

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Prömel, Christopher

# **Working Paper**

# Belonging or estrangement: The European refugee crisis and its effects on immigrant identity

SOEPpapers on Multidisciplinary Panel Data Research, No. 1160

# **Provided in Cooperation with:**

German Institute for Economic Research (DIW Berlin)

Suggested Citation: Prömel, Christopher (2022): Belonging or estrangement: The European refugee crisis and its effects on immigrant identity, SOEPpapers on Multidisciplinary Panel Data Research, No. 1160, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin

This Version is available at: https://hdl.handle.net/10419/251453

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.









Belonging or Estrangement – the European Refugee Crisis and its Effects on Immigrant Identity

Christopher Prömel



# SOEPpapers on Multidisciplinary Panel Data Research at DIW Berlin

This series presents research findings based either directly on data from the German Socio-Economic Panel (SOEP) or using SOEP data as part of an internationally comparable data set (e.g. CNEF, ECHP, LIS, LWS, CHER/PACO). SOEP is a truly multidisciplinary household panel study covering a wide range of social and behavioral sciences: economics, sociology, psychology, survey methodology, econometrics and applied statistics, educational science, political science, public health, behavioral genetics, demography, geography, and sport science.

The decision to publish a submission in SOEPpapers is made by a board of editors chosen by the DIW Berlin to represent the wide range of disciplines covered by SOEP. There is no external referee process and papers are either accepted or rejected without revision. Papers appear in this series as works in progress and may also appear elsewhere. They often represent preliminary studies and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be requested from the author directly.

Any opinions expressed in this series are those of the author(s) and not those of DIW Berlin. Research disseminated by DIW Berlin may include views on public policy issues, but the institute itself takes no institutional policy positions.

The SOEPpapers are available at http://www.diw.de/soeppapers

## **Editors:**

Jan **Goebel** (Spatial Economics)
Stefan **Liebig** (Sociology)
David **Richter** (Psychology)
Carsten **Schröder** (Public Economics)
Jürgen **Schupp** (Sociology)
Sabine **Zinn** (Statistics)

Conchita **D'Ambrosio** (Public Economics, DIW Research Fellow)
Denis **Gerstorf** (Psychology, DIW Research Fellow)
Katharina **Wrohlich** (Gender Economics)
Martin **Kroh** (Political Science, Survey Methodology)
Jörg-Peter **Schräpler** (Survey Methodology, DIW Research Fellow)
Thomas **Siedler** (Empirical Economics, DIW Research Fellow)
C. Katharina **Spieß** (Education and Family Economics)
Gert G. **Wagner** (Social Sciences)

ISSN: 1864-6689 (online)

German Socio-Economic Panel (SOEP) DIW Berlin Mohrenstrasse 58 10117 Berlin, Germany

Contact: soeppapers@diw.de



Belonging or Estrangement – the European Refugee Crisis and its Effects on Immigrant Identity\*

Christopher Prömel<sup>†</sup>

October 2021

Abstract

This study deals with the impact of the 2015 European Refugee Crisis on the ethnic identity of resident migrants in Germany. To derive plausibly causal estimates, I exploit the quasi-experimental setting in Germany, by which refugees are allocated to different counties by state authorities without being able to choose their locations themselves. This study finds that higher shares of refugees in a county increased migrants' attachment to their home countries, while not affecting their perceived belonging to Germany. Further analyses uncover strong heterogeneities with respect to country of origin and immigrant characteristics and suggest that the observed effects may be primarily driven by experiences of discrimination and the consumption of foreign media. Lastly, I find that changes in ethnic identity coincide with the political polarization of migrants. These results have various policy implications in terms of the dispersal of asylum seekers, the modes of communication with different migrant groups and the importance of anti-discrimination measures.

Keywords: Refugees, Migrants, Ethnic Identity, European Refugee Crisis

JEL: F22, J15, P16, Z13

<sup>\*</sup>Acknowledgements: I would like to thank Eugenia Baroncelli, Natalia Danzer, Sascha-Christopher Geschke, Felix Kersting, Felicitas Schikora, Thomas Siedler, Alexandra Spitz-Oener, Max Steinhardt, Dominik Stelzeneder, Thomas Tichelbäcker and participants of the 1st Una Europa Competition on Global Governance Research Seminar, the Bavarian Young Economists' Meeting 2021, the Potsdam PhD Workshop in Empirical Economics 2021, the Research Seminar in Applied Microeconomics (FU Berlin) and the Brown-Bag Seminar in Public Economics (FU Berlin) for helpful comments and suggestions.

<sup>&</sup>lt;sup>†</sup>Economics Department of the John F. Kennedy Institute for North American Studies, Freie Universität Berlin, Lansstr. 7-9, 14195 Berlin. Email: christopher.proemel@fu-berlin.de

## 1. Introduction

In the last decades, immigration has increasingly become a politically salient and hotly discussed topic in many Western countries. Not only has it galvanized voters in the 2016 US presidential election and the UK Brexit referendum, but it has also fueled populist movements in virtually all European countries (Inglehart and Norris 2016). One of the most impactful events in recent times was the European Refugee Crisis (ERC) in 2015. It polarized the political land-scape in many European countries, with concern about the safety and welfare of refugees on one side and fear and worry about them on the other (Hangartner et al. 2018, Rodrik 2020). These dynamics were particularly pronounced in Germany, where over the span of only a few months close to a million asylum seekers arrived. At first, many Germans were accommodating, with a broad spectrum of society helping to provide immediate aid and support for the incoming. Yet over time, critical voices grew louder, leading to vocal anti-immigrant movements and culminating in far-right Alternative für Deutschland (AfD) entering into the Bundestag (German national parliament) in 2017 (Arzheimer and Berning 2019).

While public and scientific discourse was often mainly focused on either the integration of refugees or the concerns of the German population (Gehrsitz and Ungerer 2017, Aksoy et al. 2020), little attention has been paid to the reaction of migrants already living in Germany. This is particularly noteworthy as many European countries still struggle to integrate parts of the immigrant community, resulting in far worse labor market outcomes for migrants compared to natives (e.g., Dustmann et al. 2013). While researchers have studied which factors affect migrant integration, increased attention has been paid to the importance of identity in recent years, and more specifically, the effects of ethnic identity (e.g., Battu and Zenou 2010, Casey and Dustmann 2010, Manning and Roy 2010). Adding to this literature, this study examines the effects the 2015 ERC had on already resident migrants, looking at how it affected their attachment to Germany and their original home country, respectively.

The 2015 European Refugee Crisis offers a quasi-natural experiment in the form of an arguably exogenous migration shock. Starting on 4 September 2015, Germany opened its borders to refugees stuck in other European countries, leading to a sudden and very strong increase of asylum seekers in Germany. According to state authorities, approximately 890,000 refugees arrived in Germany in 2015 (BAMF 2016b) – the vast majority at the end of the year. After arrival, refugees were unable to choose their locations themselves, but were placed by the authorities to individual states, counties, and municipalities. The distribution to different states (Bundesländer) followed a pre-determined quota called the "Königstein Key" (Königsteiner Schlüssel), which is based on state population and tax revenue (Stips and Kis-Katos 2020). Within states,

refugees were placed to counties according to rules set by each state. For example, nine of 16 states allocated refugees according to the population size of counties, while others had fixed and previously agreed upon quotas (Geis and Orth 2016). Importantly, residents in neighborhoods, where refugee reception facilities were established, had no influence on the allocation of asylum seekers. This was particularly true for migrants, who – by virtue of being a minority in society and oftentimes ineligible to vote – have little voice in these decisions.

In this study, I exploit the plausibly exogenous variation that arose from the placement of asylum seekers during the ERC to see whether increased concentration of refugees within counties affected the already resident immigrants' self-identification. This endeavor is partly inspired by Fouka et al. (2021). The authors show that the in-migration of millions of African Americans from the US South to the Northern metropolitan areas during the Great Migration led to significant increases in European immigrants' assimilation effort and success. I examine whether a similar mechanism could be at play for the refugee crisis in Germany. Yet, instead of looking at revealed preferences, I focus on migrants' host and home country attachment. To arrive at arguably causal estimates, I employ a variant of a difference-in-differences approach, regressing the two mentioned identity measures on an interaction of the change in refugees over population per county between 2014 and 2015. Moreover, I include a host of plausibly exogenous controls, as well as time and individual fixed effects.

In my estimations, I use individual-level data from the German Socio-Economic Panel (SOEP), a representative longitudinal household survey, that provides time-varying information on migrants' identity measures (Goebel et al. 2019, Liebig et al. 2019). Attachment to Germany is measured through the question, to what extend migrants feel German, while the other outcome is captured by asking how connected migrants feel to their own or their parents' home country. Both outcomes are scaled from 0 ("not at all") to 4 ("completely"/"very strong"). For my main explanatory variable, I use administrative end-of-year data on the recipients of asylum seeker benefits per county, which reflect actual refugee inflows very well.

To argue that the ERC offers an arguably exogenous migration shock requires the explanatory variable to be unaffected by the outcomes of interest and any confounding factor in the error term. There are three potential threats to the identification. First, migrants' identification with their home or host country itself could affect placement more or less directly. Testing whether my outcome variables influenced the placement of refugees directly, I find no effect of migrant self-identification on refugee allocation. Second, refugees could be placed where immigrants generally integrate faster socially and economically. If better integrated migrants identify more with Germany and less with their home country, this could bias results. Nevertheless, I show

that the placement of refugees per county was independent of a host of integration outcomes of migrants, including social, economic and demographic measures. Lastly, there could be other confounding factors that are not controlled for in my main estimation equation. To assess this possibility, I introduce a myriad of further controls – which are possibly influenced by the treatment itself – into my main regression. However, including these "bad controls" (Angrist and Pischke 2008) barely affects my main results.

Overall, I find that increases in refugee concentration led to an increase in migrants' attachment to their home countries, while having no significant impact on their identification with Germany, on aggregate. Baseline results suggest that home country connection increased by .5 standard deviations in response to an increase in counties' asylum seeker share of ten percentage points. Moreover, I find substantial heterogeneities in these effects along country of origin. On one side, migrants from Eastern European countries, particularly those who are not ethnic Germans, became significantly less attached to Germany and more attached to their home countries the more asylum seekers were placed in their county. On the other side, I observe opposite (albeit insignificant) effects for Western migrants, who increased their attachment to Germany while decreasing the connection to their home countries. Lastly, migrants from Turkey, the Middle East, and North Africa (TMENA) became less attached to Germany, but did not feel more connected to their home countries in response to the treatment. Examining the characteristics of migrants further, I find additional heterogeneities. E.g., results show that the connection to their home country only grew for first-generation immigrants, but not the second generation or immigrants who came to Germany as minors, suggesting that socialization may have played an important role.

My results are robust to a range of different specifications, and possible objections. First, to check for omitted variable bias, a host of further potential confounders were controlled for, such as selective in- and out-migration and aggregate voting behavior by county. Next, I employ different regression methods, namely ordinal and binary logit regressions, finding overall similar results that are statistically significant. Thirdly, I test whether my findings hold for different sample specifications. Lastly, results are also robust to the inclusion of region-specific time fixed effects, different specifications of my treatment variable, and when I cluster standard errors by household instead of county.

Looking for the underlying causes of the observed effects, I do not find that changes in ethnic identification are due to changes in migrants' worries about immigration, crime, xenophobia or job security. Instead, experiencing discrimination and foreign media consumption appear to play important roles in explaining results. For once, treatment effects only appear for migrants who

reported being discriminated against due to their origin. This is in essence also reflected when looking at Eastern European and TMENA migrants, which suggests a noteworthy interaction of experiences of discrimination and refugee concentration. These dynamics could be, e.g., because of a fear of future discrimination distinct from outright xenophobia. In areas with more refugees, the salience of categories like origin, ethnicity or race likely increases, which may increase such a fear and lead to an estrangement from host country society in favor of the home country. Such a phenomenon would be in line with the existing literature showing that more or less explicit forms of societal backlash against migrant groups can have detrimental effects on the integration of immigrants (Gould and Klor 2015, Elsayed and de Grip 2017). Second, I find that only immigrants, who regularly consume media from their country of origin, did experience significant treatment effects, which is also visible when looking at Eastern European and TMENA migrants, but not Western migrants. Again, there appears to be an interaction, whereby refugee inflows affect the outcomes depending on media consumption. Apparently, a higher presence of refugees in their counties - and presumably in everyday life - makes migrants feel less German and more attached to their home countries only when they are informed by media outside Germany. Previous research has already shown that news coverage of the refugee crisis in Eastern Europe differed strongly from reports in the West, being more critical of Germany's handling and more hostile towards refugees (Georgiou and Zaborowski 2017). And although Turkish media was generally empathetic with the refugees and their dire situation (Sunata and Yıldız 2018), it also differed in important aspects, e.g., by invoking narratives surrounding state control (Sert and Danış 2021).

In a last extension, I check whether the ERC also had an impact on other outcomes that could be associated with migrant self-identification. While the placement of refugees does not appear to have already affected labor market outcomes of migrants, it seems to have an impact on political outcomes. For once, migrants became more interested in politics in areas with higher relative inflows. Moreover, preferences for political parties increased, too, with Western migrants leaning stronger towards moderately left-wing parties, while Eastern European and TMENA migrants increasingly preferred far-right and far-left parties, respectively, indicating some kind of political polarization.

My findings have multiple policy implications. First, results show that refugee inflows increased migrants' home country attachment and political polarization. This suggests that it might be advisable to avoid strong clustering of asylum seekers in single counties to limit potentially unfavorable effects. Second, different migrant groups were affected differently by the migration shock. This stresses the relevance of developing diverse approaches that target immi-

grant groups individually and do not treat all migrants as one block. Thirdly, many immigrants consume media in different languages. Therefore, if policymakers, e.g., plan information campaigns targeting migrants, it could be helpful to address them in various languages and, perhaps, through different forms of media. Lastly, my analysis suggests that feeling disadvantaged in Germany interacts strongly with the treatment. Intensifying and perhaps enhancing previous measures to reduce discrimination may therefore help in limiting potential adverse effects of refugee inflows.

This study contributes, first, to the evolving literature on identity and, more specifically, ethnic identification. While there is some descriptive evidence on the determinants of ethnic identity (e.g., Dustmann 1996, Manning and Roy 2010), we know very little about the causal factors determining why some migrants identify more or less with their home and host countries. This study tries to at least partly ameliorate that by exploiting the quasi-random setting of the ERC in Germany, examining whether the large-scale refugee inflows causally affected the selfidentification of existing migrants in the short term. Second, this study adds to the literature on assimilation. While research on the effects of ethnic identity on labor market outcomes is not conclusive, there is some evidence that host country identification relates positively to labor market outcomes (e.g., Nekby and Rödin 2010, Piracha et al. 2021), while the opposite is the case for home country attachment (e.g., Battu and Zenou 2010, Bisin et al. 2011, Monscheuer 2020). As refugee inflows of the ERC impacted the ethnic identity of migrants, this may in extension influence labor market outcomes and overall assimilation in the long run. Third, my study adds to existing studies that exploit the dispersal policy of asylum seekers in Germany (Glitz 2012, Tomberg et al. 2021) more generally, and the impact the ERC specifically had on different outcomes (e.g., Gehrsitz and Ungerer 2017, Entorf and Lange 2019), being one of the first studies that focuses on the effects on already resident immigrants. Lastly, my findings also contribute to the still growing research on the determinants of immigrants' political preferences (e.g., Dancygier and Saunders 2006, Bergh and Bjørklund 2011).

The remaining parts of the paper are structured as follows. In section 2, I give an overview of the literature on identity, social assimilation, and research that has already exploited the setting of the ERC, followed by a section about the refugee crisis and the institutional background in Germany (section 3). I then describe the data used, introduce my methodological approach and provide evidence for the exogeneity of my empirical strategy (section 4). Section 5 will present my main results and show that they are robust to a number of possible objections. In this section, I also test possible channels and look at related outcomes of the setting of the ERC. In the final section, I discuss results and conclude my study.

## 2. Literature

Following the seminal study of Akerlof and Kranton (2000), topics surrounding identity have received increased attention in economic research. Subsequently, researchers have examined the role of identity in relation to various other aspects, among them voting, inequality and redistribution (Shayo 2009). Moreover, identity has also become a concern in the context of immigrant assimilation and integration.<sup>1</sup> One aspect of identity that has gained particular prominence in this context is ethnic self-identification, also called ethnic identity.<sup>2</sup>

Early studies have provided descriptive evidence on the determinants of self-identification (Dustmann 1996, and Constant and Zimmermann 2008 for Germany, Bisin et al. 2011, Manning and Roy 2010, Georgiadis and Manning 2013, and Bisin et al. 2016 for the UK). It should be noted that the measures for ethnic identity can differ quite a lot between studies. Some use information on whether respondents consider themselves more part of the host or home country society (e.g., Dustmann 1996, Manning and Roy 2010), while others use multi-dimensional measures including language skills and ethnic networks (e.g., Constant and Zimmermann 2008).

