Can Terrorism Abroad Influence Migration Attitudes at Home?

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Abstract: This article demonstrates that public opinion on migration “at home” is systematically driven by terrorism in other countries. Although there is little substantive evidence linking refugees or migrants to most recent terror attacks in Europe, news about terrorist attacks can trigger more negative views of immigrants. However, the spatial dynamics of this process are neglected in existing research. We argue that feelings of imminent danger and a more salient perception of migration threats do not stop at national borders. The empirical results based on spatial econometrics and data on all terrorist attacks in Europe for the post-9/11 period support these claims. The effect of terrorism on migration concern is strongly present within a country, but also diffuses across states in Europe. This finding improves our understanding of public opinion on migration, spill-over effects of terrorism, and it highlights crucial lessons for scholars interested in the security implications of population movements.

Replication Materials: The data, code, and any additional materials required to replicate all analyses in this article are available on the American Journal of Political Science Dataverse within the Harvard Dataverse Network, at: http://dx.doi.org/XXX.

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The movement of people across borders has risen significantly over the last few decades. According to the United Nations (2015), the total population of international migrants has more than doubled since the year 2000 to about 244 million by 2015. The scale of international migration makes it a global phenomenon. In this context, public opinion on migration is usually seen as a valuable barometer of the salience that citizens attach to this issue (e.g., Bélanger and Meguid 2008) and of the level of openness of native populations toward the arrival of foreign-born individuals. While the broader public is usually rather skeptical of immigration and migration influx (e.g., Cornelius and Rosenblum 2005; Abou-Chadi 2016), growing concerns about immigration have in fact contributed to the recent success of reactionary nationalist parties at local and national elections in Europe (Davis and Deole 2017).

In many European countries, anti-immigration rhetoric continues to resonate with voters and there is evidence that a larger number of migrants and refugees is associated with more radicalization and far-right voting (e.g., Dinas et al. 2018; Hangartner et al. 2018). Even in a country with historically very open borders such as Sweden, a sudden shift in public opinion in the autumn of 2015 translated, “seemingly overnight,” into a significant reduction in the number of new immigrants, restrictions to existing immigration policies, and the deportation of a record number of people.\footnote{See online at: \url{https://tinyurl.com/y2a2vteb}.} Thus, public sentiment toward immigration can influence which parties assume power, they shape states’ legislative outputs, and they affect the way immigrants are integrated into receiving communities (see, e.g., Meyers 2000; Money 2010; Abou-Chadi 2016; Koopmans and Michalowski 2017; Helbling and Kalkum 2018). As such, a comprehensive
understanding of how and by which factors public opinion on immigration is formed is crucial for the effective design of immigration and integration policies.

We focus on the impact of terrorism on immigration attitudes across Europe and, more specifically, whether terrorist attacks can propagate migration concern from targeted countries to their neighbors. This is a highly relevant question. Public opinion and political leaders in Europe, including in countries that have not been targeted by terrorists, often link the issue of terrorism to migration. The Hungarian Prime Minister Viktor Orban has publicly voiced his fear that more immigration is likely to lead to more terrorist attacks, as immigration is a “Trojan horse” for terrorists seeking entry into the EU. While it is ultimately elites who make the relevant migration-policy decisions, the views of the public matter greatly. Recent research demonstrates that public opinion positively correlates with policy outputs (Boswell et al. 2019). Politicians, assumed to be office-seeking and interested in retaining power (Bueno de Mesquita et al. 2005), take into account citizens’ concerns about political issues, which in turn shapes how the government responds with legislative action (e.g., Anderson et al. 2017). It is of secondary importance for this mechanism whether the public is “right” about the link between terrorism and migration, though: although the public wrongly see a link between migration and terrorism, it would still be rational for policymakers to respond to the public for maximizing politicians’ chances to remain in power. And migration policies, as the output elites produce, are unlikely to be an exception here.

In 2017, London, Manchester, and Barcelona became some of the latest major European targets of terrorism. Earlier attacks in Nice (2016), Paris (2015), and those in Brussels, Berlin, and other cities before have turned terrorism into a central issue for the broader public and policymakers across the continent. It is then not surprising that European citizens regarded
immigration as the primary public issue in 2016, before economic concerns,\(^2\) whereas recent surveys suggest that negative sentiment toward immigrant populations has become more common.\(^3\)

As immigrants are increasingly seen as a threat to national security and identity, recent studies find that the odds to regard immigration as a problem increases with their likelihood to describe terrorist attacks in the same way (Crabtree and Kluch 2017). This is more than just a correlation. Analyzing the Bali attack in 2002, Legewie (2013) argues that there is a causal link between terrorism and the perception of immigrants across countries, although there is considerable variation in both the magnitude of the effect and its temporal duration. As of yet, however, there are no studies that systematically identify the spatial dynamics of these processes, across a large number of terrorist attacks and locations, and for a sufficiently long time series. Moreover, terrorist attacks come in different forms, and previous studies have overwhelmingly focused on the most sensationalist events, with large numbers of victims and unusual media coverage. The majority of terrorist events is of much smaller scale and receives far less attention, although they can still exert important influences on public sentiment. Finally, whereas some studies – on the 9/11 attacks in the US in 2001, the knife attack in the Netherlands in 2004, Bali in 2002, or the attacks in France in 2008 – identified effects outside the targeted country (Finseraas, Jakobsson, and Kotsadam 2011; Legewie 2013; 2018; Schüller 2016), this is contentious. Finseraas and Listhaug (2013), for example, do not find much of an effect of the Mumbai attack in 2008. Hence, the average net impact of terrorism on migration attitudes is not straightforward and


\(^3\) See online, e.g., [https://tinyurl.com/y3fox6yg](https://tinyurl.com/y3fox6yg).
cannot be identified by studying single cases of terrorist attacks. Rather, it warrants systematic and comprehensive analysis, a contribution we intend to make.

