

# The Effect of Migration on Terror – Made at Home or Imported from Abroad?

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**Abstract:** We analyze the causal effect of the stock of foreigners residing in a country on the probability of a terrorist attack in that country. Our instrument for the stock of foreigners relies on the interactions of two sets of variables. Variation across host-origin-dyads results from structural characteristics between the country of origin and the host, while variation over time makes use of changes in push and pull factors between host and origin countries resulting from natural disasters. Using data for 20 OECD host countries and 183 countries of origin over the 1980-2010 period we show that the probability of a terrorist attack increases with a larger number of foreigners living in a country. However, this scale effect is not larger than the effect domestic populations have on domestic terror. We find scarce evidence that terror is systematically imported from countries with large Muslim populations or countries where terror networks prevail. Policies that exclude foreigners already living in a country increase rather than reduce the risk that foreign populations turn violent, and so do terrorist attacks against foreigners in their host country. Highly skilled migrants are associated with a significantly lower risk of terror compared to low skilled ones, while there is no significant difference between male and female migrants.

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*... the attacks of September 11, 2001, showed that some [immigrants] come to the United States to commit terrorist acts, to raise funds for illegal terrorist activities, or to provide other support for terrorist operations, here and abroad.*

George W. Bush (2001)

*Immigration and Jihad go together. One is the consequence of the other and dependent upon it.*

Imam Abu Baseer<sup>1</sup>

## **1. Introduction**

There is clear and systematic evidence that countries threatened by terrorist attacks respond to this threat to their values by diminishing the very rights they aim to protect in the first place (Dreher et al. 2010). An area particularly prone to human rights restrictions is immigration and asylum policy. Arguably, it is easier to restrict the rights of foreigners in order to increase the (perceived) security of a country's natives than to restrict the rights of these natives (i.e., voters) themselves.

Plenty of evidence suggests that stricter immigration and visa policies are a preferred reaction to terrorist attacks (Fitzpatrick 2002, Martin and Martin 2004, Avdan 2014).<sup>2</sup> After the September 11, 2001 (hereafter 9/11) attacks on the United States, U.S. President George W. Bush issued a Presidential Directive introducing stricter immigration policies to combat terrorism. The new Department of Homeland Security (DHS) was founded in 2003, incorporating the former Immigration and Naturalization Service (INS). The new Department explicitly links immigration policies to anti-terrorism strategies (Kerwin 2005). A number of additional discriminatory measures have since been implemented, among them exceptional powers to the Attorney General to detain foreigners without hearings and proof of guilt if there is "reasonable grounds to believe" these foreigners are involved in terrorist activity, ethnic profiling, and required registration for certain groups of entrants – in particular from Muslim states (Spencer 2007). In the 2016 US-Presidential election, the Republican candidate promised to ban all Muslims from immigration to the United States if he were to win the election. Directly after his inauguration he issued a travel ban for six predominantly Muslim countries.

The United Kingdom equally tightened immigration policies in the wake of 9/11, most notably with the introduction of the Anti-terrorism, Crime and Security Act 2001 (Spencer

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<sup>1</sup> Abu Baseer is a leading religious supporter of al Qaeda (Leiken 2004). Cited in Paz (2002: 73).

<sup>2</sup> Also see Bandyopadhyay and Sandler's (2014) game-theoretic model on immigration policy and counterterrorism.

2007). Under the Act, the Secretary of State for the Home Department is allowed to order the detention of foreigners based on mere suspicion of terrorist involvement, without trial.<sup>3</sup> As Spencer (2007) summarizes, France, Germany, and Spain, among others, have similarly tightened immigration laws or procedures in response to the terrorist attacks of 9/11.

In light of these reactions to terror, evidence that liberal immigration and integration policies or the number of foreigners living in a country increase terrorism is surprisingly scarce. The only systematic statistical analysis we are aware of reports a negative correlation between migration and terrorist attacks (Bove and Böhmelt 2016).<sup>4</sup> Other previous studies that address the link between terror and migration either examine the effect of terror on migration (e.g., Dreher et al. 2011) or employ data on terrorists with immigration status rather than relying on systematic cross-country time-series data on migration and terror attacks (Kephart 2005, Leiken 2004, Leiken and Brooke 2006). Studies focusing on terrorists with immigration background find a close link between immigration and terrorism. Given that they do not examine overall flows of immigration but only those cases in which immigrants have been involved in terrorist activity, these studies do not provide an accurate picture of the relation between migration and terrorism. The absence of a causal investigation about whether and to what extent migration induces terror is an important gap in the literature.

We fill this gap and analyze the effect of immigration on terrorist attacks in an instrumental variable setting. We predict the stock of foreigners with the interactions between two sets of variables. Variation across host-origin-dyads results from structural characteristics between the country of origin and the host, while variation over time (and dyads) originates from changes in push and pull factors between host and origin countries resulting from natural disasters.<sup>5</sup> Controlling for the levels of these variables and fixed effects for dyads and years, the interactions provide a powerful and excludable instrument. As we explain in some detail below, the intuition of our instrumentation strategy is in analogy to a difference-in-difference estimator, where we assume changes in the number of disasters to differentially affect terror in countries with different structural characteristics exclusively due to the number of migrants there (rather than via any omitted variables).

Our data include 20 OECD host countries and 183 countries of origin over the 1980-2010 period. This focus on countries and years – rather than individual migrants and terrorists – has a number of advantages but also comes at some cost. On the downside, most importantly,

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<sup>3</sup> The act was deemed unlawful in 2004, which is why the Prevention of Terrorism Act 2005 was passed, allowing the Home Secretary to impose “control orders” on everyone suspected of being involved in terrorism.

<sup>4</sup> There is, however, evidence that the number of refugees hosted in a country are correlated with a larger number of terrorist attacks (Milton et al. 2013).

<sup>5</sup> This follows previous literature on migration (see Alesina et al. 2016, Docquier et al. 2016).

our data do not allow us to test whether individual migrants have turned into terrorists. Instead, they allow us to test the effect of migration on the overall risk of terror. Migrants can arguably affect terror in a number of ways. Most obviously, migrants can turn into terrorists themselves. However, their presence can also affect the probability that others turn violent. As one example, larger networks of migrants from the same country, including friends and family, might reduce the risk that foreigners already living in the country turn violent. As another, the inflow of people with anti-Western sentiment might make migrants of the second or third generation living in a country turn violent, and thus increase the risk of terror even if the additional migrants themselves do not commit terrorist acts. Only country-level data, such as those that we use here, are suited to test these broader effects of migration on terror.

We find that terror becomes more likely with a larger number of foreigners living in a host country. This scale effect relating larger numbers of foreigners to more attacks does not imply that foreigners are more likely to become terrorists compared to the domestic population. When we calculate the effect of a larger native population on the probability of terror attacks by natives, we find this effect to be of comparable size. Overall, we thus conclude that a rising stock of foreigners living in a country does not increase the risk of terror more than does domestic population growth.

We refine the basic analysis in several ways and analyze how politics and economics, origin country characteristics, and the composition of migrant populations mediate the effect of migration on terror. We also test whether and to what extent immigration and integration policies change the effect of foreigners on terror. Our results show that domestic policies relating to the integration and prospects of immigrants as well as immigration policies affect the probability that foreigners turn violent. More specifically, our analysis demonstrates that restrictions on migrants' rights and stricter immigration laws increase the effect of migrants on terror. It seems that stricter policies segregating foreigners already living in a country lead to alienation and resistance, increasing the risk of terror arising from those populations rather than reducing it. Host country policies thus affect terror in ways other than commonly perceived. What is more, we find that a larger number of attacks against foreigners in the host country increases the risk of terror by foreigners there.

Our results show that highly skilled migrants are associated with a significantly lower risk of terror compared to low skilled ones, while there is no significant difference in terror arising from male compared to female migrant populations. With some exceptions, we do not find migrants coming from Muslim-majority countries and those coming from countries with

particularly pronounced terrorist networks to increase the likelihood of terror compared to other foreign populations.

The next section discusses the previous evidence linking immigration to terrorism and introduces our hypotheses. We outline our data in Section 3 and our empirical strategy in Section 4. Section 5 shows the main results, Section 6 tests robustness, and the final section concludes and discusses policy implications.

## 2. Terror and Migration

While there is no evidence of a systematic effect of immigration on terrorism, plenty of anecdotes and opinion-based writings, in concert with a number of descriptive evaluations of terrorist events exist.<sup>6</sup> Somewhat systematic evidence is offered in the few studies analyzing the vitas of known or suspected terrorists. Among these, Camarota (2002) investigates how 48 foreign-born Islamic terrorists entered and remained in the United States in the 1993-2001 period. Leiken (2004) focuses on 212 suspected and convicted terrorists in North America and Western Europe from 1993-2003. Kephart (2005) covers the immigration histories of 94 terrorists operating in the United States in the 1990-2004 period, while Leiken and Brooke (2006) coded 373 terrorists belonging to organizations with global reach over the years 1993-2004.

All these studies find that terrorism is strongly associated with immigration. Camarota (2002: 5) consequently concludes that “there is probably no more important tool for preventing future attacks on U.S. soil than the nation’s immigration system.” However, based on terrorists’ vitas summarized in the previous literature, in the vast majority of cases, foreigners committing global terrorism have lived in the country they attack for an extended period of time rather than entering and immediately engaging in an attack.<sup>7</sup> Rather than entering as a terrorist, it seems that the bulk of future terrorists immigrate without the intention to be involved in terrorism, and

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<sup>6</sup> A particularly prominent example of opinion-based “analysis” is Michelle Malkin’s (2002) bestseller *Invasion*, suggesting a range of discriminatory measures against immigrants to prevent the migration of terror.

<sup>7</sup> For example, the metro and rail bombings in Paris during the mid-1990s have been conducted by “legal” French Muslim citizens of Algerian origin (Leiken 2004). The leader of the French cell responsible for the bombings, Khaled Kelkal, e.g., immigrated to France from Algeria as an infant in the 1970s (Leiken 2004). In these and all of the other examples provided in Kephart (2005), immigration happened many years before the involvement in any terrorist activity. The three future 9/11 hijackers from the Hamburg cell came to Germany as legal immigrants and only later came in contact with fundamentalist networks (Leiken 2004). A more recent example is Najim Laachraoui who is alleged to be involved in the suicide terrorist attack on Brussel’s airport in March 2016 (as well as in the Paris attacks of November 2015). Laachraoui was born in Morocco but migrated to Belgium as a child (<http://www.nbcnews.com/storyline/brussels-attacks/najim-laachraoui-what-we-know-about-suspected-bomb-maker-n543996>, accessed November 13, 2016).

only later become terrorists. They get into contact with terrorists living in their host country or when returning to their country of origin for holiday or business.

In the empirical analysis below we therefore test whether and to what extent the *stock* of foreigners living in a country is related to the level of terror, rather than focusing on recent entrants. Focusing on stocks rather than flows comes with an additional advantage. Larger networks of foreigners already living in a country facilitate further immigration. Larger numbers of foreigners thus facilitate the actions of terrorists as well, given that they might find it easier to enter and live in the country, potentially illegally.

We are interested in whether foreign nationals living in a host country lead to a higher probability of terrorist attacks originating from nationals of this country in their host country. Arguably, the absence of such a pure “scale effect” would be surprising. An increasing number of people living in a country mechanically increases the probability to observe violence originating from that group (Jetter and Stadelmann 2017). Such correlation is comparable to those between the size of the domestic population living in a country and the number of terrorist attacks pursued by them (Kruger and Maleckova 2003). In light of the scale effect population size has on domestic terror according to the previous literature, the absence of a positive correlation between the number of foreigners and the number of attacks pursued by foreigners would imply that foreigners are less likely to become terrorists than the domestic population. We consider this unlikely. It is therefore important to put the effect of foreigners on the probability of foreign attacks in perspective, and provide a comparison with how the number of natives affects terrorism by those natives.

It is also important to understand what factors influence this scale effect. We analyze three groups of potential confounders: the political and economic environment in the host country, characteristics of the origin country, and the composition of migrant stocks.<sup>8</sup> First, we hypothesize that a host country’s policies and environment are crucial in the fight against terror. One important dimension concerns the extent to which immigrants are integrated into the culture and society of their host country (Leiken 2004, Rahimi and Graumans 2015). Well-integrated foreigners are less likely to engage in terror against their host country population. Tensions among the host and foreign populations, to the contrary, will increase the propensity (of foreigners and natives, arguably) to engage in terrorist activity (Findley et al. 2010, Gould and Klor 2015). Most importantly, we expect terrorist groups to have an easier time recruiting foreigners for the fight against the host country’s population if they themselves are the target of political violence from the domestic population.

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<sup>8</sup> Kis-Katos et al. (2014) document that the determinants of terrorism can be heterogeneous.

Furthermore, we expect immigrants' prospects to earn their living and obtain positions of respect in their host countries to be crucial. Policies aimed at forced integration – putting pressure on immigrants to assimilate, learn the language of their host country, or change the way they dress or exercise their religion – can turn either way. To the extent these policies are successful and result in better integrated immigrants, they can help to reduce terror in the future. Yet restrictions and pressure on immigrants on areas of their lives they deem important can as well raise resistance and alienation and thus achieve the opposite effect (see Fouka 2016).

A second important dimension of host country policies concerns immigration. Policies on immigration are officially, at least in part, designed to reduce the risk of terror. It is, however, not clear if stricter immigration policies do in fact reduce the probability that foreigners commit terror, since their effect on foreigners already living in the host country is not well understood. Such policies could be perceived as acts of repression, racism, and humiliation by foreigners already residing in the host country, leading to alienation and resistance, and thereby increasing terror. While we cannot test these mechanisms directly, we can test if stricter immigration policies reduce the risk that migrants engage in terror against their host country when immigration restrictions are put in place.

Second, we also allow for the possibility that migrants from different countries engage in terrorist activity to a different extent. Anecdotal evidence suggests that foreigners with Muslim background are particularly likely to engage in terrorist activity (e.g., Camarota 2002). As Enders and Sandler (2006) point out, the marginal costs of terrorism are particularly low in countries with large Muslim populations, while resources required to conduct terror are plenty. The immigration of people from Muslim-majority countries could thus be one channel by which migration affects terror. We test whether the effect of immigrants from Muslim-majority countries differs from those of other countries. We also test whether immigrants from countries where terrorist networks prevail are more likely to be involved in terror<sup>9</sup> and to what extent migrants are more prone to engage in terrorism if the host country is engaged in military conflict with the country of origin. Conflict has been shown to either directly increase the risk of a country's citizens being involved in terrorist activity or to make them more violent in general (Montalvo and Reynal-Querol 2005, Esteban et al. 2012, Campos and Gassebner 2013). Regarding terror, Bove and Böhmelt (2016) provide evidence of a spatial spillover among countries. They show that countries closer to countries rich in terror are more likely to experience terror themselves (with “closer” being measured by the number of migrants from a

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<sup>9</sup> As Leiken (2004: 87) puts it: “For the production of terrorists what could be more ideal than Algeria – with its modern history of violent political struggle and a vicious fundamentalist resistance movement?”.

country, among others). Hence, we expect foreigners born in countries with populations involved in substantial terrorist activity or with large terrorist networks present to be particularly violent.

Finally, we investigate whether the composition of migrant populations affects whether or not migration causes terror. The role of gender and education has received some attention in the previous literature. While the earlier literature tends to characterize women as victims of terror, more recent discussions acknowledge their role as perpetrators as well (Agara 2015). We therefore examine the role of male and female immigrants separately in addition to investigating their joint effect. We have, however, no clear hypothesis regarding the importance of gender for the effect of migration on transnational terror. The role of education is equally unclear. While many believe poverty and lack of education to be among the root causes of terrorism, parts of the previous literature have shown that terrorists are often well educated compared to their peers (Kruger and Maleckova 2003).

### 3. Data

We aim to test whether a larger number of foreigners from a particular country increases the probability of terrorist attacks from people of that nationality in their host country. We define  $TERROR_{hot}$  as a binary indicator that is one if at least one terrorist attack is conducted by nationals of origin  $o$  in host country  $h$  during year  $t$ .<sup>10</sup> Our main variable of interest ( $FOREIGNERS_{hot}$ ) is the log number of foreigners born in country  $o$  and living in country  $h$  at time  $t$ . While a pure scale effect of a larger number of foreigners living in a country on terror attacks pursued by people of that nationality would be unsurprising, we are interested in how the effect compares to terrorist attacks committed by the domestic population.

