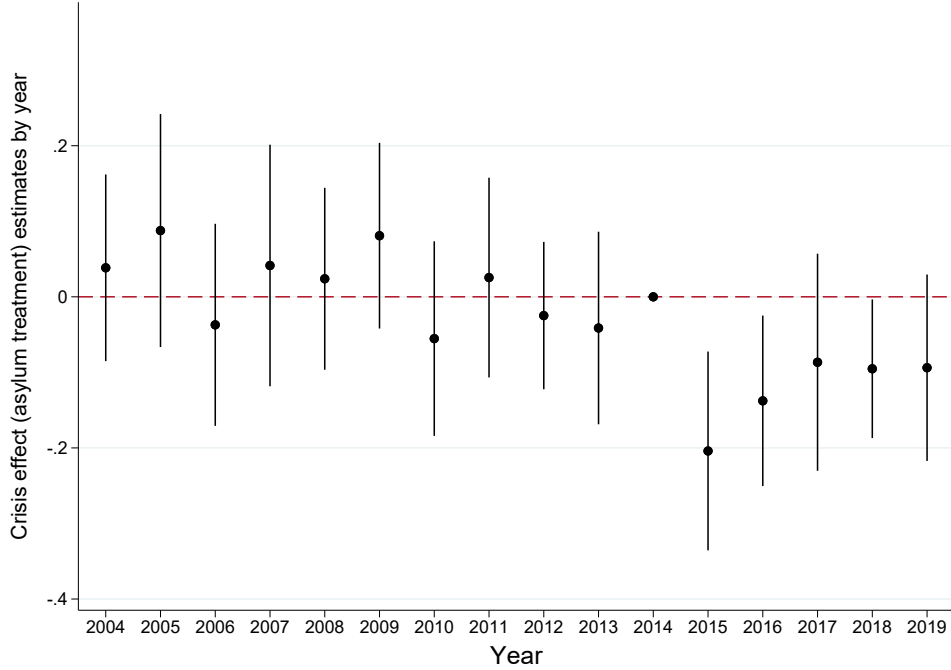
Figure 6: Dynamic effects of hosting refugees at the origins on opposition to non-Europeans abroad

from non-Asylum origins. This difference corresponds to approximately 20% lower likelihood of reporting negative attitude towards non-Europeans, relative to a pooled pre-Crisis mean. Moreover, the effect remains very strong for 2016, and still visible up until 2019. It is important to note that this result is robust to allowing separate time FEs for people with Western European origins, suggesting that the effect is driven by refugee policies at the origins, and not to by any factors common to Western European culture.

Table C3 in the Appendix shows that origin-country Asylum treatment affects a broader spectrum of opinions about refugees. Namely, if an origin country accepts and hosts refugees during the Crisis, immigrants from such a country become increasingly supportive of the opinions that (i) local governments should be more generous accepting refugees, (ii) refugees are in real fear of persecution, and (iii) refugees should be entitled to bring close family members[26]. Moreover, support for income redistribution increases if origins hosts refugees during the Crisis, which is consistent with the recent evidence in Alesina et al. (2018, 2021) on a positive link between attitudes towards migrants and redistribution preferences.Origin-country Asylum treatment also reduces concerns over security issues and perceptions that immigrants worsen crime problems. These additional outcomes confirm that hosting refugees

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[26]I am not using focusing on these outcomes because these questions only available in rounds 1, 7, and 8.

at the origins makes the expats more friendly and less stereotypical towards refugees.

To show that the effect of the Refugee Crisis at the origins is specific to refugee- and migration-related attitudes, I report a series of placebo checks in the Appendix Table C4. Focusing on political and cultural values for which I found significant co-movements with the origins in Section 2, I show that there is no effect of the 2015 Refugee Crisis treatment on these other topics. The exception is a positive effect of Asylum treatment on generalized trust among the expats, which, however, is not robust to stricter dynamic specifications.

Finally, I use an alternative measure of origin-country treatment in the Crisis - the openness of asylum recognition policy during the Crisis, see Figure 5. The hypothesis is that the larger is the drop in asylum rejection rates during the Crisis (2014-2016), as compared to the pre-Crisis period, the more positive spillovers would be sent abroad via migration networks. In the Appendix, Table C5 tests this hypothesis and finds support for it: a larger drop in asylum rejection rates at the origins makes the expats less negative towards non-European migration in their host countries. Overall, there is a strong evidence that more positive asylum treatment at the origins during the period of high issue salience creates positive spillover effects abroad via migration networks.

### When origins experience transitory migration

Experience of transitory refugee migration can be very different from actually hosting and interacting with refugees. The contact hypothesis by Allport (1954) suggests that sustained positive contact with out-group members can reduce prejudice. Moreover, a recent paper by Steinmayr (2021) showed that conservative voting increased in Austrian municipalities that experienced transitory migration, but dropped in municipalities that hosted refugees. Does a transitory origin-country exposure to refugees produce negative spillovers abroad?

Figure 7 reports the by-round[27] estimates of origin-country transitory migration treatment. It shows that when an origin country is exposed to transitory migration during the Refugee Crisis, the expats from such a country become more hostile to non-Europeans. This result is robust for allowing separate time FEs for people with South European origins[28].

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[27]With yearly estimates, most of the treatment effect comes from the year 2014 as opposed to the 2015-2016, potentially because a large part of transitory migration was happening through already in 2014.

[28]Overall, however, the asylum treatment at the origins has a stronger and more robust effect on the opinions of immigrants. One potential reason behind this is that transitory migration was a very brief experience, while hosting refugees was a more prolonged treatment that did not end in 2015.
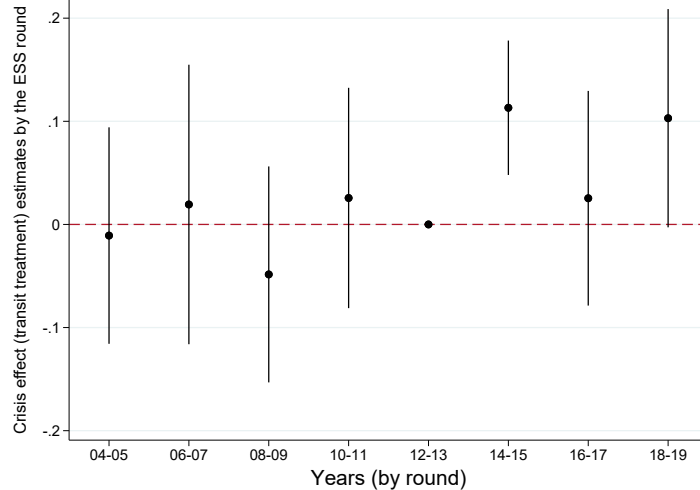
Figure 7: Dynamic effect of origin transit treatment on opposition to non-Europeans abroad

## 3.4   Political spillovers affect behavior: Far-right voting

Documented spillovers of origin-country events and preferences via international migration network constitute an important channel of political and cultural change, and contribute to the contagion of anti-immigration sentiment across the globe. But do these spillovers have real consequences in terms of voting behaviors? In this section, I test whether Refugee Crisis at the origins affects support and voting for far-right parties among the diasporas.

To classify European political parties into far-right vs. not, I rely on a widely used database: the PopuList, by Rooduijn et al. (2019), see also Guriev and Papaioannou (2022). I match parties that the ESS respondents support/voted for in last elections to the PopuList classification, and test whether the origin-country exposure to the Refugee Crisis of 2015 affects support for host-country far-right parties among the emigrants[29].

I begin with the outcome variable that gives a party that respondents support at the moment. This variable, while not reflecting actual voting, allows to see an immediate re-action to the origin-country events. Column (1) of Table 3 shows that immigrants from origin countries that accepted and hosted refugees during the Crisis became less likely to support far-right parties at destination, as compared to immigrants from other countries living nearby[30]. In contrast, as column (2) shows, massive transitory refugee flows through the

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[29]Figure B9 in the Appendix reveals a very strong positive correlation between the opposition towards non-Europeans and support/vote for far-right parties among 1st- and 2nd-generation immigrants.

[30]The results are very similar for changes in support for populist or far-right populist parties, because in Europe, most populist parties are right-wing, see Rooduijn et al. (2019), Guriev and Papaioannou (2022).

origins significantly increased support for far-right parties abroad. Both types of exposure have an independent and strong effect when estimated together in column (3). Transitory refugee flows at the origins increase support for far-right parties among the diaspora abroad by more than 6 p.p., while favorable asylum policies at the origins decrease far-right support among the diaspora by 5 p.p.

Table 3: DID estimates of spillovers to far-right voting abroad

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| | Support a far-right political party | | | Voted for a far-right political party | | |
| Origin Asylum-treated x Post2015 | -0.045** | | -0.049*** | | | |
| | (0.018) | | (0.015) | | | |
| Origin Transit-treated x Post2015 | | 0.062*** | 0.066*** | | | |
| | | (0.018) | (0.014) | | | |
| Origin Asylum-treated x Elect. Post2015 | | | | -0.047** | | -0.048** |
| | | | | (0.023) | | (0.021) |
| Origin Transit-treated x Elect. Post2015 | | | | | 0.037 | 0.040* |
| | | | | | (0.024) | (0.020) |
| Observations | 11,343 | 11,343 | 11,343 | 10,099 | 10,099 | 10,099 |
| Adjusted R-squared | 0.120 | 0.120 | 0.121 | 0.120 | 0.120 | 0.121 |
| Origin FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Country x round FEs | Yes | Yes | Yes | Yes | Yes | Yes |
| Individual controls | Yes | Yes | Yes | Yes | Yes | Yes |

Outcome variable in columns (1)-(3) is an individual-level political party voting preference from the ESS. Outcome variable in columns (4)-(6) is political party a respondent voted for in the last national elections. Party coding into far-right vs. not is based on the PopuList (Rooduijn et al. (2019)) classification. Both outcomes are {0,1} indicators, where 1 stands for a far-right political party in the current country of residence. The sample size is reduced because not all respondents specify a party they support (and even fewer immigrant respondents can vote), and because the merge between the PopuList and the ESS is not perfect. Standard errors, clustered at the level of origin countries, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Turning to the effects of origin-country events on the actual voting choices of immigrants, it is important to note that for many respondents interviewed in or after 2015, the last election still refers to a pre-Refugee Crisis period. To properly account for this fact, in columns (4)-(6) of Table 3 I compare respondents interviewed before 2015 to those interviewed in or after 2015 and having the last election in or after 2015. In all specifications, the destination × time changes in far-right voting are differenced out. Column (4) shows that immigrants from countries that accepted and hosted refugees in 2015 were 4.7 p.p. less likely to vote for far-right parties in the post-2015 elections, as compared to other immigrants in the same host country. Columns (5) and (6) show that large transitory refugee shocks at the origins increased far-right voting in the post-2015 elections by 4 p.p.[31]

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[31]While the estimates are smaller and less significant, they are based upon naturalized immigrants who can vote in their host countries. Thus, these are likely to understate the effect of origin-country events on political preferences and (desired) voting of non-naturalized immigrants.
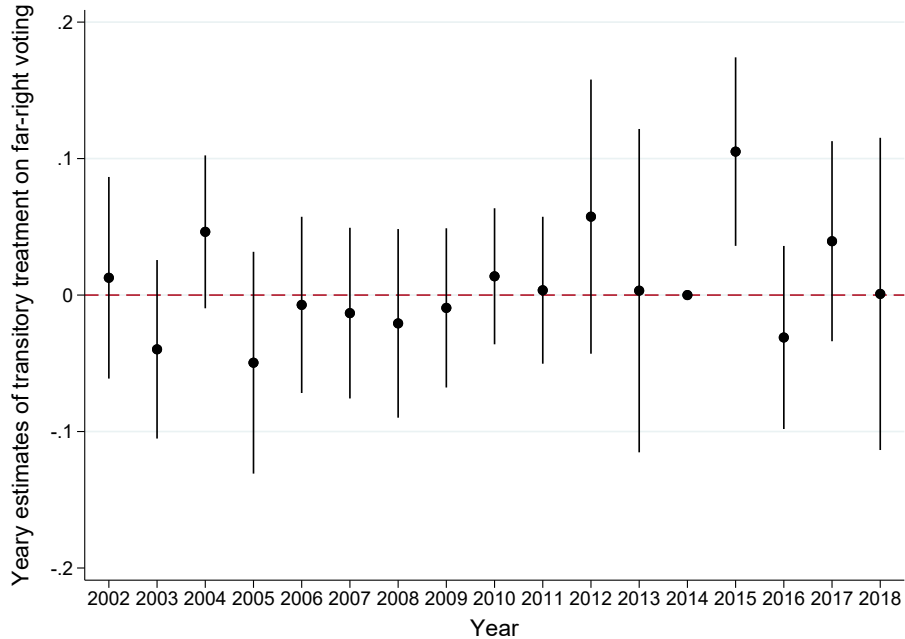
Figure 8: Yearly estimates of origin Transit treatment on far-right voting among the diaspora.

To test for pre-event differences in voting across immigrants of different origins, and to see when the treatment effect is most pronounced, I estimate dynamic DID specifications with lags and leads on Figure 8, using voting for far-right parties in last elections as an outcome. The results reveal that there are no significant pre-trends, and that the effect is most pronounced in 2015 (peak of the Crisis), when there is a 10 p.p. higher chance of voting for a far-right party by immigrants from Transit origins, as compared to immigrants from other countries living nearby. In the Appendix, Figure B10 reports similar estimates for current support, as opposed to past voting, for right-wing parties. The effect on right-wing support remains visible in 2018-2019[32].

## 3.5   Refugee Crisis activates political spillovers from the origins

In this section, I demonstrate that origin-country exposure to the Crisis triggers immigrants' learning from the origins. Namely, political spillovers, identified in section 2 intensify during the periods of high issue salience, and explain why origin-country events affect political preferences and voting among the diasporas abroad.

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[32]The results are robust to controlling for the dynamic effects of Asylum treatment, including NUTS region FEs, allowing for separate dynamics for groups with different general political ideology (left vs. right) and different education levels (like in Table 1 column (7)).

On Figure 9 I show that political attitudes of the expats respond to origin-country events similarly to how attitudes evolve back at the origins. Asylum-treated countries display a decrease in the opposition to non-Europeans during the Crisis. In contrast, countries that did not accept/host refugees display an increasing opposition to non-Europeans. Similar dynamics is observed for the expats from Asylum-treated vs. other origins. Naturally, spillovers seem to active in 2015 - when the Refugee Crisis becomes most salient.
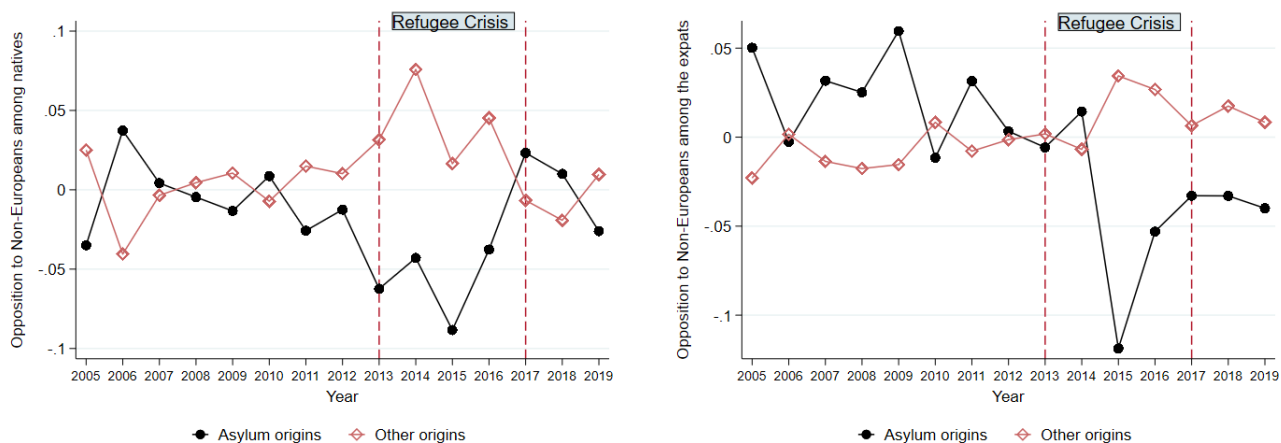


(a) Among natives at the origins      (b) Among the expats from the origins

Figure 9: Dynamics of opposition to non-Europeans, by treatment status (asylum destinations vs. not). Averages after partialling out individual controls, year FEs and country FEs.

Table 4 documents the importance of spillover intensification more rigorously. Column (1) shows that spillovers of opposition to non-Europeans, estimated in Section 2, intensify after 2015. Columns (2) and (3) report the estimates of the basic Asylum and Transit treatment effects, similar to Table 2, but on a smaller sample of respondents, for which origin-country attitudes are available in the ESS. Column (4) then shows that a large part of the Asylum-treatment effect and most of the Transit-treatment effect is accounted for by the intensification of opinion spillovers after 2015. Importantly, Appendix Figure B11 shows no spillover increase after 2015 for topics not directly related to the Refugee Crisis.

Data from the Eurobarometer (EB) gives additional support for the importance of issue salience. In Appendix D, Figures D1 - D4, I show that when the Crisis hits the origins, and immigration becomes a salient issue there, the diasporas living in less affected places also tend to report elevated salience of immigration. All this evidence suggests that the activation of opinion spillovers from origins during the Crisis is the main reason why origin-country events affect preferences and voting abroad.