Societal responses to terrorist attacks have a spatial dimension and terrorist events can have important effects on citizens’ perception of immigrants beyond national borders. Both psychological effects, particularly the perceptions of the immediate act of violence and the associated feelings of danger, as well as the perception of immigrants as a threat to safety and security to one’s identity group are felt more strongly in countries closer to the targeted state, and are exacerbated by heightened media attention to events in the vicinity. As such, we argue, residents from less distant countries are more affected by these dynamics and should show increased concern with migration in the aftermath of an attack.

We employ data from the Eurobarometer, which includes questions on Europeans’ attitudes toward immigration from 2003 to 2017. The analysis focuses on how terrorism intensifies public attention on immigration beyond national borders. We thus use questions related to the salience of immigration, i.e., whether people mention immigration as one of the two most important issues facing their country at the present time. We estimate spatial models, employing data on foreign states’ level of terrorism post-9/11, which are reasonably exogenous for the purpose of this study as this information is driven by factors that have no direct link with the timing and scope of the interviews. Our empirical results suggest that terrorism, by stimulating emotional public responses, affects the salience of immigration within a country, but also diffuses across European states and then shapes immigration-salience attitudes in nearby countries. This finding is robust across different model specifications (e.g., when including conditional effects or additional controls), across single and multiple spatial-variable models estimated using OLS and maximum likelihood approaches (Hays, Kachi, and Franzese 2010), or while controlling for a number of “exogenous-external conditions or common shocks and spatially correlated unit level
factors” (Franzese and Hays 2007, 142). The latter help us to rule out the possibility that what appears to be a diffusion process across countries is actually the result of common exposure.

This research contributes to four important strands of research. Public opinion formation, migration, terrorism, and international diffusion. Our work has important implications for the understanding of how migration attitudes are formed, and it enhances our knowledge of the security implications of migration. While there is some evidence, limited to few specific episodes, that terrorist attacks in other countries can influence the public’s view on migration, we provide the first systematic evidence that terrorism abroad affects migration attitudes at home. Moreover, we show that there is also a direct cross-national diffusion path, which is robust to the inclusion of the domestic impact of terrorism in the focal country. In addition, although there is little evidence linking migration to recent terror attacks in Europe, our results suggest that the connection between concerns over terrorism and migration flows that has been made in the public’s mind extends beyond national boundaries and can have a direct impact on political attitudes. This result has other important implications for our understanding of the strategic utility of terrorism. Terrorist organizations often exploit networks of migrant communities as a recruitment pool and to fuel their radicalization (Bove and Böhmelt 2016; Sageman 2004). To mobilize prospective members, militant groups like ISIS have explicitly sought to sharpen the divide between Muslim and non-Muslim populations in Europe, eventually to destabilize the region.4 When terrorist violence manages to deteriorate public attitudes towards immigrants and

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4 See online, e.g., https://tinyurl.com/hqu4khl. While the reference to Muslim-based terrorism here is not meant to suggest a conditional or moderating effect, it is nevertheless plausible that some effect along those lines exists. That is, the migration-terrorism nexus could be shaped by concerns over Islam, which depend on whether the country has a sizeable Muslim (immigrant) population. We examine this in the supporting information (Table A.12, p.15).
provokes anti-Muslim backlash or political discord over immigration, even in historically tolerant societies, this strategy appears fruitful. We conclude by discussing the implications of our core finding and how this is crucial for policymakers and public institutions alike.

**How Terrorism Propagates Migration Concerns**

Previous research has established a link between the exposure to terrorism and citizens’ political engagement (Balcells and Torrats-Espinosa 2018), as well as more specifically to concerns about migration (Hitlan et al. 2007; Van de Vyver et al. 2016). We build upon, but also depart from these works as we examine whether the effect of terrorism on migration attitudes can travel across borders. We contend that a terrorist attack influences migration attitudes not only in the targeted country, but also abroad and that surrounding, neighboring states are more strongly affected than less proximate ones. These expectations are due to an accrued salience of migration-threat perceptions combined with feelings of imminent danger, especially in neighboring countries, and are exacerbated by the workings of news media, which emphasize the importance of events happening in the vicinity.

The perception that migration and terrorism are linked is pervasive among the general European public, although there is inconclusive evidence to support an objective association between them. Dreher, Gassebner and Schaudt (2017) argue that the number of foreigners living in a country does not increase the risk of terror more than a rise in domestic population. Bove and Böhmelt (2016) find that the total immigrant population of a state is not associated with an increase in terrorism,

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5 However, there is also evidence against the link between terrorism and migration concerns (Brouard, Vasilopoulos, and Foucault 2018; Castanho Silva 2018).
although high levels of immigration from terror-prone countries can contribute to terrorism spreading across borders as terrorists exploit ties among migrants for radicalization.

Despite lacking evidence on an objective linkage between migration and terrorism, the wider public often demands, and politicians then frequently advocate for, stricter migration policies based on the risks of transnational terrorism, thus effectively securitizing migration (Huysmans 2006; Tirman 2004). Several states have tightened their immigration regimes as a counter-terrorism strategy (Bandyopadhyay and Sandler 2014; Epifanio 2011). Avdan (2014) reports that policy tightening with regard to asylum recognition has been most pronounced in directly affected states. Even the UN Security Council recommends effective border controls and controls on issuance of identity papers and travel documents in Resolution 1373 to prevent the movement of terrorists. The threat stemming from terrorism is thus closely linked to migration in the perception of policymakers and the general public.

As a variant of this perception of a migration-terrorism nexus, the link between terrorism and migration is often established by reference to migrants of Muslim faith. Concern with migration may then partially reflect concern with Islam. With increasing media attention to the Muslim population, the term “Muslim” has become an important category for public debate in Europe (Feddersen 2015). While other migrant groups are also seen more negatively in the aftermath of terrorist attacks (Davis 2007; Hitlan et al. 2007; Kalkan, Layman, and Uslaner 2009), Muslim migrants may be singled out as particularly threatening (Ciftci 2012; Helbling 2013). Terrorist attacks in the US (Panagopoulos 2006), the UK (Van de Vyver, Houston, Abrams, and Vasiljevic 2016), and France (Goodwin et al. 2017) have led to more negative views of Muslims. We claim that this perceived link between migration and terrorism becomes more salient after a terrorist attack, even beyond the borders of the targeted country. Residents of neighboring states may also
be concerned about migration as possible entry point for terrorists given that, from their perspective, the source of danger is close.