We construct our terror indicator from the “International Terrorism: Attributes of Terrorist Events” (ITERATE) database (Mickolus et al. 2014). ITERATE provides data on global terrorist acts, including information about the nationality of perpetrators and victims.<sup>11</sup>

Our data on migrant populations are taken from the Institut für Arbeitsmarkt- und Berufsforschung’s (IAB) brain-drain dataset (Brücker et al. 2013). The IAB defines

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<sup>10</sup> Note that we use a binary indicator since 99.5 percent of our dyad-year observations show no transnational terror events, while of the remainder, around 80 percent are one, 15 percent are between 2 and 4, and the remaining 5 percent range between 5 and 17 incidents.

<sup>11</sup> Mickolus et al. (2014: 2) define transnational terrorism as “the use, or threat of use, of anxiety-inducing, extra-normal violence for political purposes by any individual or group, whether acting for or in opposition to established governmental authority, when such action is intended to influence the attitudes and behavior of a target group wider than the immediate victims and when, through the nationality or foreign ties of its perpetrators, its location, the nature of its institutional or human victims, or the mechanics of its resolution, its ramifications transcend national boundaries.”

“immigrants” as the number of foreign-born individuals aged 25 years and older living in a country other than the country they were born.<sup>12</sup> The data are based on harmonized census data of 20 OECD host countries. The dyadic data include the stocks of immigrants from 187 countries of origin in the host countries in five-year intervals over the 1980-2010 period. Compared to other datasets, the main advantage of the IAB data is that they provide a complete time-series for each host-origin pair.<sup>13</sup> Since the stock of foreigners typically evolves slowly over time, we linearly interpolate the years in between the five-year intervals. We expect this to introduce random noise, while allowing us to exploit yearly variation in the terrorist data. We report results without interpolation to test robustness.<sup>14</sup>

Figure 1 gives a first impression of the data. The left panel shows the number of transnational terrorist attacks by *FOREIGNERS* in OECD host countries (light grey line), over the 1980-2010 period. As can be seen, the number of attacks steadily decreased over time, with total numbers in a decade ranging from 479 in the 1980s, to 138 in the 1990s, and 45 in the 2000s.

\*\*\* insert Figure 1 about here \*\*\*

The figure also shows the number of terrorist attacks of OECD *NATIVES* on *FOREIGNERS* in their country, as well as from *NATIVES* on *NATIVES* (“domestic terrorism”).<sup>15</sup> The figure shows that the bulk of attacks are committed by *NATIVES* within their own countries both against fellow *NATIVES* (black line) and against *FOREIGNERS* (dark grey line). Attacks from *NATIVES* on either *NATIVES* or *FOREIGNERS* exceed those from

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<sup>12</sup> The exception is Germany, for which data on the foreign-born population before 2009 are unavailable, so that a citizenship-based definition of foreigners is used (Brücker et al. 2013: 3). Germany differs also as an origin country, since the migrant stocks of East- and West-Germany in other countries have been aggregated prior to unification. The same procedure was implemented for South- and North-Yemen. For a more detailed discussion of the IAB harmonization procedure, see Brücker et al. (2013).

<sup>13</sup> This is important, since observations for the stock of migrants missing from other data sources in particular countries and (different) years are unlikely to be missing at random, but rather for reasons that could arguably be correlated with terror itself.

<sup>14</sup> We also test robustness by excluding host- and origin-country observations where inflows or outflows of migrants surge due to the effect of refugee crises (and noise introduced by linear interpolation is consequently most severe).

<sup>15</sup> We calculate the number of *NATIVES* by subtracting the number of *FOREIGNERS* from the host country’s total population, taking data on total population from the World Bank (2016). These data include foreigners, according to the World Bank’s definition of the series: “Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship” (World Bank 2016). ITERATE exclusively includes terrorist events in which the location, perpetrator, and victim do not have the same nationality. Terror conducted by *NATIVES* of country *h* within *h* thus exclusively captures events in which *NATIVES* attack *FOREIGNERS*. Domestic attacks are those where both the perpetrator and the victim originate from the country the attack takes place (taken from Enders et al. 2011 and Gaibullov et al. 2012 based on data from the Global Terrorism Database, GTD).

*FOREIGNERS* most of the time. Fatalities from these attacks are typically infrequent, as can be seen from the right panel of Figure 1. There are two exceptions. The first spike in the figure represents an attack on Air India Flight 182 in 1985, resulting in 331 fatalities. The second is due to attacks on a subway in Madrid in 2004 (we have omitted 9/11 from the graph so that the movements in other years are more visible).

\*\*\* insert Table 1 about here \*\*\*

To put these numbers in perspective, Table 1 reports the average and total number of terrorist attacks in each OECD country per year during the 1980-2010 period, along with the percentage of those numbers committed by *NATIVES* compared to *FOREIGNERS*. The Table shows that the large majority of attacks originate from *NATIVES*. However, when we focus on the number of attacks by *NATIVES* and *FOREIGNERS* per one million people, the number of attacks by foreigners dominates by a factor of four. Specifically, for every one million people, 0.18 terrorist attacks are conducted on average by *NATIVES* per country and year, while the corresponding number for *FOREIGNERS* is 0.83. The table also illustrates that though the probability that the average individual becomes a terrorist is very low, terror events are frequent. Over the sample period, Germany experienced 753 events. Of those incidents, 97 were committed by foreigners while the rest were perpetrated by German citizens, either against foreigners (215) or against other Germans (441). There were 470 events in France (154 committed by foreigners), 412 in Spain (35 committed by foreigners), and 319 in Greece (36 committed by foreigners). The maximum number of foreign terror attacks in the host countries of our sample in a single year is 35 in the United States in 1982. In our universe of host countries, there are 10 attacks by foreigners in the median year (1996): four attacks in Germany and three attacks in France and the United States, respectively.<sup>16</sup>

Figure 2 further illustrates the scale effects of foreign and domestic populations with respect to terror. The left panel shows that the number of attacks from *FOREIGNERS* increases with the stock of migrants living in an OECD country. According to the right panel of Figure

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<sup>16</sup> Specifically, in Germany, a U.K. national affiliated with the Irish Republican Army (IRA) fired mortar grenades towards U.K. military barracks. The other three attacks were conducted by Turkish citizens against Turkish facilities. In France, two attacks were conducted by Algerians affiliated with the Islamic Armed Group Algeria, of which one was a bombing attack on a commuter train in Paris killing 4 people and injuring 84. The third attack in France in that year was prevented by the authorities (an Iranian citizen who planned a terror attack against Israeli facilities). In the United States, two attacks were committed by Cuban nationals. One was an arson attack against an attorney representing the widow of a leftist guerrilla, the other a “sniping at a building.” The third terror attack involved a Romanian citizen who was arrested while trying to smuggle arms to conduct a terrorist attack.

2, the number of *NATIVES* living in an OECD country is positively correlated with the number of terrorist attacks from *NATIVES*. Both correlations are unsurprising.

\*\*\* insert Figure 2 about here \*\*\*

## 4. Empirical Strategy

### A. Base specification

We test the effect of *FOREIGNERS* on *TERROR* with the following baseline specification, using a linear-probability model (and clustering standard errors at the host-origin-dyad):

$$TERROR_{hot} = \alpha + \beta FOREIGNERS_{hot} + \mathbf{X}'_{hot} \boldsymbol{\psi} + \eta_{ho} + \gamma_t + \epsilon_{hot}, \quad (1)$$

where  $\mathbf{X}'_{hot}$  is a set of time-varying control variables,  $\eta_{ho}$  are dyadic host-origin fixed effects,  $\gamma_t$  are year fixed effects, and  $\epsilon_{hot}$  is an error term.

In our main specifications, we assume that terrorist attacks react to changes in our explanatory variables in the same year. This is likely to be the case if terrorist attacks are largely based on short-term changes that foreigners expect to affect their situation in the future or if the attacks are direct reactions to recent policy changes. We rerun all specifications including explanatory variables as (lagged) five-year moving averages to allow for longer lags between changes in policies and outcomes and the actions of terrorists, among other tests for robustness.

Following the previous literature on bilateral terror (Blomberg and Rosendorff 2009, Neumayer and Plümper 2009, Plümper and Neumayer 2010), we include the natural logarithm of host and origin GDP as well as their populations as our basic control variables.<sup>17</sup> The resulting dataset covers more than 102,000 dyadic observations from 183 origin countries in 20 OECD countries, over the 1980-2010 period. Our basic regressions ignore the obvious problem of reversed causality and omitted variable bias. Migrants might choose their host country according to the risk of experiencing terror, but potentially also according to the ease of pursuing attacks there. A large number of omitted variables are arguably related to both terror and migration as well. We still report these basic results for comparison.

We proceed by including a number of interactions that test the more nuanced hypotheses introduced above:

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<sup>17</sup> We test the robustness of our findings by including additional control variables that have been identified as robust correlates of terrorism below (Gassebner and Luechinger 2011).

$$TERROR_{hot} = \alpha + \beta FOREIGNERS_{hot} + \theta(FOREIGNERS_{hot} * INT_{ho,t-1}) + \delta INT_{ho,t-1} + X'_{hot}\psi + \eta_{ho} + \gamma_t + \epsilon_{hot}, \quad (2)$$

where  $INT_{ho,t-1}$  represents the variables that we hypothesized to change the effect of *FOREIGNERS* on *TERROR* in Section 2 above.<sup>18</sup> These variables are moving averages over five years, as we expect foreigners to react to a country's (recent) general trend in policies rather than year-to-year changes. We lag them by one period, since we assume that the effect of these variables on how migration affects terror is not likely to be immediate.

First, we measure conflict ( $CONFLICT_{ho,t-1}$ ) with the fraction of years a host-origin pair is in a military conflict over the t-5 – t-1 period, based on data taken from the UCDP/PRIO Armed Conflict Dataset V.4-2015 (Gleditsch et al. 2002, Pettersson and Wallensteen 2015).

We include indicators of the restrictiveness of immigration, migrant rights, and repression and integration, broadly following the approach of Mayda (2010) and Ortega and Peri (2013). As they do, we measure changes in “restrictiveness” with respect to the first year in our sample, based on data from the dyad-specific DEMIG database of the International Migration Institute (DEMIG 2015, de Haas et al. 2015).<sup>19</sup> In the initial year (1980, for most of the dyads in our sample), we code restrictiveness as “zero.” In each following year, we count the number of policies that make migration more or less restrictive. We then add (subtract) the number of policies that make migration more (less) restrictive in each year. The resulting indicator rises in years in which the number of more restrictive policies exceeds the number of policies that make migration less restrictive. The indicator falls in years in which liberalization dominates.

We measure policies that either regulate the rights of foreigners living in the respective host country or the degree of surveillance and sanctions employed against them ( $RIGHTS_{hot}$  and  $SANCTIONS_{hot}$ ).<sup>20</sup> Higher scores imply that integration policies are more restrictive, fewer rights are granted, and surveillance is more extensive.  $RIGHTS_{hot}$  covers policy measures that

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<sup>18</sup> Note that some of them vary across dyads and time, while others are constant across either host or origin countries, as we explain below. Appendix A reports the exact definitions and sources of all variables, while Appendix B shows descriptive statistics. Appendix C shows the countries included in our sample.

<sup>19</sup> An obvious alternative to DEMIG is the International Migration Policy and Law Analysis (IMPALA) Database (Beine et al. 2016), which however currently covers only ten years from nine countries.

<sup>20</sup>  $RIGHTS_{hot}$  covers policies that fall into DEMIG's categories recruitment/assisted migration program, resettlement programs, language, housing and cultural integration programs, access to social benefits and socio-economic rights, access to justice and political rights, access to permanent residency, and access to citizenship (DEMIG 2015).  $SANCTIONS_{hot}$  refers to surveillance technology/control powers, identification documents, detention, carrier liabilities, employer liabilities, and other sanctions (DEMIG 2015).  $RIGHTS_{hot}$  ( $SANCTIONS_{hot}$ ) ranges from -21 to 10 (-30 to 36) in our sample.

affect government agreements about worker recruitment, programs that resettle refugees, migrants' access to language programs or financial assistance, as well as religious and cultural integration programs, among others. Examples for policies covered by  $SANCTIONS_{hot}$  are controls on the movement and migration status of people (like the construction of fences or introduction of fingerprinting), rules on identification documents, procedures and criteria for the detention of foreigners, and employment permits.

We also use an integration policies index ( $INTEGRATION_{hot}$ ), constructed in the same way as the  $RIGHTS_{hot}$  and  $SANCTIONS_{hot}$  indices and covering restrictions on the naturalization of non-native speakers, preferential naturalization for natives of particular countries, and regulations of permanent residency or work permits, among others (DEMIG 2015). Higher values on the index imply more restrictive policies.

Furthermore, we aim to test the effect of the host country's immigration policies. Our indicator is an ordinal measure of the restrictiveness of immigration policies, again based on the DEMIG (2015) database.  $IMMIGRATION_{hot}$  captures regulations of border and land controls, as well as legal entry and stay. Again, higher values represent more restrictive policies.

Our final set of political variables varies exclusively at the host-country level.  $TERROR_FOREIGN_{ht}$  measures the number of terrorist attacks by  $NATIVES$  against foreigners in host country  $h$  and year  $t$ .  $RELIGIOUS_TENSIONS_{ht}$  is taken from the International Country Risk Guide (PRS Group undated), ranging between 1 and 6, with higher values representing fewer tensions. It measures "the domination of society and/or governance by a single religious group that seeks to replace civil law by religious law and to exclude other religions from the political and/or social process; the desire of a single religious group to dominate governance; the suppression of religious freedom; the desire of a religious group to express its own identity, separate from the country as a whole" (PRS Group undated).

Next we turn to characteristics of the origin country. We interact the bilateral stock of foreigners with a binary indicator for countries with predominantly Muslim population, according to the CIA World Factbook.<sup>21</sup> We also include a binary indicator that measures the degree of domestic terror in a country of origin. This indicator is one for countries that are in the highest quintile of the distribution of domestic terror over our sample of countries and years.

Finally, we turn to the composition of the migrant stocks (again relying on IAB data). We separately include the stock of foreign men and women to test gender-related differences. We also separate foreigners by their skills – low, medium, and high.

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<sup>21</sup> Available at: <https://www.cia.gov/library/publications/the-world-factbook/fields/2122.html> (last accessed August 11, 2016).

## B. Identification

The main problem for estimating the causal effect of the stock of foreigners on the likelihood of transnational terrorism is endogeneity. Dreher et al. (2011) show that terrorism affects migration. What is more, terrorism and migration are both correlated with a large number of variables that cannot all be controlled for in our regressions. OLS estimates of terrorism on migration stocks are therefore likely to be biased.

To address this endogeneity, we closely follow recent advances in the migration and labor literature (Feyrer 2009, Beine et al. 2011, Artuc et al. 2015, Docquier et al. 2016, Alesina et al. 2016). Our instrument relies on the interactions between two sets of variables. Variation across host-origin-dyads results from structural characteristics between the country of origin and the host, while variation over time (and between countries) results from the number of natural disasters in a country and year. Our first-stage regression is as follows (with coefficients and standard errors corresponding to the first stage of column 1 in Table 3 below):

$$\begin{aligned}
 FOREIGNERS_{hot} = & \alpha + \left( -\frac{0.0320^{***}}{(0.0118)} COLONY_{ho} + \frac{0.0116}{(0.0116)} LANGUAGE_{ho} - \right. \\
 & \left. \frac{0.0293^{**}}{(0.0147)} BORDER_{ho} + \frac{0.0051}{(0.0041)} DISTANCE_{ho} - \frac{0.0045^{***}}{(0.0012)} FOREIGNERS1960_{ho} \right) * \\
 & DISASTER_{ot} - \frac{0.0040}{(0.0371)} DISASTER_{ot} + \left( \frac{0.0072}{(0.0067)} COLONY_{ho} - \frac{0.0144^{***}}{(0.0045)} LANGUAGE_{ho} - \right. \\
 & \left. \frac{0.0224}{(0.0174)} BORDER_{ho} - \frac{0.0066^{**}}{(0.0032)} DISTANCE_{ho} + \frac{0.0050^{***}}{(0.0006)} FOREIGNERS1960_{ho} \right) * \\
 & DISASTER_{ht} + \frac{0.0927^{***}}{(0.0297)} DISASTER_{ht} + \mathbf{X}'_{hot} \boldsymbol{\psi} + \eta_{ho} + \gamma_t + \epsilon_{hot}.
 \end{aligned} \tag{3}$$

The pull and push factors between host and origin countries in our regressions include a binary indicator showing whether or not the host and origin countries share a (past or present) colonial relation, a common language (spoken by at least nine percent of the population), a common border, as well as the logged great circle distance between their capitals (in kilometers), and the log of the bilateral stock of foreigners in 1960 to capture preexisting networks. The levels of these structural variables do not vary over time and are thus captured by the host-origin fixed effects  $\eta_{ho}$ .