Table 4: Political spillovers after the Crisis explain part of the treatment effect

| VARIABLES | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| | Oppose non-European immigration | | | |
| Origin Asylum-treated x Post2015 | | -0.141*** | -0.141*** | -0.118*** |
| | | (0.037) | (0.032) | (0.028) |
| Origin Transit-treated x Post2015 | | | 0.119*** | 0.062 |
| | | | (0.039) | (0.054) |
| Oppose non-Eur. immigr. (origin) | 0.077 | | | 0.098* |
| | (0.060) | | | (0.055) |
| Oppose non-Eur. immigr. (origin) x Post2015 | 0.162*** | | | 0.066 |
| | (0.046) | | | (0.067) |
| Observations | 20,896 | 20,896 | 20,896 | 20,896 |
| Adjusted R-squared | 0.152 | 0.152 | 0.152 | 0.152 |
| Origin FE | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes |
| Country x round FEs | Yes | Yes | Yes | Yes |
| Individual controls | Yes | Yes | Yes | Yes |
| Sample | ESS Origins | ESS Origins | ESS Origins | ESS Origins |

Outcome variable is an individual-level response to a question "to what extent do you think [country] should allow people form the poorer countries outside of Europe?", with answers ranging from 1 (allow many) to 4 (allow none). Columns (1) and (4) include the country-round average value for the same question asked in respondent's country of origin, interacted with a Post-2015 indicator. Columns (2)-(4) add origin-country Asylum- and Transit-treated treatment. The sample is limited to immigrants with origins covered by the ESS. Standard errors, clustered at the level of origin countries, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Thus far, this paper has established that political preferences and voting behaviors of 1st and 2nd-generation immigrants respond to the Refugee Crisis at the origins. More welcoming asylum policies (accepting and hosting refugees) at the origins decrease opposition to non-Europeans and voting for far-right parties among the diaspora abroad. Massive transitory migration through the origins sends abroad the backlash and an increase in far-right voting. These effects are mediated by the activation of opinion spillovers from origins to immigrants when issue salience is high. This provides new evidence on how political ideology (both conservative and liberal) spreads across the world via pre-existing migration networks. But can we further unpack the mechanisms behind this phenomenon?

# 4 Mechanisms: communication, attention, and homophily

This section explores the mechanisms behind the observed spillovers of political preferences from origins to immigrants. First, using multiple-language online search data, I document that during the period of high issue salience, immigrants from heavily affected origins pay disproportionately high attention to the Refugee Crisis. Second, I show that network ho-

mophily drives most of the effect: the strongest political spillovers come from like-minded groups at the origins. Finally, I underscore the role of social integration at destination and network ties to the origins as important mediators of learning from the origins.

## 4.1 Google Trends and attention to origin-country events from abroad

Do immigrants pay special attention to salient events at the origins, above and beyond the effects of local salience, and dynamics common to other population groups? The existence of such disproportionate attention is a necessary ingredient for the 'home bias' in political preference dynamics. Traditional data sources, however, do not allow measuring attention to origin-country events. To bypass this issue, I leverage search intensity data from Google Trends (GT). Namely, to measure attention to the Refugee Crisis coming from people outside of their origin countries, I use search volumes for "Refugees" and related terms in different European languages coming from different search locations.

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, the GT index varies from 100 (peak search intensity) to 0. To make searches comparable across time and space, a given "search term × territory × time" unit needs to remain indexed as a 100 for all search queries. The highest value for foreign-language searches related to the topic of "Refugees" belongs to German-language searches coming from Denmark in September 2015, so this country-language-time is given an index value of $100^{33}$. To measure attention to the topic of "Refugees" at the linguistic origins, in local language, all search indices are made relative to the search in Austria in September 2015.

Second, the raw GT index is adjusted for the overall search volume coming from a given territory. Assuming that googling per person is relatively stable across space, one can interpret the GT index in per capita terms. However, the raw GT index is not adjusted for the linguistic composition of a region. Thus, to make foreign language search indices comparable, I account for the share of local (country $c$) population speaking origin $o$ language, $s_{o,c}$.

Figure 10 illustrates the dynamics of interest in "Refugees" for several European languages, both from within the linguistic homelands and from abroad. This measure clearly captures the growing salience of the Refugee Crisis from the beginning of 2015, with the

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[33]The value of 50 means that a given country-language-time search for "Refugees" was half as popular as the index one. The GT reports data as missing if the search volume is too low (e.g., too few speakers of a given language in a given residence country). As the result, I end up with 11 languages: BG, DE, ES, FR, HU, IT, PL, RO, RU, SE, TR. I also exclude English searches due to the widespread use of English.
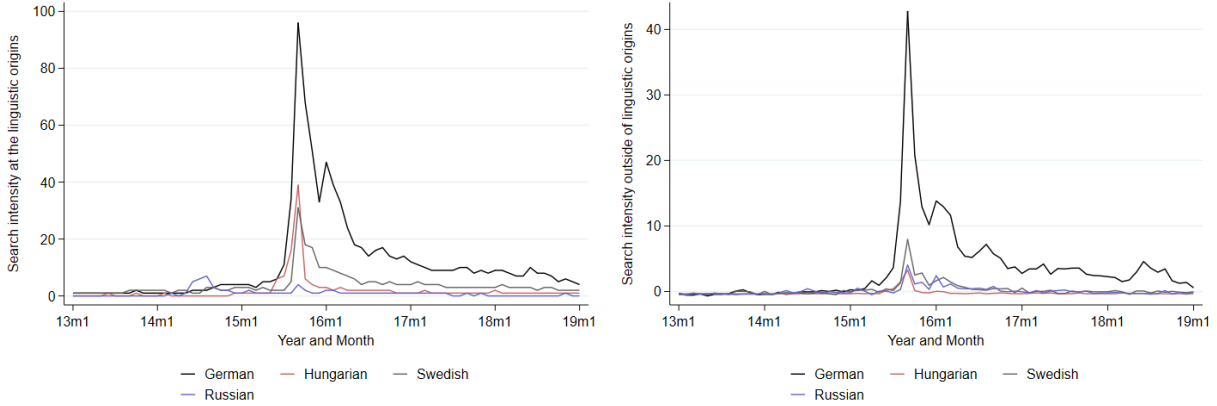
Figure 10: Google Trends search intensity: in selected origin countries (left), and in these origins' languages but coming from abroad (right), population adjusted.

peak of interest in the Fall of 2015. Moreover, the interest in concentrated among German-speakers, both at the origins and abroad, with spikes after Angela Merkel's speech in September 2015, and after Cologne assaults in January 2016. On this Figure, and in what follows, I omit searches coming from most affected countries (Turkey, Greece, North Macedonia, Serbia, Italy, Hungary, Austria, Germany, Sweden, and Switzerland), thereby restricting the sample to relatively less affected locations to avoid the issue of correlated exposures.

### *Spillovers of attention to the Crisis*

Does interest in the Refugee Crisis from abroad respond to interest at the origin? For illustration, consider two groups of immigrants living in France and tracing origins to neighboring countries: to Spain (relatively less affected country), and to Germany (heavily affected country). As Figure B12 demonstrates, search volumes for "Refugees" in German ("Flüchtlinge") and in Spanish ("Refugiados") coming from France are no different prior to 2014. However, once the Refugee Crisis begins, German-speakers google about refugees much more actively, which culminates in a 3-fold difference at the peak of the Crisis in September 2015[34]. An even stronger difference in attention is observed after the Cologne sexual assaults in January 2016: attention of German-speakers spikes, while there is no reaction from Spanish-speakers.

To address this more rigorously, I estimate the following model:

$$InterestRef_{c,o,t} = \alpha + \beta \cdot InterestRef_{o,t}^{orig} + \psi_{c,t} + \phi_o + \tau_t + s_{o,c} + \varepsilon_{c,o,t} \qquad (5)$$

where $InterestRef_{c,o,t}$ is interest in the topic of "Refugees" (measured via search volume)

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[34]The month with two of the most salient events of the Crisis: pictures of Alan Kurdi's dead body on the shores of Turkey, and Angela Merkel's "Wir schaffen das" speech, welcoming refugees to Germany.

coming from country $c$ in language $o$, in month $t$. Time component $\tau_t$ captures how salient the topic is at any given point in time. $\phi_o$ allows for differences across origins in average interest in the topic (due to, say, distance from the main events or other reasons). $InterestRef_{o,t}^{orig}$ is the measure of origin-country interest. Parameter $\beta$ captures the extent to which interest in the topic spills over from the origins to abroad. In all specifications I control for $s_{o,c}$ (share of country $c$ population coming from country $o$), and for (search)$country \times month$ FEs, $\psi_{c,t}$.

Table 5: Spillovers of attention to the Crisis: Google Trends multiple language search data.

| VARIABLES | (1) | (2) | (3) |
| --- | --- | --- | --- |
| | | GT Index | |
| GT Index (origin) | 0.355*** | 0.215*** | 0.254*** |
| | (0.033) | (0.059) | (0.028) |
| GT Index (origin) x Origin population share | | 55.956*** | |
| | | (16.837) | |
| | | | |
| Observations | 17,549 | 17,549 | 11,227 |
| Adjusted R-squared | 0.533 | 0.595 | 0.495 |
| Origin FE | Yes | Yes | Yes |
| Country FE | Yes | Yes | Yes |
| Month FE | Yes | Yes | Yes |
| Country x Month FE | Yes | Yes | Yes |
| Sample | Full | Full | Host not treated |

GT Index measures search intensity for term "Refugees" coming from outside of linguistic origins. GT Index (origin) is a corresponding search intensity coming from linguistic origins. Included languages (with sufficient non-missing data): BG, DE, ES, FR, HU, IT, PL, RO, RU, SE, TR. I exclude English language searches. Column (2) adds the interaction with local population share by country of origin (linear term for population share is also included). Column (3) excludes additional search locations (BE, BG, DK, FI, NL, NO) to safeguard against correlated exposures. Standard errors clustered at the level of origin countries in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Table 5 shows a strong spillover of interest from origins to same-language speakers abroad. Column (2), in addition, shows that the larger is the share of language $o$ speakers in country $c$, the stronger is the effect. Finally, column (3) restricts the sample further, excluding searches coming from "intermediately" exposed countries (BE, BG, DK, FI, NL, and NO), and still delivers a very strong and significant positive estimate for attention spillover. Thus, even those living in relatively non-affected places receive significant spillovers of interest in the Refugee Crisis from the origins.

Finally, I estimate dynamic $\beta_t$ coefficients to test if interest in the topic "Refugees" from outside of the linguistic origins follows that at the origins especially closely when the issue is most salient. As one can see from Figure 11, coefficients are largely not significant and do not display any stable pattern before the Refugee Crisis begins. However, once the Refugee

Crisis intensifies in 2015-2016, interest in this topic from abroad follows closely the interest at the linguistic origin. Spillovers become much less clear in 2018-2019.



Beta coefficient estimates by month. LHS variable is search intensity outside of linguistic origins. RHS variable is search intensity at the linguistic origin. The model includes language FEs, country of search x month FEs, and controls for the shares of population by origin in each country of search. I cluster s.e. at the origin-country level and report 90% confidence intervals. Omitted is Dec 2014, with the estimate 0.066 and the s.e. 0.117.
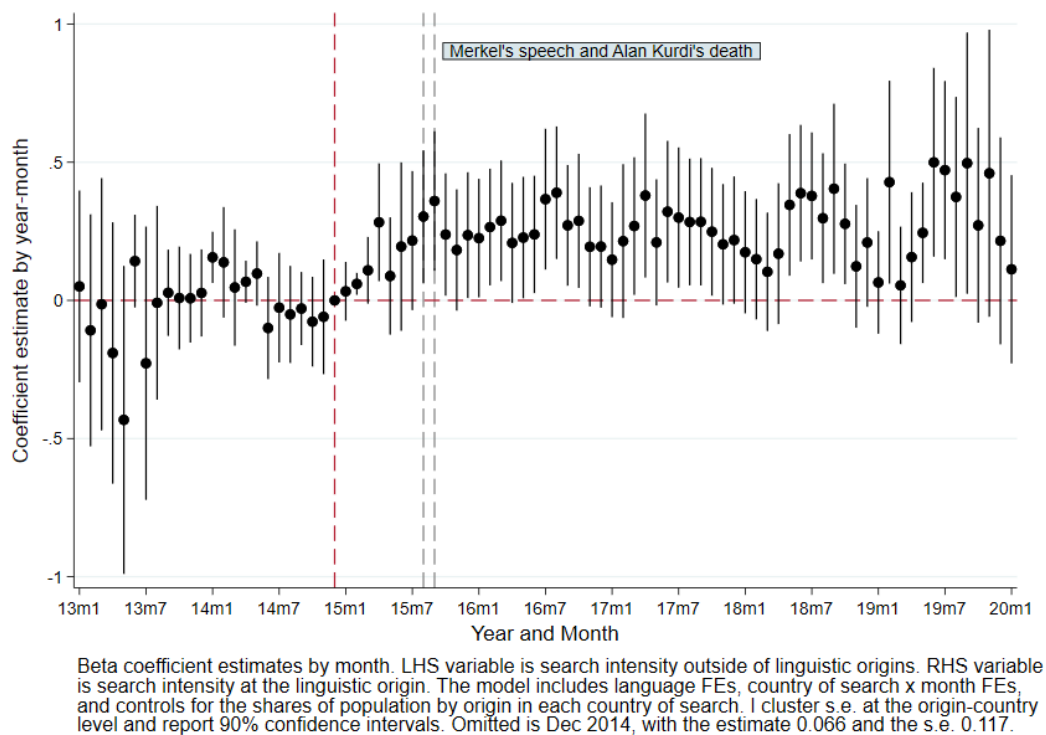
Figure 11: Dynamic estimates of search intensity spillovers from linguistic origins to abroad.

## 4.2   Network homophily: learning from like-minded groups

Who do immigrants receive opinions from? And why do those who left respond to opinion change among those who stayed behind? In this section, I show that immigrants are particularly responsive to changes among the like-minded groups at the origins.

The Refugee Crisis was a polarizing event not only across countries, but within many countries as well. Using the 0 to 10 political left-right scale from the ESS, I divide respondents into 3 roughly equally sized categories, "Left", "Center", and "Right", and calculate conditional averages at the $origin \times group \times time$ level. As illustrated on Figure 12, the Refugee Crisis induced a divergence between Left- and Right-leaning respondents. I exploit this $origin \times group \times time$ variation in political attitudes to demonstrate the role of network homophily in learning from the origins.

The idea of network homophily would suggest that communications and opinion exchanges are more intense among the like-minded groups. And indeed, Figure B13 shows
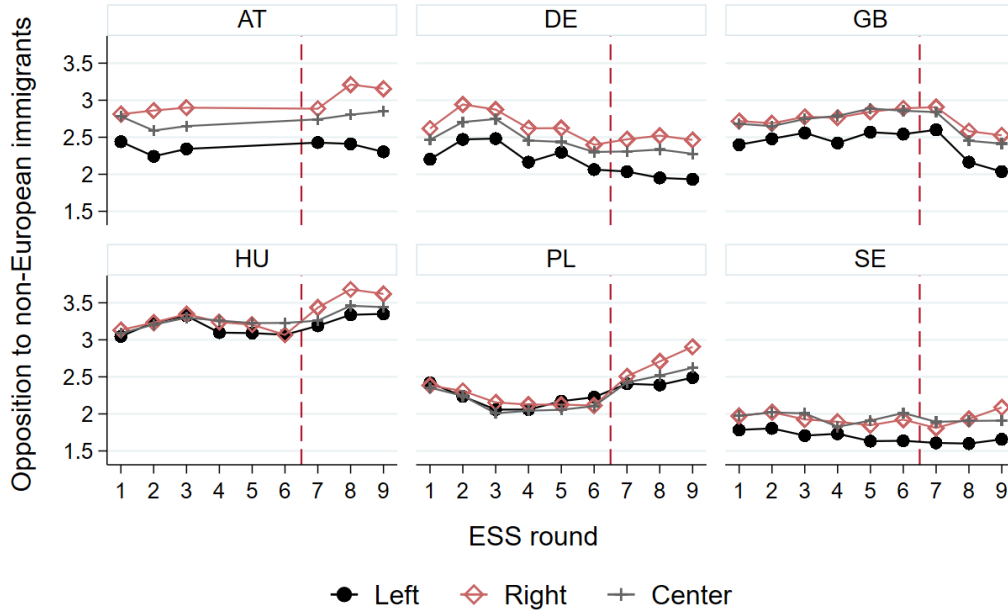
The Refugee Crisis began between rounds 6 and 7 (marked by the vertical line). Left, Right, and Center political groups are based on the 0 to 10 left-right scale from the ESS, where Left is composed of those with scores from 1 to 4, Center is composed of those with 5, and Right is composed of those with scores from 6 to 10. Each group's size is roughly 1/3 across all rounds.

Figure 12: Dynamics of opposition towards non-European immigrants, by political stance.

that immigrants identifying as politically left-leaning demonstrate a very strong and significant co-movement with left-leaning peers at the origins, but do not co-move with other political subgroups there. An even stronger evidence for homophily comes from separating respondents into left and "non-left" political subgroups. In that case, the homophily effects for non-left are stronger than when I have Center and Right groups separately. To test more rigorously whether immigrants respond particularly strongly to changing opinions among the like-minded groups at the origin, I estimate the following model:

$$Y_{i,o,g,c,t} = \alpha + \beta \cdot Y_{o,g,t}^{Orig.Av} + \eta X'_{i,o,g,c,t} + \phi_o + \tau_{c,t} + \psi_{o,g} + \kappa_{g,t} + \varepsilon_{i,c,t,r,g} \qquad (6)$$

where $Y_{o,g,t}^{Orig.Av}$ stands for average attitudes among group $g$ in country of origin $o$ in period $t$. Importantly, I identify $\beta$ controlling for $\kappa_{g,t}$, the overall dynamics of group $g$, and for $\psi_{o,g}$, which captures any specific characteristics of political spectrum by country of origin. Moreover, I also estimate $\beta_t$ coefficients separately for each time period, to show that homophily effects in learning from the origins activate when the Refugee Crisis is most salient.