When asked about terrorism, citizens can reason about its causes and point to migration as a potential driver. However, terrorist attacks can affect migration attitudes also more inadvertently through a series of psychological mechanisms. Terrorists intend to intimidate and instill fear among a large audience (Enders, Sandler, and Gaibulloev 2011). News about terrorist attacks “remind people of their own mortality,” thus triggering death-related thoughts (Das et al. 2009, 458). We argue that such feelings of danger and fear do not stop at national borders. In fact, a terrorist attack in a neighboring country is likely to heighten such perceptions of imminent danger. This can put in motion a psychological process associated with a series of behavioral and attitudinal consequences (Janoff-Bulman 1992; Lazarus and Folkman 1984). This process is relevant for migration attitudes, since taking distance from perceived out-groups is a commonly identified result of a sense of imminent fear. Feelings of danger and uncertainty can induce, for instance, a shift to a more conservative political stance and ensuing concern with migration (Bonanno and Jost 2006; Jost et al. 2003). Alternatively, they can lead to the defense of one’s worldview, whereby people hold more strongly to whatever they identified with before an attack – immigration is usually not such a value (Burke, Kosloff, and Landau 2013; Pyszczynski, Solomon, and Greenberg 2003). In line with this dynamic, several studies, which are generally based on single cases of terrorist attacks, report that such psychological processes can raise prejudice and aversion against foreigners and migrants (Das et al. 2009; Hitlan et al. 2007; Kalkan, Layman, and Uslaner 2009; Merolla and Zechmeister 2009; Van de Vyver et al. 2016).

The 2004 murder of Theo van Gogh, a Dutch filmmaker, by the Islamist-inspired Mohammed Bouyeri provides an interesting case in point. Studies refer to an invariably negative effect of the murder on attitudes toward immigration, both across Europe (Finseraas, Jakobsson, and Kotsa-
dam 2011) and within the Netherlands (Boomgaarden and de Vreese 2007; Das et al. 2009). Also, research points to how different aspects of migration attitudes can be intermingled and affected simultaneously after an incident, like a threat to one’s identity and security. After the 2004 murder, respondents were more likely to affirm that immigrants’ religious practices threatened the Dutch way of life and that immigrants posed a threat to security (Boomgaarden and de Vreese 2007).

We contend that these psychological processes associated with migration concerns have a spatial dimension. National borders will not stop feelings of danger. Imminent danger and uncertainty, which generate the psychological impact on migration attitudes, should be most intensely felt in nearby countries (Pfefferbaum et al. 2000; Schuster et al. 2001; Sprang 1999). In addition, in-group favoritism may stretch beyond borders, as a terrorist event is likely seen as an attack at a wider identity group that goes beyond the national community (Moskalenko et al. 2006). People on the other side of borders, tied to their neighbors by, e.g., frequent exchange, travel, and resulting familiarity could strongly identify with those attacked in the bordering country. These insights from social-identity theory (Tajfel and Turner 1979) thus point into the same direction of heightened emotionality and in-group favoritism, both associated with increased migration concern as mortality salience theory, but suggest that such processes are limited to nearby areas.

Hence, terrorist attacks are likely to have an effect on migration concerns in neighboring states. Residents from more distant countries should be less affected by this psychological dynamic, given that feelings of imminent danger and identification are less intense there. Notice that strong feelings of danger, group identification, and salience of the migration threat triggered by terrorism in nearby nations are interwoven and inform the psychological process of out-group hostility jointly. After all, out-groups, like “immigrants” or “Muslims,” are socially constructed and give direction to psychological processes (Ashforth and Mael 1989; Huddy et al. 2005; Hud-
In other words, the migration-threat perception and feelings of imminent danger are both part of the same process linking terrorism abroad with concerns over immigration at home.

These hypothesized effects on migration concerns are exacerbated by the news media, given that media are more likely to report events that occurred in countries closer to their audience. For example, Koopmans and Vliegenthart (2011) find that coverage of natural disasters abroad is more likely when the event happened in a state with strong economic relations, larger immigrant population, and touristic flows to one’s own country. Within Europe, we would expect the effect of homophily and social ties to be quite pronounced. Hence, while large-scale terrorist attacks in Europe will find thorough media attention across the continent, the occurrence of an average terrorist attack will be reported more extensively in neighboring states, thus generating more intense feelings of danger and reinforcing the salience of the migration threat there. Therefore, we should observe a more elevated concern with migration in the geographic vicinity of the targeted country. In sum, we postulate that terrorist attacks lead to more salient migration-threat perceptions and feelings of imminent danger, along with heightened media attention in the vicinity of targeted countries. In line with this dynamic, we seek to test the following hypothesis:

\[ H1: \text{Terrorist attacks propagate migration concern across borders with larger effects in neighboring than more distant countries.}\]

Both our main outcome of interest, migration concern, as well as the key explanatory factor, geographic proximity, can be theoretically extended in several directions. First, the process we  