We interact the structural variables with the vector of the total number of natural disasters in host ( $DISASTER_{ht}$ ) and origin countries in a given year ( $DISASTER_{ot}$ ), assuming that natural disasters in origin countries increase the importance of push factors for migration (Artuc et al. 2015, Docquier et al. 2016), while natural disasters within host countries reduce

the weight of pull factors. We use data on natural disasters provided by EM-DAT (Guha-Sapir et al. 2016). EM-DAT includes all disasters where at least ten people died, at least 100 people were affected, a state of emergency was declared, or a call for international assistance was made. Natural disasters cover five sub-categories – geophysical, meteorological, hydrological, climatological, biological, and extraterrestrial. In each year, there are 2.4 (1.7) disasters in the average host (origin) country in our sample, with a maximum of 34 (37).<sup>22</sup> Note that we do not assume that countries are hit by these disasters at random. Some countries are more likely to be hit than others, due to their geographical and climatic conditions. However, we control for the number of disasters in the host and origin countries in the first and second stage regressions. Controlled for year-fixed effects that capture events that affect the likelihood of disasters across all countries at a particular time, and host-origin fixed effects that take account of fixed geographical or climatic conditions, the number of disasters in any particular year and (origin as well as host) country is plausibly exogenous to *dyadic* terror events between any pair of countries.<sup>23</sup> The intuition behind the interacted instruments is that of a difference-in-difference approach: We investigate a differential effect of dyad-specific pull and push factors on the number of terrorist attacks in a year with fewer or more disasters.<sup>24</sup> A natural disaster in a country of origin makes migration to the OECD overall more attractive if this country is closer, has traditional migrant communities, or shares colonial and cultural ties. The dyadic characteristics would then be crucial in determining how many people affected by the disaster decide to migrate to a specific host country. In turn, disasters in host countries make them less attractive.

The second-stage regression explaining terror then looks as follows:

$$TERROR_{hot} = \alpha + \beta \widehat{FOREIGNERS}_{hot} + \rho DISASTER_{ot} + \delta DISASTER_{ht} + \mathbf{X}'_{hot} \boldsymbol{\psi} + \eta_{ho} + \gamma_t + \epsilon_{hot}. \quad (4)$$

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<sup>22</sup> EM-DAT collects data from a number of different sources, including UN agencies, non-governmental organizations, research institutes, insurance companies, and press agencies. See <http://www.emdat.be/explanatory-notes> (accessed December 28, 2017) for methodological details.

<sup>23</sup> Climatic conditions might change over the 30 years we consider in our sample. A skeptical reader might expect these changes to be correlated with omitted variables that are in turn correlated with the probability of terror between origin and host countries. When we replace the host-origin fixed effects with host-origin-decade fixed effects our estimate stays significant, and increases in size. Arguably, within-decade changes in (slow-moving) climatic conditions are unlikely to affect our results.

<sup>24</sup> We follow the previous literature and use the number of natural disasters rather than disaster outcomes such as deaths or destruction (Docquier et al. 2016), since the latter two are more likely to be correlated with terrorist activity in the origin or host country, e.g., blocking relief organizations from distributing emergency relief.

Our identification strategy rests on two assumptions.<sup>25</sup> The first assumption is the plausible exogeneity of natural disasters with respect to terror *in a dyad and year*, conditional on the variables in the models. The random timing of disasters in any year and the inclusion of year and dyad-fixed effects support this assumption. Our second assumption is that any endogeneity of the push and pull factors due to omitted variable bias must be independent of disasters. In other words, we assume that any bias resulting from the (potential) endogeneity of the push and pull factors with respect to terror is the same in countries with different numbers of disasters. The existence of alternative channels by which disasters affect terror would not threaten the consistency of the estimated interaction term, except in the case that such omitted variables are also correlated with the push and pull factors. While we control for likely determinants of terror potentially affected by disasters, it is impossible to rule out that other such variables exist. For example, migrants could choose their host countries in response to natural disasters in a way that depends on omitted variables that in turn affect terror. Given that we control for dyad-specific and year fixed effects, we consider this possible, but unlikely.<sup>26</sup>

The second stage explaining the various interactions with terror is:

$$TERROR_{hot} = \alpha + \beta \widehat{FOREIGNERS}_{hot} + \theta (\widehat{FOREIGNERS}_{hot} * INT_{ho,t-1}) + \xi INT_{ho,t-1} + \rho DISASTER_{ot} + \delta DISASTER_{ht} + \mathbf{X}'_{hot} \boldsymbol{\psi} + \eta_{ho} + \gamma_t + \epsilon_{hot}. \quad (5)$$

These regressions use an additional set of instruments: We instrument both  $FOREIGNERS_{hot}$  and  $FOREIGNERS_{hot} * INT_{ho,t-1}$  with the instruments of equation (3) as well as with the interaction of these instruments with  $INT_{ho,t-1}$ .<sup>27</sup> Note that we have no suitable instruments for the levels of the interacted variables themselves. This implies that we do not test whether these variables directly increase or reduce the risk of terror. Under mild assumptions, we can nevertheless estimate how these variables change the effect of the stock of foreigners on terror. As in any interaction model, the interpretation of our estimates is again similar to a difference-in-difference model. The interaction investigates the effect of these

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<sup>25</sup> Bun and Harrison (2014) and Nizalova and Murtazashvili (2016) provide details on the identifying assumptions and formal proofs. Also see Appendix S.4 in Dreher et al. (2017).

<sup>26</sup> To test whether our results are driven by omitted variables that are systematically correlated with the stock of migrants over time within dyads or across dyads at any specific point in time, we randomly assigned stocks of migrants in these two dimensions. First, we assign the stock of foreigners of each particular year to a random year for the same dyad. Second, we assign the stock of foreigners of one dyad in each year to a random dyad in the same year. Figure D-1 in the Appendix shows the point coefficients resulting from 5,000 randomizations for each of the two procedures in concert with the p-value testing whether the randomized coefficients are identical to the main result. As can be seen, the coefficients are centered around zero and significantly different from the main results.

<sup>27</sup> This follows Wooldridge (2010: p.143 onwards).

variables on terror for different stocks of foreigners. As long as the effect of the (instrumented) stock of foreigners on terror is exogenous, and the degree of bias for any of the variables does not depend on the stock of foreigners, the estimate for the coefficient of the interaction term is consistent.<sup>28</sup> The first assumption – the exogeneity of the stock of foreigners – depends on the validity of our instruments (which we have discussed above). The second assumption is the so-called parallel trends assumption, implying that any bias resulting from the (potential) endogeneity of the variables entering the interaction with the stock of foreigners is the same for any level of this stock. We investigate this assumption in Figure D-4 in the Appendix.<sup>29</sup>

## 5. Results

### A. Descriptive Evidence, Native and Foreign Born Populations

Column 1 of Table 2 shows the results of the baseline regression, estimated with OLS (equation 1 above). As can be seen, the probability of a transnational terrorist attack decreases with the GDP of the origin country and increases with the size of its population, at the one percent level of significance. Both results are in line with the previous literature.<sup>30</sup> Just like Gassebner and Luechinger (2011), we find no significant effect of host country GDP and population.<sup>31</sup>

The results also reflect the positive scale effect already visible in Figure 2. At the one percent level of significance, the number of terrorist attacks increases with the number of migrants living in a country. The coefficient implies that an increase in the number of migrants by one percent comes with an increase in the probability of terrorist activity of 0.001 percentage points. In order to put the magnitude of this scale effect into perspective, we proceed by comparing it to the effect of the size of the domestic population on domestic terror.

We are interested in whether the stock of *NATIVES* affects the probability of terror against either other *NATIVES* or against *FOREIGNERS* to a different extent compared to how the stock of *FOREIGNERS* affects the probability of transnational terror. Rather than estimating separate models, we nest the regressions so that we can directly compare their magnitudes.

\*\*\* include Table 2 about here \*\*\*

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<sup>28</sup> See again the references we refer to in footnote 25.

<sup>29</sup> The figure depicts the trends of our potentially endogenous confounding variables over the quartiles of the migrant stocks that we have predicted based on the first stage of our regression (in column 1 of Table 3). The figure shows no obvious differences in these trends across the respective sub-samples. The exception is our indicator for conflict, where we are thus less confident that the coefficient of the interaction term is estimated consistently.

<sup>30</sup> See, for example, Li and Schaub (2004) and Li (2005) on how GDP affects terror, and Burgoon (2006) on population.

<sup>31</sup> Also see Jetter (2017).

We include dyads of the host country with itself and replace the number of foreigners with the log stock of natives there (i.e., when  $h = o$ ). We do not include origin-country GDP in this regression, as it would be undefined for the domestic terror dyads.

The upper panel in column 2 of Table 2 reports the average effect of the number of natives (on domestic terror) and foreigners (on transnational terror). The lower panel shows the differential effect of *NATIVES* compared to the pooled estimate. According to the results, there is no statistically significant difference among the two sets of regressions. The average scale effect of the total population on the probability of terror is positive and significant at the one percent level. However, while the point coefficient estimating the difference for terror originating from the native population compared to the total population is large, this difference is not significant at conventional levels.

Column 3 of Table 2 replaces the binary dependent variable with the number of attacks in a country-dyad and year. Again, the difference between the baseline effect of average terror and terror by *NATIVES* is not statistically significant. When we calculate the elasticity at the sample mean of transnational terror incidents (0.028), we find that a one percent increase in the stock of foreigners increases the number of terrorist attacks by 0.43 percent. These numbers are not easily comparable to the scale effects for the domestic population shown in the previous literature. Studies with a monadic setting typically find a positive effect of population size on terror, but coefficients vary greatly in size and significance (see Gassebner and Luechinger 2011). They are, however, not directly comparable to our setting as they combine scale effects for perpetrators and victims. Most dyadic studies focus on GDP and GDP per capita and thus only implicitly control for population. The exception is Neumayer and Plümper (2009). According to their results, a one percent change in the perpetrator population leads to an increase in the expected number of attacks of 0.45 percent. In their unilateral analysis, Savun and Phillips (2009) obtain an elasticity of one for the expected number of domestic attacks with respect to the domestic population.

One might argue that even if there is no difference in the quantity of terror attacks committed by natives and foreigners, the number of victims resulting from foreign attacks might be higher. We test this in a sample containing only those terrorist attacks in which at least one person was either wounded or killed. The results shown in columns 4 (for the occurrence of at least one terrorist event) and 5 (for the number of attacks) show again no statistical difference between foreigners and natives. We thus conclude that the scale effect of foreign populations – while positive and significant – is comparable to those associated with domestic populations. We also replicated these regressions using the number of terror fatalities as the dependent

variable (column 6). The migrant stock is only marginally significant in this regression. Given that fatalities involve a larger degree of randomness than the occurrence of an attack, this is unsurprising.

## **B. Causal evidence**

Table 3 shows the main results of our instrumental variables regressions. As can be seen from column 1, the average effect the stock of foreigners has on transnational terror is substantially larger than in the OLS regression above (in column 1 of Table 3) and is significant at the one percent level.<sup>32</sup> The coefficient implies that a one percent increase in the stock of foreigners increases the probability of a terrorist attack by 0.044 percentage points, on average.<sup>33</sup> The estimated Local Average Treatment Effect (LATE) captures the effect of those migrants that have been induced to migrate by natural disasters in host and origin countries. While such disasters are unlikely to have a direct effect on terrorists' desire to move to a particular country, the resulting flows of migrants facilitate the flow of terrorists as well. The larger the numbers of migrants from a particular country of origin to a specific host country, the easier it is for terrorists to hide among the crowd. What is more, the resulting larger networks of foreigners residing in the host countries make it easier for terrorists to find shelter there or receive other support – financial and logistical. The sheer presence of a larger number of foreigners from a particular country makes it easier for terrorists from the same country to remain in cover. We thus assume that the push and pull factors covered in our model affect the move of (present and future) terrorists in concert with other migrants. To the extent that disasters affect the flow of terrorist migrants to a lower degree than other migrants, we might however underestimate the total effect of migration on terror.

\*\*\* insert Table 3 about here \*\*\*

While the literature seems to accept that our instrument is exogenous to labor market outcomes (Feyrer 2009, Beine et al. 2011, Artuc et al. 2015, Docquier et al. 2016, Alesina et al. 2016), one might question its excludability in our setting. The further columns of Table 3 thus test the robustness of our results to the inclusion of those dyad- and year-specific variables that

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<sup>32</sup> The first-stage results are shown in equation (3) above as well as in Table D-1 in the Appendix. Kleibergen-Paap F-statistics indicate the power of our instruments, ranging from 12.8 to 15.9. The correlation between our predicted stocks of migrants and actual migrant stocks is about 0.3, illustrating that a substantial share of migrant stocks is explained by our instruments.

<sup>33</sup> This result is not driven by any particular host or origin country (see Figures D-2 and D-3 in the Appendix). The coefficient changes most notably when we exclude Turkey as a country of origin. The point estimate is not statistically different from the main results, however.

are most likely to threaten our identifying assumptions. To rule out that differences in results are due to differences in the number of observations rather than the effect of additional variables, we hold the sample constant across these regressions. Column 2 shows results for this reduced sample without additional control variables. The point coefficients are almost identical.

In column 3, we control for net Official Development Assistance given by a host country to a country of origin. Foreign aid is given to reduce terror, and terror affects aid (Fleck and Kilby 2010, Dreher and Fuchs 2011), while aid in turn affects migration (Dreher et al. 2017). For similar reasons we control – in column 4 – for voting coincidence between host and origin in the United Nations General Assembly (Dreher and Gassebner 2008), as well as – in column 5 – for bilateral imports and exports (Egger and Gassebner 2015). While these variables enter with significant coefficients, the effect of the stock of foreigners hardly changes.

Column 6 includes host-year and origin-year fixed effects instead of the fixed effects for years. In tandem with the dyad-fixed effects, we thereby control for all factors that do not vary between dyads over time.<sup>34</sup> Again, the result is similar. We are thus confident that our identifying assumptions are not threatened by omitted variables that do not vary at the dyad-year level.<sup>35</sup>

\*\*\* insert Table 4 about here \*\*\*

Table 4 turns to the alternative definitions of our dependent variable, in line with Table 2 above. Across the regressions, the scale effect of foreigners on terror remains significant at the one percent level. The exception is column 4, where we focus on fatalities arising from transnational terror, with an insignificant coefficient. Fatalities in OECD countries are too random to be predicted with any accuracy in our dyadic setting.

We find that the stock of foreigners increases the occurrence of terror and severe terror as well as the number of terror events and severe terror events. Ideally, we would like to compare these scale effects to those of the domestic population in our instrumental variable

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<sup>34</sup> We show the first stage regression of the high dimensional fixed effects specification in Table D-1 (column 2).

<sup>35</sup> Again see Figure D-1 in the Appendix for the (lack of) systematic importance of unobserved dyad-specific variation over time or time-specific variation across dyads. We also gauged the importance of omitted variable bias following the approach of Altonji et al. (2005) and Bellow and Miguel (2009). Specifically, we compared the relative impact that unobserved variables would need to have on our coefficients of interest relative to observed ones in order to fully account for our results. For instance, the estimated effect of migration on terror is 0.0443 according to column 1 of Table 3. The coefficient decreases to 0.0377 when we omit all control variables. This suggests that omitted variable bias would need to be in the opposite direction and almost 54% percent larger (i.e.,  $0.0443/(0.0377 + 0.0443)$ ) than the impact of the observed variables to explain away the entire effect of migration.

setting as well. However, our instrument is not suited to predict changes in the stock of natives and we have no additional instrument for the size of the domestic population that would allow this comparison.