These differences help explain why studies looking at the impact of ethnic identity on social and labor market outcomes often come up with ambivalent or even conflicting findings. On one side, studies such as Battu and Zenou (2010) and Bisin et al. (2011) find that stronger home country identification<sup>3</sup> is negatively related to labor market outcomes. Other studies such as Casey and Dustmann (2010) and Nekby and Rödin (2010), on the other side, find more modest effects, that in some cases even show positive labor market effects of home country attachment. Newer studies on Australia (Piracha et al. 2021), Canada (Islam and Raschky 2015), China (Cai and Zimmermann 2020), Denmark (Gorinas 2014) and Italy (Carillo et al. 2021), that partly use instrumental variables to deal with endogeneity, also do not come up with clear patterns, either finding slightly positive (negative) or negligible effects of host country (home country) identification. However, most research shows that ethnic identity is transmitted across generations (Casey and Dustmann 2010), which can affect educational, social, and labor market outcomes (Schüller 2015, Monscheuer 2020).

The second strand of literature important to this study relates to the assimilation of migrants, i.e. the convergence in economic or social outcomes between natives and migrants. Research

<sup>&</sup>lt;sup>1</sup>While the terms assimilation and integration are not congruent, there is not a clear boundary between both concepts in the economics literature, either. In this paper, I will use "assimilation" to mean convergence in economic or social outcomes. "Integration", on the other side, is the more general social and economic success of migrants in the host country.

<sup>&</sup>lt;sup>2</sup>In the literature, sometimes the terms national identity or social identity are also used.

<sup>&</sup>lt;sup>3</sup>An extreme form of that are the so-called "oppositional identities", which refer to values and behavior particularly rejecting of the dominant culture. These are studied theoretically in Battu et al. (2006) and empirically by Battu and Zenou (2010).

on economic assimilation is already well-established and still growing (e.g., Dustmann et al. 2012, Abramitzky et al. 2014, Borjas 2015). Yet an increasingly important part in assimilation research concerns social and cultural outcomes. This literature deals with the influence of factors such as naturalization (e.g., Steinhardt 2012), language skills (e.g., Bleakley and Chin 2004), inter-marriage (e.g., Fouka et al. 2021), and name-giving (e.g., Biavaschi et al. 2017), generally providing evidence of the utility of these forms of social capital in the economic and social realm.

Yet, while there is a variety of studies looking at the impact of social assimilation on economic or other social outcomes, we do not know very much about the determinants of social assimilation. An exception is Fouka et al. (2021), who examine the impact of the first Great Migration between 1915 and 1930 on assimilation effort and success of white European immigrants in the US. They show substantial positive effects of the migration movement on immigrants' probability to naturalize and inter-marry.

Lastly, in the context of Germany, a number of studies examine the effects of the ERC. Thematically, the most similar study to this one is Deole and Huang (2020), who, among other outcomes, study how the ERC affected the economic and social assimilation of immigrants from Turkey, the Middle East, and North Africa (TMENA). Using data from the German Socio-Economic Panel, they find no change in migrant identification with Germany, while the connection to their home country increased. Other studies concerning Germany look at the effects of the ERC on crime (Dehos 2017, Huang and Kvasnicka 2019, Gehrsitz and Ungerer 2017) and anti-foreigner hate crime (Entorf and Lange 2019), rental prices (Kürschner Rauck and Kvasnicka 2018), attitudes toward immigration (Sola 2018), support for right-wing parties (Schaub et al. 2021), and voting (Gehrsitz and Ungerer 2017).

### 3. Institutional Background

#### 3.1. Historical Background

The 2015 European Refugee Crisis was the culmination of several dynamics preceding this event. First of all, the Syrian Civil War starting in 2012 led to the spread of millions of Syrians fleeing war, hunger, and persecution. At first, many of them sought shelter in neighboring countries such as Turkey, Jordan or Lebanon, while others remained in Syria. Yet, as time went by with no end of the civil war in sight and few opportunities in neighboring countries, those migrants headed for Europe.

Second, on their way, they were joined by other migrants fleeing political and other forms of persecution, oppression, and lack of economic opportunity. Those other refugees predominantly came from Afghanistan and Iraq, but also from Balkan countries such as Albania and Kosovo,

African countries like Eritrea, and other Asian countries.

Third, the European Union's system of registering and distributing asylum seekers across member states was already dysfunctional and subject of heated debate (Niemann and Zaun 2018). Unprepared and overwhelmed, the EU was unable to properly manage this groundswell of refugees, leading to thousands of people being stranded in countries such as Serbia and Hungary.

Faced with this situation, the German government headed by Chancellor Angela Merkel decided to open the German border on 4 September 2015 to refugees stuck in Budapest. Moreover, it was announced that there would not be an upper limit on the number of refugees accepted in Germany. The opening of the border accompanied by this announcement resulted in the arrival of hundreds of thousands more refugees seeking protection and opportunity in Germany. At the end of the year, a total of approximately 890,000 asylum seekers were received in Germany according to federal authorities (BAMF 2016b), with the vast majority arriving in the last few months of 2015 (BAMF 2015a).

In the following, I will briefly describe how asylum seekers are registered and distributed across counties in Germany. More extensive overviews of these processes can be found, e.g., in Geis and Orth (2016) or Huang and Kvasnicka (2019).

## 3.2. Registration of Asylum Seekers

Generally, when refugees arrive in Germany, they have to notify state authorities, which can happen either directly while crossing the border or later on at several state institutions, e.g., a refugee reception center or a local police station. There, they are initially recorded using the so-called EASY system ("Erstverteilung der Asylbegehrenden"). This declaration initiates the asylum process, whereby asylum seekers are provided with a proof of arrival, entitling them to reside in Germany and receive asylum seeker benefits. Later, refugees have to officially register and apply for asylum at the Federal Office for Migration and Refugees (Bundesamt für Migration and Flüchtlinge, BAMF). Under normal circumstances, the official registration mostly occurs relatively quickly. However, because of the large number of arriving refugees during the ERC, authorities struggled to register asylum seekers in due time, leading to delays of weeks and sometimes even months.

This discrepancy in arrival and registration can be seen in Figure 1. Official registrations (dashed line) suggest that refugees arrived gradually over time, barely exceeding 100,000 within a month and maintaining their inflow until the fall of 2016. In contrast, the EASY registration data (solid line) show that the inflow of refugees was actually much more sudden, reaching its peak in late 2015, and subsiding quickly thereafter. Comparing both lines clearly shows that official

Jan 2015 Jul 2015 Jan 2016 Jul 2016

---- Official Registrations — EASY Registrations

Figure 1: Registration of Asylum Seekers in Germany

Note: Official asylum seeker registration data over time compared to data captured through the EASY system ("Erstverteilung der Asylbegehrenden"). Data by BAMF (2015b) and BAMF (2016a).

statistics severely lagged the EASY statistics, making its use inappropriate for my analysis.<sup>4</sup>

# 3.3. Distribution of Asylum Seekers

After receiving their proofs of arrival, refugees are distributed to one of the 16 states (Bundesländer) in Germany according to the "Königstein Key" (Königsteiner Schlüssel). This is a predetermined quota based on tax revenues (with a weight of two thirds) and population size (weighted by one third) of each state (Geis and Orth 2016), which is supposed to ensure a fair and proportional allocation of asylum seekers across Germany. To determine how many refugees are allocated to each state, data collected through the initial asylum seeker declarations are used. While under normal circumstances, the quota is followed relatively closely, over time, as refugee inflows strained existing capacities of some states, the availability of vacant accommodations became an increasingly important concern during the ERC (Gehrsitz and Ungerer 2017).

After being allocated to a state, state authorities distribute refugees to different counties (Kreise). The distribution among counties differs between states. In 2015, for nine of 16 states, decisions were based on county population size (Geis and Orth 2016)<sup>5</sup>, while for most others the

<sup>&</sup>lt;sup>4</sup>It should be noted, that I am not working with the monthly EASY data, but with an end-of-year registry of recipients of asylum seeker benefits. Nevertheless, the end-of-year registry builds upon the EASY data and reflects the sudden inflow of refugees presented in Figure 1 well.

<sup>&</sup>lt;sup>5</sup>Technically, in one of the nine states, Brandenburg, not only population size, but also the share of employed

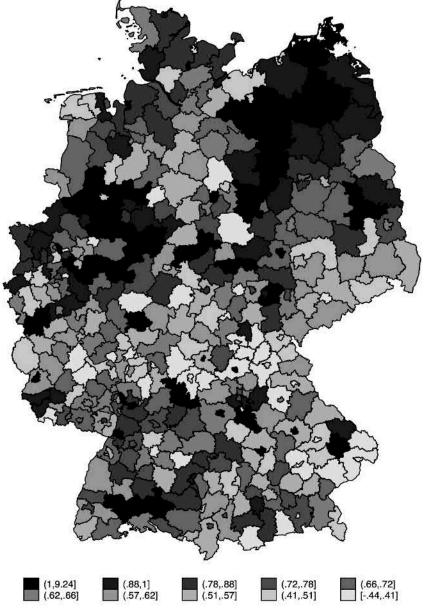


Figure 2: Spatial Distribution of Asylum Seekers

Note: County-level percentage change of recipients of asylum seeker benefits between 2014 and 2015. Source: Statistical offices of the  $Bundesl\ddot{a}nder$ .

distribution of asylum seekers followed previously fixed, permanent quotas (Stips and Kis-Katos 2020).

Upon arrival in the county's allotted reception center, refugees had to stay there for at least six weeks and up to three months (later six months) (Stips and Kis-Katos 2020). Moreover, they also had to remain within a designated area, often within the borders of the county itself, in the first three months of the asylum process, severely restricting the asylum seekers' freedom of movement. Restrictions were eventually lifted when an asylum seeker was permanently allowed,

people subject to social security contributions by county influenced refugee allocation.

tolerated or permitted to stay in Germany for three months. However, residence restrictions could be placed on refugees relying on government aid, which was very often the case.

Figure 2 gives an impression of the spatial distribution of refugees in Germany. It depicts the change in the share of refugees by county between 2014 and 2015. Counties are sorted by decile, with darker colors indicating a higher change in concentration. Shares range from a low of -0.4 percentage points in Mönchengladbach to a high of 8.5 percentage points in Trier. Generally, there is variation in the distribution of asylum seekers across counties, although strong outliers with increases above 2 percentage points remain the exception. Comparing Figure 2 with the overall spatial distribution of asylum seekers in Germany in Figure A2 in the appendix shows that both maps are relatively similar, emphasizing the magnitude of the ERC.

# 4. Data & Methodology

## 4.1. Data

In this study, I work with two data sets. First, as a measure of the local concentration of refugees, I use administrative data on the recipients of asylum seekers' benefits. Second, to capture migrant self-identification I employ high-quality panel data from the German Socio-Economic Panel (SOEP).

I work with data on the recipients of asylum seekers' benefits due to severe distortions of official statistics on refugee numbers. As outlined in section 3.2., registrations were delayed, sometimes by several months, due to overwhelmed administrations, which led to severe mismeasurement of official registration statistics. In contrast, data on asylum seekers' benefits are more reflective of actual refugee inflows, as they were gathered shortly after each arrival. The statistics on asylum seekers' benefits are publicly available and provided by the statistical offices of the *Bundesländer*. The data sets include the total number of asylum seekers in every German county, as well as their gender and age composition. While statistics for other years are also available, I mostly use end-of-year data for 2014 and 2015 to construct a measure of change in the share of asylum seekers divided by total county population between both years.

Data from the SOEP provide information on the self-identification of migrants. The SOEP is a representative longitudinal household survey that is conducted annually since 1984. Beneficial to this study, it oversamples immigrants, which are usually harder to reach than native Germans (Liebig et al. 2020). In my analysis, I exclude native Germans without foreign-born parents, and solely look at respondents with either direct (born abroad) or indirect migration background (one

<sup>&</sup>lt;sup>6</sup>The data can be accessed publicly and free of charge via regional statistik.de.

or both parents born abroad). Moreover, as I am interested in the effects of refugee concentration by county, I exclude respondents who moved between counties in the studied time period.

As main outcomes, I am interested in two variables, which are generally surveyed every two years: First, respondents with a migration background are asked: "To what extent do you feel German?" Second, to elicit respondents' identification with their original home country, they are also asked: "How connected do you feel to your country of origin?" Both variables are ordinally-scaled from 0 ("not at all") to 4 ("completely"/"very strong").<sup>8</sup> In this study, both variables are used for the years 2012, 2014, 2016, and 2018.<sup>9</sup>

In addition to the main outcomes of interest, the SOEP data also provide a broad spectrum of further information, such as interview and household characteristics, and importantly, place of residence including county. I describe these variables in more detail in section 5.1.

Because sample composition and size changed drastically over time, I have constructed a balanced panel of 1,504 respondents for the years between 2012 and 2018. This panel includes only those respondents, who answered both of the questions stated above in 2012, 2014, 2016, and 2018. To keep effects of the treatment consistent over time, respondents who moved between counties in those years are removed, limiting the number of respondents to 1,346 per year and 5,384 observations in total. Table 1 displays the number of times each answer is given in each year to both questions. Moreover, the table also shows the total number of observations per year coupled with means and standard deviations. On aggregate, respondents feel more German over time, with increases for the two highest categories ("Completely" and "For the Most Part"), and decreases for the two lowest. This is also reflected by the yearly means, which steadily increase from around 2.7 in 2012 to 2.9 in 2018. Therefore, it seems as if migrants identified more with Germany, the longer they stayed in the studied time period, in line with the literature (Dustmann 1996, Manning and Roy 2010). On the other side, there is hardly any dynamic visible for home country attachment, as means hover around 2.1.

In an extension of my main analysis, I also sort migrants by country of origin. To reach sufficiently large samples, I distinguish between three main groups: Western countries, Eastern Europe, and TMENA (Turkey, Middle East and North Africa). Moreover, there is an additional

<sup>&</sup>lt;sup>7</sup>Before these questions are asked, the questionnaire states: "When we use the term "country of origin" below, we are referring to the country where you were born if you immigrated to Germany, as well as to the country where your parents or grandparents were born if you are the child or grandchild of immigrants to Germany."

<sup>&</sup>lt;sup>8</sup>In the original data set both variables are scaled inversely from 1 ("completely"/"very strong") to 5 ("not at all"). I rescaled them to make results more easily interpretable.

<sup>&</sup>lt;sup>9</sup>Both outcome variables have been captured in some years before, however, there is a large gap between 2003 and 2010 and the sample size in 2010 is relatively small. Therefore I exclude observations before 2012.

<sup>&</sup>lt;sup>10</sup>The panel also includes respondents, who were asked both questions, but who declined to answer at least one of them in one or more years.

Table 1: Descriptive Statistics

|              |                       | 2012    | 2014    | 2016    | 2018    | Total   |
|--------------|-----------------------|---------|---------|---------|---------|---------|
|              | (-) No Answer         | 9       | 10      | 12      | 9       | 40      |
|              | (0) Not at All        | 75      | 53      | 39      | 35      | 202     |
|              | (1) Barely            | 126     | 106     | 91      | 81      | 404     |
|              | (2) In Some Respects  | 343     | 362     | 343     | 335     | 1383    |
| Feel German  | (3) For the Most Part | 373     | 421     | 414     | 417     | 1625    |
|              | (4) Completely        | 420     | 394     | 447     | 469     | 1730    |
|              | Mean                  | 2.701   | 2.746   | 2.854   | 2.901   | 2.800   |
|              | (SD)                  | (1.168) | (1.085) | (1.052) | (1.034) | (1.089) |
|              | (-) No Answer         | 9       | 12      | 10      | 12      | 43      |
|              | (0) Not at All        | 157     | 153     | 153     | 157     | 620     |
|              | (1) Barely            | 224     | 220     | 213     | 216     | 873     |
|              | (2) In Some Respects  | 440     | 424     | 447     | 451     | 1762    |
| Connect Home | (3) $Strong$          | 334     | 354     | 347     | 346     | 1381    |
|              | (4) Very Strong       | 182     | 183     | 176     | 164     | 705     |
|              | Mean                  | 2.120   | 2.145   | 2.135   | 2.108   | 2.127   |
|              | (SD)                  | (1.191) | (1.191) | (1.178) | (1.172) | (1.183) |
|              | N                     | 1346    | 1346    | 1346    | 1346    | 5384    |

*Note:* Outcome frequencies, means, and standard deviations of the two main variables feeling German and attachment to home country for the years 2012, 2014, 2016, and 2018. Both outcomes are scaled from 0 to 4. Data source: German Socio-economic Panel.

category for Balkan countries, which is relatively small. Lastly, for further analyses, I split the Eastern European category in so-called resettlers (*Aussiedler*) and non-resettlers. Resettlers are a large and important immigrant group, who are ethnic Germans. They predominantly lived in Poland, Romania and the former Soviet Union, before coming to Germany, particularly, after the Fall of the Berlin Wall in 1989.