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6 For the theoretical mechanisms, we assume that the public pays attention to the news and that there is sufficient news coverage. While the latter is positively related to proximity, we examine the first component in the supporting information’s section A.14 (p.17).
outline theoretically may well influence other related factors, e.g., immigration legislations, particularly those regarding asylum claims and refugees, or the political success of anti-immigration parties. In terms of the former, as public demands often lead politicians to implement new laws to please the domestic audience and retain power (Bueno De Mesquita et al. 2005), terrorism abroad, through its effect on public attitudes towards immigrants, is likely to indirectly lead to more restrictive immigration regulations. In terms of the latter, previous research demonstrates that terrorism at home increases the support for right-wing parties (e.g., Getmansky and Zeitzoff 2014). It might thus not be entirely implausible that terrorism abroad also shapes certain parties’ electoral success. To give one additional illustration, which demonstrates the more general scope of our argument and underlines that our findings likely broader implications, we complement our theory and analysis by offering evidence for a positive association between proximity to terrorism abroad and anti-immigration parties’ electoral success at home in Table A.8 in the supporting information (p.9). Second, proximity can be captured in more than one way and the proximity to a terrorist event is not limited to physical distance. On one hand, proximity or distance between states and contiguity may affect attitudes through distinct conceptual channels. The two are certainly correlated, but there may be differences in how attitudes transmit across borders conceptually. To this end, Table A.6 in the supporting information (p.7) focuses on distance as opposed to contiguity. On the other hand, commonalities, trust, and familiarity between countries are more likely to be observed between culturally proximate societies (see e.g., Gokmen 2017). In fact, media frames and news coverage of an event also depend on cultural bonds between countries (Yang and Chen 2018). As country’s media are subjected to different cultural perspectives and news coverage represents more “culturally proximate” cases (Kwon, Chadha, and
Pellizzaro 2017), we also explore the cultural similarity between societies in Table A.10 of the supporting information (p.12).

FIGURE 1  Immigration Salience in Europe
Note: The variable Immigration Salience captures the percent of the population that listed immigration as one of the two most important issues.

Data and Method

We have compiled a unique data set comprising information on public opinion on migration, terrorism incidents, and a series of control variables for several European states between 2003 and 2017. The sample’s country-time coverage is driven by data availability of the core variables of interest, most crucially public opinion on immigration. The country-year is the unit of analysis in this time-series cross-section data set \( N=413 \) observations.

Our dependent variable, the public’s attitude toward migration, is based on the Eurobarometer survey.\(^7\) As of 2003, the Eurobarometer has consistently, and for a sufficiently large set of countries, included “immigration” as response option for the following item: “[w]hat do you think are the two most important issues facing (OUR COUNTRY) at the moment?” With a view to capturing our theoretical concept as closely as possible and for maximizing country-year coverage, we ultimately chose that question for our outcome variable and use it to code the percent of individuals who mentioned immigration as one of these two most salient issues. For example, in the Eurobarometer survey 62 in 2004, 30.27 percent of the British respondents mentioned immigration as one of the two most important issues facing the UK at the present time. For our final dependent variable, we first dropped the “don’t know” answers and missing values in each item. In a second step, we aggregated this individual-level information to the country level by averaging across respondents. Finally, we calculated the average value per country-year in case

\(^7\) Available online at: [https://zacat.gesis.org/webview/index.jsp](https://zacat.gesis.org/webview/index.jsp).
more than one Eurobarometer survey comprising the item we focus on existed in a given year. We thus end up with a variable measuring the public mood toward immigration salience, which theoretically ranges in [0; 100], with higher values pertaining to a larger share of respondents perceiving immigration as a pressing issue for their country. The item’s mean value is 11.822 (standard deviation of 10.938) with a minimum of 0.200 and a maximum of 64.157. Figure 1 plots the public opinion on immigration as captured by immigration salience for all states included in our analysis across the years for which data are available.

In general, survey data generally comprise two dimensions of attitudes toward immigration, i.e., preference and salience (see Hutton 2017, for a thorough). There are two important differences. Whereas preferences relate to the level of immigration that the individual would like to see, salience is the “intensity of that feeling” and the degree of importance that she attaches to immigration as a policy issue (Hatton 2017). In other words, “preference is viewed as evaluative while salience is a cognitive dimension” (Hutton 2017, 3). From a policy perspective, voters’ preferences do not become political priorities when salience is low. At the same time, highly salient issues can elicit strong responses. We thus use immigration salience as our main dependent variable.

Given our theoretical interest in whether terrorism abroad influences public opinion on migration at home, we estimate spatial-x models (Franzese and Hays 2007; 2008; Plümper and Neumayer 2010, 420f), i.e., we “regress the dependent variable on the values of one […] independent explanatory variable.” Hence, a country’s attitude toward migration is in our case a

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8 Moreover, short-term shocks are more likely to influence the salience of immigration than preferences toward immigration (Hutton 2017).
function of foreign states’ level of terrorism, and a weighting matrix specifies which subset of countries exerts influence. Using a scalar notation (with $i \neq j$), we estimate,

$$y_{it} = \alpha + \phi y_{i t-1} + \rho \sum_{j} w_{ij} x_{jt} + \beta X_{it} + \epsilon_{it},$$

(1)

where $y_{it}$ is our dependent variable, i.e., *Migration Attitude*, and $y_{i t-1}$ is its one-year temporally lagged value. $X$ is a set of controls discussed below, year fixed effects, and country fixed effects, while $\alpha$ stands for the constant and $\epsilon$ is the error term. The spatial part of the first equation comprises the product of a connectivity matrix ($w_{ij}$) and an explanatory variable ($x_{jt}$), which we discuss in the following. We estimate the models using ordinary least squares (OLS), but eventually focus on the maximum-likelihood procedure introduced in Franzese and Hays (2007; 2008), which “does not assume a temporally lagged spatial lag and addresses simultaneity bias head on” (Ward and Cao 2012, 1084).\(^9\)

We systematically control for countries’ common exposure to similar exogenous (unit-level) factors, which – rather than a genuine diffusion process we argue for – may drive attitudes toward migration (Franzese and Hays 2007, 142). Franzese and Hays (2008) suggest including a lagged dependent variable, country fixed effects, and time fixed effects to address this. Including these items, plus a set of control variables that we introduce below, credibly ensures that contagion “cannot be dismissed as a mere product of a clustering in similar [state] characteristics,” i.e., common exposure (Buhag and Gleditsch 2008, 230; Plümper and Neumayer 2010, 427). To this end, the temporally lagged value of migration attitudes allows for path dependencies, common trends, and temporal dynamics more generally. Year fixed effects control for system-

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\(^9\) This directly corrects for simultaneity bias and further “seems to offer weakly dominant efficiency and generally solid performance in unbiasedness and SE [standard error] accuracy” as compared to other estimation procedures (Franzese and Hays 2007, 163; Franzese and Hays 2008).
wide shocks such as the 2015 “refugee and migration crisis” in Europe. Finally, country fixed effects control for time-invariant, but idiosyncratic factors affecting a state’s public opinion on migration.