\*\*\* insert Table 5 about here \*\*\*

Table 5 tests if the effect of the stock of foreigners depends on whether these foreigners migrated from countries that are engaged in military conflict with their host, integration and immigration policies, the degree of terror against foreigners in the host countries, and religious tensions there. We include the interaction of the respective variable with migration as an additional regressor (which we instrument with the interaction of the respective variable and our interacted set of instruments as outlined above).

Column 1 tests the importance of military conflict between the host and origin countries for how the stock of foreigners affects terror. To this end, we introduce  $CONFLICT_{hot}$  and its interaction with the number of foreigners. The coefficient is negative but not precisely estimated. It thus seems that the effect of foreigners on terror is independent from military conflict between the origin and host countries.

Columns 2-5 introduce the variables measuring the policies and outcomes of immigration and integration policies and their interactions with the number of foreigners. We find that laws putting pressure on migrants to integrate (column 2) and stronger restrictions of foreigners' rights (column 3) increase the probability of terror associated with a rising number of foreigners in a country. Stricter sanctions on migrants seem to reduce the threat of terror associated with the number of foreigners (column 4), while we do not find a significant interaction with restrictions on immigration (column 5).<sup>36</sup>

Columns 6 and 7 focus on terror against foreigners and (the absence of) religious tensions in the host country. As can be seen, terror against foreigners (column 6) and religious tensions (column 7) increase the scale effect of migrants on terror, at the one and ten percent level of significance, respectively.

\*\*\* insert Figure 3 about here \*\*\*

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<sup>36</sup> Results are similar when we estimate the regressions with OLS. The exceptions are the interactions with religious tensions (which turns insignificant) and immigration restrictions (which is significant and positive). We also tested an interaction with GDP per capita growth, but found no statistically significant effect of the interaction.

Figure 3 shows the marginal effects of the significant interactions. Panel A of Figure 3 shows that immigration policies substantially affect the risk of terror arising from any given stock of migrants in a country. At the mean value of the integration index, a one percent increase of the stock of foreigners increases the probability of a terrorist event by 0.0409 percentage points on average. The corresponding increase is 0.0473 percentage points when integration restrictions are maximal (which is a 14.6% increase). Results are similar when we focus on migrant rights instead (Panel B): At the mean value of migrant rights, a one percent increase in the stock of foreigners increases the likelihood of terror by 0.0419 percentage points on average and at the maximum value by 0.0495 percentage points (an 16.7% increase).

Panel C turns to the effect of migrant surveillance and sanctions. While the effect is significant over the entire range of the distribution, the change of the conditional effect is small in quantitative terms: At the mean value of the index, a one percent increase of the stock of foreigners leads to an increase of 0.0391 in the likelihood of terror compared to an 0.0366 increase at the maximum (corresponding to a 6.6% reduction). Although the interaction points into the opposite direction, the marginal effect is substantially smaller compared to the integration and rights interactions discussed above.

Overall, we conclude that migration policies play an important role in the fight against terror. The optimal mix however is crucial. Countries that put too much pressure on immigrants to integrate, and that restrict their rights are likely to achieve the opposite of what they aim for, at least in the short-run. Immigrants already living in the country might turn against their host and get increasingly violent.<sup>37</sup>

The effect of terror against foreigners is also substantial (Panel D). At the mean value of terror against foreigners, a one percent increase in the stock of foreigners increases the probability of a terrorist attack committed by foreigners by 0.0379 percentage points on average. The corresponding increase is 0.0442 percentage points at the maximum value of terror against foreigners (15.5% higher compared to the mean). To the contrary, while the effect of (the absence of) religious tensions is statistically significant (Panel E), the difference of a one percent increase in the stock of foreigners at the mean of religious tensions is hardly distinguishable from that at the maximum (0.0294 vs. 0.0291).

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<sup>37</sup> As an illustration, consider France. According to the DEMIG (2015) data, France introduced 18 additional restrictions on immigration over the 1991-1994 period. This included prohibiting foreign graduates from gaining employment in France and suppressing work permits for asylum seekers. In 1994, France restricted the access and right of residence for Algerians (DEMIG 2015). France suffered a spell of terrorism in the following year with at least one attack per year committed by an Algerian citizen over the 1995-1999 period.

### **C. Composition of migrant populations**

We proceed with testing whether the composition of migrants matters. Column 1 of Table 6 separately investigates male and female migrants. Column 2 distinguishes migrants with low, medium, and high skills.<sup>38</sup> As an additional set of instruments for the stock of male and female migrants, we add the interaction of our instruments with the share of male migrants from a country of origin to a specific host country over the entire sample period.<sup>39</sup> For the stock of low, medium and high skilled migrants, we add interactions of our instruments with the shares of low and medium skilled workers among each dyad over the sample period. As can be seen in Table 6, our instruments are relevant.<sup>40</sup>

\*\*\* include Table 6 about here \*\*\*

The results of Column 1 show that the risk of terror increases with the number of male immigrants, at the one percent level of significance, but not with the number of female immigrants. The coefficients of the two groups are, however, not statistically different from each other (p-value: 0.54). Column 2 shows that the risk of terror increases with low skilled immigrants, but decreases with highly skilled immigrants, the difference between the two being significant at the one percent level. While the previous literature has often argued that terrorists are well educated compared to their peers (Kruger and Maleckova 2003), the same does not seem to hold for highly skilled immigrant populations in general. This is in line with the game theoretical model of Bandyopadhyay and Sandler (2014), showing that increases in skilled labor quotas generally reduce terrorist attacks in the host country.

### **D. Investigating Possible Channels**

We investigate two main channels through which migration can be expected to affect terror. Migration is most frequently attributed to terror because it supposedly increases the inflow of religious extremists or directly allows terrorists to enter the country (rather than affecting the general risk of terror arising from any foreigner living in the country).

As we have no data on religious extremists, we instead focus on migrants from Muslim-majority countries which are often perceived to be linked with Islamic terror (Gloud and Klor

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<sup>38</sup> The IAB database defines the skill levels as follows: Low skilled individuals have received lower secondary, primary or no schooling. Medium skilled migrants have obtained a high school diploma or equivalent certificate. High skilled immigrants have tertiary education (Brücker et al. 2013: 4).

<sup>39</sup> We predict the number of male and female migrants with our instruments and then use the predicted migrant stocks as instruments for the second stage.

<sup>40</sup> Figure D-6 in the Appendix shows that our predictions for the different groups match the actual values well.

2010). We therefore test whether migrants from countries with a Muslim-majority population affect the risk of terror differently from the average non-Muslim majority country in our sample. In order to allow this comparison between countries, rather than within dyad-pairs over time exclusively, we replace the dyad-fixed effects with dummies for individual host countries. Rather than pooling all Muslim-majority countries, we include dummies for each individual country in this group and interact them with our migration variable. The resulting coefficients can be interpreted as the difference in the average partial effect of migrants from Muslim-majority countries compared to all other (i.e., non-Muslim) countries. As before, we instrument the stock of foreigners with the interaction of natural disasters and the pull and push factors introduced above. We also control for the structural variables in the first and second stage since they are no longer absorbed by dyadic fixed-effects in this setting.

\*\*\* insert Figure 4 about here \*\*\*

Figure 4 plots average partial effects for each Muslim-majority country and the effect of the reference group (i.e., the average non-Muslim country), along with a 95 percent confidence interval (shown as vertical line on the x-axis). Overall, foreigners from Muslim countries do not differ in how they affect terror in their host country from the average non-Muslim country (“Reference Group”).<sup>41</sup> The two exceptions are Algeria and Iran, at the ten percent level of significance. Compared to the (insignificant) average effect of foreigners from non-Muslim countries, the marginal effect for Algeria implies that a one percent increase in the stock of Algerian migrants increases the likelihood of terror on average by 2.1 percentage points in the average OECD country. The corresponding effect for Iranian migrants is 1.5 percentage points. The effect of Algerian migrants can mainly be attributed to attacks from Algerian fundamentalists who participated in 12 attacks in France in the late 1980s to mid-1990s. The effect of Iranians is driven by 18 attacks against each France and Germany in the 1980s and early 1990s by Iranian nationals.<sup>42</sup> Overall, there is little evidence that migration affects terror because it increases the inflow of religious extremists.

We proceed with testing whether migration from origin countries with prevailing terror networks can explain the effect of overall migration on terror. To the extent that terrorism spreads from countries with such networks, migration might be one vehicle of such diffusion

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<sup>41</sup> Jetter and Stadelmann (2017) show that the probability that Muslims become terrorists is smaller compared to non-Muslims once population size is accounted for.

<sup>42</sup> There is no dominant terror organization behind these attacks in Germany, while one third of the French attacks were conducted by Islamic Jihad organizations. In our sample, Algerian terrorists conducted 34 terror attacks in total, while citizens of Iran conducted a total of 80 attacks.

(Bove and Böhmelt 2016). As above, we therefore test whether migrants from “terror-rich” countries show different effects of terror compared to migrants from the average “non-terror-rich” country.

\*\*\* insert Figure 5 about here \*\*\*

Our first proxy for the existence of terror networks is a binary indicator variable  $TERROR\ RICH_o$  for each country that is located within the top quintile of the overall terrorist incident distribution of the GTD dataset.<sup>43</sup> Again, we interact these dummies with our migration variable. Figure 5 shows that five countries have average partial effects that are higher than the reference group, at least at the ten percent level of significance. Compared to the average “non-terror-rich” country, migrants from Algeria, Iran, India, Spain, and Turkey are all more likely to increase the likelihood of a terrorist attack, while migrants from Angola and Cambodia are less likely than the reference group to affect terror.<sup>44</sup> Overall, there is no sweeping evidence indicating that the exclusion of immigrants based on the degree of terror in their country of origin could reduce terror substantially. Immigration from terror-rich countries is thus not responsible for the overall effect of migration on terror.

Our second proxy for the existence of terrorist networks identifies the ten most active terrorist groups, in terms of incidents perpetrated globally, and that operate in at least five countries (using GTD data).<sup>45</sup> We then identify the three countries in which each group commits most of their attacks over our sample countries and period. We list these groups and countries in Table D.6 in the Appendix, in descending order of group activity.

Figure 6 shows the average partial effects of the baseline estimate for how the stock of foreigners affects terror without the countries that the respective group is most active (left) and the interaction coefficient for the countries with the most active terrorist networks (right) for each of the ten most active transnational terror groups.<sup>46</sup> The Figure shows that the effect of migration on terror is not statistically different for most of these countries. The exceptions are

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<sup>43</sup> We focus on GTD rather than ITERATE as we are interested in overall terror at the origin-country level rather than in exclusively transnational terror exposure or the terror against specific groups.

<sup>44</sup> Some background for Algeria and Iran was given above. In most of the 15 attacks in India, the victims were Indian nationals. Sikh extremists conducted the majority of these attacks with several attacks pertaining to the Kashmir conflict, split equally between the United States, United Kingdom, and Canada. Towards the end of our sample, three attacks in the United Kingdom were directed against U.K. citizens by Muslim extremists. Spanish nationals were involved in 17 attacks in France, 10 attacks in Italy and a total of 43 attacks in our sample (34 were the responsibility of ETA). 145 attacks were conducted by Turkish nationals, 39 of which occurred in France and 20 in Germany. More than half of the attacks are related to the Turkish-Armenian conflict.

<sup>45</sup> While the GTD provides information on the group that commits an attack it does not provide the nationality of the perpetrators.

<sup>46</sup> In the pooled specification all countries of Table-A1 are coded as network-countries.

countries where the Kurdistan Workers' Party (PKK) is most active. It turns out that the effect of migrants from these countries – which include Germany, Turkey and Iraq – is *smaller* than the effect of migrants from all other countries. Again, there is thus no evidence that migration from countries with large terror networks accounts for the overall effect of migration on terror.<sup>47</sup>

In summary, our analysis does not provide support for widely-held beliefs that terror is imported from Muslim-majority countries or countries with large terrorist networks. It seems that the effect that foreign populations have on terror is largely independent of their country of origin but rather is related to the sheer size of the overall (foreign) population (the scale effect).

## **6. Tests for robustness**

In summary, we find a positive scale effect of larger foreign populations. We find this scale effect to be more severe when migrants are situated in host countries where terror against foreigners is prevalent and religious tensions abound, when migrant rights are restricted and integration laws get tougher. The risk of terror is lower when sanctions against migrants become more frequent. We find no significant difference between male and female immigrants on the risk of terror. Highly skilled immigrants reduce the risk of terror, while low skilled immigration increases it.

We test the robustness of these results in a number of dimensions. First, we include all explanatory variables – rather than just the interaction variables – as (lagged) five-year moving averages to allow for longer lags between changes in policies and outcomes and the actions of terrorists. Second, we use yearly values for our interaction variables, rather than five-year moving averages. Third, we test whether and to what extent the linear interpolation of the migration data affects our results. Instead of interpolating, we use averages over five years (but no moving average). Fourth, we test whether and to what extent our results are driven by dyads in which the stock of the foreign-born population changes substantially, for example due to refugee crises and the resulting surge in immigrants. Specifically, we exclude the dyads that experience the biggest five percent of changes in migration within our sample. Fifth, we employ additional instrumental variables to test if our results hold for a broader LATE. Following Beine and Parsons (2015), we add to our set of instruments the interaction of the yearly deviations in

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<sup>47</sup> We also tested for differences for every country in each group. Again we do not find systematic differences overall, but once more obtain a differential effect for Algeria (Figure D-5 in the Appendix). We also test if migration from countries in which terror groups have a strong presence (commit a lot of attacks) has a stronger effect on terror in years in which those groups are more active compared to migration from countries where the groups are less active, using a triple interaction. Again, we do not find any evidence that migrants from countries with larger terrorist activities affect terror more strongly than migrants from the average country without such networks (Table D-7 in the Appendix).

temperatures and precipitation from their decade averages.<sup>48</sup> Sixth, we estimate the first and second stage including fixed effects for origin-years and host-years instead of just years (in concert with the dummies for each dyad). We consequently rely exclusively on within-dyad variation to identify our coefficients. Finally, we test whether our results for the interacted variables are driven by our focus on all terror events rather than focusing on severe events only. Hence we (again) replace all terror events with terror events during which at least one victim was wounded or killed.

We show the results from these tests in Tables D-2 (for the main regressions) and D-3 (for the separate regressions according to gender and skills) in the Appendix. Most of our results turn out to be robust to all modifications. The effect of a one percent increase in the stock of migrants on the probability of transnational terrorist attacks ranges between 0.023 percentage points (when we include the additional fixed effects) and 0.043 percentage points (when we use moving averages throughout). This is similar to the main estimate of 0.043 percentage points from column 1 of Table 3 above, that we reproduce in Table D-2 for comparison (“no moving average”).

With respect to the interaction terms, terror from natives against migrants in the respective host country robustly increases the effect of migrants on transnational terror, while the religious tensions interaction holds in only four of the robustness tests. Regarding policies, it turns out that while the harmful effect of strict integration policies and restrictions of migrant rights prevails in all regressions, the beneficial effect of strict sanctions turns insignificant in five out of the seven additional regressions. There is thus no robust evidence that stricter policies reduce the risk of terror, while there is robust evidence that they increase terror. Table D-3 confirms our previous finding with respect to the gender and skill composition of foreigners.

We conclude this section with two extensions. First, we test if the effect of migration on terror varies over different periods of time, across the different definitions of dependent variables. Table D-4 presents the results of a nested model in which we allow for different average partial effects between the 1980s, 1990s and the 2000s. We find that the effect of the stock of foreigners is statistically different in the 1990s and 2000s compared to the 1980s, while the effect does not differ between the 1990s and 2000s. According to the estimates shown in column 1, the scale effect is about 10% lower in the 1990s and about 14% lower after the turn of the millennium compared to the 1980s. The overall effect however stays positive and significant at all times.

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<sup>48</sup> We thank Sven Kunze for sharing his temperature and precipitation data (Kunze 2016).

Our second extension increases the time that we allow for migrant stocks to affect terror. Rather than focusing on the immediate effect of migrants on terror, we investigate their effect after five, 10, 15, and 20 years. The results of Table D-5 show that the effect remains significant when we lag the stock of migrants by five and 10 years, but is much reduced in magnitude. There is no significant effect for the deeper lags. We take this as evidence that the effect we measured in the main analysis pertains to the presence of the migrant stocks themselves, rather than any long-term effects that arise from their persistent presence in a country (such as potentially violent second generations whose size should correlate with the stock of foreign born 20 years prior within a dyad).