Table 6 reports the estimates of $\beta$ from model (6). In all specifications, the origin-country average among the politically like-minded group exerts a strong effect on attitudes of the

Table 6: Origin country spillovers from similar groups

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | Oppose non-European immigration | | | | |
| Oppose non-Eur. immigr. (origin \| group) | 0.262*** | 0.151** | 0.328** | 0.313* | 0.384** |
| | (0.070) | (0.067) | (0.156) | (0.162) | (0.175) |
| Oppose non-Eur. immigr. (origin) | | | -0.177 | -0.208 | |
| | | | (0.165) | (0.170) | |
| | | | | | |
| Observations | 18,527 | 18,527 | 18,527 | 18,527 | 18,527 |
| Adjusted R-squared | 0.175 | 0.176 | 0.176 | 0.176 | 0.175 |
| Standard FEs | Yes | Yes | Yes | Yes | Yes |
| Individual controls | Yes | Yes | Yes | Yes | Yes |
| Group x round FE | Yes | Yes | Yes | Yes | Yes |
| Group x origin FEs | No | Yes | Yes | Yes | Yes |
| Origin time trends | No | No | No | Yes | Yes |
| Origin x round FEs | No | No | No | No | Yes |

Outcome variable is an individual-level response to a question "to what extent do you think [country] should allow people form the poorer countries outside of Europe?", with answers ranging from 1 (allow many) to 4 (allow none). Main treatment variable is the country-round-subgroup average value for the same question asked in respondent's country of origin. Subgroups are defined by political ideology: Left vs. Center & Right. Columns (3) and (4) control for simple origin-country average attitudes. Standard errors, clustered at the level of origin countries, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

expats. Moreover, as one can see from columns (3) and (4), simple origin-country average no longer matters once I include the subgroup origin average. Thus, this evidence suggests that most of learning from the origins is actually learning from like-minded origin-country subgroups. In column (5), I include a full set of Fixed Effects, including the Origin × Round FEs, so the effects of changes in origin-country subgroups are identified out of deviations from origin-country averages in each period (see Figure 12).

These results suggest that because of the network homophily effect, immigrants learn disproportionately from opinions prevalent among like-minded groups at the origins. Moreover, as one can see from Figure 13, the extent of learning from like-minded peers at the origins intensifies when the Refugee Crisis is most salient. In addition, origin-country effects are stronger when immigrants are not themselves exposed to the Crisis (host countries are neither major asylum nor transit countries, Figure B14).

These results on the importance of network homophily align very well with the evidence from Section 4.3 on the importance of Internet and social media ties to the origins. As was documented in several recent papers, social media often supplies like-minded news and opinions, and contributes to increased political polarization, Halberstam and Knight (2016), Allcott et al. (2020), Levy (2021) and a review in Zhuravskaya et al. (2020). Thus, the fact that most of the origin-country spillover comes from like-minded groups, together with
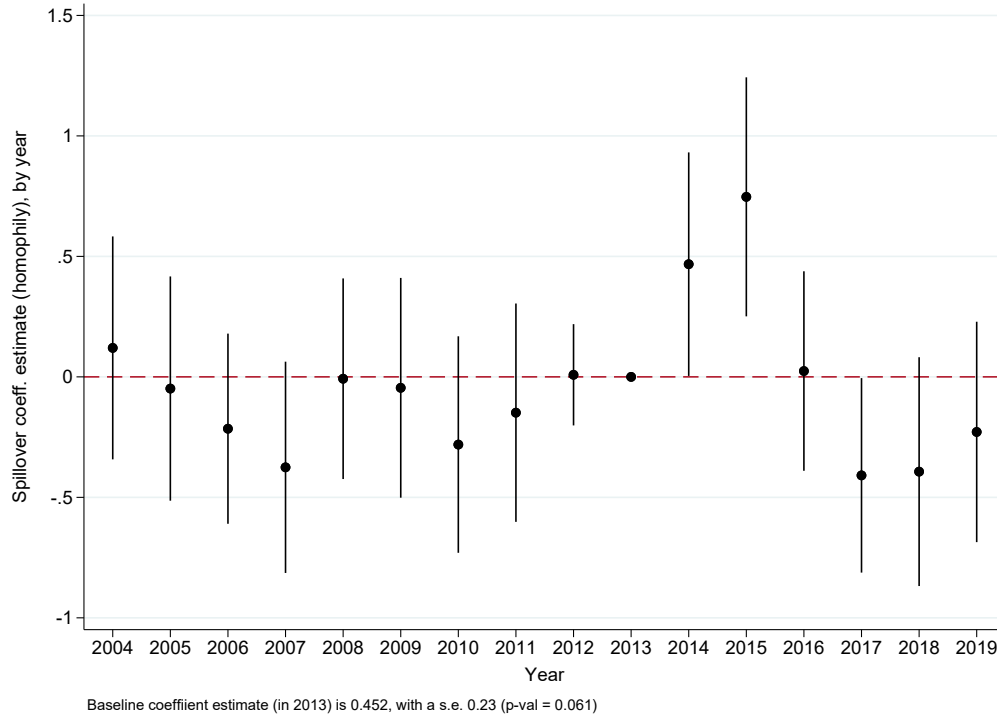
Figure 13: Dynamic spillover coefficients from like-minded groups at the origins.

the fact that spillovers are much stronger for regions and individuals well-connected to the origins via social media, suggest that social media is likely to be the key mode of transmission of attitudes from origins to immigrants. Moreover, this section suggests that while shared identity, culture and worldviews among co-ethnics living in different countries may be part of the story behind the co-movement in attitudes and policy preferences, the actual communication over networks is an important separate mechanism.

## 4.3  Integration at destination and network ties to the origins

How strongly immigrants respond to origin-country news and opinions may depend on their attachment to destination and ties to the origins. Below I test if this is indeed the case for several political topics explored in Section 2.

### 4.3.1  Role of immigrants' integration at destination

Beginning with the opposition towards non-Europeans as the main outcome, Figure 14 reports the estimates of interaction coefficients. The main result is that better integration into the host society weakens co-movements with the origins. Naturalization significantly

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decreases co-movement coefficient[35], while speaking origin language at home strengthens co-movements with the origins. Slightly less significantly, longer residence in the host country weakens the co-movement. Immigrants with tertiary education and those interested in politics tend to receive stronger spillovers from the origins, potentially because they pay more attention to salient political events happening abroad.



Estimates of the interaction terms applied to the main explanatory variable from model (1), specification from Table 1, column (4). Length of residence is only defined for 1st-gen immigrants. Speaking origin language is a dummy variable that equals 1 for respondents who report speaking the language of their origin country at home, and this language is not the official language of the host country. Displayed are 90% confidence intervals.
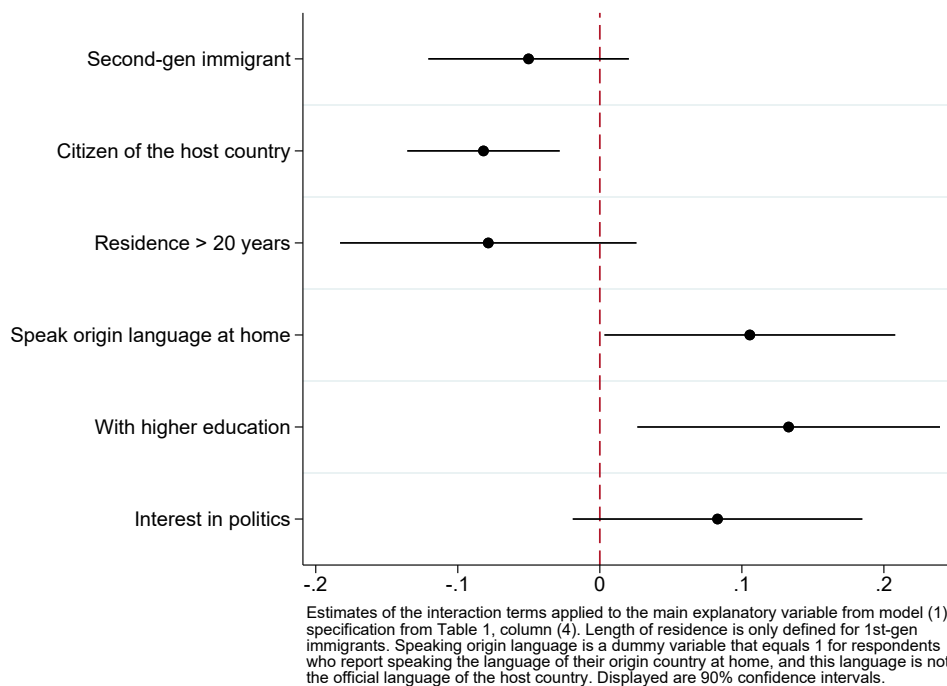
Figure 14: Individual-level interactions: role of immigrants' integration and other factors

To show that immigrants' social integration matters across a broader set of topics, on the Appendix Figure B16 I report similar interaction coefficients for the six political attitudes showing strong co-movement patterns in Section 2. The main result remains the same: better integration into the host society weakens immigrants' co-movement with the origins.

### 4.3.2 Network ties to the origins: the diaspora, the Internet, the family

How do information and attitudes get from origins to immigrants? In this section, I find suggestive evidence for three network channels: (i) local diasporas, (ii) social media connections to the origins, and (iii) cross-border family ties.

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[35]In the Appendix, Figure B15 shows that the relative strength of co-movement with host- and origin-country attitudes depends on the citizenship status. Naturalized immigrants show much stronger co-movement with destination, and a much weaker one with the origins.

**Co-national diasporas in the host regions**

To measure sub-national (NUTS-2 level) population shares by country of origin, I use data from Alesina et al. (2021). While available only for 16 European countries, this data allows me to test whether living in a region with a larger co-national diaspora makes one more responsive to origin-country changes.

Panel (a) of Figure 15 shows that larger local diasporas correspond to stronger spillovers of political preferences from the origins. For example, looking at the support towards the EU integration, each additional percent of co-nationals in the local population increases the spillover coefficient by 0.03 units.



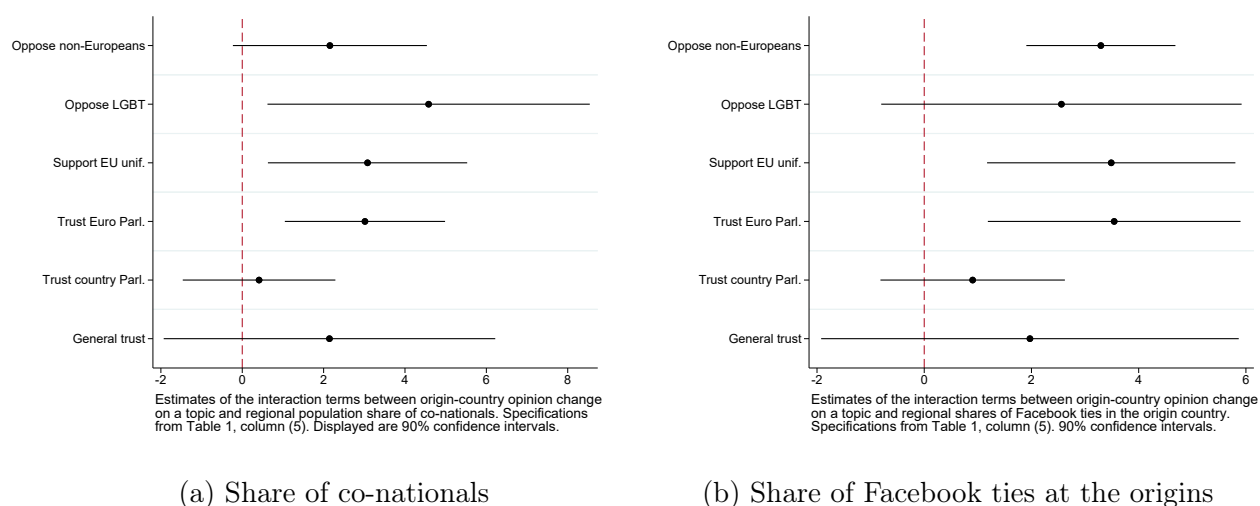(a) Share of co-nationals             (b) Share of Facebook ties at the origins

Figure 15: Interaction coefficients with (a) regional size of the local diaspora, and (b) regional Facebook ties to the origins. Several salient topics.

To take into account potential selection into regions with more co-nationals, I calculate the ratio of regional share of co-nationals to the host-country share of co-nationals, and split the sample into two parts based on the median (around 1) of this variable. As one can see on Figure 16, the results get even sharper: spillovers from the origins are almost absent for respondents living in regions where co-nationals are under-represented as compared to the host country overall. This can be the result of two forces. First, smaller diasporas provide less information and less social pressure to comply with origin-country norms. Second, people may select to regions with larger diasporas based on their level of attachment to the origins and integration at destination[36].

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[36]Indeed, immigrants speaking origin language at home, less educated, and those who migrated recently - all are more likely to live in regions with large diasporas.
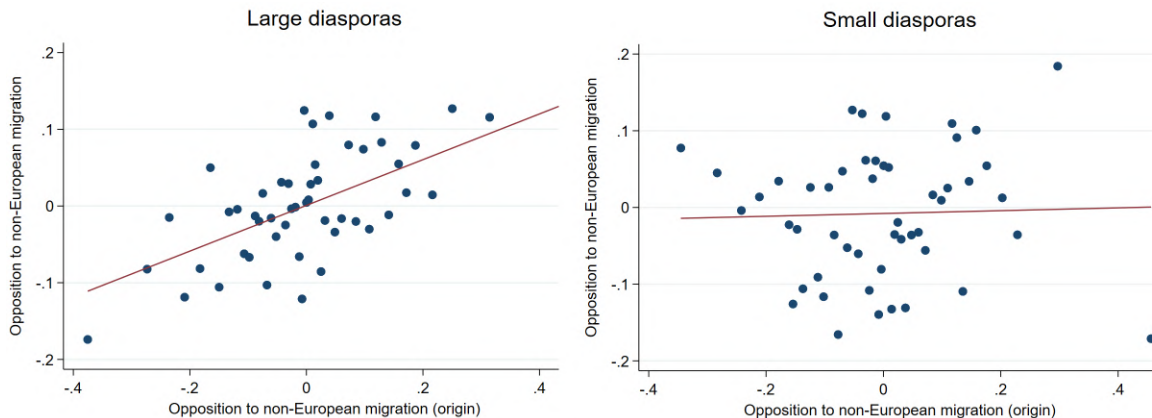
Figure 16: Binscatter plot: co-movement with the origins for immigrants living in regions with larger (left) and smaller (right) co-ethnic diasporas

**Social media ties to the origins**

To measure online social media ties to the origins I use data from Facebook's Social Connectedness Index (SCI) introduced in Bailey et al. (2018). The SCI is a measure of connectivity between a pair of geographic regions $(i, j)$ based on the number of Facebook friendship links as a share of maximum possible number of links. Formally, $SCI_{i,j} = \frac{Connections_{i,j}}{Users_i \cdot Users_j}$[37]. Panel (b) on Figure 15 shows that the larger is the share of region $i$ Facebook friendships that go to origin-country $o$, the stronger is the spillover coefficient for immigrants from that origin living in that region. As before, this holds for several salient topics.

Quite naturally, the size of the local diaspora and the share of Facebook ties to the origins are very closely correlated, see Figure B18 in the Appendix[38], which makes it harder to separate the two effects. To side-step this issue, I measure the intensity of local interactions and the intensity of Internet use.

First, I use the ESS question about the frequency of meetings with friends, colleagues, and relatives. In the Appendix Table C6, columns (1)-(3), I show that the effect of large diasporas is only there for respondents who frequently meet with their friends and colleagues. Second, I use the ESS variable that gives the frequency of using the Internet. Columns (4)-(5) of Table C6 show that respondents not socially active locally receive significant spillovers from the origins only if they actively use the Internet. In contrast, the Internet does not

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[37]Figure B17 shows ties to Germany at the NUTS-2 level, confirming a significant variation at the regional level, and that geographically/linguistically closer regions have stronger social media ties to Germany.

[38]A 1 p.p. higher local share of population from country $i$ corresponds to a 1.28 p.p higher share of local social media ties with country $i$. Thus, immigrants' tend to have social media ties disproportionately in their countries of origin.

play any role for locally active respondents. Thus, there is suggestive evidence that both local and online communications facilitate spillovers from the origins[39].

**Cross-border family ties**

To examine the role of family networks in cross-border transmission of attitudes, I use the data on local household composition from the ESS. This allows me to distinguish between immigrants who live together with their parents and those who do not. Especially for 1st-gen immigrants, not having parents in the household usually means that they remain at the origins, creating an additional channel of transmission from the origins. And indeed, columns (1) and (2) in Table C7 show that co-movement with the origins is weaker for immigrants living with their parents[40], more so for 1st-gen immigrants.

Additional evidence supporting the within-family transmission comes from the fact that higher parental education strengthens the co-movement with the origins as much as does immigrants' own education, see columns (3)-(5) in Table C7. Assuming that a higher parental educational corresponds to a stronger interest in politics, a positive interaction with parental education suggests that parental opinions constitute an important transmission channel.

# 5 Extensions and generalizations

In this section I provide evidence for the external validity of the "learning from the origins" phenomenon. First, I show that European Refugee Crisis affects political preferences of 1st- and 2nd-generation immigrants in the US. Second, I show that the passage of same-sex marriage laws at the origins also sends spillover effects to the diasporas abroad.