Our main focus lies on the spatial variable $W^T_{\text{Terrorism}}$. As indicated above, this item is the product of a weighting matrix ($w_{ijt}$) and one of our explanatory variables ($x_{jt}$). First, the weighting matrix is based on direct contiguity: using the Correlates of War Direct Contiguity Data (Douglas et al. 2002), the elements in the connectivity matrix capture the contiguity of country $i$ and country $j$ as defined by a land/river border or the two are separated by up to 400 miles (643.74 km) of water (value of 1 in the matrix). If there is no such border between countries $i$ and $j$ or elements refer to two different years in the matrix, we assign a value of 0 (and also $w_{i,i}=0$). We focus on contiguity as the interpretation of the results is facilitated when using binary weights in the connectivity matrix. That said, our theoretical mechanism mainly concentrates on the proximity between states (e.g., great circle distance between capital cities), which is related to, but also conceptually different from, contiguity. As suggested above, contiguity and proximity may affect attitudes through distinct conceptual channels. For example, Avdan and Webb (2018) show that the public views contiguous “territory” as within one’s neighborhood, which in turn affects attitudes toward terrorism. Braithwaite (2013) and Braithwaite et al. (2018) focus on the effects of distance on risk perception. To this end, Braithwaite (2013, 97) suggests that “that physical proximity to attacks may heighten emotional arousal and personal sense of vulnerability in a manner that separates this population from the rest in terms of perceived threat” (emphasis added; see also Huddy et al. 2005). Fischhoff et al. (2003, 138) also focus on distance rather than contiguity and claim that “those close to attacks may both see and feel more of both components of risk: higher probabilities [of attacks] and greater consequences” (emphasis added; see also Schlenger et al. 2002). Eventually, contiguity and distance between states are related to each
other, but there may be differences in how attitudes transmit across borders conceptually. To this end, although we focus on contiguity in the following, we evaluate the robustness of our main finding with an indicator based on the distance between capitals in the supporting information (Table A.6, p.7).

Second, the independent variable we use to construct the spatial item is the number of terrorist attacks in countries $j$ (i.e., sending states from which the spatial stimulus originates). We rely on the Global Terrorism Database (GTD) (Enders, Sandler, and Gaibulloev 2011, 321), which defines terrorism as “the premeditated use or threat to use violence by individuals or sub-national groups against noncombatants in order to obtain a political or social objective through the intimidation of a large audience beyond that of the immediate victims.” The GTD codes the number of terrorist attacks, domestic and transnational ones, in country-years and we focus on the total number of terrorist attacks in a given country-year for $x_{jt}$. Ultimately, in rows corresponding to country $i$, entries are 0 unless the corresponding state in column $j$ of the weighting matrix is a neighbor, in which case the entry is $j$’s number of terrorist attacks as coded by the GTD. On theoretical grounds that apply here, we do not row-standardize the matrix underlying $W_{Terrorism}$. Row-standardization changes “the relative substantive weight of units from which the contagion originates. Without row-standardization, all contiguous countries exert the same influence no matter how many contiguous countries there are. After row-standardization, contiguous countries exert an influence that becomes proportionally smaller the larger the number of contiguous countries” (Plümper and Neumayer 2010, 430). In our European context and given the interest in whether public opinion may be influenced by terrorist attacks abroad, it seems unlikely that the number of neighboring states is of importance, and all contiguous countries should in principle exert the same influence.
In light of the discussion about common exposure, we control for a series of other influences that may well be correlated with migration attitudes at the domestic level. Given the spatial-x specification of our model, we include *Terrorism*, a count variable measuring the number of terrorist attacks in the focal country \( i \) in a given year. As in the case of the spatial variable, we use the GTD (Enders, Sandler, and Gaibulloev 2011). Despite our interest in a transnational diffusion effect stemming from terrorism abroad, we still expect this variable *Terrorism* to be positively linked to *Migration Attitude*. When subscribing to our claim that people, albeit wrongly, link terrorism to migration, we should observe the proclaimed effect also at the domestic level, and potentially even a stronger impact than in the case of \( W_{x}^{Terrorism} \).

We also include variables such as the socio-economic status, left-right self-placement, and country-level economic and political characteristics that enjoy near-consensus support in the literature as main drivers of opinions over immigration (Ceobanu and Escandell 2010; Hainmueller and Hopkins 2014). We control for the position of the median voter using Eurobarometer data on respondents’ left-right self-placement on a scale of 1 (left) to 10 (right) (Schmitt and Scholtz 2005). We use Tukey’s method (1977) to calculate the median from the individual level data. The more “conservative” or “right” the general public is, the more likely it will be that migration is seen as salient. In our sample, this variable has a mean value of 5.360 (standard deviation of 0.554). While all countries in our dataset are democracies, we also control for variation within this form of government using the *polity2* item from the Polity IV data.\(^\text{10}\)

Finally, we include three variables that are all taken from the World Bank Development Indicators, which are all log-transformed to account for their skewed distributions. First, public opinion on migration may be linked to states’ economic development and we use GDP per capita (in

\(^{10}\)Available online at: [https://www.systemicpeace.org/inscr/p4manualv2016.pdf](https://www.systemicpeace.org/inscr/p4manualv2016.pdf).
current US Dollars), which is defined as the gross domestic product divided by midyear population. Second, population size is likely to be linked to the degree of preference heterogeneity in a society, which in turn could affect the public’s views on migration. We rely on a country’s mid-year total population, which counts all residents regardless of legal status or citizenship (except for refugees not permanently settled). Finally, there is the total population size (or stock) of international migrants and refugees living in a country. The World Bank defines the international migrant and refugee stock as “the number of people born in a country other than that in which they live. It also includes refugees.” Hence, this variable captures the entire population of foreign-born individuals in a state.