Generally, classifications are made using data about the respondents' country of origin and first nationality. Thus, e.g., if a respondent was born in France, I categorize them as 'Western'. Moreover, I do not make a judgement call when a respondent is part of two or more groups. Hence, e.g., if a respondent is a French citizen but born in Algeria, they are categorized as both a Western and a TMENA migrant.<sup>11</sup> To give readers an impression of the countries included in each group and how large each origin group is, Table A1 in the appendix displays the number of migrants by country of origin.<sup>12</sup> While there is a wide range of countries included, the largest

<sup>&</sup>lt;sup>11</sup>If a respondent is German-born with German citizenship, I additionally look at second and past nationality, as well as the father's and mother's nationality and country of origin. Still, 20 respondents could not be matched to one of the groups, as they were reported to be German-born German citizens without further information. These were excluded from the subsample analysis, but not the main analysis.

<sup>&</sup>lt;sup>12</sup>This, of course, can only give an imperfect overview, as it does not include nationality and other indicators of origin of the migrants.

groups of people (after Germany) are from Italy and Austria, Turkey, Kazakhstan, Russia, and Poland.

Table A2 in the appendix shows descriptive statistics of the main origin groups mentioned above for host country (Panel A) and home country connection (Panel B). Eastern Europeans are not only the largest group with somewhat over 2,000 observations in total, but also the group that on average feels the most German at around 3.1 (looking at the mean for all years). Two thirds of them are resettlers and one third non-resettlers with mean values of 3.2 and 2.8, respectively. Eastern Europeans are followed by Balkan area migrants (2.9), Westerners at 2.6, and TMENA migrants (2.4). Moreover, the latter are the only that did not show any real upward trajectory while all other groups increased their attachment. In Panel B, the differences between groups are basically the opposite of what can be observed in the panel above, with groups who feel a strong belonging to Germany exerting only sparse home country connection, and vice versa. Eastern Europeans show the lowest home country attachment at 1.7 (with mean values of 1.5 for resettlers and 2.0 for non-resettlers), followed by migrants from the Balkans (1.9). The other two groups are somewhat farther apart at around 2.5. Remarkably, there is very little change within most of the groups over time (apart from Balkans), with values basically stagnating between 2012 and 2018.

# 4.2. Empirical Strategy

In my main specification, I estimate a variant of a difference-in-differences regression of the following form:

$$y_{ict} = \beta_0 + \beta_1 Post_t + \beta_2 Post_t \cdot \Delta Ref\_share_{c14-15} + X'_{ict}\gamma + \rho_i + \tau_t + \epsilon_{ict}. \tag{1}$$

The outcome  $y_{ict}$  – which is either feeling German or the attachment to home country – for respondent i in county c at time t is regressed on the treatment dummy  $Post_t$ , which indicates the start of the treatment (which I defined to be 4 September 2015, the date of chancellor Merkel's announcement mentioned in section 3.1.), as well as the interaction of this dummy with the change in county refugee share  $\Delta Ref\_share_{c14-15}$ . The latter term is calculated by taking the difference in the number of refugees in 2014 and 2015 by county and dividing it by county population in 2012 ( $\frac{\#Refugees_{c,2015} - \#Refugees_{c,2014}}{Population_{c,2012}}$ ). If additionally include plausibly exogenous control variables ( $X_{ict}$ ), as well as individual ( $\rho_i$ ) and time fixed effects ( $\tau_t$ ). The main coefficient of interest is  $\beta_2$ , which measures the arguably causal effect of refugee inflows on the identification

<sup>&</sup>lt;sup>13</sup>The population size is fixed at 2012 levels, i.e., clearly before the treatment started, to avoid issues of endogeneity.

measures.

As events such as marriage or childbirth may affect respondents' self-identification, I include time-varying household controls, namely marriage status, a dummy indicating whether the respondent is the household head as well as the number of children and adults in the household. Moreover, to control for interview effects, dummies for month, weekday, and mode of the interview are also included. Following Abadie et al. (2017), standard errors are clustered at the county level – the level of the treatment.

# 4.3. Exogeneity of Refugee Placement

In order to estimate potentially causal effects, the relation of refugee placement and selfidentification would have to be absent of any confounding factor not included in the regression that could be correlated with both the dependent and main independent variable. There are three potential risks to the identification.

The first issue may arise if immigrants' identification outcomes may have an effect on the placement of asylum seekers. While placement was rule-based in the beginning (see section 3.3), this became less tenable as the refugee crisis continued, leading to more discretionary allocation. Although it is unlikely that migrants' home- and host-country attachment would directly influence decision-makers, it could be correlated with cultural and social outcomes that are hard to capture statistically in the data. Therefore, state authorities might place refugees in accordance with the cultural assimilation of immigrants. Unfortunately, it is hard to test this possibility, as there are not any aggregate data for migrant self-identification by county for Germany. However, I can use the SOEP data to check whether any of the identification outcomes in the past is correlated with refugee allocation thereafter. In order to test this, I estimate six different regressions, using the change in host (home) country connection between 2010 and 2012, 2012 and 2014, and 2010 and 2014 ( $\Delta y_{ict}$ ) as main regressors and the change in refugee concentration per country between 2014 and 2015 ( $\Delta Ref\_share_{c14-15}$ ) as dependent variable. Using this approach, which is similar to the one used in Halla et al. (2017) and Dustmann et al. (2019), I arrive at the following first-differences regression equation:

$$\Delta Ref \ share_{c14-15} = a_0 + a_1 \Delta y_{ict} + X'_{ict} a_2 + e_{ict}.$$
 (2)

The controls used  $(X_{ict})$  are the same covariates as in equation (1). Moreover, in order to achieve sufficiently large sample sizes, I use unbalanced SOEP data.

Results are provided in Table A3 in the appendix, with columns 1 to 3 (4 to 6) presenting results when using changes in feeling German (home country attachment). In column 1, I ap-

ply the change between 2012 and 2014 as the main regressor. There, the coefficient is clearly insignificant, indicating that migrant host country attachment did not affect placement. The same is also true when using differences from 2010 to 2012 (column 2) and 2010 to 2014 (column 3), although the sample size is much smaller for these regressions. Results are also insignificant, when testing the effect of home country attachment, applying the same differences over time as in columns 1 to 3. Coefficients in columns 4 to 6 are insignificant, as well.

Another possible risk to identification is that the states may have allocated refugees to counties where migrants are generally better integrated or integrate faster. While integration and identification are not congruent concepts, it is likely that migrants who feel more attached to Germany are also better integrated. If the placement decisions were made according to these considerations, this could potentially distort estimates, likely biasing results upwards in the case of host- and downwards in the case of home-country attachment. To test whether this was the case up until the ERC, I run a host of fixed effects regressions of the following form:

$$Ref \ share_{ct} * 100 = \alpha_0 + \alpha_1 int \ measure_{ct} + \lambda_c + \pi_t + \eta_{ct}.$$
 (3)

The regressions include asylum seeker concentration  $Ref\_share_{ct}$  in county c in year  $t^{14}$  as the outcome which is regressed separately on different integration measures ( $int\_measure_{ct}$ ), as well as time ( $\pi_t$ ) and county ( $\lambda_c$ ) fixed effects. Standard errors are clustered at the county level. Integration measures include a number of social and economic integration outcomes. First, I introduce constructed measures for intermarriage and naturalization shares of migrants as well as their representation among Gymnasium students, Germany's highest tier secondary school form. Thereafter, I look at foreigner unemployment rate, their share in employment that is subject to social insurance contributions, as well as the shares of foreigners receiving different kinds of social security benefits. Lastly, I examine whether there were any differences in the demographic composition of counties, namely the foreigner share of the population and migrant nationality. The data, again, are from the statistical offices of the  $Bundesl\"{a}nder$ .

The results in the appendix Tables A4 to A6 show that asylum seekers were not placed in areas where migrants had integrated faster. First, there is no indication that any of the social outcomes (intermarriage, naturalization, *Gymnasium* student representation) influenced placement, as all coefficients are insignificant. Second, there was no influence of migrants' economic integration, with estimates for both unemployment rate as well as employment share being insignificant. Third, there is also little evidence that asylum seekers were placed according to

<sup>&</sup>lt;sup>14</sup>With t representing the years 2010, 2011, 2012, 2013, 2014.

the demographic composition of migrants. Both the coefficient for foreign population share and those for all nationalities are insignificant. The only category that jumps out is social security benefits, with the share of foreigners receiving *Mindestsicherung* (minimum income guaranteed), *Grundsicherung* (basic social security, mostly paid to low-income retirees) and *Hilfe bei besonderen Lebenslagen* (assistance for sick or disabled people or those facing social hardships) having a negative association with the share of refugees in a county. It is unclear, however, whether these coefficients actually capture differences in the integration of migrants, as differences in unemployment rates did not affect the distribution of refugees. Rather, it appears more likely that they are the results of fiscal considerations as some of the social benefits had to be paid by local governments. This would mean that refugees were placed less often in areas where social expenditures for foreigners were already growing.

So what determined the governments' allocation decisions, and thereby, the differences in refugee concentration by county? For a start, I have already showed that fiscal considerations played some role, leading to a lower concentration of asylum seekers in areas that already had higher increases in social security expenses for foreigners. Another determinant can be found in Table A5, in column (7), namely the share of asylum seekers hosted in a county in the year before. Refugee allocation in the past is highly decisive for allocation decisions in the future, with a percentage point increase in refugee share in the past being associated with around half a percentage point increase in the future. This indicates that some counties might have existing structures and facilities such that they are better equipped to host larger numbers of refugees.

Overall, it appears as if refugees were not placed according to factors correlated with the identification or integration of migrants. Rather, determining factors in the allocation decisions were fiscal considerations and the existence of facilities and structures that are capable of handling the inflow of refugees. However, I cannot completely rule out that there are other possible confounders determining both refugee allocation and migrant self-identification. Therefore, I include a number of individual and regional controls that are not strictly exogenous in further specifications of my main regressions. Rather, these covariates run at the risk of being "bad controls", meaning that they are also affected by the treatment (Angrist and Pischke 2008).

#### 5. Results

## 5.1. Main Results

The main results for the effect of the treatment on the two outcome variables can be seen in Table 2, with Panel A (Panel B) showing results for feeling German (home country connection). Column (1) shows the results for the simplest specification, which only includes individual and

Table 2: Main Regression Results

|                            | (1)       | (2)           | (3)       | (4)       |
|----------------------------|-----------|---------------|-----------|-----------|
| Panel A: Feel German       |           |               |           |           |
| Post                       | 0.205***  | $0.201^{***}$ | 0.209***  | 0.229***  |
|                            | (0.0361)  | (0.0380)      | (0.0371)  | (0.0817)  |
| Post * $\Delta$ Ref_share  | -0.00924  | -0.00715      | -0.0124   | -0.0229   |
|                            | (0.0131)  | (0.0153)      | (0.0146)  | (0.0149)  |
| Panel B: Connect Home      |           |               |           |           |
| Post                       | -0.0512   | -0.0482       | -0.0421   | -0.115    |
|                            | (0.0367)  | (0.0360)      | (0.0356)  | (0.0942)  |
| Post * $\Delta$ Ref_share  | 0.0500*** | 0.0631***     | 0.0639*** | 0.0601*** |
|                            | (0.0177)  | (0.0182)      | (0.0182)  | (0.0217)  |
| Basic Controls             |           | Yes           | Yes       | Yes       |
| Additional Indiv. Controls |           |               | Yes       | Yes       |
| Regional Controls          |           |               |           | Yes       |
| Individual FE              | Yes       | Yes           | Yes       | Yes       |
| Time FE                    | Yes       | Yes           | Yes       | Yes       |
| N                          | 5384      | 5384          | 5384      | 5384      |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. Column (1): Simple fixed effects regression without controls. Column (2): Also includes plausibly exogenous regressors, mentioned on page 15. Column (3): Adds further individual controls mentioned in footnote 15. Column (4): Adds regional controls mentioned in footnote 16. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_ share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

time fixed effects and no further covariates. The other columns incrementally add controls. In column (2), only plausibly exogenous controls related to interview and household characteristics are added. This is the preferred specification, that will also be used for most additional analyses. Further individual<sup>15</sup>, and then regional controls<sup>16</sup> are gradually included in columns (3) and (4) to check whether there might be indications of some omitted variable bias. These are potentially "bad" controls, meaning they are affected by the treatment itself and might therefore pick up variation that we do not want to remove.

Let us first look at the first outcome variable, feeling German, in Panel A. The coefficient *Post* is highly significant and positive at around 0.2 across all specifications, indicating that the attachment to Germany increased after 4 September 2015. This is unsurprising, given the

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

<sup>&</sup>lt;sup>15</sup>These include the respondent's logged individual labor income, annual hours worked, years of education and employment status.

<sup>&</sup>lt;sup>16</sup>Regional controls include the county's GDP per capita, unemployment rate, population size, number of foreigners, female population share, and indicators for child poverty and supply of doctors.

descriptive statistics we saw in Table 1 and the findings in previous research (e.g., Dustmann 1996, Manning and Roy 2010). As a note of caution however, coefficients are likely inflated, as this panel exclusively consists of people who were present in Germany in all the observed periods between 2012 and 2018. Therefore, effects for other respondents, such as those who re-emigrated, would likely have been lower.

The coefficient of interest is the interaction of Post and change in refugee concentration between 2014 and 2015 (Post \*  $\Delta$  Ref\_share), shown in the second row. It is negative, close to zero and insignificant in all specifications. The estimate decreases somewhat after including more controls in (3) and (4), but still remains insignificant at conventional levels. This indicates that, on aggregate, there was no effect of the local presence of refugees on host-country identification.

In Panel B, estimates in the first row indicate no significant change of home country attachment after the treatment started. However, the coefficient in the second row, representing the main treatment effect, is positive and highly significant in all specifications. Values range from 0.05 without controls to around 0.0639 in column (3). In the preferred specification (column 2), this means that increasing the share of asylum seekers by ten percentage points increases the outcome by about half a standard deviation, which is relatively sizable. While such an increase is unlikely to occur country-wide, it can occur in some counties, such as in the case of Trier, which took in refugees equivalent to 9 percent of the county population.

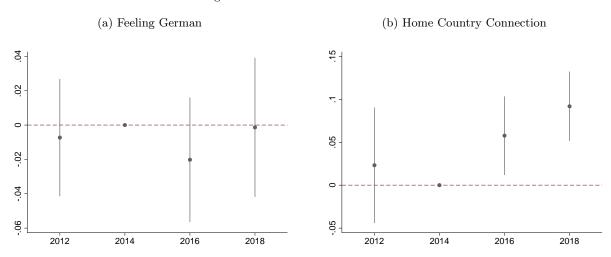
# 5.2. Robustness

The results presented in Table 2 are very similar across specifications, which lends support to omitted variables not being a problem in this setting. To rule out omitted variable bias for even more factors, I additionally estimate regressions controlling for further potential influences. Results in Table A7 illustrate that neither the inclusion of interviewer fixed effects, the inclusion of tragic or potentially traumatizing events such as deaths of relatives or separation from partner nor controls for movement within counties meaningfully alter the main coefficients.

To control for selective migration and political climate, Table A8 in the appendix shows regressions including information about cross-county in- and out-migration of Germans and for-eigners and voting behavior and turnout by county for federal elections. Again the main results barely move, suggesting that the results are generally robust to the inclusion of these potential confounders.

Next, I check, whether results might be driven by region-specific shocks. For that, I include state- and county-year fixed effects in the regressions in column (1) and (2) of Table A9. Overall, this does hardly change the effects for home country attachment. However, in column (2), the coefficient for feeling German becomes significantly negative. We should be very careful

Figure 3: Treatment Effects over Time



*Note:* Effects of refugee placement on outcomes over time. Coefficients are for the interactions of refugee share and year dummies (base year 2014) in fixed-effects regressions including the regressors mentioned on page 15.

here, however, as county-year fixed effects may remove a lot variation from counties with few respondents, biasing results, overall.