## 5.1 Cross-Atlantic spillovers: European Refugee Crisis in the US

While the core of the paper focuses on intra-European spillovers, this section documents political spillovers from Europe to the US. Using the General Social Survey (GSS) data, I show that when European countries accept and host refugees after 2015, US respondents with

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[39]Traditional media, such as TV, can also transmit opinions from the origins. However, since the majority of TV channels target local audiences, immigrants are predominantly exposed to host-country opinions via TV. Using the ESS question on the amount of time spent on political news via TV, Figure B19 shows that an hour of TV weakens the co-movement by 0.06 units (around 20% of the baseline coefficient).

[40]I control for the interaction of origin-country attitudes with respondents' age, because age and cohabitation with parents are strongly correlated. Moreover, I may underestimate the true within-family spillovers, as those living separately from parents are probably less attached to their family and origins.

family origins in these countries show improved attitudes towards immigrants and become more political liberal overall. One important advantage of looking at spillovers across the Atlantic is that the US is far away from the Crisis's epicenter alleviating further any concerns about correlated exposures to the Crisis. Moreover, the GSS allows identifying immigrants down to 4th generation, so it's possible to test how the strength of reaction to origin-country events fades with each additional generation.

Table 7: DID estimates of origin-country asylum treatment on immigrants in the US.

| VARIABLES | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | Oppose immigration to the US | | | | Conservative |
| Origin treated (Host Refs.) x Post2016 | -0.535*** | -0.507*** | -0.182** | -0.072 | -0.307* |
| | (0.150) | (0.143) | (0.077) | (0.044) | (0.153) |
| Observations | 678 | 678 | 1,816 | 5,215 | 1,005 |
| Adjusted R-squared | 0.070 | 0.063 | 0.060 | 0.073 | 0.066 |
| Origin FE | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes |
| Host Region FE | Yes | Yes | Yes | Yes | Yes |
| Host Region x Time FEs | No | Yes | Yes | Yes | Yes |
| Individual controls | Yes | Yes | Yes | Yes | Yes |
| Sample | 1-2 gen | 1-2 gen | 1-2-3 gen | 1-2-3-4 gen | 1-2 gen |

Outcome variable is an individual-level response to a question "Do you think the number of immigrants to America nowadays should be...?", with answers ranging from 1 (increased a lot) to 5 (reduced a lot). Main treatment variable is the origin-country treatment status interacted with the post-2016 dummy (the first survey year after the Refugee Crisis began in Europe). Columns (1)-(2) only use 1st and 2nd gen migrants. Column (3) adds 3rd gen migrants, and column (4) adds 4th gen migrants. Column (5) uses a measure of liberal vs. conservative values, on a scale from 1 (extremely liberal) to 7 (extremely conservative). Individual controls include gender, age, age squared, marital status, employment status, education, and race. Standard errors, clustered at the level of origin countries, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

The GSS rounds are conducted every two years, and I focus on years 2006-2018, for which the GSS consistently recorded respondents' policy preferences on whether the number of immigrants in the US should be increased or decreased[41]. The first post-Crisis round is 2016. Column (1) in Table 7 shows that when respondents' country of origin accepts and hosts refugees in 2015-2016 (e.g., Germany or Sweden) they reduce their opposition to additional immigration to the US, as compared to respondents coming from European countries that did not host many refugees (such as Hungary, Great Britain, or Spain). The effect is not driven by differential exposure to local shocks in the US, as suggested by column (2), and is quantitatively large: about 1/2 of the pre-treatment s.d. of 1.1. There is a clear

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[41]Unfortunately, unlike the ESS, the GSS does not allow distinguishing between various types of immigrants. Moreover, questions on opinions about refugees are asked in only one round in the GSS.
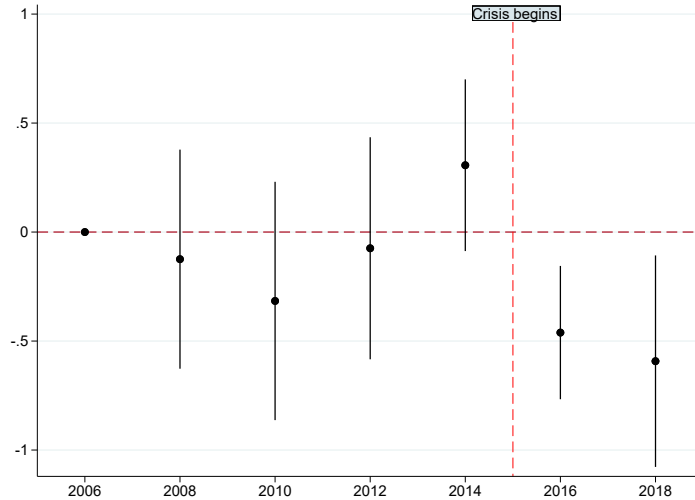
Figure 17: Event study: the effect of Crisis at the origins (asylum treatment) on the opposition towards immigration in the US

weakening of reaction to origin-country events with each subsequent generation of ancestry: column (3) adds 3rd-gen immigrants (defined as in Algan and Cahuc (2010)) and shows a much weaker effect. Column (4) adds 4th-gen immigrants, and the effect almost disappears. Finally, column (5) looks at the self-reported liberal vs. conservative stance and shows that respondents from Asylum-treated origins become more liberal overall.

Figure 17 shows the dynamic DID estimates, and confirms (i) the absence of significant pre-trends across groups of immigrants in the US, and (ii) that the effect of the Crisis kicks in 2016, and remains strong until at least 2018[42].

## 5.2   Same-sex marriage laws and LGBT attitudes abroad

Does the "learning from the origins" phenomenon generalize to other events and topics, not directly related to migration? Below I use the staggered passage of same-sex marriage (SSM) laws across European countries and the ESS data on opposition to LGBT rights to test whether 1st- and 2nd-gen immigrants abroad are affected by the SSM laws at the origins. While each individual SSM law was less salient in the media and the public discourse than the Refugee Crisis of 2015, the staggered passage of these laws allows for a better identification within the event-study framework. Figure B20 in the Appendix shows when a SSM law passed in each country.

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[42]If I increase the sample size by either (i) adding respondents of non-European origins to the control group, or (ii) adding 3rd-generation immigrants, the absence of pre-trends becomes much clearer.

Beginning with a simple DID model, columns (1)-(2) in Table 8 show that opposition towards the LGBT among the expats abroad weakens in the years following the passage of the SSM law at the origins. Columns (3)-(4) show that, as before, the effect is driven by non-citizens at destination and 1st-gen immigrants. Importantly, liberal reforms at the origins create divergent reactions across the political spectrum abroad: column (5) reveals that left-leaning respondents increase their support of the LGBT freedoms, while center and right-leaning respondents do not conform to the policy change at the origins. Column (6) shows that these results hold and are even more pronounced for immigrants living in countries that never legalized same-sex marriage locally, potentially because local influence does not saturate origin-country effects in such host countries.

Table 8: Same-sex marriage (SSM) laws at the origin and LGBT attitudes abroad

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| | | | Oppose LGBT rights | | | |
| After SSM law passed (origin) | -0.108*** | -0.075** | -0.184*** | -0.130*** | -0.136** | -0.191*** |
| | (0.035) | (0.032) | (0.045) | (0.035) | (0.053) | (0.066) |
| After SSM law passed (origin) x Citizen | | | 0.174*** | | | |
| | | | (0.043) | | | |
| After SSM law passed (origin) x 2$^{nd}$ gen | | | | 0.163*** | | |
| | | | | (0.030) | | |
| After SSM law passed (origin) x Center | | | | | 0.043 | 0.106* |
| | | | | | (0.037) | (0.054) |
| After SSM law passed (origin) x Right | | | | | 0.119* | 0.374*** |
| | | | | | (0.068) | (0.117) |
| | | | | | | |
| Observations | 34,350 | 34,350 | 34,317 | 34,350 | 29,342 | 15,055 |
| Adjusted R-squared | 0.271 | 0.275 | 0.277 | 0.278 | 0.279 | 0.279 |
| Origin FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Host FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Host x round FE | No | Yes | Yes | Yes | Yes | Yes |
| Region FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Individual controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Group x round FE | No | No | No | No | Yes | Yes |
| Sample | Full | Full | Full | Full | Full | Host never SSM law |

Outcome variable is an individual-level response to a question "Please say to what extent you agree or disagree with each of the following statements: Gay men and lesbians should be free to live their own life as they wish", with answers ranging from 1 (agree strongly) to 5 (disagree strongly). Main treatment variable is the origin-country passage of the same-sex marriage legislation, with values of 1 for time periods after the passage of the legislation. Column (3) interacts the main treatment with the host-country citizenship status. Column (4) interacts with the generation of migration (1$^{st}$ or 2$^{nd}$). Column (5) interacts the main treatment with Left-Center-Right political identification of the respondents (smaller sample size). Column (6) retains only those expats currently residing in host countries that never passed a SSM law themselves. Standard errors, clustered at the level of origin countries, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Exploring the homophily effect and the dynamics of the opinion response abroad further, on Figure 18, I show the event-study estimates for respondents on political Left and political Right. Clearly, there is no evidence for pre-trends among either of the two groups. There

is a strong positive response to origin-country SSM law among Left-leaning expats, but a backlash from the Right-leaning expats. Both effects, however, are short-lived, potentially because the event salience is smaller and shorter than in the Refugee Crisis case.
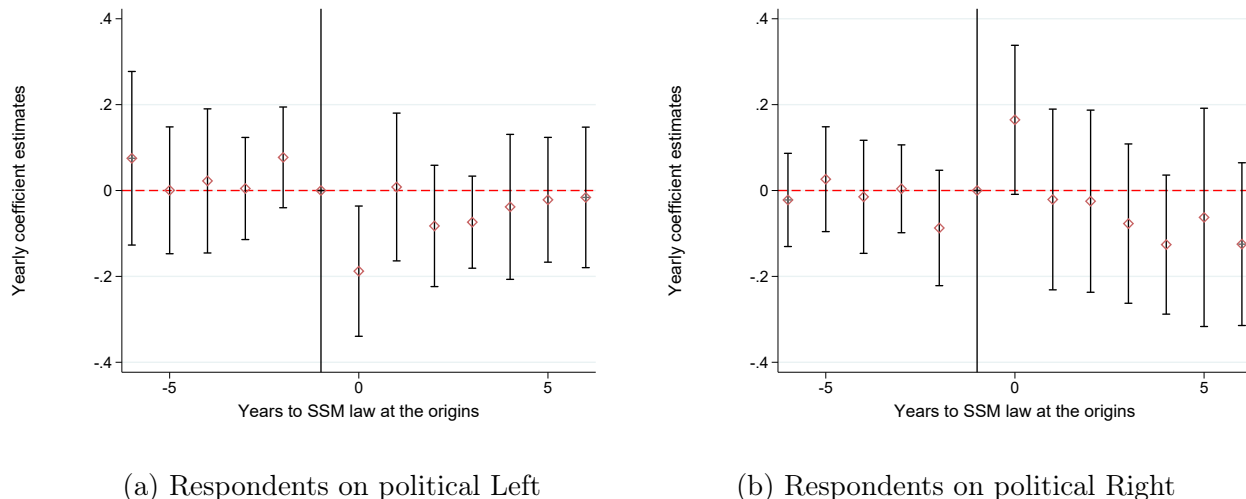


(a) Respondents on political Left

(b) Respondents on political Right

Figure 18: Dynamics of opposition to LGBT: event-study around SSM laws at the origins.

# 6   Conclusion

This paper documented the phenomenon of "learning from the origins" in the dynamics of political preferences and voting behaviors: following salient events, political opinions spill over from abroad via pre-existing migration networks. There are significant spillovers from origins to (1st and 2nd-gen) immigrants for a range of topics: opposition to non-Europeans, anti-LGBT attitudes, and so on. Three channels facilitate the transmission: (i) local co-national diasporas, (ii) online social ties to the origins, and (iii) within-family cross-border networks. Social integration at destination, such as naturalization, tends to weaken contagion from abroad, underscoring another reason for the importance of immigrants' integration.

To get closer to causality, this paper focused on the European Refugee Crisis of 2015, one of last decade's most salient events that strongly affected some European countries, but did not affect others. Origin-country exposure to the Refugee Crisis and associated asylum policies can be seen as plausibly exogenous for the expats, which allows evaluating their effect on (i) opposition to non-Europeans, and (ii) support for far-right parties among the diasporas abroad. The main finding is that favorable asylum policies at the origins (accepting and hosting refugees) reduced opposition to non-Europeans and far-right voting

among the diasporas abroad. In contrast, large transitory refugee inflows through the origins sent abroad the backlash, similar to what was happening in the main transition countries.

Evidence from online search activity suggests that salient events attract disproportionate attention of co-nationals from abroad. Moreover, evidence on the importance of network homophily suggests that most of the learning from the origins is driven by like-minded groups. Thus, in the era of online media, when maintaining attention to distant friends and events in real-time is virtually cost-less, there emerges a fertile ground for the cross-border spread of ideology, both populist/xenophobic and more liberal. These results generalize beyond refugee attitudes (similar spillovers following the passage of same-sex marriage laws) and to non-European settings (Refugee Crisis spillovers are felt in the US).

Further research can shed more light on the mechanisms behind the international contagion of political preferences. How much of these effects are explained by inter-personal transmission vs. media consumption? Is preference/belief updating mostly driven by identity and social pressure or by rational learning? In the age of modern ICTs, do we learn from distant places as much as we do from events nearby? These and related questions may enrich the research on cultural and political change, polarization, and immigrants' integration.

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# Online Appendix

# to

# "Learning from the Origins"

# A. Conceptual framework

In this section, I describe a simple conceptual framework to guide our thinking about how identity, information, and issue salience can shape the process of learning from the origins. The model is inspired by two strands of research: the economics of identity (Akerlof and Kranton (2000)) and the economics of salience and attention (Bordalo et al. (2012)).

Consider an individual who forms an opinion or decides on an action $a$ regarding an issue $A$: for example, whether refugees coming to Europe bring more good than harm, or whether to vote for a far-right candidate. An individual derives utility from acting in a way aligned with the state of the world, $a_t^*$. However, an individual is also subject to a pressure to comply with the opinions/actions $a_{o,t}$ prevalent in group $o$ that they identify with. Consider the following utility function that combines these two motives:

$$U_{i,o,t}(a_{i,o,t}, a_t^*, a_{o,t}) = \lambda \cdot (a_{i,o,t} - a_{o,t})^2 + (1 - \lambda) \cdot (a_{i,o,t} - a_t^*)^2, \tag{7}$$

where $\lambda$ is the weight of identity concerns. State of the world is unknown, but individual $i$ has a prior about $a_t^*$ that is normally distributed around mean $a_{i,o}^{pr}$ with a variance $\sigma_{a^{pr}}^2$ [43].

Attitudes and actions prevalent in the group one identifies with also carry a signal $s_{o,t}$ about the true state of the world. Assume for simplicity that individuals only pay attention to signals coming from groups they identify with, and that attitudes in group $o$ are a noisy signal of the true state of the world, with precision $1/\sigma_{\varepsilon_{o,t}}^2$ and potentially some bias $a_o$, so $s_{o,t} = a_{o,t} = a_t^* + \varepsilon_{o,t}$, where $\varepsilon_{o,t} \sim \mathcal{N}(a_o, \sigma_{\varepsilon_{o,t}}^2)$. Individual $i$ wants to take an action/form an opinion that solves

$$\max_{a_{i,o,t}} \lambda \cdot (a_{i,o,t} - a_{o,t})^2 + (1 - \lambda) \cdot \mathbb{E}((a_{i,o,t} - a^*)^2 | s_{o,t}). \tag{8}$$

It is straightforward to show that the solution to this problem is:

$$a_{i,o,t} = \lambda \cdot a_{o,t} + (1 - \lambda) \cdot (\gamma_{o,t} \cdot a_{o,t} + (1 - \gamma_{o,t}) \cdot a_{i,o}^{pr}), \tag{9}$$

where $\gamma_{o,t} = \frac{\sigma_{a^{pr}}^2}{\sigma_{a^{pr}}^2 + \sigma_{\varepsilon_{o,t}}^2}$ captures the relative precision of the signal versus the prior. Thus, more noisy information from group $o$ (higher values of $\sigma_{\varepsilon_{o,t}}^2$) means an agent updates his or her own position less. Overall, equation (9) gives a micro-founded version of the linear-in-means peer effects model, where peers' actions/opinions matter through two channels: identity and information. The extent to which individual $i$ updates his own position $a_{i,o,t}$

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[43] Note that the prior can also depend on the group one belongs to: country of origin, or current country/region, or religious group, etc.

for each unit of change in the group he identifies with is given by:

$$\frac{\partial a_{i,o,t}}{\partial a_{o,t}} = \lambda + (1 - \lambda) \cdot \gamma_{o,t}. \tag{10}$$

Thus, a stronger sense of belonging to group $o$ increases the extent of co-movement/adjustment to that group's actions and opinions. Moreover, more precise information coming from group $o$ also increases the extent of adjustment to group's changing stance. Importantly, all the fixed biases and priors are naturally differenced out.