**Empirical Analysis**

Table 1 summarizes our main models. Model 1 is a “naive” estimation that merely comprises the controls, the domestic-level terrorism item, and the fixed effects, but omits the international-level spatial variable. Hence, Model 1 neglects that an international diffusion effect stemming from terrorism abroad exists that shapes migration attitudes at home. Model 2 changes this perspective as we now include $W_{x}^{Terrorism}$ next to $Terrorism$. We omit the substantive controls, though, to demonstrate that our main finding is not affected by their inclusion or exclusion. Models 3 and 4 constitute our full models (all explanatory variables included). Model 3 is based on OLS, while Model 4 is estimated via maximum likelihood using the estimator from Franzese and Hays (2007; 2008).

Interpreting the results in Table 1 requires some additional information. First, as we do not row-standardize the spatial variable’s connectivity matrix, its coefficient cannot be interpreted directly. However, Plümper and Neumayer (2010, 430f; see also Ward and Gleditsch 2008, 39) suggest to multiply the coefficient of the spatial item with the average number of neighbors to obtain short-
term spatial impacts. Second, because we include the temporally lagged dependent variable, long-
term effects are larger than short-term effects in the current year. Plümper, Troeger, and Manow
(2005, 336; Plümper and Neumayer 2010, 425) show how the former, asymptotic long-term effects
can be calculated by taking the temporally lagged dependent variable’s coefficient into account, and
we follow their approach to estimate both asymptotic long-term effects and short-term effects (Fig-
ure 3). Finally, when including a spatial item in a model, coefficients provide information about the
pre-dynamic effects, i.e., “the pre-[spatial] interdependence feedback impetus to outcomes from
other regressors” (Hays, Kachi, and Franzese 2010, 409). To fully understand the direct and indirect
effects of $W_x^\text{Terrorism}$, we also present spatio-temporal multipliers, which allow the “expression of
estimated responses of the dependent variable across all units” (Hays, Kachi, and Franzese 2010,
409). The corresponding effects are presented in Figure 4.

<table>
<thead>
<tr>
<th></th>
<th>Model 1 OLS</th>
<th>Model 2 OLS</th>
<th>Model 3 OLS</th>
<th>Model 4 MLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagged Migration Attitude</td>
<td>0.7107</td>
<td>0.7025</td>
<td>0.7084</td>
<td>0.7087</td>
</tr>
<tr>
<td></td>
<td>(0.0410)</td>
<td>(0.0386)</td>
<td>(0.0405)</td>
<td>(0.0380)</td>
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<tr>
<td>Terrorism</td>
<td>0.0653</td>
<td>0.0573</td>
<td>0.0589</td>
<td>0.0597</td>
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<tr>
<td></td>
<td>(0.0203)</td>
<td>(0.0201)</td>
<td>(0.0202)</td>
<td>(0.0189)</td>
</tr>
<tr>
<td>$W_x^\text{Terrorism}$</td>
<td>0.0247</td>
<td>0.0259</td>
<td>0.0227</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0081)</td>
<td>(0.0083)</td>
<td></td>
<td>(0.0072)</td>
</tr>
<tr>
<td>Population (ln)</td>
<td>-6.1839</td>
<td>-10.2671</td>
<td>-9.7651</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(9.9617)</td>
<td>(9.9278)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita (ln)</td>
<td>2.1225</td>
<td>1.6733</td>
<td>1.7285</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.4129)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migrant Population (ln)</td>
<td>0.0705</td>
<td>1.0590</td>
<td>0.9374</td>
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<tr>
<td></td>
<td>(2.6088)</td>
<td>(2.5967)</td>
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<td></td>
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<tr>
<td>Median Voter</td>
<td>0.7385</td>
<td>0.7403</td>
<td>0.7401</td>
<td></td>
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<tr>
<td></td>
<td>(0.6289)</td>
<td>(0.6213)</td>
<td>(0.5818)</td>
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<td>Democracy</td>
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<td>0.2337</td>
<td>0.1932</td>
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</tr>
<tr>
<td></td>
<td>(1.1069)</td>
<td>(1.0987)</td>
<td>(1.0282)</td>
<td></td>
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<tr>
<td>Observations</td>
<td>413</td>
<td>413</td>
<td>413</td>
<td>413</td>
</tr>
<tr>
<td>Moran’s I</td>
<td>0.095</td>
<td>0.095</td>
<td>0.095</td>
<td>0.095</td>
</tr>
<tr>
<td>Year and Country Fixed Effects</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----</td>
<td>-----</td>
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<tr>
<td>RMSE</td>
<td>4.3497</td>
<td>4.2960</td>
<td>4.2976</td>
<td>4.0243</td>
</tr>
</tbody>
</table>

Note: Table entries are coefficients; standard errors in parentheses; constant, year fixed effects, and country fixed effects included in all models, but omitted from presentation.

$W_x^{Terrorism}$ is positively signed and statistically significant across Models 2-4 of Table 1. Adding or dropping control variables or a change in the estimation procedure from OLS to maximum likelihood estimation do not affect the robustness of this finding. Thus, we obtain evidence that terrorism abroad does influence public opinion on immigration at home, as we contend in theoretically. Substantively, we begin with Figure 2 that depicts predicted values of Migration Attitude, our dependent variable, for values of $W_x^{Terrorism}$ while holding all other variables constant at their mean values. At the minimum of the spatial item, which pertains to no terrorist attacks in neighboring states, our model predicts a value of about 11, i.e., on average, 11 percent of the population would indicate that immigration is one of the two most salient issues affecting their country. The point estimate of the predicted values increases to more than 16 when raising $W_x^{Terrorism}$ to its sample maximum (the root mean square error is about 4.30 in Model 3).