To evaluate the validity of the common trend assumption, Figure 3 shows the treatment effects over time for feeling German (a) and home country connection (b). The graphs depict the coefficients and the 95% confidence intervals of the interaction of refugee share and year dummies, with base year 2014.<sup>17</sup> For both, feeling German and connection to home country, there is no significant difference between 2012 and 2014, indicating that counties that received more refugees were not on a different trajectory than those that received less. Furthermore, while coefficients for feeling German are never statistically different from the value in 2014, coefficients for connection to home country are both significantly different from 2014 and increasing over time.<sup>18</sup> This indicates that home-country attachment became significantly larger after time in areas with higher refugee concentration.

Another potential issue lies in the scaling of the dependent variable. In my main regression, I treat my outcomes as if they were cardinally-scaled. This may be problematic, as I assume that the degree of difference between the proposed options is identical in the eyes of the respondents. However, this might not actually be true. Take, e.g., the question: "How connected do you feel to your country of origin?" Respondents might not see too much of a difference between the options "barely" and "not at all", but a large one between "barely" and "in some respects". Therefore I additionally estimated the regressions using ordinal and binary logit methods. As

<sup>&</sup>lt;sup>17</sup>Regressions are similar to those in Table 2, column 2, as they include time- and individual fixed effects, as well as the control variables mentioned on page 15.

 $<sup>^{18}</sup>$ Taking 2012 as the base year, the difference to 2016 is insignificant. However, the coefficient for 2018 is significantly different at the 10% level.

Table 3: Ordered Logit Regressions

|                            | (1)         | (2)          |
|----------------------------|-------------|--------------|
|                            | Feel German | Connect Home |
| No Answer                  | -0.000117   | -0.00207***  |
|                            | (0.000793)  | (0.000732)   |
| Not at All                 | -0.000545   | -0.0208***   |
|                            | (0.00368)   | (0.00734)    |
| Barely                     | -0.000871   | -0.0250***   |
|                            | (0.00589)   | (0.00885)    |
| In Some Respects           | -0.00131    | -0.00806***  |
|                            | (0.00887)   | (0.00285)    |
| For the Most Part / Strong | 0.000849    | 0.0289***    |
|                            | (0.00574)   | (0.0102)     |
| Completely / Very Strong   | 0.00200     | 0.0270***    |
|                            | (0.0135)    | (0.00953)    |
| Basic Controls             |             |              |
| Individual FE              | Yes         | Yes          |
| Time FE                    | Yes         | Yes          |
| N                          | 3900        | 4352         |

Note: Dependent variables are ordered and concern feeling German in column (1), and home country attachment in (2). Coefficients indicate marginal effects of the interaction  $Post * \Delta Ref\_share$  for the average respondent, c.p., for the respective level of the dependent variable. All ordered logit regressions include individual and time fixed effects. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

ordinal logit regressions with fixed effects are computationally intensive and usually require large sample sizes to work well, I estimate the two baseline regressions without any controls, and only include individual and time fixed effects. Standard errors, again, are clustered at the county level. The results can be seen in Table 3. Generally, they are in line with the results in Table 2, showing insignificant effects for host country and significantly positive effects for the most affirmative response options regarding home country attachment. At the sample average, respondents became significantly more likely to report higher levels of home country connection in counties with the higher proportions of asylum seekers. Increasing the shares of refugees by one percentage point raised the likelihood of reporting "strong" or "very strong" home country connection by 2.9 and 2.7 percentage points, respectively. On the other side, respondents were 2.1 and 2.5 percentage points less likely to state to "not at all" or "barely" feel connected to their home countries.

Another way to deal with the ordinal scaling of the dependent variable is to apply a binary logit regression. However, the main problem of using such a regression is choosing an adequate cutoff. Because this is not meaningfully possible in this case, I estimate three separate regressions

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

<sup>&</sup>lt;sup>19</sup>Estimations are conducted with Stata 15.1 using the *feologit* command created by Baetschmann et al. (2020).

for both outcomes. For the first one, I take the three most affirmative responses for both outcomes and code them as 1, with all other responses being 0. For the second and (third) cutoff, I code the two (one) most affirmative response option(s) as 1, and the others as 0. The regressions are specified as in the case before and standard errors are clustered at the county level. The results of the three logit regressions in Table A10 point in a similar direction as the previous results, showing insignificant values that are close to zero for all regression in Panel A. Values for home country connection in Panel B, on the other hand, are positive and weakly significant for the medium and high cutoff. This implies that increasing asylum seeker concentration by one percentage point increases the likelihood to report a "strong" or "very strong" connectedness with the home country by two to three percentage points, which is in line with previous results.

Another issue with my main estimations may lie in the clustering of standard errors I have chosen. While I have followed Abadie et al. (2017) in clustering my standard errors at the level of the treatment before, it might be prudent to examine, whether my results still hold when I cluster at the level where the sampling took place. As the SOEP samples by household, I rerun my regressions from Table 2, column (2), but this time, cluster standard errors at the household level. Unfortunately, household IDs change whenever respondents move or switch households within counties. Therefore, in Table A11, column (1), I first cluster at the level of original household, meaning where the household respondents lived in when they were first surveyed by the SOEP. As this may not be adequate for respondents, who have switched households thereafter, I cluster standard errors at the level of the household in which respondents lived in 2014, the year before the treatment started.<sup>20</sup> Results in Table A11 show, that, while the significance of the effects is a bit smaller, effects in Panel B are still significant at conventional levels in both columns.

In the next step, I check whether my results still hold for different sample selections. First, I test, whether results are driven by regions or particular states. In column (1) of Table 4, I drop all counties from the former East Germany from my sample. We can see that estimates are barely different from the ones before. In an additional test to check whether individual states drive results (not shown), I estimate my regressions while selectively excluding one state at a time. Again, coefficients remain in line with previous results.<sup>21</sup> Next, as many labor economists are interested in the effects on working age adults, as they are the primary actors on the labor market, I exclude respondents, who were not of working age in 2012. Again, results change only little (2). Thereafter, I examine, whether results still hold, when I relax my movement restrictions, and include all respondents, who moved between different counties after 2012. For that, I fix

<sup>&</sup>lt;sup>20</sup>Results are virtually identical when clustering at the level of the household in which respondents lived in 2012, 2016, and 2018.

<sup>&</sup>lt;sup>21</sup>When excluding Bavaria, the effect on home country connection becomes nearly twice at large.

Table 4: Sample Selection

|                           | (1)       | (2)       | (3)       | (4)      | (5)       |
|---------------------------|-----------|-----------|-----------|----------|-----------|
|                           | West      | Working   | +Moved    | Nine     | Extended  |
|                           | Germany   | Age Pop.  | Resp.     | States   | Sample    |
| Panel A: Feel German      |           |           |           |          |           |
| Post                      | 0.195***  | 0.216***  | 0.185***  | 0.288*** | 0.163***  |
|                           | (0.0390)  | (0.0410)  | (0.0363)  | (0.0638) | (0.0315)  |
| Post * $\Delta$ Ref share | -0.00633  | -0.0154   | 0.00201   | -0.00561 | -0.0283   |
| _                         | (0.0158)  | (0.0133)  | (0.0149)  | (0.0303) | (0.0206)  |
| Panel B: Connect Home     | ,         | , , ,     | ,         |          | ,         |
| Post                      | -0.0368   | -0.0466   | -0.0621*  | -0.103*  | -0.0839** |
|                           | (0.0376)  | (0.0391)  | (0.0352)  | (0.0614) | (0.0410)  |
| Post * $\Delta$ Ref_share | 0.0643*** | 0.0659*** | 0.0784*** | 0.0631*  | 0.0847**  |
|                           | (0.0203)  | (0.0195)  | (0.0243)  | (0.0359) | (0.0391)  |
| Basic Controls            | Yes       | Yes       | Yes       | Yes      | Yes       |
| Individual FE             | Yes       | Yes       | Yes       | Yes      | Yes       |
| Time FE                   | Yes       | Yes       | Yes       | Yes      | Yes       |
| N                         | 5140      | 4868      | 6016      | 2412     | 20252     |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Column (1): Sample restricted to respondents from West Germany (incl. West-Berlin). Column (2): Sample restricted to respondents, who were of working age, meaning between 18 and 64, in 2012. Column (3): Sample including respondents who moved between 2012 and 2018. Treatment fixed by county, in which respondent lived in 2014. Column (4): Sample restricted to only those nine states, that distribute asylum seekers to counties according to population-based rules. (5) Unbalanced sample including all respondents who did not move between 2012 and 2018. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

treatment effects for counties where respondents lived in 2014.<sup>22</sup> Results in column (3) show that including respondents who moved does not change coefficients a lot; if anything, the effect on home country attachment is even larger. As mentioned in section 3.2., German states have different regimes, how they distribute asylum seekers to counties and municipalities. This can be a concern, if authorities in some states have more leeway to place refugees in counties they deem more suitable. Therefore, I examine in column (4), whether results remain the same, when I only include the nine states that have fixed, population-based allocation schemes, which reduces the sample size by more than half. However, while the statistical significance decreases a little, point

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

<sup>&</sup>lt;sup>22</sup>This can be problematic, if respondents moved between 2014 and the start of the treatment. However, results barely change, when I look at the treatment effects for counties, where respondents lived in 2016.

estimates remain near identical to the ones observed before.<sup>23</sup> For my main regressions, I use a balanced panel of respondents who have regularly participated in the survey. This balancing, of course, could lead to a highly selected sample, that might differ from the original sample. E.g., respondents dropping out over time might differ in important characteristics from those remaining, potentially biasing results. To check whether this could be a potential issue, I run the same regressions as in column (2) in Table 2 on the unbalanced sample. Results in Table 4, column (5) show that, while the coefficient for connection to home country loses a bit of its significance, it actually increases in size. Moreover, the coefficient for feeling German becomes more negative, while still remaining insignificant. Again, these results suggest that if sample selection might lead to a bias at all, it might actually bias results towards zero, lending further evidence to the findings presented above.

Lastly, I check, whether results also hold when I employ different treatment variables. Looking at the change in asylum seeker share between 2014 and 2015 might be problematic if some counties have already received a lot of refugees between 2013 and 2014, thereby limiting the number of additional refugees that could be housed in the following years. Therefore, I estimate the main regression equations using the change in refugee share between 2013 and 2015. Results in Table A12, column (1), show that this only affects results slightly, lowering coefficients for home country attachment. In column (2), I divide the number of asylum seekers not by the overall population, but only by the working age population. Again, this hardly changes estimates, only mechanically reducing them with the rate by which changes in refugee concentration are increased due to the smaller denominator of the treatment variable. Overall, results appear robust to using a different treatment variable.

Overall, these findings imply that the presence of refugees might make migrants feel more connected to their home countries, while affecting their attitudes towards Germany only little.

## 5.3. Heterogeneities

To further investigate the dynamics observed in my main findings, I look at the origin groups of the migrant respondents. As described above, there are three main groups: Westerners, Eastern Europeans, and migrants from Turkey, Middle East and North Africa (TMENA).<sup>24</sup> I additionally look more specifically at Eastern Europeans, as they make up the biggest part of the sample, checking how results are affected if migrants from Balkan countries are added and

<sup>&</sup>lt;sup>23</sup>In another regression not shown, results also do not change when I additionally exclude Brandenburg, which also factors in employment shares.

<sup>&</sup>lt;sup>24</sup>A relatively small number of respondents from countries not included in these categories are grouped into a very heterogeneous "Rest of World" category. It would be very hard to interpret results meaningfully, therefore they are left out.

Table 5: Effect on Feeling German by Country of Origin

|                           | (1)       | (2)      | (3)       | (4)        | (5)           | (6)        |
|---------------------------|-----------|----------|-----------|------------|---------------|------------|
|                           | TMENA     | Western  | E Europe  | EE + Balk. | No Aussiedler | Aussiedler |
| Panel A: Feel German      |           |          |           |            |               |            |
| Post                      | 0.0644    | 0.193*** | 0.244***  | 0.225***   | $0.357^{***}$ | 0.182***   |
|                           | (0.0949)  | (0.0711) | (0.0528)  | (0.0470)   | (0.0882)      | (0.0626)   |
| Post * $\Delta$ Ref_share | -0.0700** | 0.0756   | -0.0438** | -0.0379**  | -0.0741***    | -0.0193    |
|                           | (0.0290)  | (0.0555) | (0.0209)  | (0.0180)   | (0.0261)      | (0.0271)   |
| Panel B: Connect Home     | e         |          |           |            |               |            |
| Post                      | -0.0138   | 0.0417   | -0.0265   | -0.0752    | 0.0170        | -0.0407    |
|                           | (0.102)   | (0.0775) | (0.0531)  | (0.0477)   | (0.107)       | (0.0675)   |
| Post * $\Delta$ Ref_share | 0.0157    | -0.0555  | 0.0949*** | 0.108***   | 0.133***      | 0.0822**   |
|                           | (0.0359)  | (0.0458) | (0.0248)  | (0.0261)   | (0.0420)      | (0.0395)   |
| Basic Controls            | Yes       | Yes      | Yes       | Yes        | Yes           | Yes        |
| Individual FE             | Yes       | Yes      | Yes       | Yes        | Yes           | Yes        |
| Time FE                   | Yes       | Yes      | Yes       | Yes        | Yes           | Yes        |
| N                         | 952       | 1376     | 2056      | 2680       | 692           | 1364       |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents from Turkey, Middle East and North Africa. Column (2): Western Europe, USA, Canada, Australia, New Zealand. Column (3): Eastern Europe, meaning former Warsaw Pact countries. Column (4): Eastern Europe and Balkan countries. Column (5): Eastern Europe, only non-resettlers. Column (6): Eastern Europe, only resettlers. Post indicates years after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

when I distinguish between resettlers (Aussiedler) and non-resettlers.

The results for the effects by origin group are displayed in Table 5, with Panel A presenting results for feeling German and Panel B those for home country connection. The regressions are specified as in Table 2, column (2). Looking at Panel A, we see that refugee concentration has a significantly negative impact on the outcome for migrants from the TMENA region (column 1). This stands in contrast to Western migrants (2), who feel more German, albeit narrowly insignificant, when surrounded by more asylum seekers. When looking at Eastern Europeans in columns (3) to (6), results appear similar to those of the TMENA region. Effects are generally negative and significant, with coefficients of about -.04 for Eastern Europeans overall. Including migrants from the Balkans in column (4) cuts the coefficient down only a bit. More interestingly, there appears to be a difference in the reaction of non-resettlers and resettlers (columns 5 and 6), with the latter actually experiencing no effect overall, while the impact on the former is negative and comparable to TMENA migrants in size.

Overall, this sets up a very interesting picture. While migrants from countries that are culturally and politically close to (West-)Germany became (insignificantly) more attached to Germany following the ERC, the opposite was true for migrants from the former Warsaw Pact

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

states. Moreover, migrants from the TMENA region reacted even more negatively.

Similar observations can be made when looking at the second outcome, home country connection, in Panel B. Again, the effects on Westerners (2) point in the opposite direction compared to Eastern Europeans ((3) to (6)). While home country attachment for the former is (statistically insignificantly) decreasing in counties with higher refugee shares, the opposite is true for Eastern Europeans, where the negative effects are large and highly significant across the board. Coefficients are around .1 for Eastern Europeans overall and a little higher when including migrants from the Balkans. Moreover, note again the difference between non-resettlers and resettlers, with the effect for the former group being much larger than for the latter. The only group that does not show any clear effect in either direction are the TMENA migrants (column 1), whose coefficient is very close to zero.

These findings mostly fit well with those in Panel A. With Western migrants feeling (insignificantly) more German, they may have also shed some of their home country attachment in counties with higher refugee shares. The opposite can be observed with Eastern Europeans who not only became less attached to Germany, but also far more attached to their home countries. More ambivalent was the reaction of TMENA migrants, who felt less German, without any impact on their home country connection. The latter observation stands in contrast to the findings in Deole and Huang (2020), who find increased home country attachment for TMENA migrants, with no effects on feeling German.