What determines the signal's precision? While in this simple version of the model signal's precision is exogenous, one can reasonably argue that it may depend on (i) the amount of information coming from a group (a larger number of noisy individual signals makes the average message more precise), (ii) the extent to which a group is an 'expert' in a given issue (certain groups may have more information about certain issues), (iii) issue salience among the members of a group, and so on. It is easy to extend this toy model to incorporate multiple sources of signals (e.g., adding host country attitudes as a source of information) and endogenous allocation of attention weights between host and origin societies.
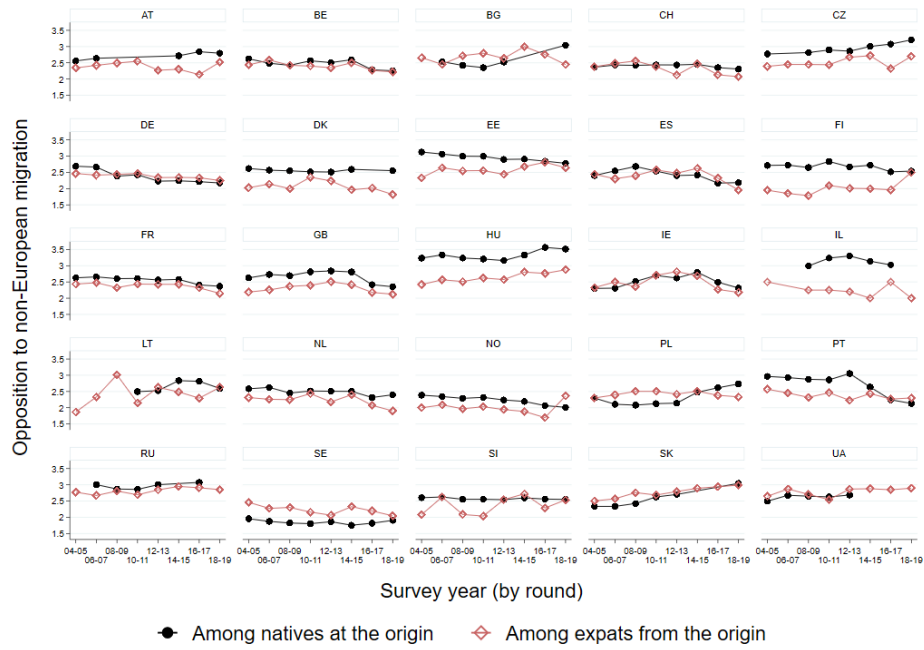
# B. Additional Figures



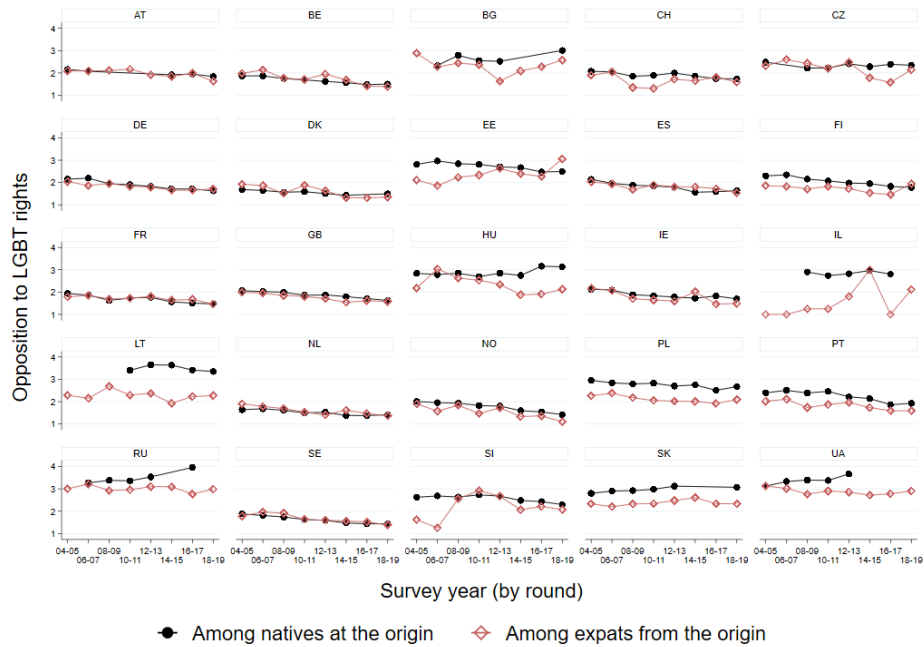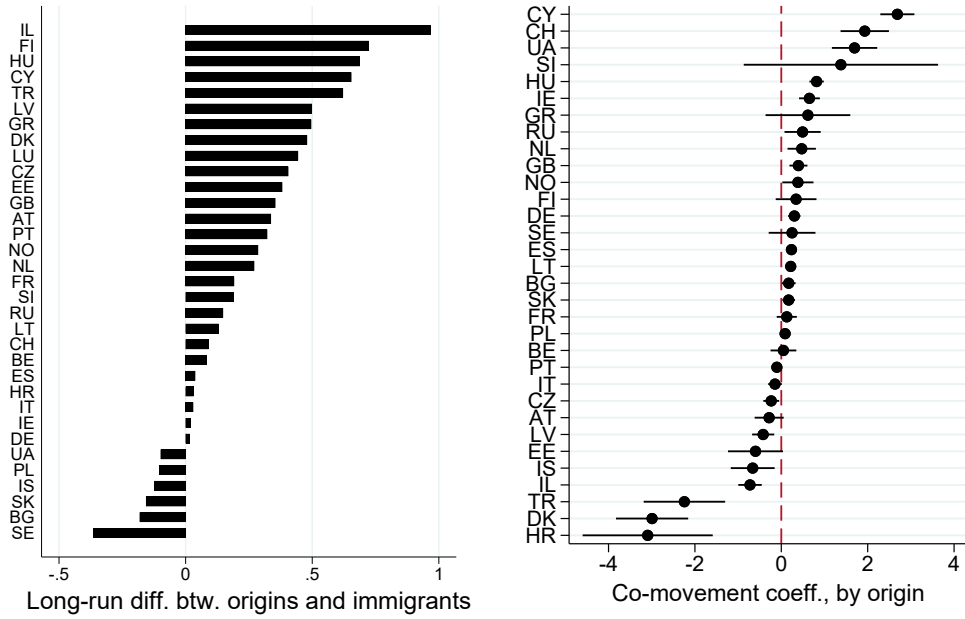Figure B1: Opposition towards non-Europeans: among the expats and at the origins.



Figure B2: Opposition towards LGBT rights: among the expats and at the origins.

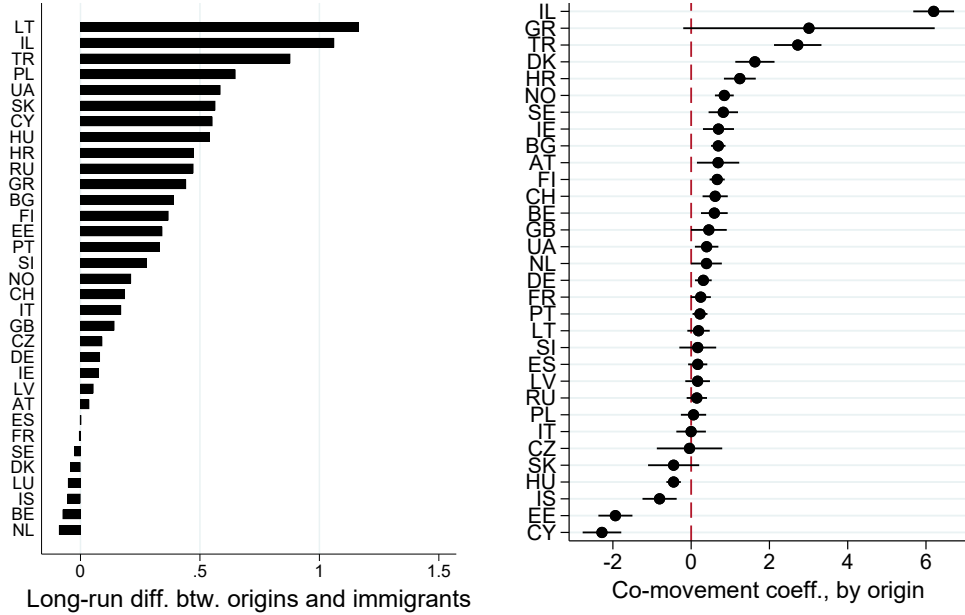## Opposition to non-Europeans



## Opposition to LGBT rights



Figure B3: On the left are long-run differences between origins and immigrants. On the right are country-specific $\beta$ coefficients from model (1).
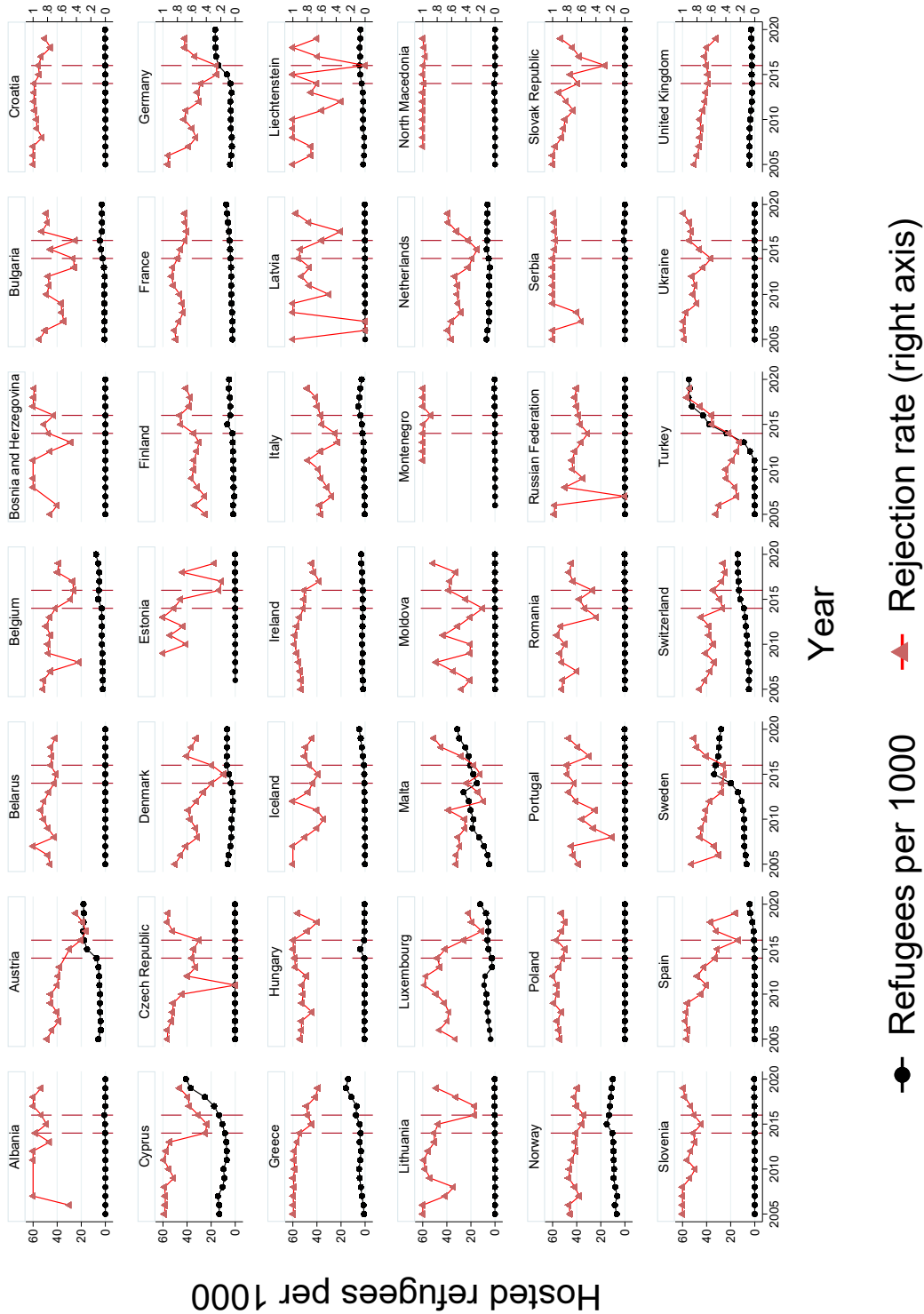
Figure B4: Hosted refugee populations per capita (end of year), by country, and asylum application rejection rates (right axis). Both for non-European asylum seekers.
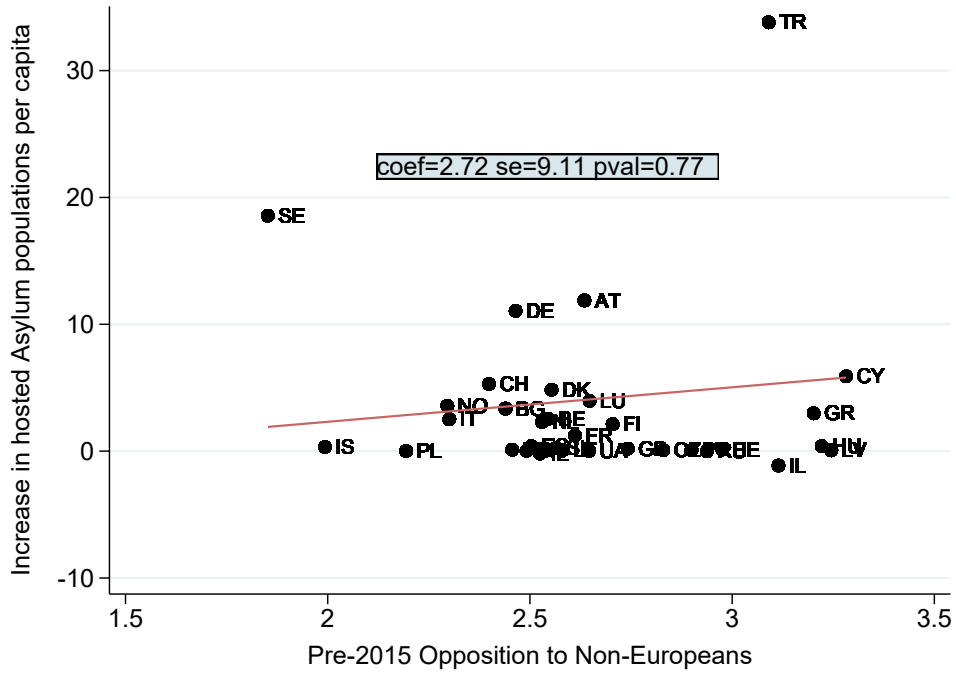
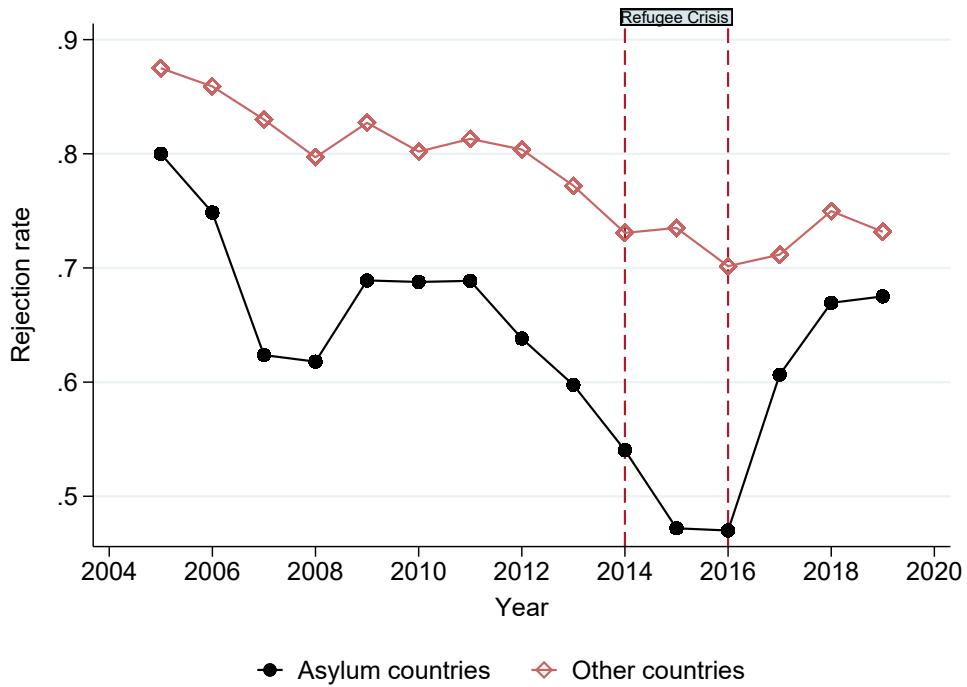Figure B5: Increase in hosted refugees vs. pre-2015 opposition to non-Europeans



Figure B6: Changes in asylum rejection rates, by Asylum-treatment status.
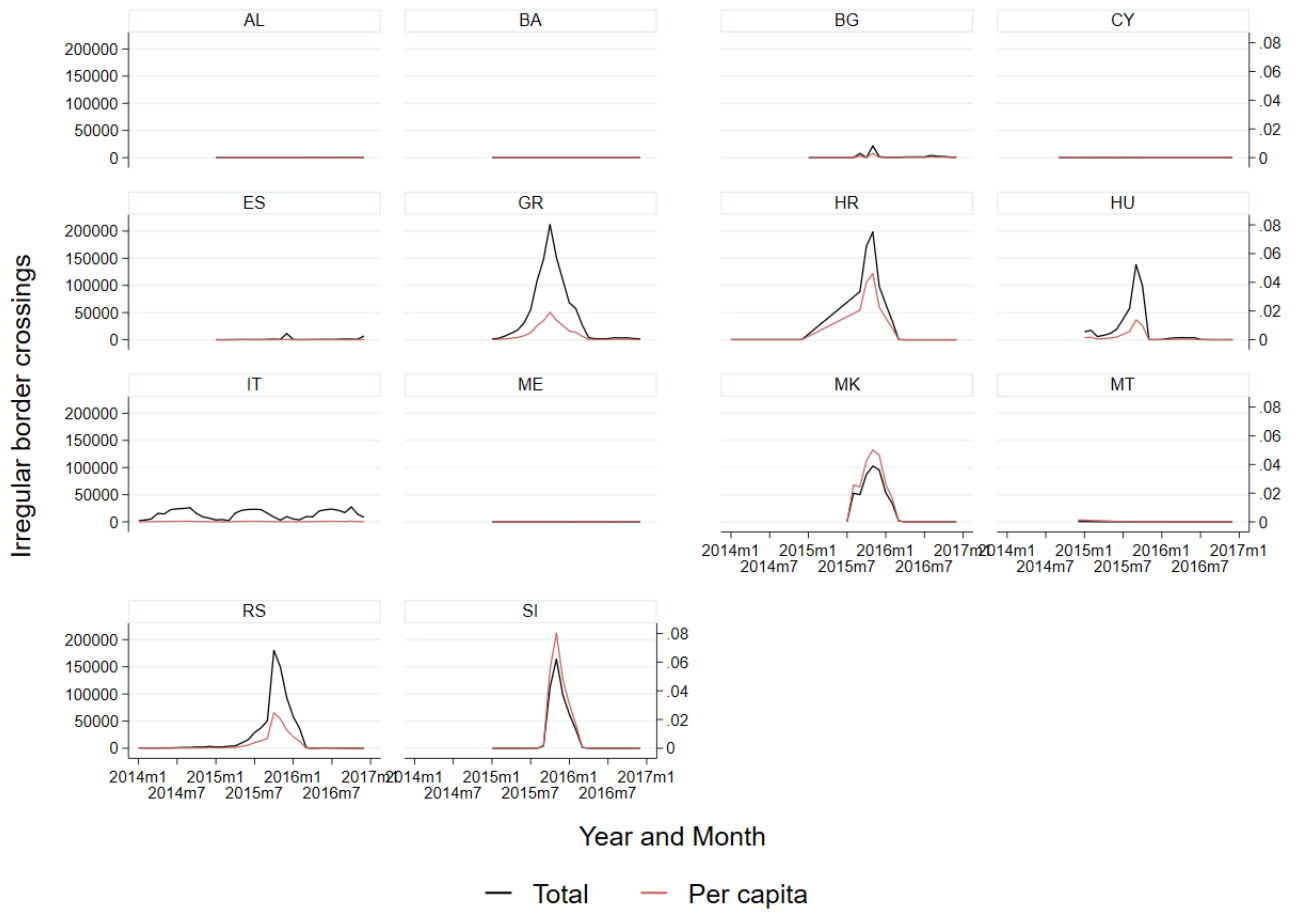
A7

Figure B7: Irregular border crossings, entry and transit countries. Based on the IOM data.