FIGURE 2 Predicted Values of Migration Attitude by $W_x^{Terrorism}$
Note: Dashed lines pertain to the 95 percent confidence interval; rug plot along the x-axis illustrates the distribution of \( W_x^{Terrorism} \); estimates are based on Model 3.

FIGURE 3 Temporal Short-Term and Asymptotic Long-Term Effects

Note: Horizontal bars are 95 percent confidence intervals; estimates are based on Model 4.

In addition, a country’s migration attitude would be 0.12 points higher in the short run, if all neighboring states would see one terrorist attack (see Ward and Gleditsch 2008, 38). In the long run, as demonstrated with Figure 3, the effect increases to 0.41 when the spatial item \( W_x^{Terrorism} \) is raised by one unit. Recall that short-term effects in Figure 3 pertain to the impact of the spatial
variable in the current year, while long-term effects stand for the asymptotic influence, i.e., when $t$ goes toward infinity and they can directly be derived from our estimation (Plümper, Troeger, and Manow 2005, 336; Plümper and Neumayer 2010, 425). To this end, the interpretation of the long-term effects is that the impact of incidents in year $t$ strengthens over time. If attitudes cement over time rather than dissipate, a quasi-permanent shift in the political landscape may emerge whereby migration overtakes other issues in terms of policy salience. This seems to be in line with what we report above, i.e., that European citizens regarded immigration as the primary public issue in 2016. However, there may clearly be different mechanisms and influences emerging over the years that will drive this result – our asymptotic estimate is based on the covariate values observed until the end of the sample period. The substance of these effects is nevertheless considerable, clearly showing that an important effect does exist. However, as discussed below, the impact of Terrorism is, as expected, larger. While these substantive results are based on Model 4, adding or dropping specific variables does not change the findings qualitatively.

Coming to the long-term equilibrium impacts, i.e., the higher-order effect from the influence of the number of terrorist attacks of $j$ exerts on its neighbor $i$, which in turn feeds back into the network and then influences others via direct and indirect links, including $i$ (see also Ward and Cao 2012, 1092-1094), we focus on the year 2015 for our simulation and hypothetically induce one terrorist attack in two states: France and the UK, respectively. These two countries are not only the European countries widely regarded as most influential in terms of international diplomacy; they have also shared the brunt of the recent rise of right-wing and Islamist terrorist attacks and extremism. We then calculate the long-term effects on all states, as the shock reverberates through the system of spatial and temporal lags using Ward and Gleditsch (2008, 45),

$$\Delta X \beta,$$

\begin{equation}
(I - \rho W - \phi I)^{-1} \Delta X \beta, \tag{2}
\end{equation}
where \( I \) is the identity matrix, \( W \) the sub-matrix of the \( i^{th} \) weighting matrix for period \( t \), and \( \Delta X \beta \) is the shock at time \( t \). Since each unit will have a different set of linkages to its neighbors, the impact of a hypothetical change in \( x_i \) will depend on which unit is being changed. Hence, we capture the combination of direct and indirect effects given direct and indirect links. It is through that network of direct and indirect links that information flows.

**FIGURE 4  Spatial Long-Term Equilibrium Effects**

![Spatial Long-Term Equilibrium Effects](image)

*Note:* Entries pertain to spatial long-term equilibrium effects in other countries when simulating one terrorist attack in either France (grey diamonds) or the UK (black circles). Direct effects for France (3.71) and UK (3.61) not reported to improve readability.

Based on Model 4, Figure 4 summarizes the findings from two experiments for the impact of one induced terrorist attack in 2015 for either the UK or France. In the UK, Mohammed Rehman
and Sana Ahmed Khan planned to commemorate the anniversary of the July 7, 2005 suicide bomb attacks, while the November 2015 attacks in Paris are one of the most severe terror incidents in France’s recent history. We report the median (50 percent) equilibrium impact as our calculations are based on 1,000 random draws from the multivariate normal distribution of the spatial and temporal lags. The simulations suggest that the proclaimed effect is both significantly and substantively important. An induced terrorist attack in the UK in 2015 would positively affect all other countries in the system to the extent that a larger percentage of people would see immigration as a salient issue. Not surprisingly, the effect is largest in the UK, though, with an increase of 3.61 percentage points of Migration Attitude. Across borders, the effect weakens but remains influential: in Germany, France, Belgium, or the Netherlands, our model predicts an increase of almost half a unit in public opinion on immigration salience. The effects are similar when simulating a terrorist attack in France in 2015. For instance, the German public would react to this by increasing its migration attitude by 0.49 units. Similar effects are given for Denmark, Belgium, the Netherlands, or Italy.

Linking these findings to our theory, we find strong and robust support for our hypothesis. Although most terrorist attacks hardly have any connection to migrants or refugees, the public perceives that such a link does exist. This effect is even so strong that it can travel across national borders, with terrorist incidents in, for example, France crucially influencing the public mood on immigration salience in neighboring states. These findings provide important lessons. First, public opinion on migration is not only shaped by domestic, unit-level effects, but there are transnational-diffusion mechanisms that systematically shape how the public sees immigration. Second, this transnational-diffusion effect originates in what people believe is linked to migration, although existing evidence suggests otherwise.
Finally, the results concerning the control covariates are mixed. On one hand, *Terrorism* is the only substantive control that is linked to statistically significant effects. As we would expect, this variable also exerts a positive impact on *Migration Attitude*, which is also more strongly pronounced than in the case of $W_x^{Terrorism}$. The short-term effect of *Terrorism* is, for instance, 0.060 in Model 4, which renders even more support for our underlying theoretical argument that people link terrorism and migration, but also shows that the effect weakens off when it has to travel across borders. On the other hand, all other control variables are statistically insignificant. We believe that this is driven by our conservative approach that likely soaks up the effects of slow-moving variables in either the fixed-effects or in the lagged dependent variable. Finally, an F-test shows that the battery of country and year fixed effects does add to the model fit, and it is particularly interesting, although not unexpectedly, that the 2015-year dummy exerts the overall strongest marginal effect among all explanatory powers as this was the year the migration and refugee crisis reached its climax in Europe.