## **7. Conclusions**

Over the last 15 years, a number of countries have substantially tightened immigration laws and introduced policies putting pressure on migrants to integrate into their host countries, including restrictions on migrants' rights as well as surveillance and sanctions. These changes have been caused by expectations that a larger number of foreigners living in a country increases the risk of terrorist attacks in the host country. This paper has put these expectations to the data, for 20 OECD host countries and 183 countries of origin over the 1980-2010 period.

First, we tested the hypothesis that the stock of foreigners residing in a country leads to a larger number of terrorist attacks. Our results show that the probability of a terrorist attack increases with a larger number of foreigners living in a country. This scale effect relating larger numbers of foreigners to more attacks does not imply however that foreigners are more likely to become terrorists compared to the domestic population. When we calculate the effect of a larger population of natives on the number of times natives attack foreigners or other natives, we find this effect to be of comparable quality. Overall, we thus conclude that increases in the stock of foreigners living in a country do not affect the risk of terror differently than domestic population growth.

Second, we test whether migrants from countries with large terrorist networks or from Muslim-majority countries affect the risk of terror differently, and whether and to what extent host country immigration and integration policies mediate the risk arising from foreigners. We find scarce evidence that terror is systematically imported from countries with large Muslim populations, or countries rich in terror.

We also test whether and to what extent stricter policies on immigration and integration change the effect of migrant stocks on terror. Contrary to the expectations of politicians, introducing strict laws that regulate the integration and rights of migrants does not seem to be

effective in preventing terror attacks from foreign-born residents. Terrorist attacks have made politicians across the Western world severely diminish the very rights they aim to protect (Dreher et al. 2010), without, it seems, achieving the desired increase in security. To the contrary, repressions of migrants already living in the country alienate substantial shares of the population, which overall increases rather than reduces the risk of terror. We find a similar result with respect to terrorism against foreigners in their host country, which we also found to increase the risk of terror originating from the stock of foreigners.

We conclude with two qualifications. First, our results are based on data for the group of migrants from a particular country and the number of terrorist attacks by nationals from this country. This has the advantage that we can estimate how the risk of terror is affected by a larger number of migrants, but does not allow to test whether specific migrants are engaged in terrorist events. Such analysis would require more detailed (individual-level) data than are currently available for a large sample of countries and years.

Second, an analysis of whether or not migration should be restricted has to involve a broader calculation of its costs and benefits (Fitzpatrick 2002). Driving fast on motorways leads to accidents and fatalities, planes crash and people die, and more people living in cities leads to a larger number of murder cases. Few people favor strict bans on motorways and planes, or cities. In a similar vein, a larger number of people leads to a higher risk that some of them engage in terror. This holds for native and foreign populations alike, and by itself hardly qualifies as reason to ban migration (or population growth). Rather, the increased risk of terror has to be weighed against the many other – positive and negative – effects that come with immigration. We leave such analysis for future research.

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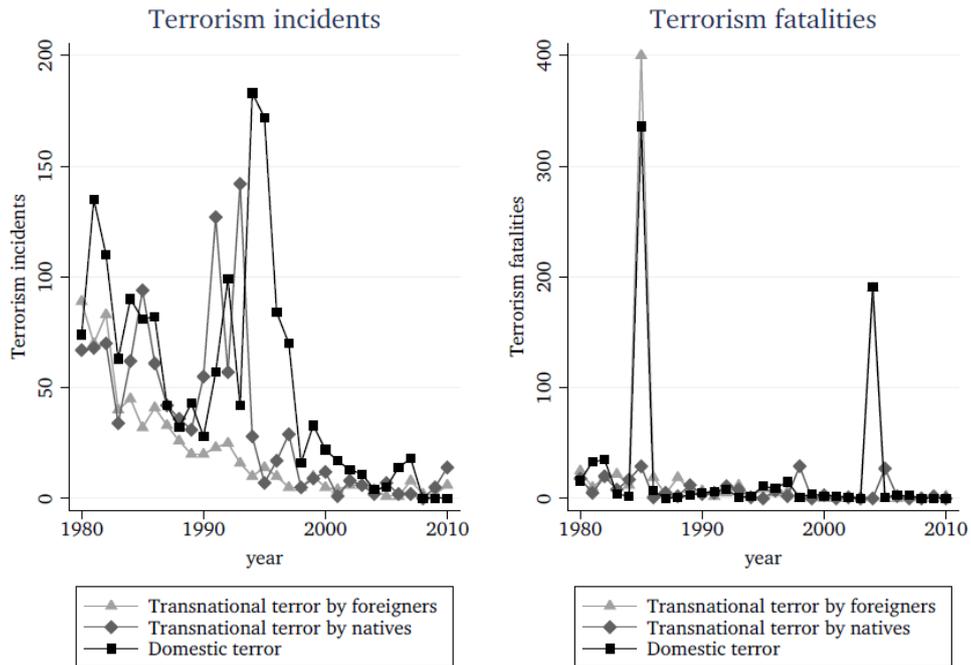
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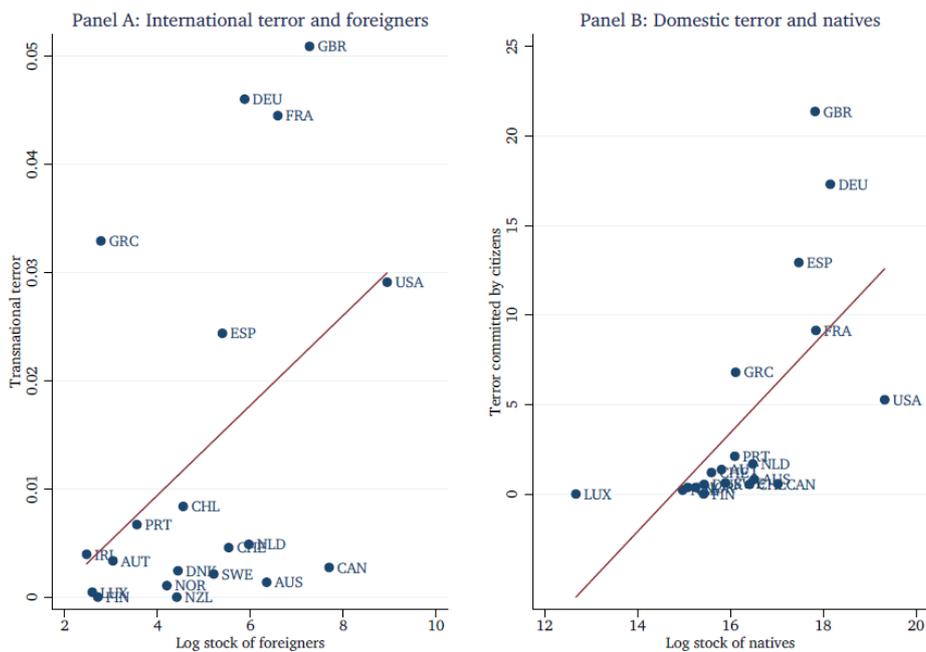
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**Figure 1: Terror Incidents and Fatalities in the OECD over Time**



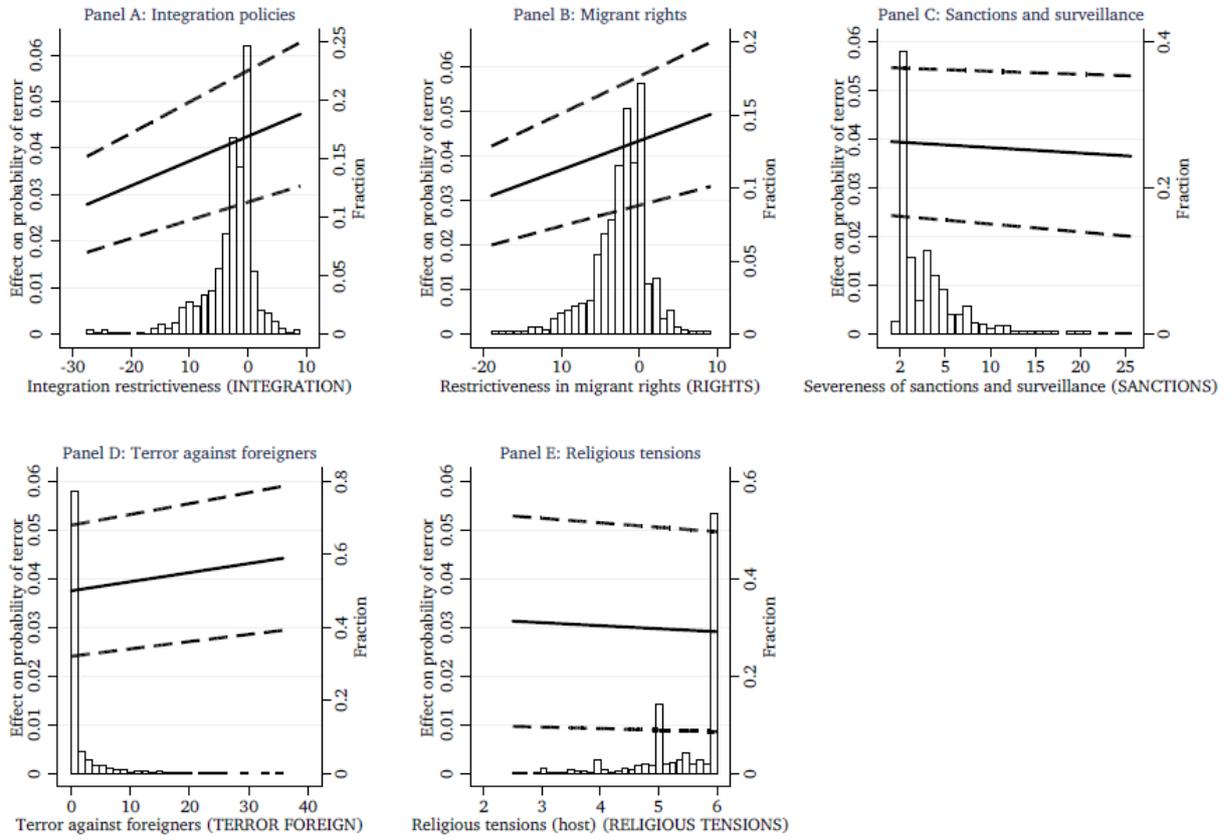
Note: The Figure shows the number of transnational and domestic terror events over time, taken from ITERATE, Enders et al. (2011), and Gaibulloev et al. (2012). We have omitted 9/11 from the graph so that the movements in other years are more visible.

**Figure 2: Transnational and Domestic Terror Incidents across the OECD**



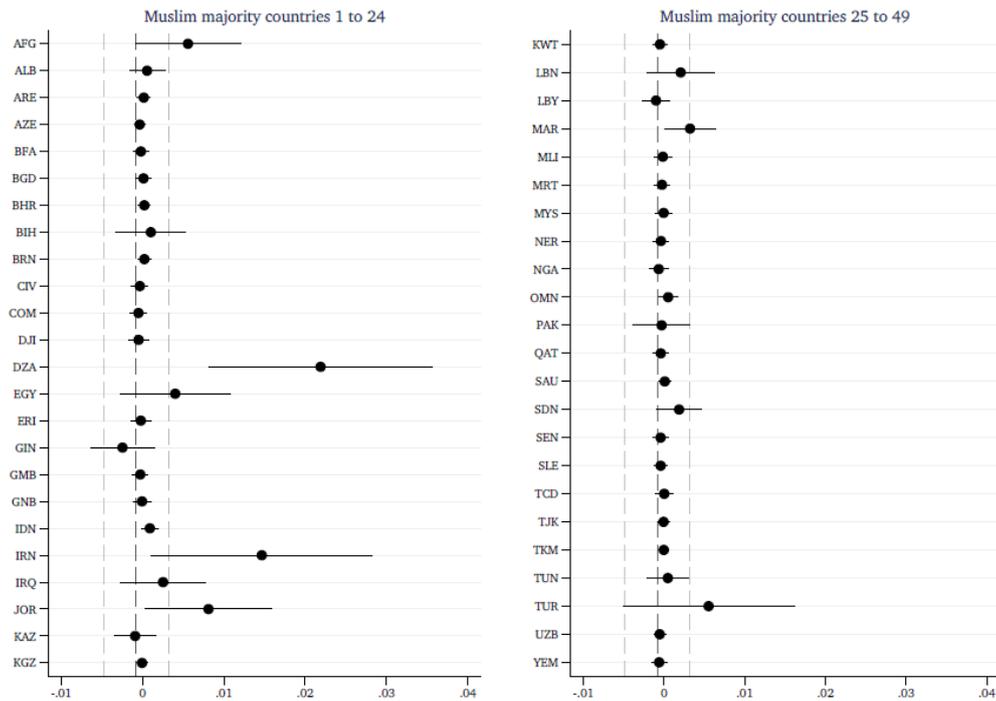
Note: The figure plots the average log of migrants against international terror (Panel A) and domestic terror (Panel B) per country, respectively.

**Figure 3: Marginal Effects Corresponding to Table 5**



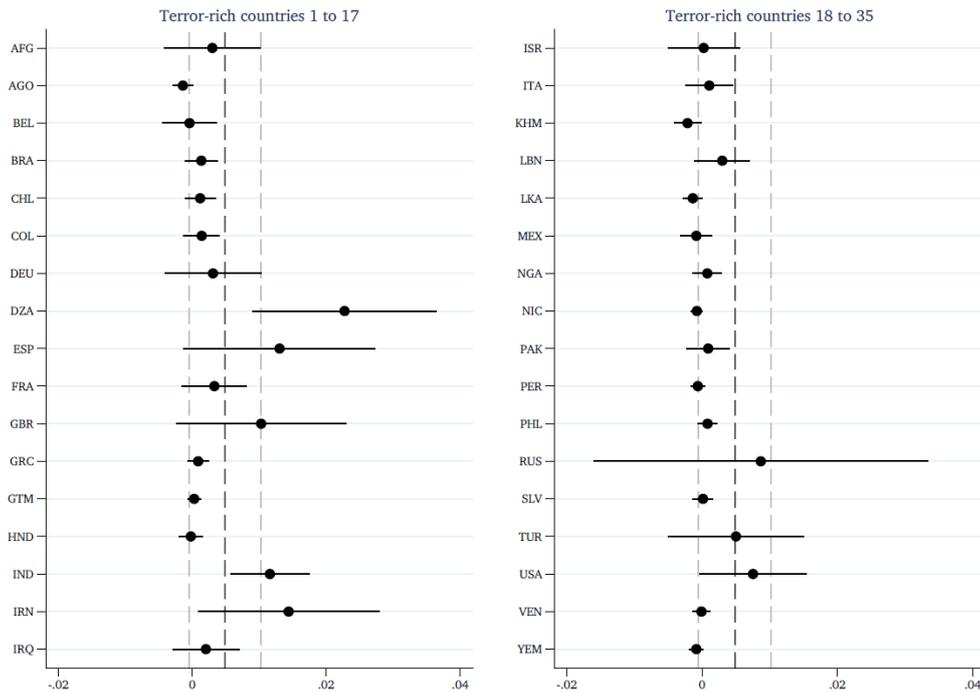
Note: The figures show the marginal effects of the significant interactions from Table 5 with bars indicating the distribution of the underlying data (right scale).