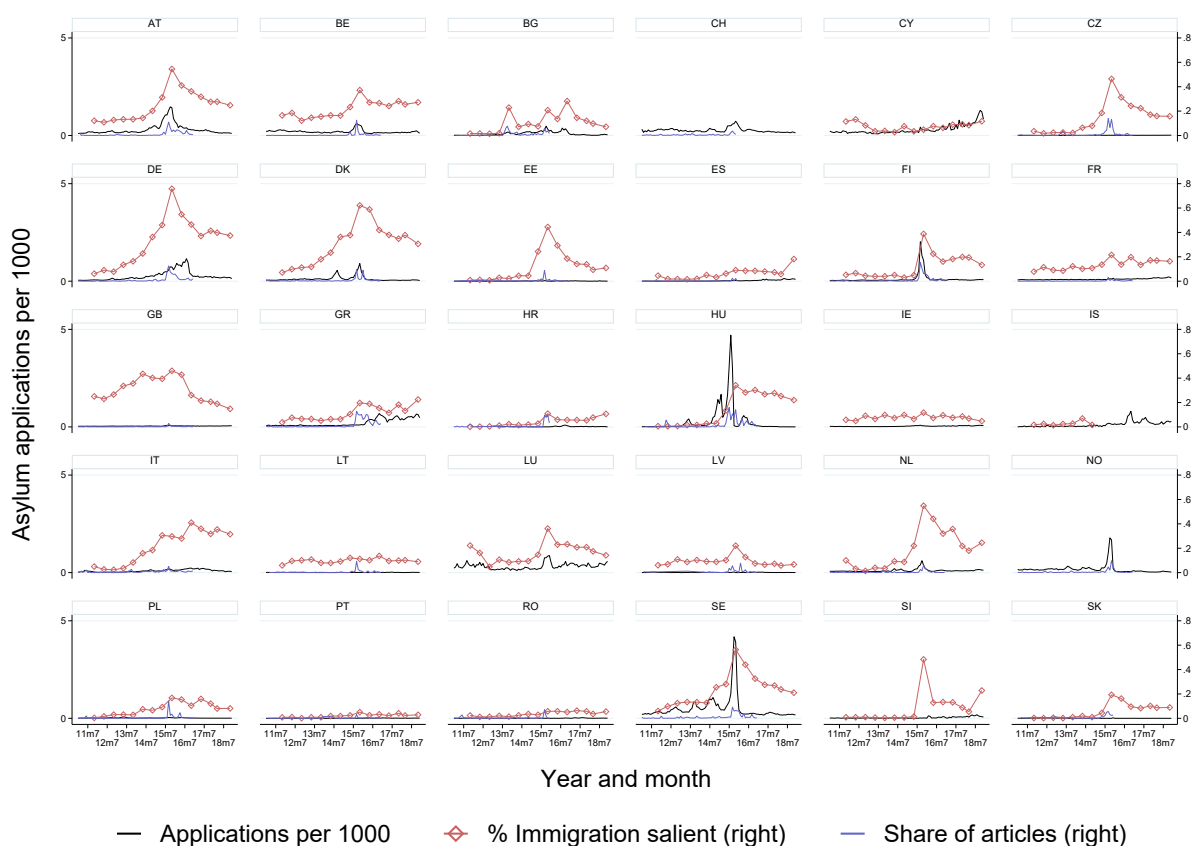Figure B8: Refugee Crisis salience: % saying immigration is salient (Eurobarometer), share of refugees-related media articles (GDELT), and asylum applications (Eurostat)



(a) Which party support now

(b) Which party voted for in the last election
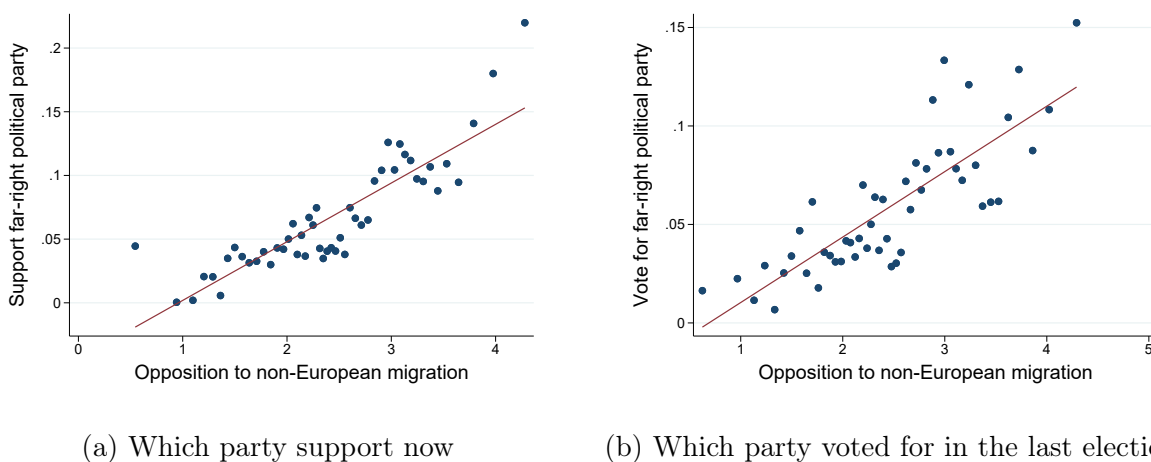
Figure B9: Binscatter: opposition to non-Europeans and support for far-right parties among immigrants. Controls: origin FEs, destination x time FEs, and individual characteristics.
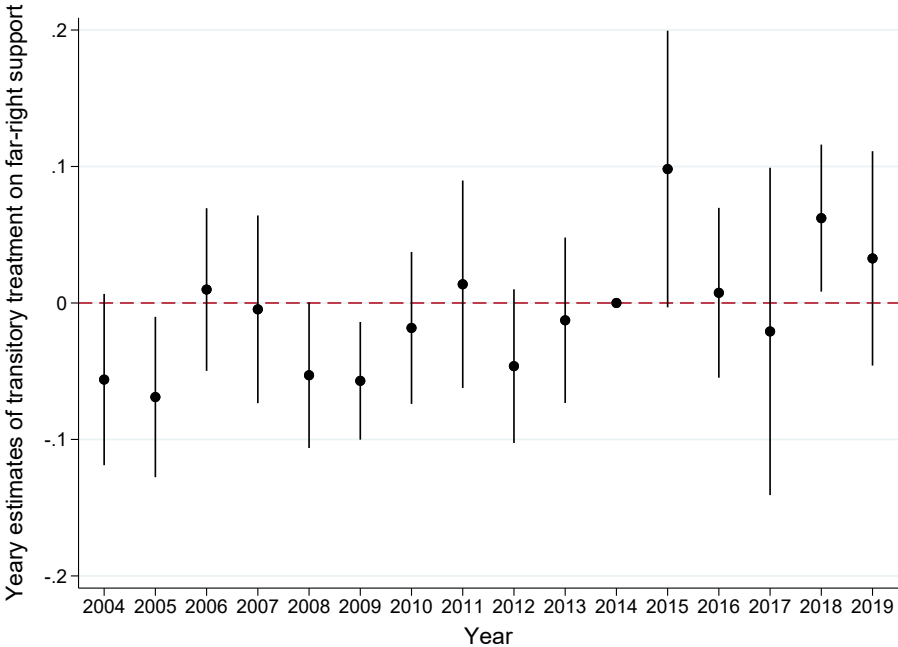
Figure B10: Yearly estimates of origin-country Transit treatment on voting for far-right parties by the expats abroad.
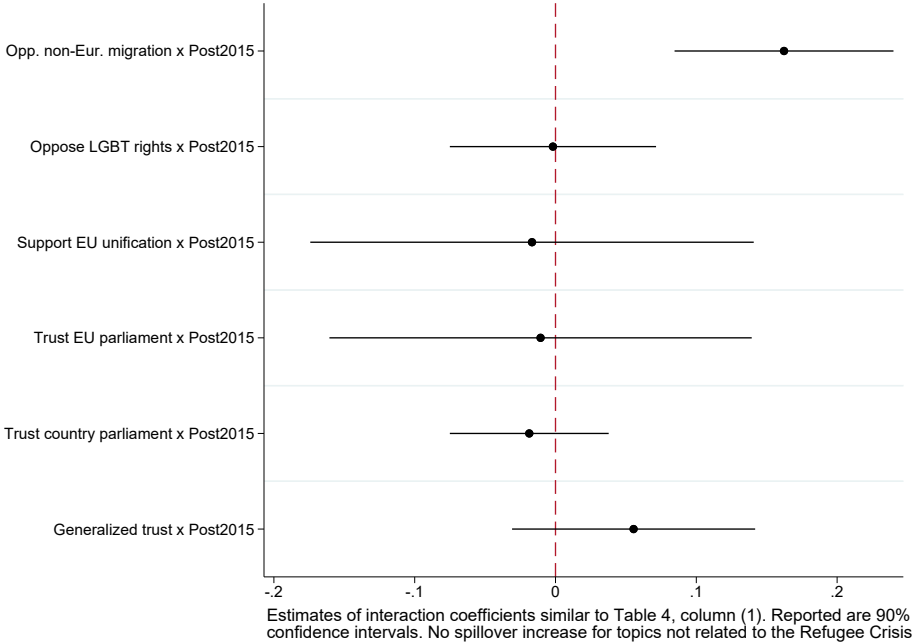


Figure B11: Increase in spillover coefficients after 2015: placebo topics.
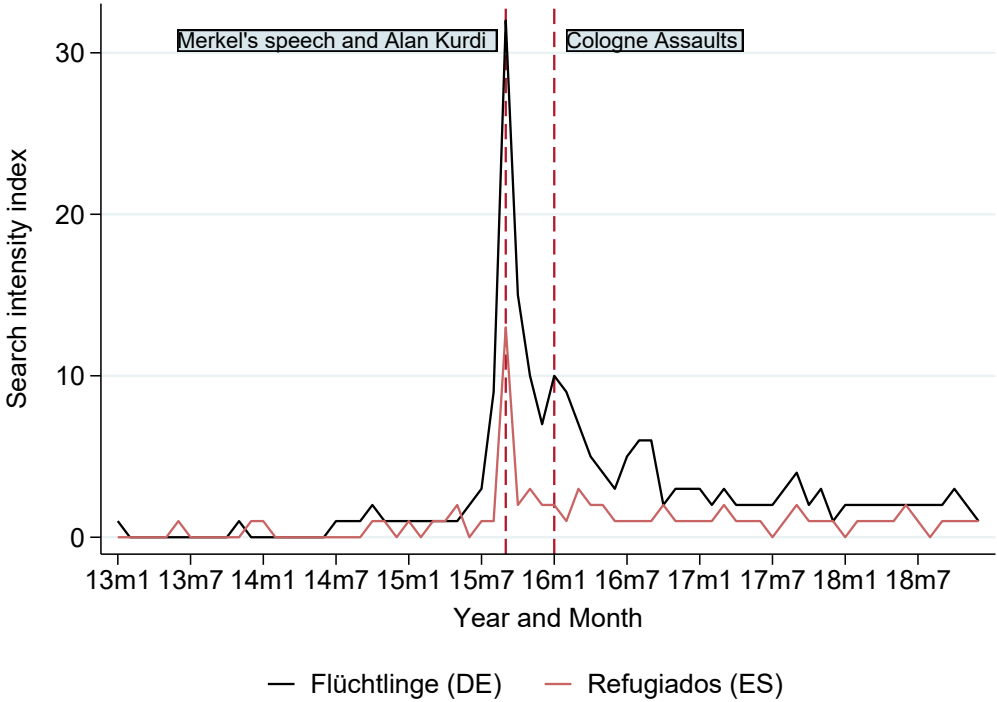
Figure B12: GT search for Flüchtlinge (DE) and Refugiados (ES) coming from France.
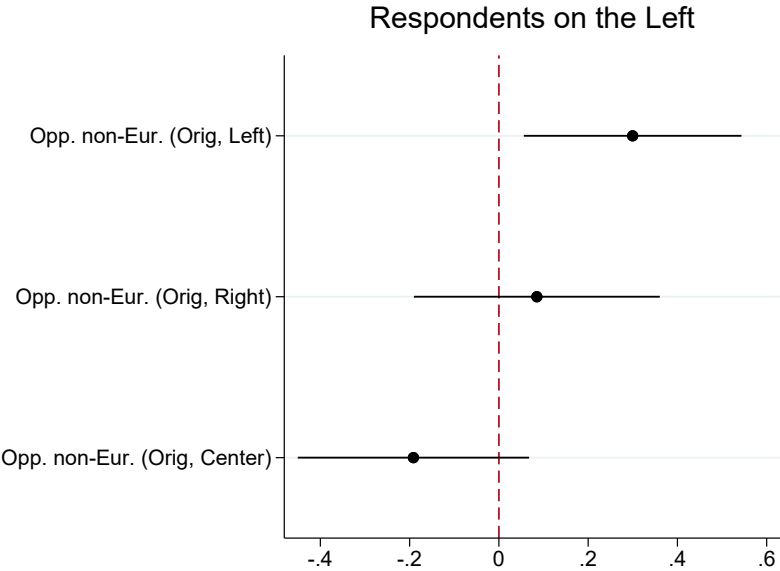


Figure B13: Reactions of immigrants on the left to political subgroups at the origins
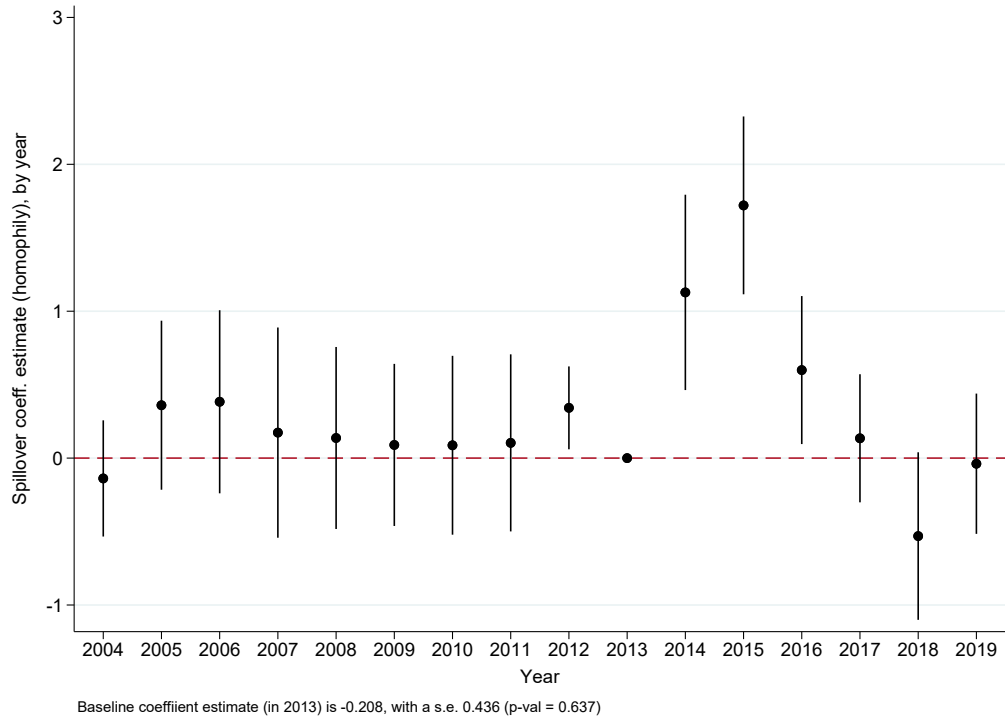
Figure B14: Dynamic spillover coefficients from like-minded groups at the origins, only non-treated host countries.
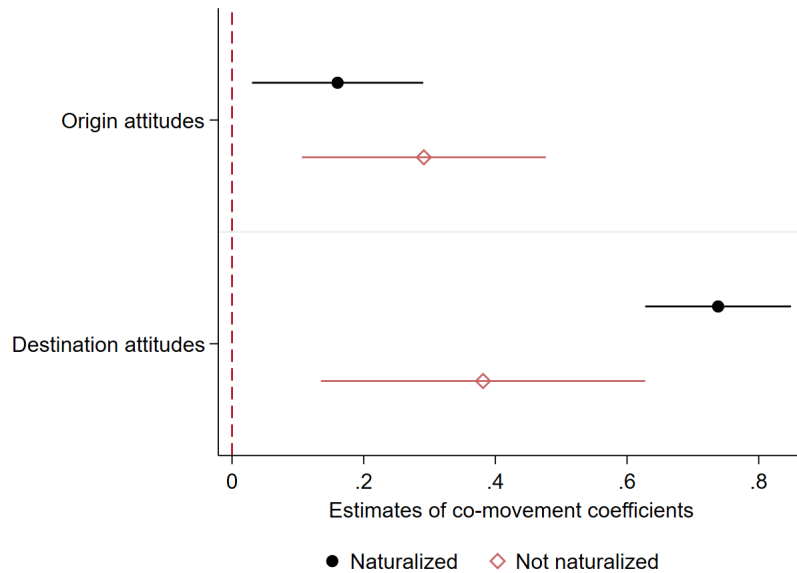