We probe the robustness of our empirical findings with several additional analyses, which are presented and discussed in the supporting information. We address issues of intra-group correlations more effectively by means using clustered standard errors (Table A.1 of the supporting information, p.3) and we introduce a Spatial Durbin Model, which adds a traditional spatial lag to control for the impact of migration attitudes abroad on public opinion at home (Table A.2, p.3). We also evaluate our findings conditional on countries’ population size and economic power (Table A.3, p.5) as well as on right-wing executive leadership (Table A.13 and Figure A.1, p16). We further control for unemployment (Table A.4, p.6) and distinguish between transnational and domestic terrorism (Table A.5, p.6). In light of our argument on media attention, we additionally consider other characteristics of terrorist attacks, including the lethality of an incident (Table A.7, p.8), multiple events comprising a terrorist attack, suicide terrorism, and suc-
cessful attacks (Table A.11, p.13). Finally, we mitigate concerns regarding simultaneity bias by means of three-stage least square estimations (Table A.9, p.10). All analyses in the supporting information emphasize that the results carry over and these additional checks increase the confidence in our main result: migration attitudes “at home” are systematically driven by terrorist attacks in neighboring countries.

Conclusion

Over the last years, the increasing frequency of terrorist violence meant that the question of how to most effectively respond to terrorism has returned as a central concern for policymakers. Public opinion is an important measure of success and influence for terrorist organizations, thus understanding how public attitudes are formed is fundamental for counterterrorism policies. In this article, we focus on attitudes toward immigration. Immigration is a highly debated issue, particularly in Europe where a record 1.26 million migrants, mostly from war-torn nations, sought asylum in 2015. A main issue in the public debate on immigration revolves around the possible security implications of such population inflows. Whereas the EU and its member states have long integrated immigration into their security agenda, Jihadist radicalization and the potential arrival of extremist terrorists through legal or irregular immigration routes has become a concern for European leaders and their voters. Although in most cases, attacks in Europe have been carried out by native-born residents rather than recently-arrived migrants, opinion polls show that many respondents link the risk of terrorism to increased immigration.

We examine the spatial dynamics of this link and ask whether terrorist events in neighboring countries affect attitudes toward immigrants. We contend that the perceived relation between immigrants and terrorism becomes more prominent after a terrorist attack, even when this is
beyond the borders of a targeted country. Our approach differs from previous studies in that, among others, we consider the universe of terrorist events in Europe in the post-9/11 period rather than selected emblematic cases. We find that both terrorism at home and terrorism abroad significantly increase concerns over migration. Thus, terrorist attacks abroad, particularly those from neighboring countries, seem to play an important role in explaining domestic public sentiment toward immigrants. As such, the overall effect of terrorism on public opinion about migration is even larger than hypothesized by previous studies.

The “European migrant crisis” has created deep divisions within the EU and has challenged its commitment to hosting third-country nationals from war-torn regions. Previous research shows that incumbents usually pay a great deal of attention to public opinion and a poor understanding of what drives public sentiment, particularly the fear of a migration-terrorism link, can lead to dire policy decisions, e.g., more stringent selection and admission requirements, a lack of access to long-term settlement and rights associated with the status of immigrants, or the deportation of foreign citizens. In light of potential reforms to the asylum policy within the EU, and the way opinion polls shape domestic policies and political reforms, our results suggest a more careful consideration of exogenous factors. The effect of terrorism can be felt by citizens abroad, even when their country is neither directly targeted nor at imminent risk.

While our research is based on evidence from Europe, its findings are also relevant for other world regions. However, we expect a cross-border diffusion of migration concern as a result of terrorism only if three scope conditions are met. First, the terrorist attacks that are at the origin of attitudinal change must be sufficiently novel and shocking. Hence, we do not expect our findings to travel to conflict countries where terrorist attacks represent repeated occurrences. Second, diffusion of attitudinal change from targeted to nearby countries hinges on some sense of similarity and identification across borders. We would thus expect to see similar effects in culturally inte-
grated regions like North America, but not in world areas where neighbors share little commonalities. Third, the content of attitudinal change – in our context migration concerns – depends on the public’s preconceptions. Where citizens commonly believe in a linkage between terrorism and migration (despite lacking evidence), we expect to see a similar effect of nearby terrorist attacks on migration concern.

There are several interesting questions to explore in further research. First, future studies may identify conditions under which terrorism in another country influences migration attitudes at home. In the supplementary materials, we consider diffusion effects from more populous and economically stronger states to smaller and economically weaker countries, respectively (Table A.3), but other scope conditions seem plausible. Second, given that anti-Muslim sentiment is on the rise in many European countries, exploring differences in opinion toward EU and non-EU immigrants seems an effort worth making. Third, our core finding for both domestic and transnational paths of influence from terrorism is large enough to be politically relevant. An important question is whether this effect may increase in the long-run as the cumulative impact of multiple attacks sets in. If anything, then, what explains this strong link that citizens attach to migration and terrorism requires more systematic and in-depth research. Finally, public opinion matters for policymakers’ decision-making. As discussed, politicians have incentives to respond to public opinion via legislative output for maximizing the chances to stay in power. To this end, it may be an effort worth making to study how policy outputs and public opinion are related to and influence each other. These variables may form a system in which each is related to the other – each variable is endogenous. Earlier research provides some support for linkages between public opinion and policy output, but assumes that each relationship is unidirectional. By going beyond studying the associations of migration policy output and public opinion as binary, unidirectional
relationships, we will likely further our understanding of how migration attitudes are formed and what impact they have.

References