**Figure 4: Marginal Effects of Majority Muslim Countries**



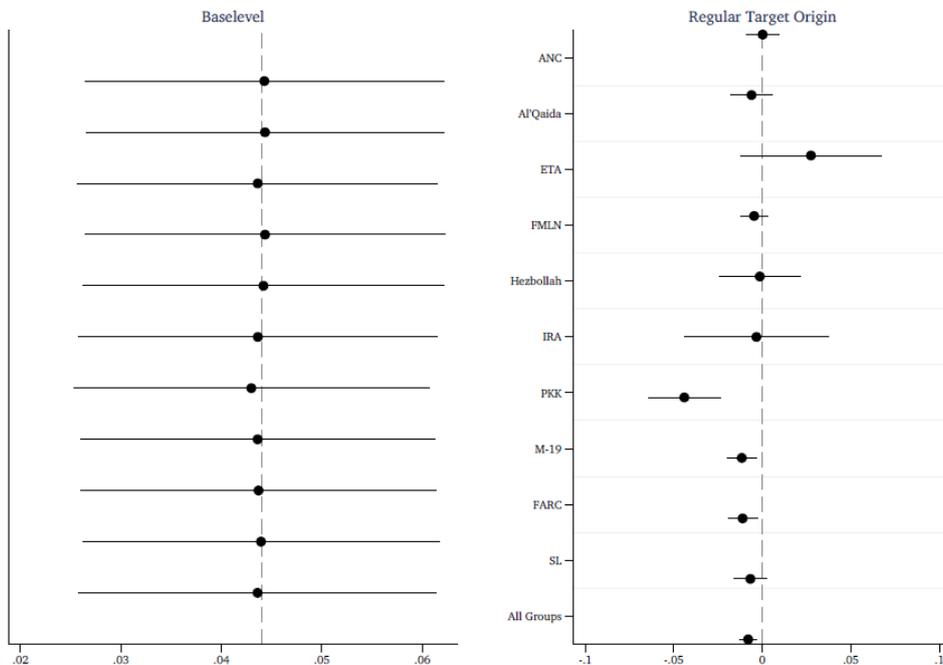
Notes: The vertical solid line is the average partial effect of the estimate for migration from the average non-Muslim-majority country; the dotted lines show the 95% confidence interval. The figure shows the additional effect for each Muslim-majority country, in tandem with the 95% confidence interval.

**Figure 5: Marginal Effects of “*Terror rich*” Countries**



Notes: The vertical solid line is the average partial effect of the estimate for the average non-“terror rich” country; the dotted lines show the 95% confidence interval. The figure shows the additional effect for each “terror rich” country, in tandem with the 95% confidence interval.

**Figure 6: Marginal Effect of Migrants from Countries with Terrorist Networks**



Note: Shows the average partial effects of the baseline estimate for how the stock of foreigners affects terror without the countries that the respective group is most active (left) and the interaction coefficient for the countries with the most active terrorist networks (right) for each of the ten most active transnational terror groups (with the 95% confidence interval).

**Table 1: Decomposition of Terror Incidents, 1980-2010**

Host countries	Sum of terror incidents (total)	Average amount of terror incidents (total)	Percentage committed by native born	Percentage committed by foreign born	Terror committed per million native born	Terror committed per million foreign born
Australia	24	0.774	0.75	0.25	0.039	0.061
Austria	63	2.032	0.71	0.29	0.197	1.070
Canada	32	1.044	0.54	0.46	0.023	0.109
Chile	67	2.170	0.96	0.04	0.153	0.157
Denmark	31	1.009	0.62	0.38	0.123	1.890
Finland	0	0.000	-	-	0	0
France	471	15.183	0.67	0.33	0.182	1.360
Germany	753	24.295	0.87	0.13	0.276	0.773
Greece	319	10.291	0.88	0.12	0.915	2.280
Ireland	31	1.000	0.26	0.74	0.073	3.290
Luxembourg	3	0.112	0.43	0.57	0.149	0.676
Netherlands	75	2.419	0.63	0.37	0.105	0.901
New Zealand	5	0.161	1.00	0.00	0.051	0.000
Norway	13	0.419	0.69	0.31	0.069	0.672
Portugal	68	2.198	0.90	0.10	0.201	0.595
Spain	412	13.305	0.92	0.08	0.313	0.680
Sweden	29	0.935	0.69	0.31	0.081	0.391
Switzerland	70	2.260	0.59	0.41	0.223	0.884
United Kingdom	748	24.133	0.92	0.08	0.401	0.619
United States	305	9.830	0.60	0.40	0.024	0.206
Average	176	5.679	0.72	0.28	0.180	0.831

Notes: Results are based on the average number of natives and foreigners within the host countries during the 1980-2010 period. The total amount of terror attacks refers to the sum of terror attacks committed within the host country, by nationals against nationals (Enders et al. 2011 and Gaibulloev et al. 2012), by nationals against foreigners (ITERATE 2015) and by foreigners within the host country regardless of the targets' nationality (ITERATE 2015).

**Table 2:** Terror and Migration Comparing Natives and Foreigners, 1980-2010, OLS

	(1) Terror indicator	(2) Terror indicator	(3) Terror count	(4) Severe terror indicator	(5) Severe terror count	(6) Terror Fatalities count
Log GDP host	0.0032 (0.0040)	0.0062** (0.0029)	0.0926** (0.0464)	0.0028*** (0.0010)	0.0034** (0.0017)	-0.0393 (0.0623)
Log stock foreigners	0.0013*** (0.0003)	0.0036*** (0.0008)	0.0120*** (0.0033)	0.0014*** (0.0005)	0.0024*** (0.0009)	0.0275* (0.0162)
Log GDP origin	-0.0021*** (0.0007)					
Log population host	0.0125 (0.0093)					
Log population origin	0.0077*** (0.0026)					
	<b>Citizen interaction</b>					
Log GDP host		-0.4291** (0.1863)	-10.943** (5.0809)	0.0103 (0.0168)	0.0648 (0.0463)	-10.092 (10.892)
Log stock		0.1823 (0.9179)	19.117 (19.501)	0.0889 (0.0983)	0.1927 (0.3089)	142.62 (138.89)
R-squared	0.0035	0.0216	0.0401	0.0019	0.0023	0.0025
Fixed effects	HO, Y	HO, Y	HO, Y	HO, Y	HO, Y	HO, Y
Observations	102,760	123,380	123,380	123,380	123,380	123,380

Notes: The dependent variable in columns (1) and (2) is binary and indicates that at least one transnational attack occurs in a year. Column (3) uses the number of transnational attacks per year. In column (4) the binary indicator is one if a transnational terror attack occurs in a given year which results in at least one person wounded or killed. Column (5) uses the number of those attacks per year. Column (6) counts the number of fatalities. In the case of natives, also domestic attacks are included. Robust standard errors clustered on host-origin dyad in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. HO are host-origin fixed effects, Y are year fixed effects.

**Table 3: Terror and Migration, 1980-2010, 2SLS**

	(1)	(2)	(3)	(4)	(5)	(6)
Log GDP host	-0.0644*** (0.0167)	-0.0689*** (0.0200)	-0.0685*** (0.0200)	-0.0681*** (0.0200)	-0.0586*** (0.0175)	
Log GDP origin	0.0073** (0.0030)	0.0066** (0.0033)	0.0064* (0.0033)	0.0068** (0.0033)	0.0052* (0.0028)	
Log population host	0.0986*** (0.0263)	0.1026*** (0.0298)	0.1018*** (0.0300)	0.0959*** (0.0287)	0.0913*** (0.0262)	
Log population origin	-0.0247*** (0.0084)	-0.0280*** (0.0098)	-0.0283*** (0.0099)	-0.0321*** (0.0107)	-0.0266*** (0.0093)	
Natural disaster host	-0.0002 (0.0002)	-0.0002 (0.0002)	-0.0002 (0.0002)	-0.0003 (0.0002)	0.0000 (0.0002)	
Natural disaster origin	-0.0013*** (0.0003)	-0.0011*** (0.0003)	-0.0011*** (0.0003)	-0.0011*** (0.0003)	-0.0010*** (0.0003)	
Log stock foreigners	0.0443*** (0.0091)	0.0430*** (0.0100)	0.0440*** (0.0102)	0.0431*** (0.0101)	0.0355*** (0.0088)	0.0360*** (0.0129)
Log net ODA			-0.0006*** (0.0002)			
UNGA Alignment				-0.0413*** (0.0122)		
Log Imports host from origin					-0.0017*** (0.0004)	
Log Imports origin from host					-0.0008*** (0.0002)	
R-squared	0.00737	0.0072	0.0072	0.0070	0.0070	0.1045
Kleibergen-Paap F-stat. IV	15.91	13.19	12.77	13.22	14.18	6.429
Fixed effects	HO,Y	HO,Y	HO,Y	HO,Y	HO,Y	HO,HY,OY
Observations	102,760	91,621	91,621	91,621	91,621	91,621

Notes: The dependent variable is binary and indicates that at least one transnational attack occurs in a year. Robust standard errors clustered on host-origin dyad in parentheses; \*\*\* p<0.01, \*\* p>0.05, \* p<0.01. HO are host-origin fixed effects, Y are year fixed effects, HY are host-year fixed effects, and OY are origin-year fixed effects.

**Table 4:** Terror and Migration, Alternative Definitions, 1980-2010, 2SLS

	(1) Terror count	(2) Severe terror indicator	(3) Severe terror count	(4) Terror fatalities count
Log GDP host	-0.1488*** (0.0520)	-0.0226** (0.0094)	-0.0341** (0.0144)	0.0197 (0.0439)
Log GDP origin	0.0180** (0.0085)	0.0028* (0.0015)	0.0040* (0.0022)	-0.0046 (0.0081)
Log population host	0.2079*** (0.0676)	0.0372*** (0.0134)	0.0547*** (0.0210)	-0.1689 (0.1843)
Log population origin	-0.0569** (0.0231)	-0.0107** (0.0048)	-0.0158** (0.0073)	-0.0331 (0.0276)
Natural disaster host	-0.0009 (0.0007)	-0.0001 (0.0001)	-0.0002 (0.0001)	0.0004 (0.0004)
Natural disaster origin	-0.0027*** (0.0008)	-0.0005** (0.0002)	-0.0008*** (0.0003)	-0.0020 (0.0021)
Log stock foreigners	0.1009*** (0.0313)	0.0172*** (0.0059)	0.0261*** (0.0091)	0.0424 (0.0427)
R-squared	0.00419	0.00251	0.00190	0.00001
Kleibergen-Paap F-stat. IV	15.91	15.91	15.91	15.91
Fixed effects	HO,Y	HO,Y	HO,Y	HO,Y
Observations	102,760	102,760	102,760	102,760

Notes: The dependent variable in column (1) counts the number of transnational attacks per year. In column (2) we use a binary indicator that is one if a transnational terror attack occurs in a given year which results in at least one wounded or killed victim. Column (3) uses the number of those attacks per year. Column (4) counts the number of fatalities. Robust standard errors clustered on host-origin dyad in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. HO are host-origin fixed effects, Y are year fixed effects.

**Table 5: Terror and Migration, Interactions, 1980-2010, 2SLS**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log GDP host	-0.0643*** (0.0167)	-0.0718*** (0.0173)	-0.0741*** (0.0178)	-0.0616*** (0.0166)	-0.0621*** (0.0164)	-0.0535*** (0.0150)	-0.0570** (0.0264)
Log GDP origin	0.0073** (0.0030)	0.0072*** (0.0028)	0.0074*** (0.0028)	0.0064** (0.0028)	0.0069** (0.0029)	0.0060** (0.0026)	0.0025 (0.0024)
Log population host	0.0985*** (0.0263)	0.1293*** (0.0298)	0.1276*** (0.0299)	0.0976*** (0.0253)	0.1028*** (0.0259)	0.0936*** (0.0247)	0.1072*** (0.0404)
Log population origin	-0.0246*** (0.0084)	-0.0323*** (0.0088)	-0.0322*** (0.0090)	-0.0233*** (0.0078)	-0.0237*** (0.0081)	-0.0215*** (0.0076)	-0.0092 (0.0075)
Natural disaster host	-0.0002 (0.0002)	-0.0002 (0.0002)	-0.0002 (0.0002)	-0.0001 (0.0002)	-0.0001 (0.0002)	-0.0002 (0.0002)	-0.0000 (0.0002)
Natural disaster origin	-0.0013*** (0.0003)	-0.0010*** (0.0003)	-0.0010*** (0.0003)	-0.0012*** (0.0003)	-0.0013*** (0.0003)	-0.0012*** (0.0003)	-0.0005* (0.0002)
Log stock foreigners	0.0442*** (0.0091)	0.0425*** (0.0086)	0.0435*** (0.0088)	0.0395*** (0.0093)	0.0421*** (0.0092)	0.0375*** (0.0082)	0.0328** (0.0136)
Additional variable	Conflict	Integration	Migrant rights	Migrant sanctions	Immigration	Terror vs. foreigners	Religious tensions
Variable coefficient	-0.0049 (0.0167)	-0.0030*** (0.0005)	-0.0038*** (0.0007)	0.0001 (0.0005)	0.0001 (0.0004)	-0.0013*** (0.0003)	0.0020 (0.0016)
Interaction coefficient	-0.0015 (0.0027)	0.0005*** (0.0001)	0.0006*** (0.0001)	-0.0001* (0.0001)	0.0001 (0.0000)	0.0002*** (0.0000)	-0.0006* (0.0003)
R-squared	0.00737	0.00612	0.00637	0.00712	0.00723	0.00731	0.00510
Kleibergen-Paap F-stat. IV	14.51	16.23	15.27	13.18	13.70	15.96	11.81
Fixed effects	HO,Y	HO,Y	HO,Y	HO,Y	HO,Y	HO,Y	HO,Y
Observations	102,760	102,760	102,760	102,760	102,760	102,760	89,020

Notes: The dependent variable is binary and indicates that at least one transnational attack occurs in a year. Robust standard errors clustered on host-origin dyad in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. HO are host-origin fixed effects, Y are year fixed effects.

**Table 6: Gender and Skill Level, 1980-2010, 2SLS**

	(1)	(2)
Log GDP host	-0.0234*** (0.0087)	-0.0214** (0.0106)
Log GDP origin	0.0025 (0.0016)	-0.0038 (0.0025)
Log population host	0.0611*** (0.0201)	0.0812*** (0.0308)
Log population origin	-0.0072 (0.0046)	-0.0140** (0.0064)
Natural disaster host	-0.0003 (0.0002)	0.0003 (0.0003)
Natural disaster origin	-0.0011*** (0.0003)	-0.0006*** (0.0002)
Log stock (male)	0.0160*** (0.0054)	
Log stock (female)	0.0093 (0.0071)	
Log stock (low skilled)		0.0459*** (0.0122)
Log stock (medium skilled)		0.0161 (0.0136)
Log stock (high skilled)		-0.0506** (0.0237)
R-squared	0.0079	0.0033
Kleibergen-Paap F-stat. IV	30.84	9.968
Fixed effects	HO,Y	HO,Y
Observations	102,760	102,760

Notes: The dependent variable is binary and indicates that at least one transnational attack occurs in a year. Robust standard errors clustered on host-origin dyad in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. HO are host-origin fixed effects, Y are year fixed effects.

## Appendix A: Sources and Definitions

Variable	Source	Definition
Transnational terror attacks	Mickolus et al. 2014	Sum of yearly incidents of terror attacks from nationals of an origin country within the host country.
Domestic terror attacks	Enders et al. 2011, Gaibullov et al. 2012	Terror from nationals against nationals within the country.
Terror against foreigners (by natives)	Mickolus et al. 2014	Terror from nationals against foreigners within the host country.
Transnational terror dummy	Mickolus et al. 2014	Dummy that is one if at least one terror attack was committed by a national of an origin country within the host country during a year.
Transnational terror attacks (severe)	Mickolus et al. 2014	Sum of yearly incidents of terror attacks from nationals of an origin country within the host country, in which at least one victim was wounded or killed.
Transnational terror dummy (severe)	Mickolus et al. 2014	Dummy that is one if at least one severe terror attack was perpetrated by a national of an origin country within the host country during a year.
Log of foreign-born residents	IAB Database, Brücker et al. 2013	Log of total bilateral foreign-born residents from an origin country.
Log of foreign-born male residents	IAB Database, Brücker et al. 2013	Log of total bilateral foreign-born male residents from an origin country.
Log of foreign-born female residents	IAB Database, Brücker et al. 2013	Log of total bilateral foreign-born female residents from an origin country.
Log of foreign-born residents low skilled	IAB Database, Brücker et al. 2013	Log of total bilateral foreign-born low skilled residents from an origin country.
Log of foreign-born residents medium skilled	IAB Database, Brücker et al. 2013	Log of total bilateral foreign-born medium skilled residents from an origin country.
Log of foreign-born residents high skilled	IAB Database, Brücker et al. 2013	Log of total bilateral foreign-born high skilled residents from an origin country.
Log of natives	World Bank 2016, IAB Database, Brücker et al. 2013	Log of total population minus the total foreign-born resident stock.
Common border	Head et al. 2010	Dummy for shared border.
Common language	Head et al. 2010	Dummy that is one if at least 9% of the host population speak the language of the origin country.
Current/former colony	Head et al. 2010	Dummy that is one if the origin country ever was a colony of the host country.
Log of distance	Head et al. 2010	Log of Distance in km between host and origin country.
Natural disaster (host)	Guha-Sapir et al. 2016	Sum of natural disasters in host country. Includes all disasters where at least ten people died, at least 100 people were affected, a state of emergency was declared, or a call for international assistance was made. Natural disasters cover five sub-categories – geophysical, meteorological, hydrological, climatological, biological, and extraterrestrial.