Figure B15: Allocation of attention between origin and destination: the role of naturalization
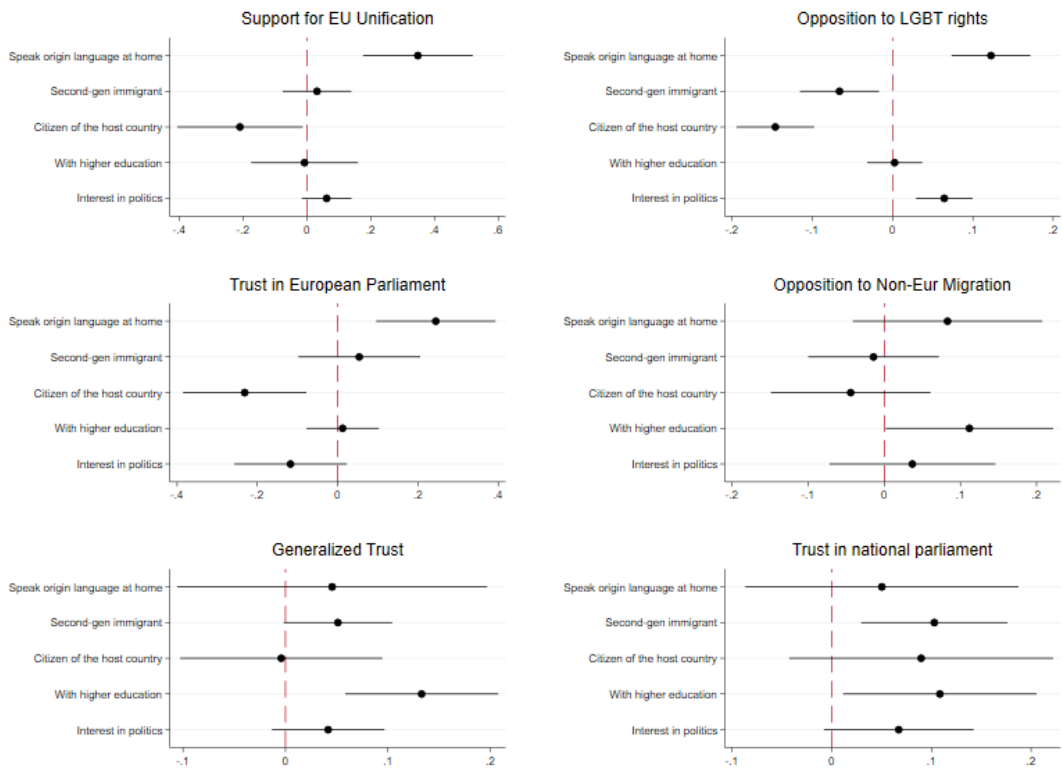
Figure B16: Interactions estimated jointly. Each figure focuses on a separate political topic. The estimates show how the co-movement coefficient changes with a given variable.
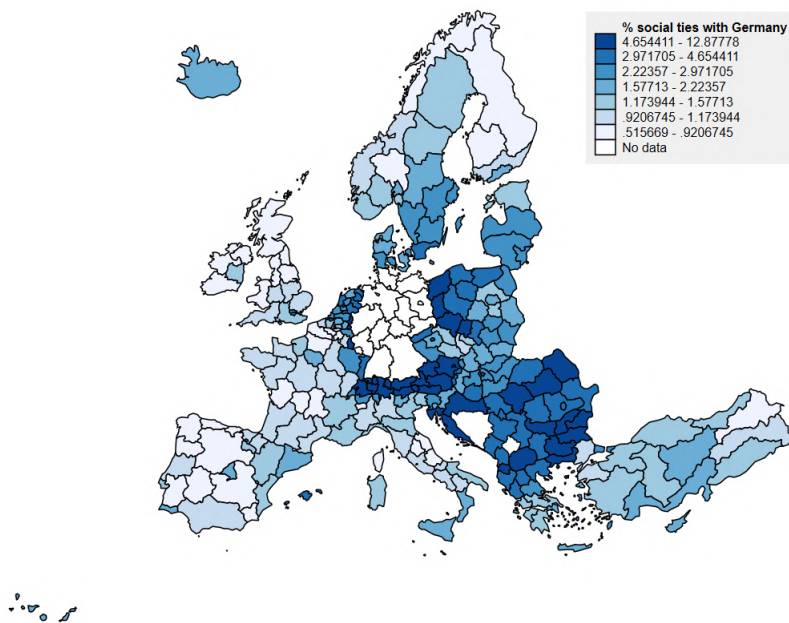


Figure B17: Facebook ties to Germany, NUTS-2 level subregions

coef=1.284, se=0.247 (clustered at the origin level), pval<0.001, R-sq=0.68, #obs=1776
Including the country of origin FEs and the NUTS-2 regional FEs.
Countries with NUTS-level ancestry data: AT, BE, CH, DE, DK, ES, FI, FR, GR, IE, IT, NL, NO, PT, SE, UK.
Ten observations with origin shares larger than 0.05 dropped.
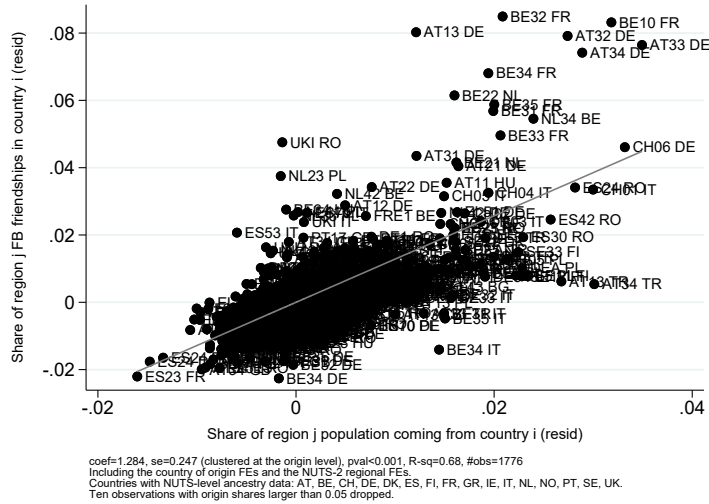
Figure B18: Facebook ties to the origins and local population shares by country of origin
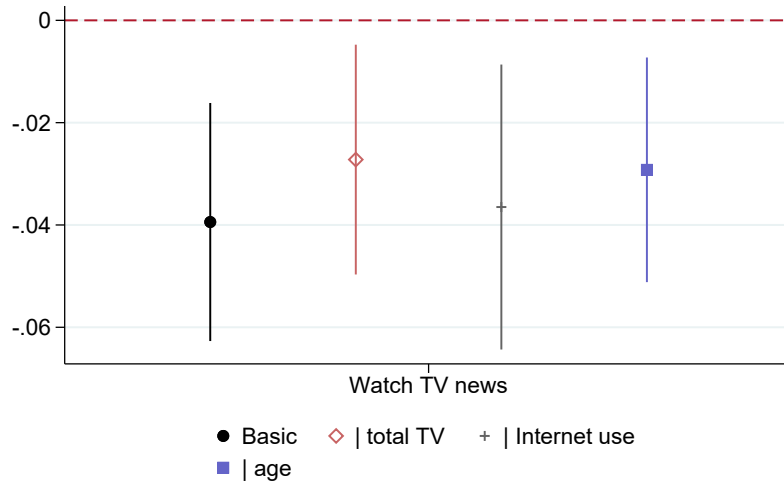


Estimates of the interaction coefficients of origin-country opposition to non-Europeans and
time spent watching news on TV, measured in 30 min categories. Second model controls
for the interaction with total time watching TV. Third model adds control for the interaction
with active Internet use. Fourth model controls for the interaction with respondent's age.
All models include all the standard FEs. Confidence intervals are 90%. For immigrants not
watching TV, co-movement coefficient is around 0.35, depending on the model.

Figure B19: Interactions with news consumption via TV, basic and with controls.
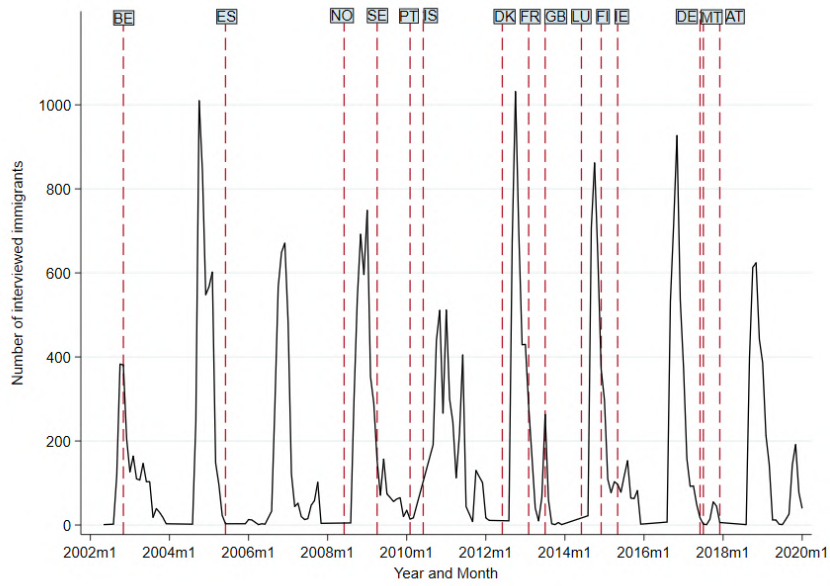
Figure B20: The timing of same-sex marriage legislation across countries in Europe, together with the sampling of immigrants in the ESS rounds 1-9. NL (passed in 2000) are not shown.

# C. Additional Tables

Table C1: Summary statistics, ESS sample: 1st and 2nd-gen immigrants vs. natives

Summary Statistics, Immigrants and natives

| | Immigrants (1st and 2nd gen.) | Natives |
|---|---|---|
| Tertiary Education | 0.33 | 0.27 |
| | (0.47) | (0.44) |
| Unemployed | 0.051 | 0.040 |
| | (0.22) | (0.20) |
| Second gen. | 0.35 | |
| | (0.48) | |
| Citizen | 0.69 | |
| | (0.46) | |
| Length of Residence (years) | 29.2 | |
| | (19.9) | |
| Oppose Non-Eur. Migration | 0.48 | 0.53 |
| | (0.50) | (0.50) |
| Political Left | 0.35 | 0.31 |
| | (0.48) | (0.46) |
| Political Right | 0.30 | 0.36 |
| | (0.46) | (0.48) |
| $N$ | 38065 | 359308 |

Standard deviations in parentheses.

Table C2: Origin countries of 1st and 2nd gen immigrants in the ESS sample

Immigrants' origin countries

| Country of Origin | Number of individuals | Share among all immigrants |
|---|---|---|
| Albania | 597 | 0.014 |
| Austria | 711 | 0.017 |
| Bosnia and Herzegovina | 1499 | 0.036 |
| Belgium | 545 | 0.013 |
| Bulgaria | 469 | 0.011 |
| Belarus | 1132 | 0.027 |
| Switzerland | 299 | 0.007 |
| Cyprus | 164 | 0.003 |
| Czech Republic | 741 | 0.017 |
| Germany | 3284 | 0.079 |
| Denmark | 426 | 0.010 |
| Estonia | 291 | 0.007 |
| Spain | 692 | 0.016 |
| Finland | 807 | 0.019 |
| France | 1676 | 0.040 |
| United Kingdom | 2138 | 0.051 |
| Greece | 453 | 0.011 |
| Croatia | 740 | 0.017 |
| Hungary | 687 | 0.016 |
| Ireland | 555 | 0.013 |
| Israel | 161 | 0.003 |
| Iceland | 160 | 0.003 |
| Italy | 1942 | 0.047 |
| Liechtenstein | 10 | 0.0002 |
| Lithuania | 456 | 0.011 |
| Luxembourg | 155 | 0.003 |
| Latvia | 373 | 0.009 |
| Moldova | 330 | 0.007 |
| Montenegro | 33 | 0.0007 |
| North Macedonia | 235 | 0.005 |
| Malta | 136 | 0.003 |
| Netherlands | 693 | 0.016 |
| Norway | 365 | 0.008 |
| Poland | 2616 | 0.063 |
| Portugal | 1104 | 0.026 |
| Romania | 1676 | 0.040 |
| Serbia | 435 | 0.010 |
| Russia | 6945 | 0.168 |
| Sweden | 602 | 0.014 |
| Slovenia | 166 | 0.004 |
| Slovakia | 769 | 0.018 |
| Turkey | 1844 | 0.044 |
| Ukraine | 1979 | 0.047 |
| Kosovo | 214 | 0.005 |
| *Total* | 41305 | 1 |

Table C3: DID estimates of origin-country asylum treatment: additional outcomes

| VARIABLES | (1)<br>DID<br>Strict<br>refugee<br>policy | (2)<br>DID<br>Ref. not<br>in fear of<br>persec. | (3)<br>DID<br>Restrict<br>family<br>reunif. | (4)<br>DID<br>Oppose<br>income<br>redistrib. | (5)<br>DID<br>Immigr.<br>worsen<br>crime | (6)<br>DID<br>Safety<br>important<br>concern |
|---|---|---|---|---|---|---|
| Origin Treated (Host Refs.) x Post2015 | -0.124* | -0.095* | -0.107 | -0.123*** | -0.286** | -0.078** |
| | (0.068) | (0.053) | (0.071) | (0.033) | (0.110) | (0.034) |
| | | | | | | |
| Observations | 10,386 | 5,790 | 6,224 | 32,824 | 6,109 | 32,341 |
| Adjusted R-squared | 0.117 | 0.082 | 0.093 | 0.096 | 0.073 | 0.123 |
| Origin FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Country x round FEs | Yes | Yes | Yes | Yes | Yes | Yes |
| Individual controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Sample | Full | Full | Full | Full | Full | Full |

Outcome variables (and hence sample sizes) differ across columns. Column (1): support for strict government policies towards granting refugee status. Column (2): support for the opinion that refugees are not in real fear of persecution in their own countries. Column (3): opposition to refugee family reunification. Column (4): opposition to government reducing differences in income levels. Column (5): opinion that immigrants worsen crime issues. Column (6): importance of personal safety concerns (average of two questions: on government providing safety, and on the importance of safe surroundings). Main treatment variable is the origin-country treatment status interacted with the post-2015 dummy. Treatment definition is based on the increase in hosted refugees per capita from 2013 to 2016. Standard errors, clustered at the level of origin countries, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table C4: DID estimates of origin-country asylum treatment: placebo outcomes

| VARIABLES | (1)<br>DID<br>Trust local<br>parl. | (2)<br>DID<br>Trust EU<br>parl. | (3)<br>DID<br>Support<br>EU unif. | (4)<br>DID<br>Oppose<br>LGBT | (5)<br>DID<br>General<br>trust |
|---|---|---|---|---|---|
| Origin Treated (Host Refs.) x Post2015 | -0.073 | 0.100 | 0.129 | -0.014 | 0.107*** |
| | (0.058) | (0.111) | (0.148) | (0.037) | (0.039) |
| | | | | | |
| Observations | 32,041 | 29,372 | 26,335 | 32,161 | 33,510 |
| Adjusted R-squared | 0.210 | 0.087 | 0.074 | 0.274 | 0.107 |
| Origin FE | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes |
| Country x round FEs | Yes | Yes | Yes | Yes | Yes |
| Individual controls | Yes | Yes | Yes | Yes | Yes |
| Sample | Full | Full | Full | Full | Full |

Outcome variables (and hence sample sizes) differ across columns. Column (1): trust in local parliament. Column (2): trust in the EU parliament. Column (3): support for the EU unification. Column (4): opposition to LGBT rights. Column (5): generalized trust. Main treatment variable is the origin-country treatment status interacted with the post-2015 dummy. Treatment definition is based on the increase in hosted refugees per capita from 2013 to 2016. Standard errors, clustered at the level of origin countries, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table C5: DID estimates of origin-country asylum rejection rates treatment

| VARIABLES | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| | | Oppose non-European immigration | | |
| Rejection rate drop x Post2015 | -0.303*** | -0.307*** | -0.230 | -0.298*** |
| | (0.104) | (0.112) | (0.161) | (0.090) |
| Observations | 32,021 | 28,195 | 15,459 | 31,414 |
| Adjusted R-squared | 0.155 | 0.159 | 0.126 | 0.155 |
| Origin FE | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes |
| Country x round FEs | Yes | Yes | Yes | Yes |
| Individual controls | Yes | Yes | Yes | Yes |
| Sample | Full | No transit origins | Host not treated | No recent migrants |