Thus, overall, it appears as if migrants from countries that are culturally and politically closer to Germany are more inclined to identify with Germany when surrounded by more refugees. To further explore this, I examine whether second-generation migrants, i.e. those born in Germany, react differently than those born abroad. Results are presented in the first two columns of Table 6. Apparently, while there is no there difference in the first outcome, results are fairly different for the latter. German-born (1) experience insignificantly negative and foreign-born migrants (2) insignificantly positive effects. Looking further at foreign-born respondents, we can see that these effects are primarily driven by those who came to Germany as adults (column (4)), while effects remain insignificant for those who arrived as children (3). Again, this lends credence to the idea that socialization might be important here. Interestingly, effects are driven by migrants arriving after 1989. Home country attachment is twice as large as our baseline estimates (6). In addition, the coefficient for feeling German is significantly negative for this group. This stands in strong contrast to migrants who arrived before 1990, who showcase significant increases in feeling German and (statistically insignificant) decreases in home country attachment when refugee shares in their counties rose. This is also partly reflected in Table A13, where the point estimates

Table 6: Effect by Country of Birth and Arrival Characteristics

|                           | (1)                   | (2)                   | (2)      | (4)           | (5)         | (6)          |
|---------------------------|-----------------------|-----------------------|----------|---------------|-------------|--------------|
|                           | (1)                   | (2)                   | (3)      | (4)           | (5)         | (6)          |
|                           | German-               | Foreign-              | Minor at | Adult at      | Arrived     | Arrived 1990 |
|                           | $\operatorname{born}$ | $\operatorname{born}$ | Arrival  | Arrival       | before 1990 | or later     |
| Panel A: Feel German      |                       |                       |          |               |             |              |
| Post                      | 0.0694                | 0.234***              | 0.176**  | $0.280^{***}$ | 0.0524      | 0.343***     |
|                           | (0.0689)              | (0.0451)              | (0.0764) | (0.0608)      | (0.0545)    | (0.0701)     |
| Post * $\Delta$ Ref_share | 0.00478               | -0.00914              | 0.0102   | -0.0271       | 0.107**     | -0.0442**    |
|                           | (0.0464)              | (0.0168)              | (0.0567) | (0.0342)      | (0.0476)    | (0.0188)     |
| Panel B: Connect Home     | •                     |                       |          |               |             |              |
| Post                      | -0.114                | -0.0121               | -0.0640  | -0.0161       | 0.0223      | -0.00138     |
|                           | (0.0932)              | (0.0396)              | (0.0702) | (0.0477)      | (0.0579)    | (0.0586)     |
| Post * $\Delta$ Ref_share | -0.0994               | 0.0747***             | 0.0563   | 0.0989***     | -0.0780     | 0.123***     |
|                           | (0.0700)              | (0.0168)              | (0.0400) | (0.0206)      | (0.0490)    | (0.0403)     |
| Basic Controls            | Yes                   | Yes                   | Yes      | Yes           | Yes         | Yes          |
| Individual FE             | Yes                   | Yes                   | Yes      | Yes           | Yes         | Yes          |
| Time FE                   | Yes                   | Yes                   | Yes      | Yes           | Yes         | Yes          |
| N                         | 1180                  | 4204                  | 1304     | 2816          | 1776        | 2344         |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents are German-born. Column (2): Foreign-born migrants. Column (3): Foreign-born migrants who came to Germany before they turned 18. Column (4): Foreign-born migrants who came to Germany as adults. Column (5): Foreign-born migrants who came to Germany before 1990. Column (6): Foreign-born migrants who came to Germany in 1990 or later. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_ share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

for the treatment effects for respondents 60 years and older point in the same directions. It is unclear, however, whether these effects are driven by some form of adaption to German society over time or whether arrival cohorts are inherently different. The latter might be the case, as many Eastern Europeans and migrants from the Balkans only arrived in Germany during the 1990s, while the so-called *Gastarbeiter* (foreign workers who were recruited to temporarily work in the German labor market) – which predominantly came from Southern Europe and Turkey – and their families arrived in Germany before.

These results dovetail nicely with the previous findings. Overall, migrants born and therefore likely socialized in Germany reacted similarly to those born in culturally similar countries, while migrants from culturally more remote regions and migrants born abroad reacted by identifying themselves less with Germany when there were more refugees.

Tables A14 to A17 in the appendix provide further heterogeneity analyses in terms of religion and religiosity, gender, education, and refugee status upon arrival. In Table A14, effects appear

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

 $<sup>^{25}</sup>$ Even though workers were initially supposed to work for a limited period of time in Germany, many stayed long-term.

the strongest for respondents without official denomination; however, at the same time, they only apply to people who place high value on religion. These findings may appear at odds at first. However, people who left the church can potentially be just as spiritual as those who did not. Moreover, differences within religions can be just as large as between them, as religious Christians, for example, can have strongly different values from more secular ones. Next in Tables A15 and A16, there are only small differences in effects between genders (the treatment effect on feeling German is significantly negative for women), while effects on home country attachment appear to be driven by respondents with lower levels of education. Lastly, respondents who came to Germany as refugees<sup>26</sup> experienced large decreases in host and large increases in home country connection in relation to our treatment, which appears pretty striking (Table A17). However, we should be careful in interpreting these estimates, as the sample size is very small.

# 5.4. Channels

In this section, I will analyze possible explanations of the phenomena observed above. There are several possible channels, through which refugee placement could theoretically affect the ethnic identity of migrants. One possible path may run through changes in attitudes of migrants that lead to changes in self-identification. Migrants may have become more wary of immigration or crime in areas with more asylum seekers. On the other side, some may have also become more aware of xenophobia, as far-right protests became more widespread and salient, and hate crimes against foreigners rose in areas with larger changes in refugee concentration (Entorf and Lange 2019). Lastly, migrants may have become more worried about their economic future, fearing that they may lose their jobs due to the large inflow of potential competitors in the labor market.

Table 7 examines these channels. The SOEP offers information about respondents' worries regarding immigration, xenophobia, crime and job security.<sup>27</sup> However, including these variables in the regression separately (columns (1)-(4)) and together (5) hardly affects the main estimates. This suggests, that the changes in ethnic identity do not run through changes in worries that may be related to refugee inflows.

So what may explain the observed findings? In the following, I provide suggestive evidence for the influence of two other channels, which do not look at changes in respondents' attitudes over time. Rather, they address more general differences between respondents in terms of experiences of discrimination and media consumption.

 $<sup>^{26}</sup>$ Virtually all of these respondents immigrated a long time before the treatment started, most of them in the 1990s.

<sup>&</sup>lt;sup>27</sup>Unfortunately, some respondents were not asked these questions in every year. The number is relatively small, though, and this is controlled for using dummies for missing values.

Table 7: Channel: Worries

|                           | (1)        | (2)           | (3)         | (4)          | (5)       |
|---------------------------|------------|---------------|-------------|--------------|-----------|
|                           | Xenophobia | Immigration   | Crime       | Job Security | All       |
| Panel A: Feel German      |            |               |             |              |           |
| Post                      | 0.179***   | $0.163^{***}$ | 0.174***    | 0.203***     | 0.166***  |
|                           | (0.0391)   | (0.0407)      | (0.0388)    | (0.0380)     | (0.0410)  |
| Post * $\Delta$ Ref share | -0.0102    | -0.00949      | -0.0100     | -0.00739     | -0.0100   |
| _                         | (0.0153)   | (0.0155)      | (0.0157)    | (0.0150)     | (0.0154)  |
| Panel B: Connect Home     | 9          |               |             |              |           |
| Post                      | -0.0653*   | -0.0654*      | $-0.0625^*$ | -0.0452      | -0.0559   |
|                           | (0.0364)   | (0.0379)      | (0.0368)    | (0.0367)     | (0.0379)  |
| Post * $\Delta$ Ref_share | 0.0610***  | 0.0609***     | 0.0608***   | 0.0630***    | 0.0602*** |
|                           | (0.0179)   | (0.0179)      | (0.0179)    | (0.0185)     | (0.0179)  |
| Basic Controls            | Yes        | Yes           | Yes         | Yes          | Yes       |
| Individual FE             | Yes        | Yes           | Yes         | Yes          | Yes       |
| Time FE                   | Yes        | Yes           | Yes         | Yes          | Yes       |
| N                         | 5384       | 5384          | 5384        | 5384         | 5384      |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Column (1): Regression controls for respondent's worry about xenophobia. Column (2): Regression controls for respondent's worry about immigration. Column (3): Regression controls for respondent's worry about their personal job security. Column (5): Regression controls for all four types of worry. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

The first channel I examine focuses on migrants' experiences as immigrants in Germany. About 40 percent of migrants in the data set report being disadvantaged due to their origin, which likely impacts how accepted and welcome they feel in German society. In extension, this may have also affected their reaction to the ERC and the large inflows of asylum seekers, as notions of origin, race, and ethnicity have become much more salient in the public. Discriminated migrants might be particularly sensitive to such changes in public debate and may fear future implicit discrimination as a consequence of it. This may then, in effect, make them feel less a part of Germany and more of their home country. Such a mechanism would be in line with the existing literature that shows that discrimination against migrant groups (Gould and Klor 2015, Elsayed and de Grip 2017) can have detrimental effects on their integration.

To test this channel, I split the sample along the lines of reported discrimination. The SOEP data capture, whether respondents experienced being disadvantaged due to their origin for the years 2013 and 2017. However, because responses for 2017 were already affected by the treatment, I only use information for 2013. Thereafter, I separate between those who did not

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 8: Channel: Experience of Discrimination

|                           | (4)               | (2)                        |
|---------------------------|-------------------|----------------------------|
|                           | (1)               | (2)                        |
|                           | No Discrimination | Experienced Discrimination |
| Panel A: Feel German      |                   |                            |
| Post                      | 0.136***          | 0.330***                   |
|                           | (0.0414)          | (0.0666)                   |
| Post * $\Delta$ Ref_share | 0.0269            | -0.0713**                  |
| _                         | (0.0167)          | (0.0283)                   |
| Panel B: Connect Home     |                   |                            |
| Post                      | -0.0407           | -0.0608                    |
|                           | (0.0440)          | (0.0638)                   |
| Post * $\Delta$ Ref share | 0.0347            | 0.106**                    |
| _                         | (0.0237)          | (0.0411)                   |
| Basic Controls            | Yes               | Yes                        |
| Individual FE             | Yes               | Yes                        |
| Time FE                   | Yes               | Yes                        |
| N                         | 3104              | 2052                       |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents reported in 2013 that they never felt disadvantaged in the last two years due to their ethnic origins. Column (2): Respondents reported in 2013 that they seldom or often felt disadvantaged in the last two years due to their ethnic origins. Post indicates time after September 4 2015, Post \* $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

report being disadvantaged and those who reported at least some discrimination. Looking at Table 8, we can see strong treatment effects for discriminated migrants, with significantly higher home country and lower host country attachment. Effects for the other group, on the other side, remain small and insignificant. These patterns are also observable when we distinguish between country of origin in Table A18. There, overall effects are also visible for Eastern European and TMENA migrants.<sup>28</sup> However, while host (home) country attachment decreased (increased) for Eastern Europeans, who reported discrimination against them, TMENA migrants only became significantly less attached to Germany.

Turning to the second channel, we know that many immigrants, particularly those born abroad, often still consume media like television or newspapers from their countries of origin. In my data set, over sixty percent of respondents consume at least some media from their countries of origin. While media consumption is to a large extend a reflection of already held attitudes

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

 $<sup>^{28}</sup>$ Too few Western migrants reported discrimination due to their origins to be able to run meaningful regressions.

and beliefs (Gentzkow and Shapiro 2010), it still likely affects consumers' political views (e.g., DellaVigna and Kaplan 2007) and may also affect migrants' self-identification.<sup>29</sup> Georgiou and Zaborowski (2017) report strong differences in how mainstream media covered the European Refugee Crisis in different European countries. While the reporting in Western Europe often also incorporated sympathetic coverage, emphasizing the plight of the refugees, news media in Eastern Europe was generally much more sceptical, and often downright hostile. Media in Turkey and other MENA countries also differed in the way they covered the ERC, as – in the case of Turkey – images of state control were frequently invoked in the press (Sert and Danış 2021). It is therefore likely that differences in media consumption between migrants have impacted their views and identity. Moreover, it is possible that such effects are activated more strongly in areas where refugees are more present, as issues surrounding refugees are more visible in everyday life. In the following, I examine, whether such an interaction is observable in the data.

The SOEP data provide information about the language in which migrants consume news media for the year 2014. Respondents are given five options<sup>30</sup> ranging from only consuming German media, to only consuming media in the language of their home country. In Table 9, I employ this information and perform subsample regressions in two forms: First, I compare migrants who exclusively consume German news coverage (column (1)) with those who at least consume some foreign media (2). Second, I check whether results change when I compare migrants who consume no or only some foreign media (3) with those who consume at least half in the language or their home country (4). The results in Table 9 show strong differences between the groups. While differences in media consumption do not lead to significant differences in attachment to Germany, they lead to striking differences in home country attachment. For those who consume no or only little foreign news, the effect is virtually zero, while it is double the size of the baseline coefficient for those who consume at least half their news in a foreign language.

A similar pattern can be observed for Eastern European and TMENA migrants. Even though sample sizes are quite small, Table A19 shows that there was no treatment effect for members in both groups, who only consumed German media, while effects were large and significant for consumers of foreign media. Not only did their home country attachment increase strongly, but they also felt less German in counties with stronger inflows of refugees. The latter is particularly striking for TMENA migrants. The opposite of these effects can be observed for Western

<sup>&</sup>lt;sup>29</sup>Because of strong issues of simultaneity and selection, research on the effects of media consumption on political views has for a long time been highly contested. However, some more recent studies, that exploit different natural experiments, generally find significant effects. Examples include Enikolopov et al. (2011), DellaVigna et al. (2014), Adena et al. (2015), and Durante et al. (2019).

<sup>&</sup>lt;sup>30</sup>There is a sixth option for those who do not consume news media at all. However, only very few selected this option in 2014.

Table 9: Channel: Language of Media Consumed

|                           | (1)          | (2)           | (3)          | (4)           |
|---------------------------|--------------|---------------|--------------|---------------|
|                           | Only         | At Least Some | Mostly       | At Least 50%  |
|                           | German Media | Foreign Media | German Media | Foreign Media |
| Panel A: Feel German      |              |               |              |               |
| Post                      | 0.168***     | $0.234^{***}$ | 0.200***     | 0.193***      |
|                           | (0.0474)     | (0.0482)      | (0.0461)     | (0.0588)      |
| Post * $\Delta$ Ref_share | 0.0261       | -0.0290       | 0.0219       | -0.0384       |
|                           | (0.0233)     | (0.0202)      | (0.0225)     | (0.0241)      |
| Panel B: Connect Home     | e            |               | , ,          |               |
| Post                      | -0.0807      | -0.0332       | -0.0717      | 0.0251        |
|                           | (0.0625)     | (0.0457)      | (0.0448)     | (0.0616)      |
| Post * $\Delta$ Ref_share | -0.0206      | 0.110***      | 0.0113       | 0.125***      |
| _                         | (0.0294)     | (0.0295)      | (0.0255)     | (0.0376)      |
| Basic Controls            | X            | X             | X            | X             |
| Individual FE             | X            | X             | x            | X             |
| Time FE                   | X            | X             | x            | X             |
| N                         | 1844         | 3384          | 3284         | 1944          |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents reported in 2014 that they only consumed news media in German. Column (2): Respondents reported in 2014 that they consumed at least some foreign media/media in the language of their country of origin. Column (3): Respondents reported in 2014 that they "only" or mainly" consumed news media in German. Column (4): Respondents reported in 2014 that they foreign in equal proportion to German media or more. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

migrants. For this group, estimates for consumers of foreign media, while being insignificant, are large and point in the opposite direction, implying that they – if anything – became more attached to Germany and less attached to their home countries.

To make sure that these pattern are not solely due to differences in language use more generally, I run additional regressions, splitting the sample by the language spoken with family members and friends. In Table A20, overall effects are not driven by respondents who predominantly talked with their family or their friends in the language of their home country. Rather, effects for this group are smaller than for other migrants and statistically insignificant.

These findings suggest that differences in news media consumption likely played an important role in shaping the ethnic identity of migrants, helping us explain the overall patterns observed. The contrasting press coverage of refugees and Germany's handling of the ERC in Western countries (including Germany) on one side and Eastern European and the TMENA countries on

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

the other may have led to some disconnect for Eastern Europeans and TMENA migrants, which made them feel less of a part of Germany and closer to their home countries in counties where there were more refugees. This disconnect appears to be increasing in the share of refugees in a county, indicating an interaction of media consumption and the presence – and likely salience – of refugees in everyday life.