Natural disaster (origin)	Guha-Sapir et al. 2016	Sum of natural disasters in origin country. Includes all disasters where at least ten people died, at least 100 people were affected, a state of emergency was declared, or a call for international assistance was made. Natural disasters cover five sub-categories – geophysical, meteorological, hydrological, climatological, biological, and extraterrestrial.
Temperature deviation (origin)	Kunze 2016	Temperature deviations from the decade mean.
Precipitation deviation (origin)	Kunze 2016	Precipitation deviations from the decade mean.
Log GDP (host)	World Bank 2016	Log of GDP in constant 2010 US\$ of the host country.
Log GDP (origin)	World Bank 2016	Log of GDP in constant 2010 US\$ of the origin country.
Log population (host)	World Bank 2016	Log of total population in the host country.
Log population (origin)	World Bank 2016	Log of total population in the origin country.
Bilateral conflict dummy	UCDP Armed Conflict Dataset (V.4-2015), Gleditsch et al. 2002, Pettersson and Wallensteen 2015	Dummy that is one if host and origin country are engaged in military conflict, both as primary or supporting actors.
Religious tensions (host)	PRS Group 2016	Religious tension indicator (ranking 1 to 6), measures the degree to which religious issues are politicized in a country. Higher values mean fewer tensions.
GDP per capita growth (host)	World Bank 2016	Log of GDP per capita growth in host country.
Integration index	DEMIG 2015	Index of integration restrictiveness. Rolling stock of the net count of more restrictive policy measures (DEMIG policies that are labeled integration under the variable “pol_area”).
Migrant rights index	DEMIG 2015	Index of migrant rights restrictiveness. Rolling stock of the net count of more restrictive policy measures (DEMIG policies that are related to access of social programs, labor access and residence under the variable “pol_tool”).
Migrants surveillance & sanction index	DEMIG 2015	Index of surveillance & sanction restrictiveness. Rolling stock of the net count of more restrictive policy measures (DEMIG policies that are related to sanctions, surveillance measures, like regular reporting, and liabilities under the variable “pol_tool”).
Immigration index	DEMIG 2015	Index of immigration restrictiveness. Rolling stock of the net count of more restrictive policy measures (DEMIG policies that are labeled integration under the variable “pol_area”).
Muslim country dummy	CIA Factbook 2016	Dummy that is one if Islam is the majority religion of a country.
Terror rich country dummy	Enders et al. 2011, Gaibullov et al. 2012	Dummy that is one if a country is in the top quintile of the domestic terror distribution over the whole sample.
Log of net ODA in constant 2015 US\$	OECD 2017	Log of net ODA commitments in constant 2015 US\$ from the host to the origin country.
UNGA voting alignment	Voeten et al. 2017	UNGA voting alignment, common votes share

Log of Imports host from origin	Fouquin and Hugot 2016	including abstentions Log of imports the host country imports from the origin country.
Log of Imports origin from host	Fouquin and Hugot 2016	Log of imports the origin country imports from the host country.

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## Appendix B: Descriptive Statistics

Variable	Mean	SD	Min	Max	N
<b>Dependent Variables</b>					
Transnational terror attacks	0.01	0.13	0.00	17.00	102,760
Domestic terror attacks	0.99	6.94	0.00	135.00	102,760
Terror against foreigners (by citizens)	1.66	6.96	0.00	110.00	102,760
Transnational terror dummy	0.00	0.06	0.00	1.00	102,760
Transnational terror attacks (severe)	0.00	0.05	0.00	7.00	102,760
Transnational terror dummy (severe)	0.00	0.03	0.00	1.00	102,760
<b>Independent Variables</b>					
Log of foreign-born residents	5.05	3.51	0.00	16.04	102,760
Log of foreign-born (male)	4.47	3.33	0.00	15.43	102,760
Log of foreign-born (female)	4.34	3.37	0.00	15.25	102,760
Log of foreign-born (low skilled)	4.11	3.21	0.00	15.48	102,760
Log of foreign-born (medium skilled)	3.95	3.15	0.00	14.78	102,760
Log of foreign-born (high skilled)	4.11	3.23	0.00	14.09	102,760
<b>Instrumental Variables</b>					
Common border	0.02	0.13	0.00	1.00	102,760
Common language	0.14	0.35	0.00	1.00	102,760
Current/former colony	0.04	0.21	0.00	1.00	102,760
Log of distance	8.68	0.82	4.09	9.88	102,760
Natural disaster (host)	2.36	4.52	0.00	34.00	102,760
Natural disaster (origin)	1.69	3.19	0.00	37.00	102,760
Temperature deviation (origin)	0.42	0.50	0.00	9.07	86,571
Precipitation deviation (origin)	10.09	12.50	0.00	120.00	91,060
Bilateral migrant stock 1960	3.46	3.31	0.00	14.62	102,760
<b>Control Variables</b>					
Log GDP (host)	26.81	1.36	23.43	30.34	102,760
Log GDP (origin)	23.63	2.42	18.10	30.34	102,760
Log population (host)	16.36	1.38	12.81	19.55	102,760
Log population (origin)	15.43	2.07	9.65	21.01	102,760
Bilateral conflict dummy	0.00	0.04	0.00	1.00	102,760
Religious tensions (host)	5.60	0.68	2.50	6.00	89,020
GDP per capita growth (host)	1.91	2.58	-11.63	10.52	102,628
Integration index	-3.58	5.38	-30.00	10.00	102,760
Migrant rights index	-2.80	4.17	-21.00	10.00	102,760
Migrants surveillance & sanction index	3.88	4.75	-2.00	28.00	102,760
Immigration index	-2.10	4.32	-21.00	8.00	102,760
Muslim country dummy	0.25	0.43	0.00	1.00	102,760
Terror rich country dummy	0.19	0.39	0.00	1.00	102,760
Ethnic tensions (host)	4.91	0.90	2.00	6.00	89,020
Log net ODA, const. 2015 US\$	-7.22	7.42	-13.82	9.50	101,132
UNGA voting alignment	0.74	0.15	0.00	1.00	93,190
Log of imports host from origin	22.24	7.19	0.00	27.87	102,760
Log of imports origin from host	2.37	6.37	0.00	26.55	102,760

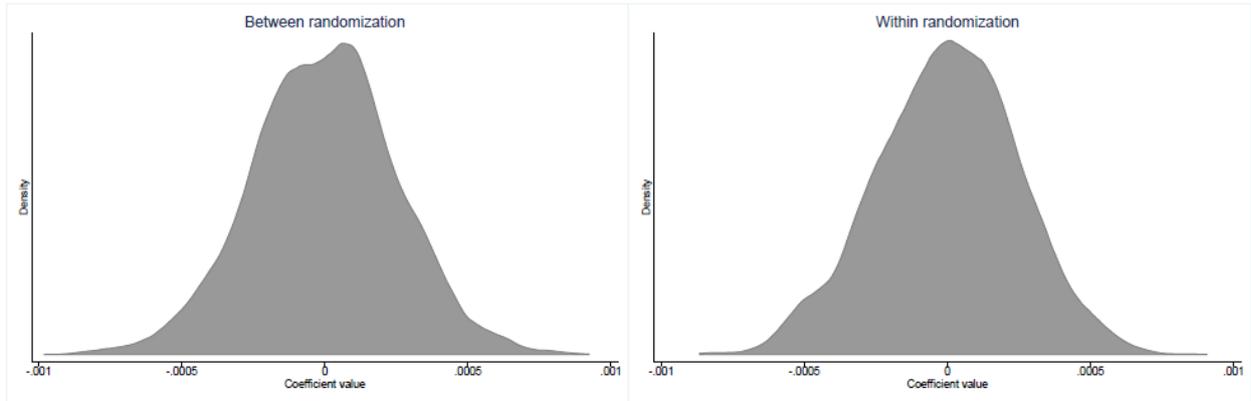
### **Appendix C: List of Countries**

Host countries (and first year of inclusion): Australia 1980, Austria 1980, Canada 1980, Chile 1980, Denmark 1980, Finland 1980, France 1980, Germany 1980, Greece 1980, Ireland 2010, Luxembourg 1980, Netherlands 1980, New Zealand 1980, Norway 1980, Portugal 1980, Spain 1980, Sweden 1980, Switzerland 1980, United Kingdom 1980, United States 1980.

Origin countries: Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo-Brazzaville, Congo-Kinshasa, Costa Rica, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Ivory Coast, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Korea South, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia, Moldova, Mongolia, Morocco, Mozambique, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russia, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Principe, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, South Africa, Spain, Sri Lanka, Sudan, Suriname, Swaziland, Sweden, Switzerland, Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States of America, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe

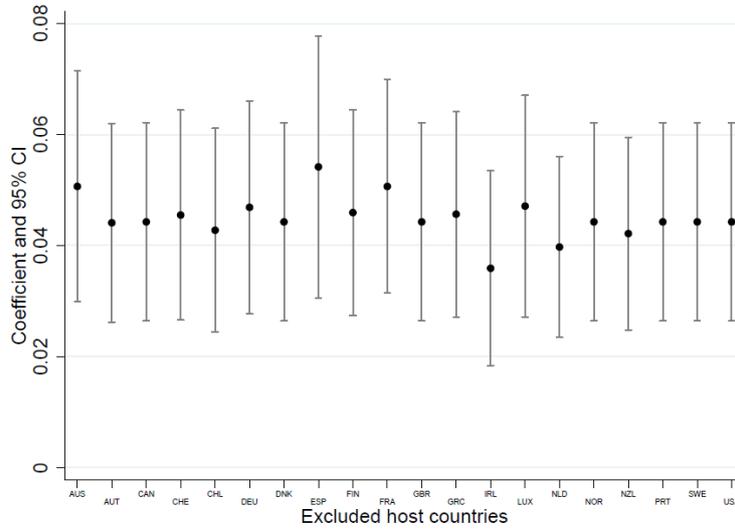
## Appendix D: Figures and Tables

**Figure D-1:** Randomization test



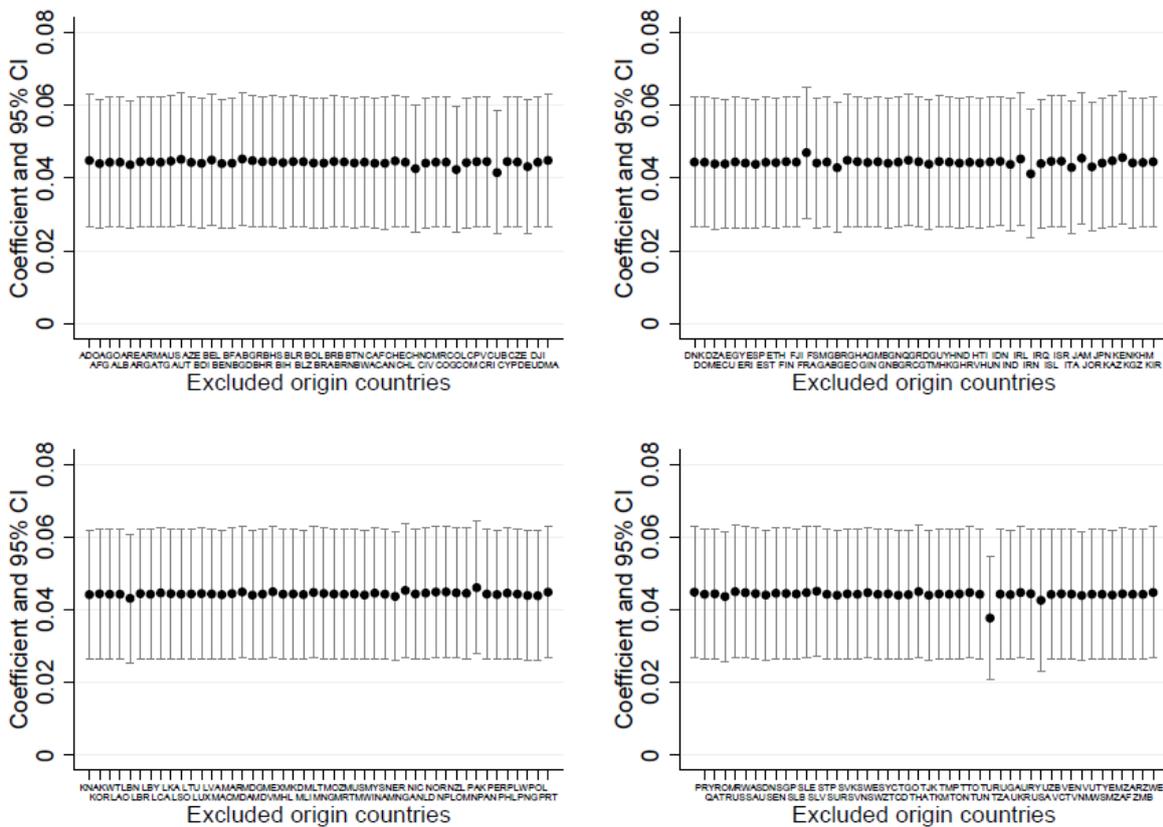
Notes: Coefficient distributions are obtained from 5,000 randomizations and depict the base level effect (corresponding to column 1 of Table 3). Note that the point coefficient estimated from the actual data is 0.0443 and is thus not shown in the graphs.

**Figure D-2: Leave one out test (host countries)**



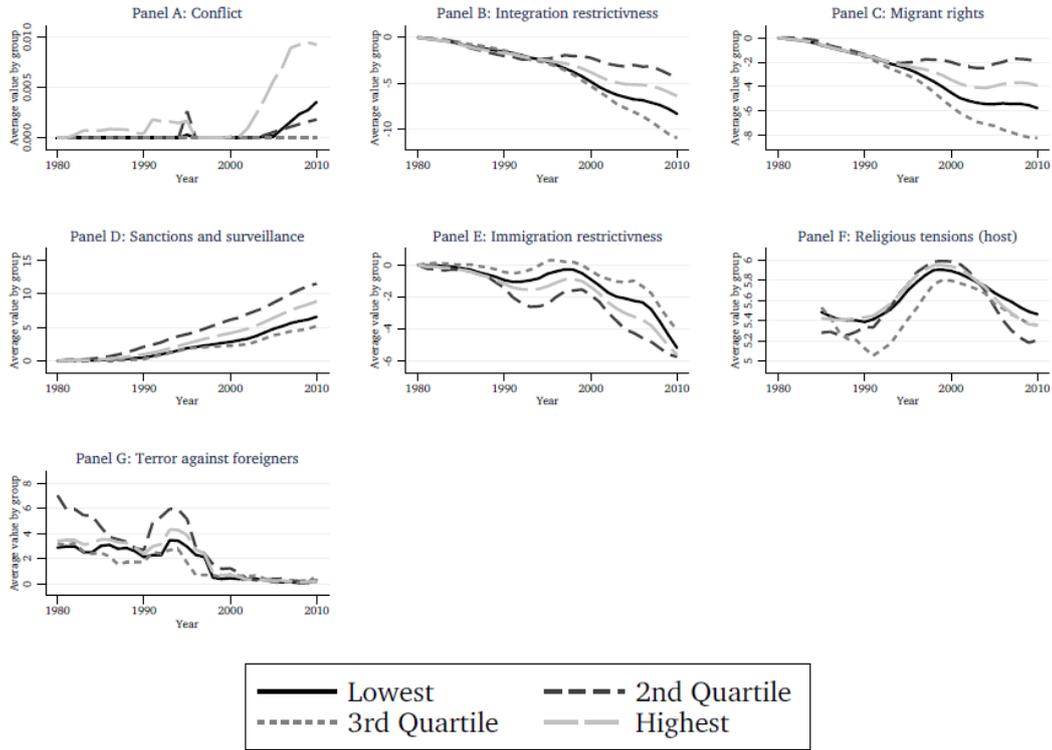
Notes: Depicts the point coefficients of the stock of foreigners and the 95% confidence interval based on column 1 of Table 3 for regressions excluding the respective host country.