Outcome variable is an individual-level response to a question "to what extent do you think [country] should allow people form the poorer countries outside of Europe?" with answers ranging from 1 (allow many) to 4 (allow none). Main treatment variable is the origin-country drop in asylum rejection rates, displayed on Figure 5. Column (2) removes transit migration origins. Column (3) only retains the expats currently residing in host countries without significant exposure to the Crisis (asylum or transit). Column (4) omits immigrants who left their origins after 2012. Standard errors, clustered at the level of origin countries, are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table C6: Transmission of opinions from the origins: local interactions vs. the Internet

| VARIABLES | (1) FE | (2) FE | (3) Fe | (4) FE | (5) FE |
|---|---|---|---|---|---|
| | | | Oppose non-Eur. immigration | | |
| Oppose non-Eur. migr. (origin) | 0.012 | 0.167* | 0.163 | 0.100 | 0.082 |
| | (0.108) | (0.091) | (0.101) | (0.075) | (0.108) |
| Oppose non-Eur. migr. (origin) x Large Diasp. | 0.186** | 0.029 | 0.028 | | |
| | (0.076) | (0.056) | (0.046) | | |
| Oppose non-Eur. migr. (origin) x Meet Social. | | | -0.119** | | |
| | | | (0.052) | | |
| Oppose non-Eur. migr. (origin) x Meet Social. x Large Diasp. | | | 0.176** | | |
| | | | (0.069) | | |
| Oppose non-Eur. migr. (origin) x High Internet Usage | | | | 0.168** | 0.039 |
| | | | | (0.075) | (0.110) |
| Observations | 5,672 | 6,744 | 12,416 | 5,293 | 4,481 |
| Adjusted R-squared | 0.133 | 0.140 | 0.144 | 0.150 | 0.128 |
| Origin FE | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes |
| Host x Time FE | Yes | Yes | Yes | Yes | Yes |
| Individual controls | Yes | Yes | Yes | Yes | Yes |
| Country-pair FE | Yes | Yes | Yes | Yes | Yes |
| Sample by local social activity | High | Low | Full | Low | High |

Internet use variable is only available for rounds 1-5 and 8-9, so rounds 6 and 7 are omitted in columns (4) and (5), hence a smaller sample size. Cluster-robust standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table C7: Within-family ties and co-movements with the origins

| VARIABLES | (1)<br>FE | (2)<br>FE | (3)<br>FE | (4)<br>FE | (5)<br>FE |
|---|---|---|---|---|---|
| | | | Oppose non-Eur. immigration | | |
| Oppose non-Eur. immigr. (origin) | 0.279***<br>(0.089) | 0.420***<br>(0.104) | 0.098**<br>(0.038) | 0.058<br>(0.037) | 0.123**<br>(0.047) |
| Oppose non-Eur. immigr. (origin) x Live with parents | -0.082*<br>(0.044) | -0.223**<br>(0.097) | | | |
| Oppose non-Eur. immigr. (origin) x Mother higher ed. | | | 0.125**<br>(0.056) | 0.088*<br>(0.047) | 0.169***<br>(0.040) |
| Oppose non-Eur. immigr. (origin) x Own higher ed. | | | | 0.115*<br>(0.062) | 0.061*<br>(0.032) |
| | | | | | |
| Observations | 19,731 | 11,405 | 19,447 | 19,399 | 11,835 |
| Adjusted R-squared | 0.153 | 0.142 | 0.152 | 0.156 | 0.145 |
| Origin FE | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes |
| Country x round FEs | Yes | Yes | Yes | Yes | Yes |
| Individual controls | Yes | Yes | Yes | Yes | Yes |
| Sample | Full | 1st gen | Full | Full | 1st gen |

Outcome variable is an individual-level response to a question "to what extent do you think [country] should allow people form the poorer countries outside of Europe?", with answers ranging from 1 (allow many) to 4 (allow none). Main treatment variable is the country-round average value for the same question asked in respondent's country of origin. Columns (1)-(2) focus on interactions with whether immigrants live in the same household with their parents. Columns (3)-(5) focus on mother's education level (similar, but weaker, results are there for father's education). Both results are stronger for 1st-gen immigrants (columns (2) and (5)). Standard errors clustered at the level of origin countries are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

# D. Issue salience and political spillovers in the Eurobarometer

In this section, I augment and the main analysis of the paper with data from the Eurobarometer (EB). One advantage of the EB data is that its rounds are conducted at a much higher frequency than in the ESS: about 6 months between the rounds. Utilizing this finer temporal dimension, Table D1 reports basic results from estimating model (1) on the EB data, focusing on opposition towards non-EU immigration. Columns (1) to (5) and column (7) replicate some of the main specifications estimated on the ESS data in Table 1, and show very similar results, confirming the significance and strength of political spillovers from the origins. Quantitatively, the spillover coefficients are even stronger, potentially because of the finer time scale. Moreover, column (6) uses lagged attitudes at the origin to safeguard against the reverse direction of spillovers, showing very strong and significant results. Overall, it is reassuring to find similar results from a completely different dataset[44].

Table D1: Eurobarometer: spillovers of opposition towards non-EU immigrants

| VARIABLES | (1) FE | (2) FE | (3) FE | (4) FE | (5) FE | (6) FE | (7) FE |
|---|---|---|---|---|---|---|---|
| | | | Oppose non-EU immigration | | | | |
| Oppose non-EU immigr. (origin) | 0.476*** | 0.478*** | 0.458*** | 0.301*** | 0.298** | | 0.277** |
| | (0.094) | (0.096) | (0.106) | (0.105) | (0.128) | | (0.132) |
| Oppose non-EU immigr. (local) | | | 0.442* | | | | |
| | | | (0.222) | | | | |
| Oppose non-EU immigr. (origin), 1st lag | | | | | | 0.270** | |
| | | | | | | (0.128) | |
| Observations | 5,420 | 5,366 | 5,366 | 5,366 | 5,366 | 4,738 | 4,065 |
| Adjusted R-squared | 0.084 | 0.101 | 0.102 | 0.110 | 0.130 | 0.114 | 0.127 |
| Origin FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Host Country FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Individual controls | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Host x round FE | No | No | No | Yes | Yes | Yes | Yes |
| NUTS FE | No | No | No | No | Yes | No | No |
| Group x round FEs | No | No | No | No | No | No | Yes |

Outcome variable is individual-level feeling towards immigration from outside of EU, ranging from 1 (very positive) to 4 (very negative). Main treatment variable is the country-round average value for the same question asked in respondent's country of origin. Column (3) adds local country-round averages. Column (6) estimates the effect of previous-round attitudes at the origins on current attitudes of emigrants. Column (7) allows for separate shocks for Left-Center-Right political groups (available for a subset of respondents), and for (non)tertiary educated groups of respondents. Standard errors, clustered at the level of origin countries, are in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

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[44]The downside of the EB data is that questions on the attitudes towards non-EU immigrants began to appear only from November 2014 onward - 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 2. Moreover, the Eurobarometer does not allow to distinguish 1st- and 2nd-gen immigrants, which also constrains the analysis.

An additional benefit of the EB is data on issue salience, which allows me to test whether changes in issue salience at the origins affect what immigrants perceive as salient, thereby contributing to the spread of opinions. The EB offers a list of economic and political issues (inflation, unemployment, health, education, immigration, crime, etc.) which respondents code as salient or not (i) for the country of residence, and (ii) the EU overall. Respondents can only code 1 or 2 issues as salient. I use data on immigration salience from 2011 to 2018 and estimate whether a higher immigration salience at the origins affects the perceptions of immigration salience among the expats (for the host country and for the EU overall).

To begin with, Figure D1 shows that there is a stronger increase in perceptions of local issue salience during and after the Refugee Crisis for the expats from more affected origins (either as asylum countries or as transit countries).
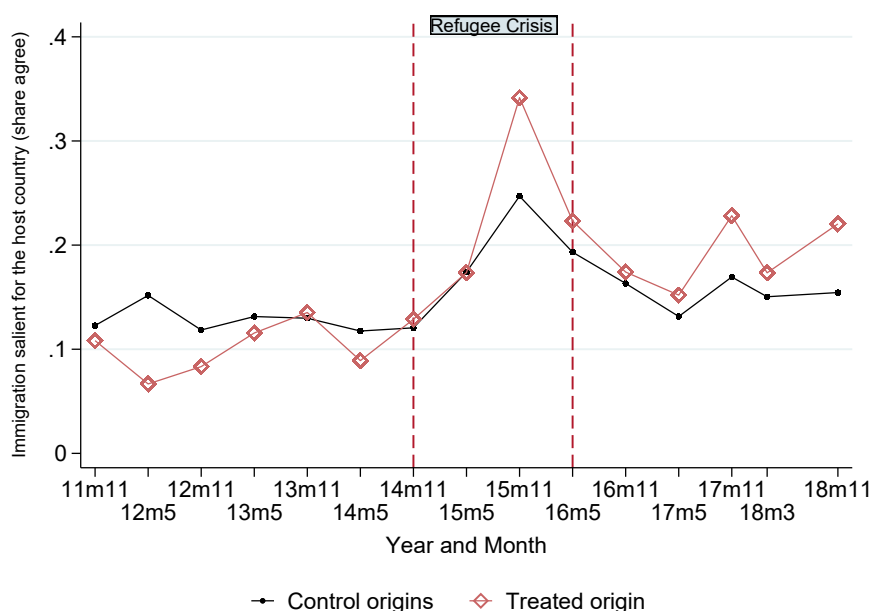


Figure D1: Local immigration salience among the expats, by origin-country treatment status

Moreover, Figure D2 reveals a strong co-movement in perceptions of broad (EU-level) immigration salience between immigrants and their origins. During the Refugee Crisis rounds (Nov 2014, May 2015, Nov 2015 and May 2016) the co-movement is the closest. This supports the key assumption of the paper: during the periods of salient events at the origins, topics deemed important at the the origins receive additional attention from the expats abroad[45].

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[45]Similar, but slightly weaker co-movements are observed for perceptions of local issue salience. Thus, for example, if Germans report immigration being salient for Germany, then Germans abroad tend to report immigration being salient for their current host country.
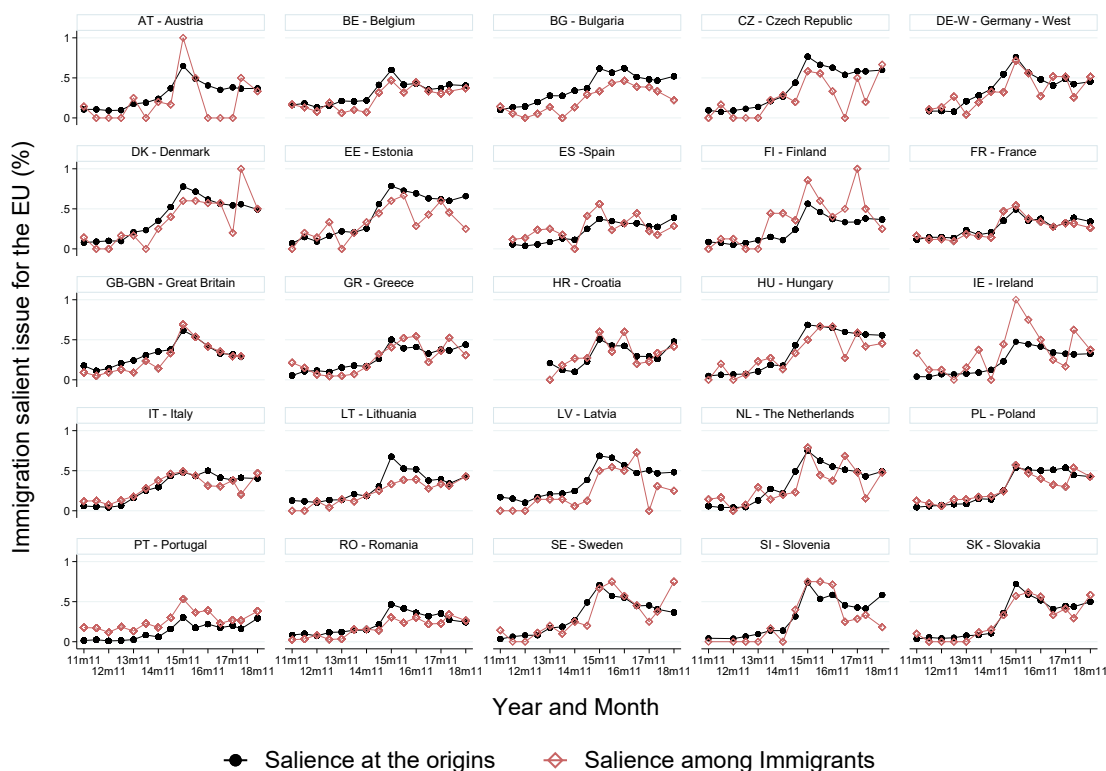
Figure D2: Co-movement of immigration salience (EU): immigrants and their origins

Could these patterns reflect correlated exposures to the Crisis or general trends in issue salience? Following the strategy used in models (1) and (5), I estimate spillover coefficients for issue salience, conditional on local dynamics and origin FEs. Moreover, to further address the issue of correlated exposure, I limit the sample of residence countries to those which were not strongly exposed to the Crisis. Figure D3 shows that among the diasporas living in non-affected host countries, there is a growing perceptions of (EU-level) immigration salience when immigration becomes salient at the origins in 2014-2016. Figure D4 reveals somewhat weaker spillovers to local immigration salience (i.e., immigrants coming from countries where immigration becomes salient tend to increasingly report immigration being salient locally). Overall, this supports the attention and salience arguments made in section 4.1.
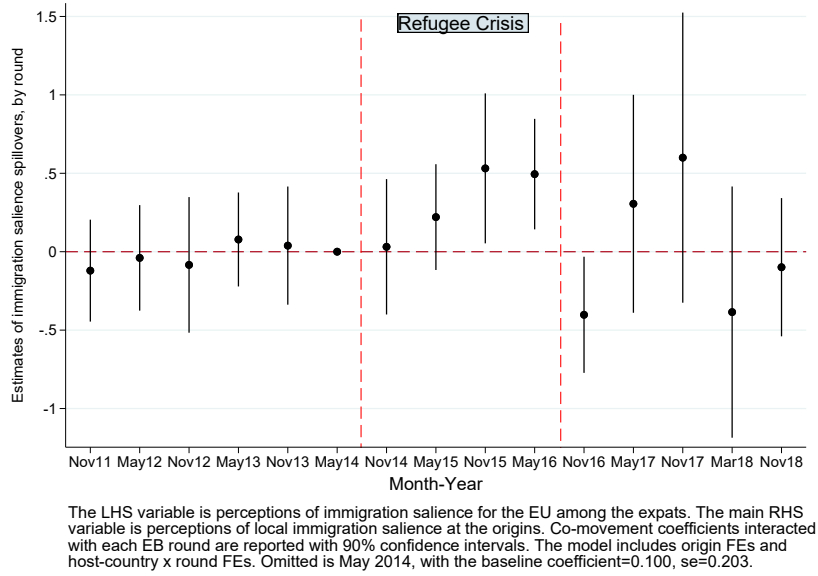
The LHS variable is perceptions of immigration salience for the EU among the expats. The main RHS variable is perceptions of local immigration salience at the origins. Co-movement coefficients interacted with each EB round are reported with 90% confidence intervals. The model includes origin FEs and host-country x round FEs. Omitted is May 2014, with the baseline coefficient=0.100, se=0.203.

Figure D3: Spillovers of immigration salience: EU salience among the expats



The LHS variable is perceptions of immigration salience for the host country among the expats. The main RHS variable is perceptions of local immigration salience at the origins. Co-movement coefficients interacted with each EB round are reported with 90% confidence intervals. The model includes origin FEs and host-country x round FEs. Omitted is May 2014, with the baseline coefficient=-0.032, se=0.089.
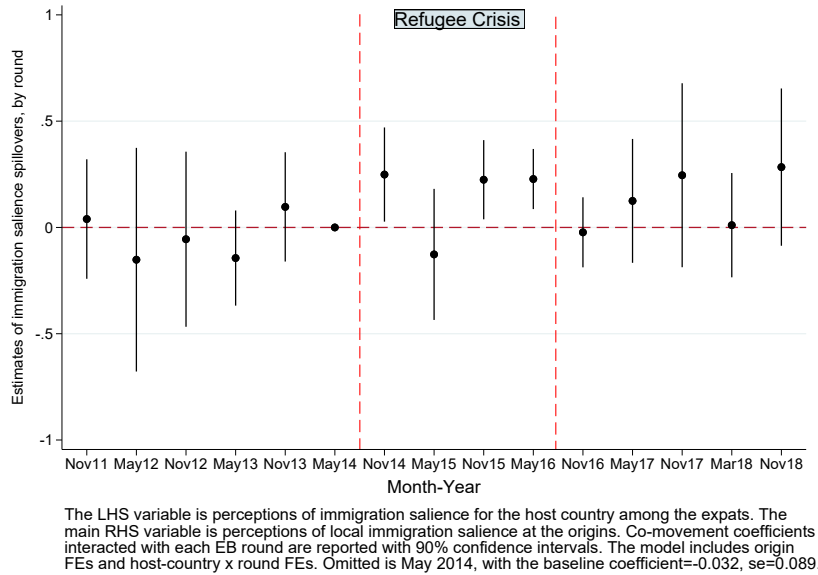
Figure D4: Spillovers of immigration salience: local salience among the expats