## 5.5. Related Outcomes

In this section, I will look at other outcomes that the placement of refugees may have affected, starting with the labor market and education. We know that the arrival of a large amount of immigrants can lead to increased competition in the labor market – particularly for the lower skilled. While this may result in lower wage growth and higher unemployment (Hunt 1992, Dustmann et al. 2013), labor market adjustments may also lead to opposite effects or no real changes (Kerr and Kerr 2011). I test whether increased refugee inflows lead to changes in income, annual hours worked or employment, finding no changes overall (Table A21). I additionally check for differential effects on education, finding no changes, either.

This is not particularly surprising, as asylum seekers in Germany are not allowed to work right away, but rather have to wait until they get a work permit. Moreover, many jobs require foreigners to provide language certificates, guaranteeing at least some knowledge of German. Refugees generally acquire these by visiting language classes for a substantial amount of time. In addition, due to the regulated nature of the German labor market, many jobs require apprenticeships or training, which usually last about three years. While we do not have data about the employment rates of asylum seekers specifically, employment rates<sup>31</sup> of migrants from the eight main source countries (such as Afghanistan and Syria) were still relatively low at 24.9 percent in January 2018 (Bundesagentur für Arbeit 2018), compared to foreigners (47.7 percent) and Germans (68.1 percent). As a further factor, it appears unlikely that changes in the ethnic identity of migrants would already make themselves visible in labor market outcomes in such a short amount of time. It is more likely, that, if they have consequences at all, they will manifest themselves over time.

Next, I will look at outcomes previously understudied in the literature, namely the political preferences of migrants (Dancygier and Saunders 2006, Bergh and Bjørklund 2011). Although the share of voters with migration background has risen steadily over time, making them an evermore important part of the constituency, much research, particularly on the effects of immigration itself, is restricted to the effects on natives or the overall population (Dustmann et al. 2019, Edo

<sup>&</sup>lt;sup>31</sup>These statistics only factor in employment subject to social security contributions.

Table 10: Effects on Party Preferences

|                           | (1)       | (2)       | (3)                         | (4)       | (5)       | (6)       | (7)       | (8)       |
|---------------------------|-----------|-----------|-----------------------------|-----------|-----------|-----------|-----------|-----------|
|                           | Pol. Int. | Pref.     | $\mathrm{CDU}/\mathrm{CSU}$ | SPD       | Grüne     | FDP       | Linke     | AfD       |
| Post                      | -0.00237  | 0.00457   | 0.0117                      | -0.0186   | -0.0125*  | 0.0109*** | 0.000793  | 0.0172*** |
|                           | (0.0197)  | (0.0183)  | (0.0131)                    | (0.0143)  | (0.00745) | (0.00349) | (0.00671) | (0.00593) |
| Post * $\Delta$ Ref_share | 0.0186**  | 0.0154**  | -0.0205***                  | 0.00401   | 0.00562** | -0.00172  | 0.0160*** | 0.00968** |
|                           | (0.00759) | (0.00709) | (0.00566)                   | (0.00947) | (0.00242) | (0.00110) | (0.00563) | (0.00385) |
| Basic Controls            | Yes       | Yes       | Yes                         | Yes       | Yes       | Yes       | Yes       | Yes       |
| Individual FE             | Yes       | Yes       | Yes                         | Yes       | Yes       | Yes       | Yes       | Yes       |
| Time FE                   | Yes       | Yes       | Yes                         | Yes       | Yes       | Yes       | Yes       | Yes       |
| N                         | 4885      | 5384      | 5384                        | 5384      | 5384      | 5384      | 5384      | 5384      |

Note: Apart from dependent variable, all regressions are linear probability models specified as those in Table 2, column (2). Column (1): Outcome is whether respondent is moderately or very interested in politics (=1) or not (=0). Column (2): Outcome is whether respondent has a preference for a political party (=1) or not (=0). Column (3): Outcome is whether respondent prefers CDU or CSU. Column (4): Outcome is whether respondent prefers SPD. Column (5): Outcome is whether respondent prefers  $B\ddot{u}ndnis\ 90/Die\ Gr\ddot{u}nen$ . Column (6): Outcome is whether respondent prefers FDP. Column (7): Outcome is whether respondent prefers  $Die\ Linke$ . Column (8): Outcome is whether respondent prefers AfD. Post indicates time after September 4 2015, Post \*  $\Delta\ Ref\_\ share$  is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

et al. 2019). Using simple fixed effects linear probability models, I test whether the inflow of refugees leads to changes in political interest and preferences for political parties. To examine the first, which is scaled from 0 ("completely disinterested") to 3 ("very interested") in the SOEP, I transform this information into a binary variable, coded 1 if the respondent is at least "moderately" interested, and 0 if else. For party preference, the SOEP asks two questions, first, whether respondents lean towards any party at all, and second, which party that is.

Overall, the political interest of migrants is relatively low, with only a third being at least moderately interested. This is also reflected by the political preferences, as two thirds of migrants have no preference for any party. This can at least partly be explained by the fact that around 40 percent of immigrants in the sample do not have a German citizenship, which precludes them from voting in most elections.<sup>32</sup>

It appears, however, that the inflow of refugees led to an increase in political interest and party preference. As Table 10 shows, immigrants in counties, which received relatively more refugees, experienced clear increases in both outcomes. While political interest rises by close to 2 percentage points for every percentage point increase in the share of refugees (column (1)), stating a preference went up by 1.5 percentage points (2). These increases are noticeable, considering the overall low levels of political engagement. Looking at the major German parties in question, we can see that those parties, that had either very pro-  $(Gr\ddot{u}ne, Linke)$  or anti-refugee (AfD) stances, benefited most in counties with more refugee inflows. Support for more

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

<sup>&</sup>lt;sup>32</sup>Citizens of EU countries are allowed to participate in European and local elections, but not federal and state elections. All other foreigners are ineligible to vote.

Table 11: Effects on Party Preferences by Country of Origin

|                           | (1)       | (2)       | (3)        | (4)         | (5)       | (6)            |
|---------------------------|-----------|-----------|------------|-------------|-----------|----------------|
|                           | Pol. Int. | Pref.     | Mod. Cons. | Mod. Left   | Linke     | AfD            |
| Panel A: Western          |           |           |            |             |           |                |
| Post                      | 0.00912   | -0.00797  | -0.000508  | -0.0723**   | 0.0361**  | $0.0252^{***}$ |
|                           | (0.0334)  | (0.0364)  | (0.0174)   | (0.0295)    | (0.0165)  | (0.00924)      |
| Post * $\Delta$ Ref share | 0.00958   | 0.0298*   | -0.00795   | 0.0510***   | -0.00337  | -0.00376       |
| _                         | (0.0177)  | (0.0179)  | (0.00787)  | (0.0141)    | (0.00470) | (0.00411)      |
| Panel B: E European       | n         |           |            |             |           |                |
| Post                      | 0.0469    | 0.0216    | 0.0129     | $-0.0347^*$ | 0.00661   | $0.0243^{*}$   |
|                           | (0.0318)  | (0.0262)  | (0.0221)   | (0.0195)    | (0.00728) | (0.0129)       |
| Post * $\Delta$ Ref share | 0.00735   | 0.00131   | -0.0340*** | 0.0159      | 0.00131   | 0.0176**       |
| _                         | (0.0180)  | (0.0170)  | (0.0112)   | (0.0136)    | (0.00340) | (0.00679)      |
| Panel C: TMENA            | ,         | ,         | , ,        | , ,         | , , ,     | ,              |
| Post                      | -0.0593   | -0.0532   | 0.0129     | -0.0123     | -0.0466*  | 0.00765        |
|                           | (0.0403)  | (0.0521)  | (0.0248)   | (0.0435)    | (0.0238)  | (0.00689)      |
| Post * $\Delta$ Ref share | 0.0495*** | 0.0438*** | -0.00303   | -0.0214**   | 0.0591*** | 0.000146       |
| _                         | (0.0122)  | (0.0143)  | (0.00647)  | (0.00980)   | (0.0161)  | (0.000351)     |
| Basic Controls            | Yes       | Yes       | Yes        | Yes         | Yes       | Yes            |
| Individual FE             | Yes       | Yes       | Yes        | Yes         | Yes       | Yes            |
| Time FE                   | Yes       | Yes       | Yes        | Yes         | Yes       | Yes            |
| N (Panel A)               | 1276      | 1376      | 1376       | 1376        | 1376      | 1376           |
| N (Panel B)               | 1874      | 2056      | 2056       | 2056        | 2056      | 2056           |
| N (Panel C)               | 847       | 952       | 952        | 952         | 952       | 952            |

Note: Panel A: Sample consists of Western migrants. Panel B: Sample consists of Eastern Europeans. Panel C: Sample consists of TMENA migrants. Apart from dependent variable, all regressions are linear probability models specified as those in Table 2, column (2). Column (1): Outcome is whether respondent is moderately or very interested in politics (=1) or not (=0). Column (2): Outcome is whether respondent has a preference for a political party (=1) or not (=0). Column (3): Outcome is whether respondent prefers a moderately conservative party (CDU, CSU or FDP). Column (4): Outcome is whether respondent prefers a moderately left-wing party (SPD or Bündnis 90/Die Grünen). Column (5): Outcome is whether respondent prefers Die Linke. Column (6): Outcome is whether respondent prefers AfD. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_ share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

moderate parties did not change (SPD, FDP) or even decreased (CDU/CSU). While we should be careful in interpreting the coefficients, considering the low number of respondents actually reporting a preference, the effects appear quite large. Take the party  $Die\ Linke$  as an example: Raising the share of refugees by one percentage point increases preferring them by 1.6 percentage points or 0.1 standard deviations.

Lastly, I check how political interest and preferences changed by country of origin in Table 11. For that, I group moderately conservative (CDU/CSU and FDP) and moderately left-wing (SPD and  $Gr\ddot{u}ne$ ) parties together, but keep in the most left- ( $Die\ Linke$ ) and right-wing (AfD) parties.

Overall, the increase in political interest and preference appears to be predominantly driven by TMENA migrants. Furthermore, we can see that the three groups react very differently

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

to the refugee inflows. Westerners, who experience – if anything – more attachment toward Germany, show increases in preferences for moderately left-wing parties. In contrast, party preferences of Eastern Europeans and TMENA migrants show strong polarization: While the former increasingly leans towards right-wing AfD at the expense of moderately conservative parties, the latter exhibits increasing preference for the left-wing ( $Die\ Linke$ ), moving away from more moderate left-wing parties, in response to the treatment.

While these results do not provide definite proof, they still suggest that the increases in home country attachment for Eastern Europeans may be associated with increased preferences for far-right parties, while the decrease in attachment to Germany of TMENA migrants may occur simultaneously with increases for far-left parties. Both phenomena would make intuitive sense for different reasons. For Eastern Europeans, it makes sense that consuming news coverage and talking points critical of immigration might make them, on one hand, more connected to countries with far smaller or no inflows of refugees, while on the other, more likely to support parties with viewpoints that align with these perspectives, such as the AfD. This does not even require migrants to change their attitudes towards immigration, but only to make such issues more important to those who previously already held critical views. On the other side, those TMENA migrants, who feel more disconnected from Germany in part due to feeling discriminated against, might look for a party with policies strongly and vocally opposed to (anti-Arab and anti-Muslim) xenophobia. While other left-wing parties also supply such policies, it could be the case that those TMENA migrants, who feel less welcome in German society, were more receptive to the more populist and anti-establishment messaging that Die Linke was providing.

Nevertheless, these findings still provide ample ground for future research, looking at the effects of the European Refugee Crisis on political attitudes and intentions of migrants from different origins.

## 6. Discussion & Conclusion

This study explores how the 2015 European Refugee Crisis – which led to a sudden and strong increase in asylum seekers in late 2015 – affected host- and home-country attachment of resident migrants in Germany. Using administrative and survey data, I examine whether migrants in counties with higher increases in the share of asylum seekers had stronger changes in these outcomes. In order to arrive at arguably causal estimates, I exploit the quasi-natural setting whereby refugees who arrived in Germany were allocated to counties by state authorities according to fixed quotas and rules.

I mainly find that migrants' attachment to Germany was on aggregate unaffected by refugee

concentration, while home country connection increased. Looking at overall effects, however, obfuscates heterogeneities by country of origin. Point estimates suggest that while Westerners became insignificantly more attached to Germany and less to their home countries when surrounded by more refugees in their county, the opposite was true for Eastern Europeans. Effects for migrants from Turkey, the Middle East, and North Africa (TMENA) were somewhere in-between, with decreases in their perceived belonging to Germany, but no changes in home country connection. Further analyses suggest that these changes are not due to changes in worries about immigration, xenophobia, crime or job security. Rather, they appear to be influenced by differences in experiences of discrimination and media consumption. Only migrants who reported having been discriminated against due to their origin show strong treatment effects that go in both directions: feeling less attached to Germany and more attached to the respective home country. This pattern is generally also reflected when looking at TMENA and Eastern European migrants. Looking at the second channel, similar patterns can be observed for foreign media consumption. While migrants who exclusively consume German media exhibit no treatment effects, the opposite is the case for migrants who follow media from their country of origin. This dynamic is likely due to differences in media coverage of the ERC internationally.

Further analyses show that the differential placement of refugees also affected the political preferences of migrants, making Eastern Europeans more likely to lean toward the far right AfD and TMENA migrants more likely to prefer the left-wing populist  $Die\ Linke$ . These results point towards a possible polarization of the migrant electorate.

From these results follow several implications for policymakers. First, results show that home country connection of migrants rose significantly in response to relative increases of asylum seekers. While the literature is still not settled, there is some evidence that higher home country attachment is associated with worse labor market outcomes (Battu and Zenou 2010, Bisin et al. 2011). Moreover, as these attitudes are transmitted to the next generation, they can also detrimentally impact school outcomes of children (Monscheuer 2020). Therefore, it might be advisable to disperse refugees in a way that limits strong clustering and concentration in single counties, as possible negative effects would be strongest there.

Second, my heterogeneity analyses show that different migrant groups were reacting very differently to the refugee inflows. While Western migrants, if anything, increased their host country attachment, the opposite was the case for Eastern European and TMENA migrants. These dynamics stress the need to address the various and diverse sections of the immigrant population in different ways. While previous approaches have worked well with Western migrants, this was not the case for the other groups. Therefore, finetuning of messaging to reflect the

diversity of migrants audiences may help in improving outcomes.

Thirdly, based on the second point, media consumption of migrants appears important. While many German-born migrants consume predominantly German media, this is not the case for many of the foreign born. Many of the latter follow the news by watching foreign TV coverage or reading newspapers in the language of their home countries. This can have two consequences: First, migrants who consume foreign news are affected by the viewpoints presented, which may differ in important ways from German or Western media, in general. Second, these foreigners are often also harder to reach, as they may also have worse German language skills and participate less in German civil society. Addressing migrants in various languages may be very helpful in order to reach these segments of the migrant population. Moreover, it might also be helpful to think about using non-traditional or even foreign media, to get through to harder-to-reach migrants.

Lastly, my analysis also suggests that previous experiences of discrimination impact the reaction of migrants in response to the incoming refugees. Making migrants feel welcome in mainstream society therefore appears key to limit potential negative effects of refugee inflows. This could be achieved by intensifying previous measures to reduce discrimination or by developing new approaches.

While this study has provided evidence for the short-term effects of the ERC on migrant self-identification, it will be interesting to see how the presence of refugees will affect it in the future. Will migrant self-identification change again after being in closer contact with refugees? Or will effects accumulate further, possibly alienating some migrants more from Germany? A second question for future research is how the 2015 ERC will affect migrant assimilation. While it appears possible that some groups will actually invest less in host country-specific capital, we will have to see whether changes in self-identification are going to lead to substantial changes in labor market outcomes or whether effects will be more muddled overall.