**Figure D-3: Leave one out test (origin countries)**



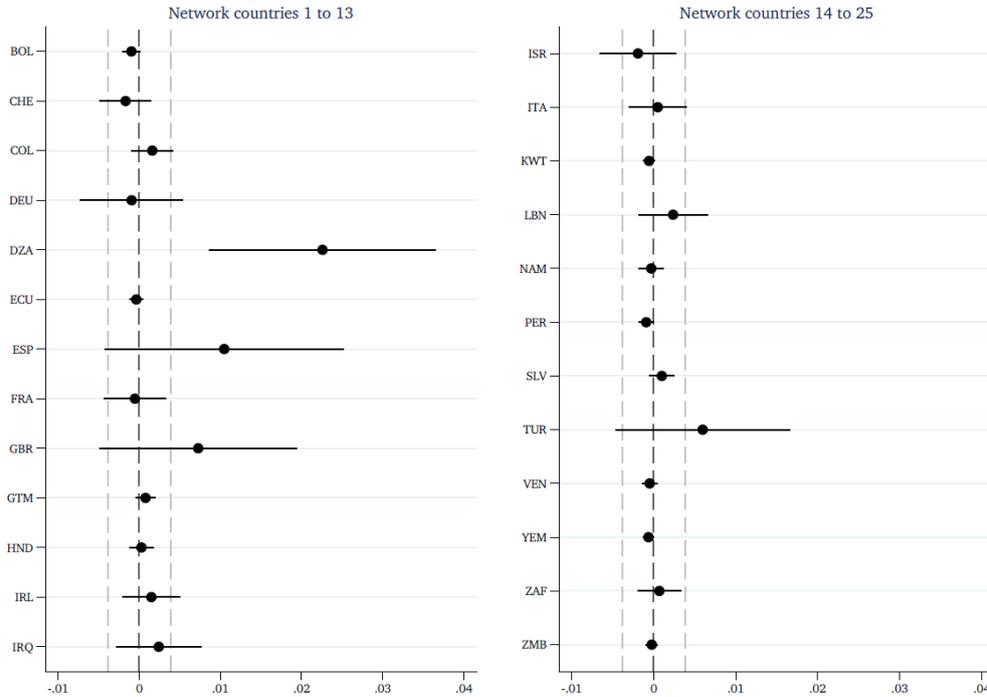
Notes: Depicts the point coefficients of the stock of foreigners and the 95% confidence interval based on column 1 of Table 3 for regressions excluding the respective origin country.

**Figure D-4: Parallel trends of interaction variables**



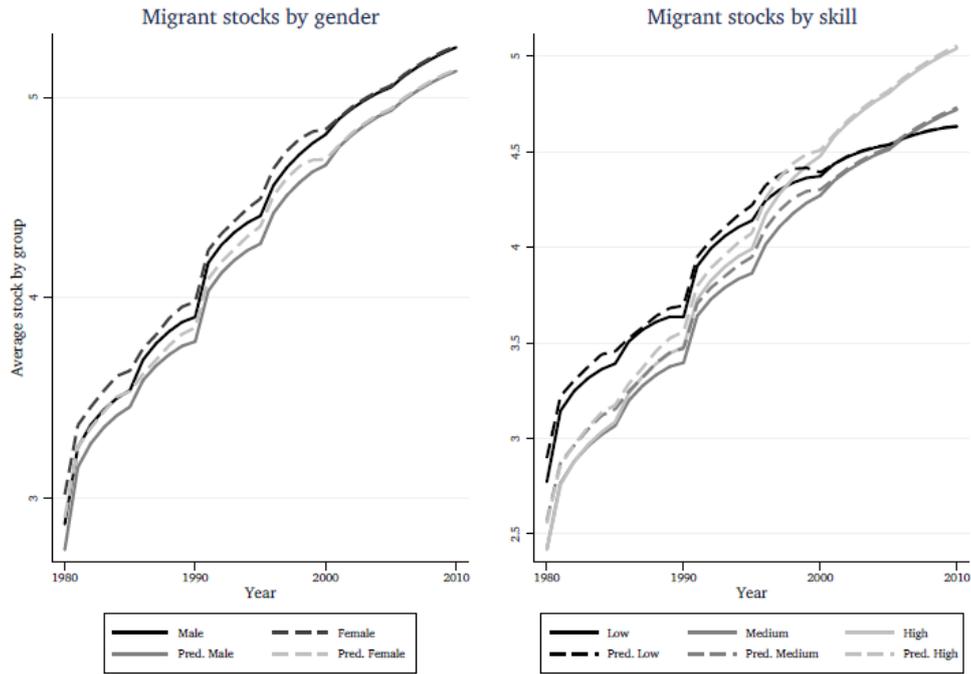
Notes: Panels A to G show the trends in the interaction variables of Table 5 over the different quartiles of the predicted migrant stocks (based on column 1 of Table 3).

**Figure D-5: Marginal Effects of individual *Network* compared to *Non-Network* Countries**



Notes: The vertical solid line is the average partial effect of the reference group (all non-network countries), the dotted lines the 95% confidence interval. The figure shows the additional effect for each country with large terrorist networks, in tandem with the 95% confidence interval.

**Figure D-6:** Parallel trends (by gender and skill level)



Note: The left figure shows the average of actual and predicted migrant stocks by gender within our 20 host countries over time. The right figure shows average stocks by skill level.

**Table D-1: First stage results (Gravity Specification)**

	First Stages		
	(1)	(2)	(3)
	Log migrants	Log migrants	Log migrants
Log GDP host	1.5391*** (0.1653)		
Log GDP origin	-0.2064*** (0.0516)		
Log population host	-1.8788*** (0.3789)		
Log population origin	0.7011*** (0.1359)		
Natural disasters host	0.0927*** (0.0297)		
Natural disasters origin	-0.0040 (0.0371)		
<b>Interactions with Natural Disasters in Host countries</b>			
Colony host	0.0072 (0.0067)	-0.0285*** (0.0108)	-0.0211* (0.0119)
Common border	-0.0224 (0.0174)	-0.0324 (0.0280)	-0.0279 (0.0258)
Common language	-0.0144*** (0.0045)	0.0159*** (0.0044)	0.0219*** (0.0049)
Log distance	-0.0066** (0.0032)	0.0114*** (0.0041)	0.0148*** (0.0040)
Migrant stock 1960	-0.0050*** (0.0006)	-0.0010 (0.0006)	-0.0024*** (0.0006)
<b>Interactions with Natural Disasters in Origin countries</b>			
Colony host	-0.0320*** (0.0118)	-0.0406*** (0.0114)	-0.0447*** (0.0122)
Common border	-0.0293** (0.0147)	0.0041 (0.0158)	-0.0047 (0.0173)
Common language	0.0116 (0.0116)	0.0278** (0.0114)	0.0319*** (0.0109)
Log distance	0.0051 (0.0041)	-0.0037 (0.0041)	-0.0101* (0.0055)
Migrant stock 1960	-0.0045*** (0.0012)	-0.0043*** (0.0012)	-0.0053*** (0.0013)
R-squared	0.4240	0.9679	0.9604
Fixed effects	HO,Y	HO,HY,OY	HO,HY,OY
Observations	102,760	91,621	115,320

Notes: Column 1 shows the first stage corresponding to column 1 of Table 3 (including host-origin and year fixed effects). Column 2 includes fixed effects for origin-year, host-year and origin-host (Column 1, row 6, in Table D-2). Robust standard errors in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. HO are host-origin fixed effects, Y are year fixed effects, HY are host-year fixed effects, and OY are origin-year fixed effects.

**Table D-2: Tests for Robustness**

	Interaction of foreigners with:					
	None	Integration	Migrant rights	Migrant sanctions	Terror vs. foreigners	Religious tensions
All moving averages (five years)	0.0426*** (0.0090)	0.0005*** (0.0001)	0.0006*** (0.0001)	0.0000 (0.0001)	0.0001*** (0.0000)	-0.0006* (0.0003)
No moving averages	0.0443*** (0.0091)	0.0005*** (0.0001)	0.0005*** (0.0001)	-0.0001** (0.0001)	0.0002* (0.0001)	-0.0013** (0.0006)
Period averages (five years)	0.0415*** (0.0078)	0.0006*** (0.0001)	0.0007*** (0.0001)	-0.0001** (0.0001)	0.0002*** (0.0001)	-0.0007** (0.0003)
Exclude outliers	0.0394*** (0.0085)	0.0005*** (0.0001)	0.0006*** (0.0001)	-0.0000 (0.0001)	0.0001*** (0.0000)	-0.0006* (0.0004)
Additional instruments	0.0397*** (0.0087)	0.0005*** (0.0001)	0.0005*** (0.0001)	-0.0001 (0.0001)	0.0002*** (0.0001)	-0.0004 (0.0003)
High dimensional FE	0.0227*** (0.0084)	0.0001*** (0.0001)	0.0002** (0.0001)	-0.0001 (0.0001)	0.0002*** (0.0001)	-0.0007 (0.0005)
Severe terror incidents	0.0172*** (0.0059)	0.0002*** (0.0001)	0.0003*** (0.0001)	-0.0000 (0.0000)	0.0001*** (0.0000)	-0.0002 (0.0002)

Notes: Regressions are variants of those shown in Table 5. *None* shows the coefficient of *log migrants*, without interaction. The remaining columns show the coefficient of the interaction. *All moving averages* includes all explanatory variables as five-year moving averages (lagged by one year). *No moving averages* uses yearly values for the interaction variables, rather than five-year moving averages. *Period averages* uses averages over five years (but no moving average). *Exclude outliers* excludes the five percent largest changes in migration in our sample. *Additional instruments* adds deviations in temperature and precipitation as interaction variables to our set of instruments. *High dimensional FE* includes fixed effects for origin-year, host-year and origin-host. *Severe terror incidents* involve at least one victim wounded or killed.

**Table D-3: Gender and Skills, Tests for Robustness**

	<u>Gender Specification</u>			<u>Skill Specification</u>			
	Male	Female	p-value Male/Female	Low	Medium	High	p-value Low/High
All moving averages (five years)	0.0071* (0.0037)	0.0137*** (0.0052)	0.3989	0.0480*** (0.0125)	0.0234** (0.0117)	-0.0724*** (0.0216)	0.0002
Period averages (five years)	0.0109** (0.0048)	0.0128* (0.0066)	0.8537	0.0567*** (0.0145)	0.0200 (0.0123)	-0.0695*** (0.0197)	0.0001
Exclude outliers	0.0116** (0.0045)	0.0092 (0.0060)	0.7924	0.0296*** (0.0095)	0.0144 (0.0112)	-0.0344* (0.0188)	0.0144
Additional instruments	0.0180*** (0.0055)	0.0047 (0.0060)	0.1838	0.0497*** (0.0135)	0.0102 (0.0135)	-0.0451** (0.0213)	0.0019
Severe terror incidents	0.0056* (0.0032)	0.0057 (0.0038)	0.9873	0.0180** (0.0085)	0.0083 (0.0080)	-0.0220 (0.0146)	0.0624

Notes: See Table D-2. The p-values correspond to t-tests testing the equality in coefficients for male and female migrants and low and medium skilled migrants. We do not show results for *No moving averages* and *High dimensional FE*. Given that we do not include interactions, there are no moving averages in any of the regressions. When we include the additional fixed effects, the first-stage F-statistic is insufficiently low, so we do not report these (insignificant) results in the table. *Severe terror incidents* involve at least one victim wounded or killed.

**Table D-4: Different time periods, 2SLS**

	(1) Terror indicator	(2) Terror count	(3) Severe terror indicator	(4) Severe terror count	(5) Terror fatalities count
Log stock foreigners	0.0270*** (0.0071)	0.0727** (0.0283)	0.0102** (0.0049)	0.0180** (0.0081)	0.0089 (0.0160)
Period Interactions					
Log stock foreigners in 1990s	-0.0023*** (0.0004)	-0.0051*** (0.0015)	-0.0010*** (0.0003)	-0.0016*** (0.0005)	-0.0085 (0.0073)
Log stock foreigners in 2000s	-0.0034*** (0.0005)	-0.0069*** (0.0017)	-0.0014*** (0.0003)	-0.0021*** (0.0005)	-0.0058 (0.0082)
R-squared	0.00580	0.00364	0.00185	0.00145	0.000008
Kleibergen-Paap F-stat. IV	19.59	19.59	19.59	19.59	19.59
Fixed effects	HO,Y	HO,Y	HO,Y	HO,Y	HO,Y
Observations	102,760	102,760	102,760	102,760	102,760

Notes: The dependent variable in column (1) is binary and indicates that at least one transnational attack occurs in a year. Column (2) counts the number of transnational attacks per year. In column (3) we use a binary indicator that is one if a transnational terror attack occurs in a given year which results in at least one wounded or killed victim. Column (4) uses the number of those attacks per year. Column (5) counts the number of fatalities. Control variables (GDP and population of host origin, and natural disasters in host and origin) are included. Note that the base level of the period dummies is absorbed by the time dummies. Robust standard errors in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. HO are host-origin fixed effects, Y are year fixed effects.

**Table D-5: Terror and Lagged Migration stocks, 2SLS**

	(1)	(2)	(3)	(4)
Log GDP host	-0.0199** (0.0083)	0.0180** (0.0077)	0.0014 (0.0094)	-0.0010 (0.0080)
Log GDP origin	-0.0017 (0.0017)	-0.0041*** (0.0016)	0.0003 (0.0012)	0.0003 (0.0026)
Log population host	0.0412*** (0.0149)	-0.0087 (0.0132)	0.0115 (0.0077)	0.0210 (0.0259)
Log population origin	-0.0113* (0.0060)	-0.0049 (0.0041)	0.0022 (0.0038)	0.0033 (0.0042)
	5 year lag	10 year lag	15 year lag	20 year lag
Natural disasters host	0.0000 (0.0001)	-0.0002 (0.0001)	-0.0001 (0.0001)	0.0001 (0.0001)
Natural disasters host	-0.0008*** (0.0003)	-0.0006*** (0.0002)	0.0000 (0.0001)	-0.0001 (0.0001)
Log stock foreigners	0.0259*** (0.0069)	0.0139*** (0.0046)	0.0008 (0.0045)	-0.0024 (0.0095)
R-squared	0.0056	0.0040	0.0019	0.0005
Kleibergen-Paap F-stat. IV	19.17	23.27	16.20	6.406
Fixed effects	HO,Y	HO,Y	HO,Y	HO,Y
Observations	89,020	74,200	57,560	39,980

Notes: The dependent variable is binary and indicates that at least one transnational attack occurs in a year. Robust standard errors in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. HO are host-origin fixed effects.

**Table D-6:** Network Countries by Transnational Terror Group

ANC	Al-Qaida	ETA	FMLN	Hezbollah	IRA	PKK	M-19	FARC	SL
South Africa	Iraq	Spain	El Salvador	Lebanon	United Kingdom	Turkey	Colombia	Colombia	Peru
Zambia	Algeria	France	Guatemala	Israel	Ireland	Germany	Venezuela	Venezuela	Bolivia
Botswana	Yemen	Italy	Honduras	Kuwait	France	Iraq	Ecuador	Peru	Colombia

Notes: The table lists the three countries in which terror groups are most active, in descending order.

Table D-7: Difference between  $\beta_4 - \beta_3$

Group	ANC	Al'Qaida	ETA	FMLN	Hezbollah	IRA	PKK	M-19	FARC	SL	All Groups
:											
<b>p-value:</b>	0.2634	0.4459	0.9682	0.2426	0.8345	0.7056	0.9444	0.5109	0.8953	0.9894	0.5304

Notes: The p-values refer to a two sided t-test testing whether the coefficients of  $\beta_4 - \beta_3$  are identical, based on the following specification:  $TERROR_{hot} = \alpha + \beta_1 \widehat{FOREIGNERS}_{hot} + \beta_2 (\widehat{FOREIGNERS}_{hot} * NETWORK_o) + \beta_3 (\widehat{FOREIGNERS}_{hot} * GROUPACTIVITY_t) + \beta_4 (\widehat{FOREIGNERS}_{hot} * NETWORK_o * GROUPACTIVITY_t) + \xi (NETWORK_o * GROUPACTIVITY_t) + \rho DISASTER_{ot} + \delta DISASTER_{ht} + X'_{hot} \psi + \eta_{ho} + \gamma_t + \epsilon_{hot}$