## References

- Abadie, A., S. Athey, G. W. Imbens, and J. Wooldridge (2017). When should you adjust standard errors for clustering? Working Paper 24003, National Bureau of Economic Research.
- Abramitzky, R., L. P. Boustan, and K. Eriksson (2014). A nation of immigrants: Assimilation and economic outcomes in the Age of Mass Migration. *Journal of Political Economy* 122(3), 467–506.
- Adena, M., R. Enikolopov, M. Petrova, V. Santarosa, and E. Zhuravskaya (2015). Radio and the rise of the Nazis in prewar Germany. *The Quarterly Journal of Economics* 130(4), 1885–1939.
- Akerlof, G. A. and R. E. Kranton (2000). Economics and identity. Quarterly Journal of Economics 115(3), 715–753.
- Aksoy, C. G., P. Poutvaara, and F. Schikora (2020). First time around: Local conditions and multi-dimensional integration of refugees. SOEPpapers on Multidisciplinary Panel Data Research, No. 1115.
- Angrist, J. D. and J.-S. Pischke (2008). Mostly harmless econometrics: An empiricist's companion. Princeton university press.
- Arzheimer, K. and C. C. Berning (2019). How the Alternative for Germany (AfD) and their voters veered to the radical right, 2013–2017. *Electoral Studies* 60, 102040.
- Baetschmann, G., A. Ballantyne, K. E. Staub, and R. Winkelmann (2020). feologit: A new command for fitting fixed-effects ordered logit models. *The Stata Journal* 20(2), 253–275.
- BAMF (2015a). Aktuelle Zahlen zu Asyl. Tabellen, Diagramme, Erläuterungen. Edition: December 2015.
- BAMF (2015b). Aktuelle Zahlen zu Asyl. Tabellen, Diagramme, Erläuterungen. Edition: October 2015.
- BAMF (2016a). Aktuelle Zahlen zu Asyl. Tabellen, Diagramme, Erläuterungen. Edition: December 2016.
- BAMF (2016b). Migrationsbericht 2015. Bundesministerium des Innern, Berlin.
- Battu, H., M. Mwale, and Y. Zenou (2006). Oppositional identities and the labor market. *Journal of Population Economics* 20(3), 643–667.

- Battu, H. and Y. Zenou (2010). Oppositional identities and employment for ethnic minorities: Evidence from England. *The Economic Journal* 120 (542), F52–F71.
- Bergh, J. and T. Bjørklund (2011). The revival of group voting: explaining the voting preferences of immigrants in Norway. *Political Studies* 59(2), 308–327.
- Biavaschi, C., C. Giulietti, and Z. Siddique (2017). The economic payoff of name Americanization.

  Journal of Labor Economics 35(4), 1089–1116.
- Bisin, A., E. Patacchini, T. Verdier, and Y. Zenou (2011). Formation and persistence of oppositional identities. *European Economic Review* 55(8), 1046–1071.
- Bisin, A., E. Patacchini, T. Verdier, and Y. Zenou (2016). Bend it like Beckham: Ethnic identity and integration. *European Economic Review 90*, 146–164.
- Bleakley, H. and A. Chin (2004). Language skills and earnings: Evidence from childhood immigrants. *Review of Economics and Statistics* 86(2), 481–496.
- Borjas, G. J. (2015). The slowdown in the economic assimilation of immigrants: Aging and cohort effects revisited again. *Journal of Human Capital* 9(4), 483–517.
- Bundesagentur für Arbeit (2018). Berichte: Arbeitsmarkt kompakt: Fluchtmigration. Edition: Januar 2018.
- Cai, S. and K. F. Zimmermann (2020). Social assimilation and labor market outcomes of migrants in China. CEPR Discussion Paper No. DP15496.
- Carillo, M. R., V. Lombardo, and T. Venittelli (2021). Identity and labor market outcomes of immigrants. Technical report.
- Casey, T. and C. Dustmann (2010). Immigrants' identity, economic outcomes and the transmission of identity across generations. *The Economic Journal* 120 (542), F31–F51.
- Constant, A. F. and K. F. Zimmermann (2008). Measuring ethnic identity and its impact on economic behavior. *Journal of the European Economic Association* 6(2-3), 424–433.
- Dancygier, R. and E. N. Saunders (2006). A new electorate? Comparing preferences and partisanship between immigrants and natives. *American Journal of Political Science* 50(4), 962–981.
- Dehos, F. T. (2017). The refugee wave to Germany and its impact on crime. *Ruhr Economic Papers No.* 737 (737).

- Della Vigna, S., R. Enikolopov, V. Mironova, M. Petrova, and E. Zhuravskaya (2014). Cross-border media and nationalism: Evidence from Serbian radio in Croatia. *American Economic Journal: Applied Economics* 6(3), 103–32.
- DellaVigna, S. and E. Kaplan (2007). The Fox News effect: Media bias and voting. *The Quarterly Journal of Economics* 122(3), 1187–1234.
- Deole, S. and Y. Huang (2020). How do new immigration flows affect existing immigrants? Evidence from the refugee crisis in Germany. Technical report.
- Durante, R., P. Pinotti, and A. Tesei (2019). The political legacy of entertainment TV. American Economic Review 109(7), 2497–2530.
- Dustmann, C. (1996). The social assimilation of immigrants. Journal of Population Economics 9(1), 37-54.
- Dustmann, C., T. Frattini, and G. Lanzara (2012). Educational achievement of second-generation immigrants: an international comparison. *Economic Policy* 27(69), 143–185.
- Dustmann, C., T. Frattini, and I. P. Preston (2013). The effect of immigration along the distribution of wages. *Review of Economic Studies* 80(1), 145–173.
- Dustmann, C., K. Vasiljeva, and A. Piil Damm (2019). Refugee migration and electoral outcomes.

  The Review of Economic Studies 86(5), 2035–2091.
- Edo, A., Y. Giesing, J. Öztunc, and P. Poutvaara (2019). Immigration and electoral support for the far-left and the far-right. *European Economic Review* 115, 99–143.
- Elsayed, A. and A. de Grip (2017). Terrorism and the integration of Muslim immigrants. *Journal* of Population Economics 31(1), 45–67.
- Enikolopov, R., M. Petrova, and E. Zhuravskaya (2011). Media and political persuasion: Evidence from Russia. *American Economic Review* 101(7), 3253–85.
- Entorf, H. and M. Lange (2019). Refugees welcome? Understanding the regional heterogeneity of anti-foreigner hate crimes in Germany. ZEW Centre for European Economic Research Discussion Paper No. 19-005 (19-005).
- Fouka, V., S. Mazumder, and M. Tabellini (2021). From Immigrants to Americans: Race and Assimilation during the Great Migration. *The Review of Economic Studies*.
- Gehrsitz, M. and M. Ungerer (2017). Jobs, crime, and votes: A short-run evaluation of the refugee crisis in Germany. *IZA Discussion Paper No.* 10494.

- Geis, W. and A. K. Orth (2016). Flüchtlinge regional besser verteilen. Ausgangslage und Ansatzpunkte für einen neuen Verteilungsmechanismus. Gutachten für die Robert Bosch Stiftung. Hg. v. Robert Bosch Stiftung. Köln..
- Gentzkow, M. and J. M. Shapiro (2010). What drives media slant? Evidence from US daily newspapers. *Econometrica* 78(1), 35–71.
- Georgiadis, A. and A. Manning (2013). One nation under a groove? Understanding national identity. *Journal of Economic Behavior & Organization 93*, 166–185.
- Georgiou, M. and R. Zaborowski (2017). Media coverage of the "refugee crisis": A cross-European perspective. Council of Europe.
- Glitz, A. (2012). The labor market impact of immigration: A quasi-experiment exploiting immigrant location rules in Germany. *Journal of Labor Economics* 30(1), 175–213.
- Goebel, J., M. M. Grabka, S. Liebig, M. Kroh, D. Richter, C. Schröder, and J. Schupp (2019). The German Socio-Economic Panel (SOEP). *Jahrbücher für Nationalökonomie und Statistik* 239(2), 345–360.
- Gorinas, C. (2014). Ethnic identity, majority norms, and the native–immigrant employment gap. Journal of Population Economics 27(1), 225–250.
- Gould, E. D. and E. F. Klor (2015). The long-run effect of 9/11: Terrorism, backlash, and the assimilation of Muslim immigrants in the West. *The Economic Journal* 126(597), 2064–2114.
- Halla, M., A. F. Wagner, and J. Zweimüller (2017). Immigration and voting for the far right.

  Journal of the European Economic Association 15(6), 1341–1385.
- Hangartner, D., E. Dinas, M. Marbach, K. Matakos, and D. Xefteris (2018). Does exposure to the refugee crisis make natives more hostile? *American Political Science Review* 113(2), 442–455.
- Huang, Y. and M. Kvasnicka (2019). Immigration and crimes against natives: The 2015 refugee crisis in Germany. *IZA Discussion Paper No. 12469*.
- Hunt, J. (1992). The impact of the 1962 repatriates from Algeria on the French labor market. ILR Review 45(3), 556–572.
- Inglehart, R. and P. Norris (2016). Trump, Brexit, and the rise of populism: Economic have-nots and cultural backlash. *HKS Working Paper No. RWP16-026*.

- Islam, A. and P. A. Raschky (2015). Genetic distance, immigrants' identity, and labor market outcomes. *Journal of Population Economics* 28(3), 845–868.
- Kerr, S. P. and W. R. Kerr (2011). Economic impacts of immigration: A survey. Working Paper 16736, National Bureau of Economic Research.
- Kürschner Rauck, K. and M. Kvasnicka (2018). The 2015 European Refugee Crisis and residential housing rents in Germany. Technical report, IZA Discussion Papers No. 12047.
- Liebig, S., J. Goebel, C. Schröder, M. Grabka, D. Richter, J. Schupp, C. Bartels, A. Fedorets, A. Franken, J. Jacobsen, S. Kara, P. Krause, H. Kröger, M. Kroh, M. Metzing, J. Nebelin, D. Schacht, P. Schmelzer, C. Schmitt, D. Schnitzlein, R. Siegers, K. Wenzig, S. Zimmermann, and Deutsches Institut Für Wirtschaftsforschung (DIW Berlin) (2019). Sozio-oekonomisches Panel (SOEP), Daten der Jahre 1984-2018.
- Liebig, S., J. Schupp, H. Brücker, M. Kroh, J. Goebel, C. Bartels, A. Fedorets, A. Franken, M. Giesselmann, M. Grabka, J. Jacobsen, S. Kara, P. Krause, H. Kröger, E. Liebau, M. Metzing, J. Nebelin, D. Richter, D. Schacht, P. Schmelzer, C. Schmitt, D. Schnitzlein, C. Schröder, R. Siegers, P. Trübswetter, K. Wenzig, Institut für Arbeitsmarkt- und Berufsforschung (IAB), and Deutsches Institut für Wirtschaftsforschung (DIW Berlin) (2020). IAB-SOEP Migrationsstichprobe 2018.
- Manning, A. and S. Roy (2010). Culture clash or culture club? National identity in Britain. *The Economic Journal* 120(542), F72–F100.
- Monscheuer, O. (2020). National identity and the integration of second-generation immigrants.

  Working Paper.
- Nekby, L. and M. Rödin (2010). Acculturation identity and employment among second and middle generation immigrants. *Journal of Economic Psychology* 31(1), 35–50.
- Niemann, A. and N. Zaun (2018). EU refugee policies and politics in times of crisis: theoretical and empirical perspectives. *JCMS: Journal of Common Market Studies* 56(1), 3–22.
- Piracha, M., M. Tani, Z. Cheng, and B. Z. Wang (2021). Ethnic identity and immigrants' labour market outcomes. *IZA Discussion Paper No.* 14123.
- Rodrik, D. (2020). Why does globalization fuel populism? Economics, culture, and the rise of right-wing populism. *Annual Review of Economics* 13.

- Schaub, M., J. Gereke, and D. Baldassarri (2021). Strangers in hostile lands: Exposure to refugees and right-wing support in Germany's eastern regions. *Comparative Political Studies* 54 (3-4), 686–717.
- Schüller, S. (2015). Parental ethnic identity and educational attainment of second-generation immigrants. *Journal of Population Economics* 28(4), 965–1004.
- Sert, D. Ş. and D. Danış (2021). Framing Syrians in Turkey: State control and no crisis discourse. International Migration 59(1), 197–214.
- Shayo, M. (2009). A model of social identity with an application to political economy: Nation, class, and redistribution. *American Political Science Review* 103(2), 147–174.
- Sola, A. (2018). The 2015 refugee crisis in Germany: Concerns about immigration and populism. SOEPpaper No. 966.
- Steinhardt, M. F. (2012). Does citizenship matter? The economic impact of naturalizations in Germany. *Labour Economics* 19(6), 813–823.
- Stips, F. and K. Kis-Katos (2020). The impact of co-national networks on asylum seekers' employment: Quasi-experimental evidence from Germany. *PloS one* 15(8), e0236996.
- Sunata, U. and E. Yıldız (2018). Representation of Syrian refugees in the Turkish media. *Journal of Applied Journalism & Media Studies* 7(1), 129–151.
- Tomberg, L., K. S. Stegen, and C. Vance (2021). "The mother of all political problems"? On asylum seekers and elections. *European Journal of Political Economy* 67, 101981.

## Appendix A. Appendix

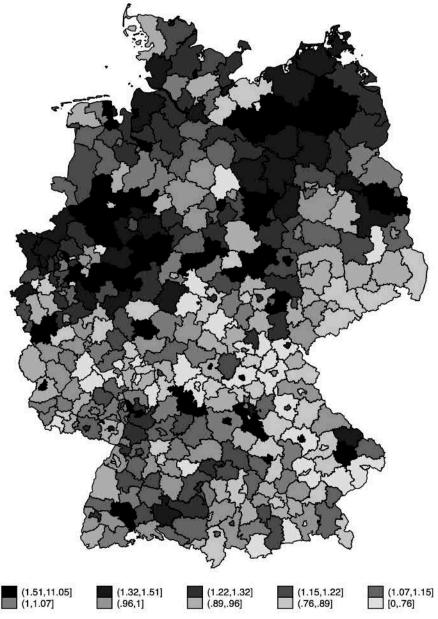


Figure A.4: Spatial Distribution of Asylum Seekers

Note: Distribution of recipients of a sylum seeker benefits the end of 2015. Source: Statistical offices of the  $Bundesl\"{a}nder.$ 

Table A.1: Migrants by Country of Origin

|                          | N        | %              | Group                            |
|--------------------------|----------|----------------|----------------------------------|
| Germany                  | 1180     | 21.92          | -                                |
| Italy                    | 204      | 3.79           | Western                          |
| Austria                  | 108      | 2.01           | Western                          |
| Greece                   | 88       | 1.63           | Western                          |
| The Netherlands          | 72       | 1.34           | Western                          |
| USA                      | 68       | 1.26           | Western                          |
| Spain                    | 64       | 1.19           | Western                          |
| France                   | 60       | 1.11           | Western                          |
| Great Britain            | 48       | 0.89           | Western                          |
| Switzerland              | 32       | 0.59           | Western                          |
| Portugal                 | 24       | 0.45           | Western                          |
| Denmark                  | 20       | 0.37           | Western                          |
| Finland                  | 16       | 0.30           | Western                          |
| Belgium                  | 16       | 0.30           | Western                          |
| Ireland                  | 12       | 0.22           | Western                          |
| Sweden                   | 8        | 0.15           | Western                          |
| Luxembourg               | 4        | 0.07           | Western                          |
| Turkey                   | 468      | 8.69           | TMENA                            |
| Iran                     | 48       | 0.89           | TMENA                            |
| Morocco                  | 32       | 0.59           | TMENA                            |
| Lebanon                  | 20       | 0.37           | TMENA                            |
| Iraq                     | 12       | 0.22           | TMENA                            |
| Syria                    | 12       | 0.22           | TMENA                            |
| Tunisia                  | 12       | 0.22           | TMENA                            |
| Palestine                | 8        | 0.15           | TMENA                            |
| Algeria                  | 4        | 0.07           | TMENA                            |
| UAE                      | 4        | 0.07           | TMENA                            |
| Kazakhstan               | 480      | 8.92           | Eastern Europe                   |
| Russia                   | 444      | 8.25           | Eastern Europe                   |
| Poland                   | 412      | 7.65           | Eastern Europe                   |
| Romania                  | 192      | 3.57           | Eastern Europe                   |
| Ukraine                  | 92       | 1.71           | Eastern Europe                   |
| Czech Republic           | 44       | 0.82           | Eastern Europe                   |
| Kyrgyzstan               | 44       | 0.82           | Eastern Europe                   |
| Hungary                  | 40       | 0.74           | Eastern Europe                   |
| Bulgaria                 | 24       | 0.45           | Eastern Europe                   |
| Slovakia                 | 24       | 0.45           | Eastern Europe                   |
| Tajikistan               | 16       | 0.30           | Eastern Europe                   |
| Azerbaijan               | 16       | 0.30           | Eastern Europe                   |
| Belarus                  | 16       | 0.30           | Eastern Europe                   |
| Uzbekistan               | 8        | 0.15           | Eastern Europe                   |
| Estonia                  | 8        | 0.15           | Eastern Europe                   |
| Latvia                   | 8        | 0.15           | Eastern Europe                   |
| Latvia<br>Lithuania      |          |                | Eastern Europe                   |
| Georgia                  | 8        | 0.15           | Eastern Europe<br>Eastern Europe |
| Georgia<br>Serbia        | $4\\124$ | $0.07 \\ 2.30$ | Eastern Europe<br>Balkan         |
| Serdia<br>Kosovo-Albania |          |                | Balkan<br>Balkan                 |
|                          | 112      | 2.08           | Balkan<br>Balkan                 |
| Bosnia-Herzegovina       | 88       | 1.63           |                                  |
| Croatia                  | 76       | 1.41           | Balkan                           |
| Ex-Yugoslavia            | 28       | 0.52           | Balkan                           |
| Macedonia                | 28       | 0.52           | Balkan                           |
| Albania                  | 20       | 0.37           | Balkan                           |
| Slovenia                 | 20       | 0.37           | Balkan                           |
| Montenegro               | 4        | 0.07           | Balkan                           |

Table A.1.: Migrants by Country of Origin (cont.)

|                    | N     | %      | Group         |
|--------------------|-------|--------|---------------|
| Thailand           | 32    | 0.59   | Rest of World |
| Philippines        | 28    | 0.52   | Rest of World |
| Sri Lanka          | 28    | 0.52   | Rest of World |
| Peru               | 20    | 0.37   | Rest of World |
| Afghanistan        | 16    | 0.30   | Rest of World |
| Argentina          | 16    | 0.30   | Rest of World |
| Bangladesh         | 12    | 0.22   | Rest of World |
| Brazil             | 12    | 0.22   | Rest of World |
| China              | 12    | 0.22   | Rest of World |
| Columbia           | 12    | 0.22   | Rest of World |
| Cuba               | 12    | 0.22   | Rest of World |
| Japan              | 12    | 0.22   | Rest of World |
| Cameroon           | 8     | 0.15   | Rest of World |
| Ethiopia           | 8     | 0.15   | Rest of World |
| Ghana              | 8     | 0.15   | Rest of World |
| India              | 8     | 0.15   | Rest of World |
| Indonesia          | 8     | 0.15   | Rest of World |
| Jamaica            | 8     | 0.15   | Rest of World |
| Mexico             | 8     | 0.15   | Rest of World |
| Nigeria            | 8     | 0.15   | Rest of World |
| Pakistan           | 8     | 0.15   | Rest of World |
| Togo               | 8     | 0.15   | Rest of World |
| Vietnam            | 8     | 0.15   | Rest of World |
| Angola             | 4     | 0.07   | Rest of World |
| Cambodia           | 4     | 0.07   | Rest of World |
| Dominican Republic | 4     | 0.07   | Rest of World |
| El Salvador        | 4     | 0.07   | Rest of World |
| Gambia             | 4     | 0.07   | Rest of World |
| Israel             | 4     | 0.07   | Rest of World |
| Kenya              | 4     | 0.07   | Rest of World |
| Korea              | 4     | 0.07   | Rest of World |
| Mauritius          | 4     | 0.07   | Rest of World |
| Mozambique         | 4     | 0.07   | Rest of World |
| South Africa       | 4     | 0.07   | Rest of World |
| Surinam            | 4     | 0.07   | Rest of World |
| Uruguay            | 4     | 0.07   | Rest of World |
| Venezuela          | 4     | 0.07   | Rest of World |
| Zimbabwe           | 4     | 0.07   | Rest of World |
| Total              | 5 384 | 100.00 |               |

Total 5,384 100.00

Note: List of countries of origin included in the balanced sample with information on total number of observations, share overall, and classification in group.

Table A.2: Descriptive Statistics by Country of Origin

| Panel A: Feel German  |           | 2012                    | 2014                    | 2016                    | 2018                    | Total                   |
|-----------------------|-----------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Western               | Mean      | 2.493                   | 2.572                   | 2.643                   | 2.767                   | 2.619                   |
|                       | (SD)      | (1.232)                 | (1.165)                 | (1.161)                 | (1.080)                 | (1.164)                 |
|                       | N         | 344                     | 344                     | 344                     | 344                     | 1376                    |
| Eastern Europe        | Mean      | 2.980                   | 3.063                   | 3.172                   | 3.191                   | 3.102                   |
|                       | (SD)      | (1.097)                 | (0.998)                 | (0.888)                 | (0.893)                 | (0.976)                 |
|                       | N         | 514                     | 514                     | 514                     | 514                     | 2056                    |
| Balkan                | Mean      | 2.853                   | 2.741                   | 2.941                   | 2.982                   | 2.879                   |
|                       | (SD)      | (1.070)                 | (1.039)                 | (0.953)                 | (0.970)                 | (1.011)                 |
|                       | N         | 170                     | 170                     | 170                     | 170                     | 680                     |
| TMENA                 | Mean      | 2.426                   | 2.369                   | 2.487                   | 2.441                   | 2.431                   |
|                       | (SD)      | (1.131)                 | (1.033)                 | (1.070)                 | (1.104)                 | (1.084)                 |
|                       | N         | 238                     | 238                     | 238                     | 238                     | 952                     |
| Non-Resettlers        | Mean (SD) | 2.628<br>(1.224)<br>173 | 2.737<br>(1.220)<br>173 | 2.947<br>(0.978)<br>173 | 2.965<br>(0.996)<br>173 | 2.819<br>(1.118)<br>692 |
| Resettlers            | Mean      | 3.159                   | 3.226                   | 3.284                   | 3.306                   | 3.244                   |
|                       | (SD)      | (0.981)                 | (0.819)                 | (0.818)                 | (0.813)                 | (0.862)                 |
|                       | N         | 341                     | 341                     | 341                     | 341                     | 1364                    |
| Panel B: Connect Home |           | 2012                    | 2014                    | 2016                    | 2018                    | Total                   |
| Western               | Mean      | 2.523                   | 2.496                   | 2.507                   | 2.506                   | 2.508                   |
|                       | (SD)      | (1.044)                 | (1.044)                 | (1.022)                 | (1.020)                 | (1.031)                 |
|                       | N         | 344                     | 344                     | 344                     | 344                     | 1376                    |
| Eastern Europe        | Mean      | 1.637                   | 1.705                   | 1.725                   | 1.655                   | 1.681                   |
|                       | (SD)      | (1.110)                 | (1.155)                 | (1.161)                 | (1.143)                 | (1.142)                 |
|                       | N         | 514                     | 514                     | 514                     | 514                     | 2056                    |
| Balkan                | Mean      | 1.970                   | 2.035                   | 1.894                   | 1.835                   | 1.934                   |
|                       | (SD)      | (1.245)                 | (1.206)                 | (1.157)                 | (1.139)                 | (1.187)                 |
|                       | N         | 170                     | 170                     | 170                     | 170                     | 680                     |
| TMENA                 | Mean      | 2.415                   | 2.572                   | 2.489                   | 2.473                   | 2.487                   |
|                       | (SD)      | (1.147)                 | (1.095)                 | (1.095)                 | (1.114)                 | (1.113)                 |
|                       | N         | 238                     | 238                     | 238                     | 238                     | 952                     |
| Non-Resettlers        | Mean      | 1.953                   | 1.988                   | 2.012                   | 1.935                   | 1.972                   |
|                       | (SD)      | (1.251)                 | (1.188)                 | (1.223)                 | (1.126)                 | (1.196)                 |
|                       | N         | 173                     | 173                     | 173                     | 173                     | 692                     |
| Resettlers            | Mean      | 1.478                   | 1.562                   | 1.581                   | 1.515                   | 1.534                   |
|                       | (SD)      | (0.996)                 | (1.113)                 | (1.102)                 | (1.127)                 | (1.085)                 |
|                       | N         | 341                     | 341                     | 341                     | 341                     | 1364                    |

Note: Means, standard errors, and observations of feeling German (Panel A) and home country connection (Panel B) for the years 2012, 2014, 2016, and 2018 by country of origin. The outcome is scaled from 0 to 4. Data source: German Socio-economic Panel.

Table A.3: Effects of Migrant Identification on Refugee Placement

|                                   | (1)      | (2)      | (3)      | (4)                | (5)      | (6)      |
|-----------------------------------|----------|----------|----------|--------------------|----------|----------|
| $\Delta_{2012-2014}$ Feel German  | -0.00552 |          |          |                    |          |          |
|                                   | (0.0139) |          |          |                    |          |          |
| $\Delta_{2010-2012}$ Feel German  |          | -0.0117  |          |                    |          |          |
|                                   |          | (0.0129) |          |                    |          |          |
| $\Delta_{2010-2014}$ Feel German  |          |          | 0.00987  |                    |          |          |
| △2010=2014 1 cc1 Gc1man           |          |          | (0.0133) |                    |          |          |
| A                                 |          |          | , ,      | 0.0110             |          |          |
| $\Delta_{2010-2014}$ Connect Home |          |          |          | -0.0112 $(0.0124)$ |          |          |
|                                   |          |          |          | (0.0124)           |          |          |
| $\Delta_{2012-2014}$ Connect Home |          |          |          |                    | -0.00776 |          |
|                                   |          |          |          |                    | (0.0131) |          |
| $\Delta_{2010-2012}$ Connect Home |          |          |          |                    |          | -0.00958 |
|                                   |          |          |          |                    |          | (0.0132) |
| Basic Controls                    | Yes      | Yes      | Yes      | Yes                | Yes      | Yes      |
| N                                 | 2654     | 859      | 883      | 2643               | 864      | 886      |

Note: Dependent variable is always the change in refugee share between 2014 and 2015. Column (1): Regressed on change in feeling German between 2012 and 2014. Column (2): Regressed on change in feeling German between 2010 and 2012. Column (3): Regressed on change in feeling German between 2010 and 2014. Column (4): Regressed on change in home country attachment between 2012 and 2014. Column (5): Regressed on change in home country attachment between 2010 and 2012. Column (6): Regressed on change in home country attachment between 2010 and 2014. All regressions include plausibly exogenous regressors, mentioned on page 15. Unbalanced sample is used in estimations. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

Table A.4: Effects of Migrant Social and Economic Integration on Refugee Placement

|                            | (1)     | (2)      | (3)        | (4)       | (5)       |
|----------------------------|---------|----------|------------|-----------|-----------|
| Naturalizations            | -0.292  |          |            |           |           |
|                            | (0.917) |          |            |           |           |
| Intermarriages             |         | 0.0264   |            |           |           |
| O                          |         | (0.0770) |            |           |           |
| F : G . D                  |         |          | 0.000050   |           |           |
| Foreign. Gym. Rep.         |         |          | -0.000253  |           |           |
|                            |         |          | (0.000422) |           |           |
| Foreig. Unemp. Rate        |         |          |            | -0.000994 |           |
| -                          |         |          |            | (0.00150) |           |
| Foreign. SSC Empl. Rate    |         |          |            |           | -0.00156  |
| roroigii oo o zimpii rooco |         |          |            |           | (0.00163) |
| County FE                  | Yes     | Yes      | Yes        | Yes       | Yes       |
| Time FE                    | Yes     | Yes      | Yes        | Yes       | Yes       |
| N                          | 1598    | 1987     | 1987       | 1987      | 1991      |

Note: Dependent variable is always the refugee share in county i at time t. Column (1): Regressed on naturalizations over foreign population. Column (2): Regressed on intermarriages over all marriages with at least one foreign spouse. Column (3): Regressed on measure of migrant representation among Gymnasium students, with 100 indicating equal representation compared to Germans. Column (4): Regressed on foreign unemployment rate. Column (5): Regressed on rate of foreigner in employment subject to social security contributions. All regressions contain observations for all years between 2010 and 2014 and include county and time fixed effects. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.5: Effects of Migrant Demographics on Refugee Placement

|                           | (1)              | (2)              | (3)              | (4)               | (5)              | (6)             | (7)                 |
|---------------------------|------------------|------------------|------------------|-------------------|------------------|-----------------|---------------------|
| Africa %                  | 1.019<br>(0.677) |                  |                  |                   |                  |                 |                     |
| Asia %                    |                  | 0.0699 $(0.202)$ |                  |                   |                  |                 |                     |
| Europe %                  |                  |                  | -0.147 $(0.157)$ |                   |                  |                 |                     |
| TMENA %                   |                  |                  |                  | -0.0164 $(0.150)$ |                  |                 |                     |
| America %                 |                  |                  |                  |                   | -0.329 $(0.541)$ |                 |                     |
| Foreign Pop $\%$          |                  |                  |                  |                   |                  | 0.862 $(0.737)$ |                     |
| Asylum Seeker $\%$ in t-1 |                  |                  |                  |                   |                  |                 | 52.26***<br>(14.89) |
| County FE                 | Yes              | Yes              | Yes              | Yes               | Yes              | Yes             | Yes                 |
| Time FE                   | Yes              | Yes              | Yes              | Yes               | Yes              | Yes             | Yes                 |
| N                         | 1950             | 1950             | 1950             | 1950              | 1950             | 1987            | 1991                |

Note: Dependent variable is always the refugee share in county i at time t. Column (1): Regressed on share of Africans over total foreign population. Column (2): Regressed on share of Asians over total foreign population. Column (3): Regressed on share of Europeans over total foreign population. Column (4): Regressed on share of migrants from Turkey, Middle East and North Africa over total foreign population. Column (5): Regressed on share of Americans over total foreign population. Column (6): Regressed on foreign population share. Column (7): Regressed on share of asylum seekers in period before. All regressions contain observations for all years between 2010 and 2014 and include county and time fixed effects. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.6: Effects of Migrant Social Security Reception on Refugee Placement

|                           | (1)     | (2)      | (3)       | (4)       |
|---------------------------|---------|----------|-----------|-----------|
| Hilfe zum Lebensunterhalt | -1.055  |          |           |           |
|                           | (1.191) |          |           |           |
| Hilfe bei bes. Lebensl.   |         | -3.258** |           |           |
|                           |         | (1.444)  |           |           |
| Grundsicherung            |         |          | -2.822*** |           |
|                           |         |          | (1.045)   |           |
| Mindestsicherung          |         |          |           | -0.428*** |
|                           |         |          |           | (0.144)   |
| County FE                 | Yes     | Yes      | Yes       | Yes       |
| Time FE                   | Yes     | Yes      | Yes       | Yes       |
| N                         | 1965    | 1959     | 1979      | 1986      |

Note: Dependent variable is always the refugee share in county i at time t. Regressed on share of foreigners receiving... Column (1): Hilfe zum Lebensunterhalt, assistance for some people who are unable to work. Column (2): Hilfe bei besonderen Lebenslagen, assistance for sick or disabled people or those facing special social hardships. Column (3): Grundsicherung, basic social security, mostly paid to low-income retirees. Column (4): Mindestsicherung, a minimum guaranteed income. All regressions contain observations for all years between 2010 and 2014 and include county and time fixed effects. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.7: Adding Potential Confounders

|                            | (1)           | (2)           | (3)           | (4)       |
|----------------------------|---------------|---------------|---------------|-----------|
| Panel A: Feel German       |               |               |               |           |
| Post                       | $0.183^{***}$ | $0.201^{***}$ | $0.201^{***}$ | 0.201***  |
|                            | (0.0444)      | (0.0381)      | (0.0381)      | (0.0383)  |
| Post * $\Delta$ Ref_share  | -0.00322      | -0.00836      | -0.00828      | -0.00714  |
|                            | (0.0168)      | (0.0153)      | (0.0153)      | (0.0153)  |
| Panel B: Connect Home      | ,             |               | , ,           | ,         |
| Post                       | -0.0512       | -0.0557       | -0.0526       | -0.0477   |
|                            | (0.0412)      | (0.0357)      | (0.0358)      | (0.0359)  |
| Post * $\Delta$ Ref_share  | 0.0566***     | 0.0638***     | 0.0639***     | 0.0631*** |
|                            | (0.0167)      | (0.0178)      | (0.0181)      | (0.0182)  |
| Basic Controls             | Yes           | Yes           | Yes           | Yes       |
| Individual FE              | Yes           | Yes           | Yes           | Yes       |
| Time FE                    | Yes           | Yes           | Yes           | Yes       |
| Interviewer FE             | Yes           |               |               |           |
| Death of Relative Controls |               | Yes           | Yes           |           |
| Separation Control         |               |               | Yes           |           |
| Move Controls              |               |               |               | Yes       |
| N                          | 5384          | 5384          | 5384          | 5384      |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. Apart from adding potential confounders, all regressions are specified as those in Table 2, column (2). Column (1): Regressions include interviewer fixed effects. (2): Regressions include dummies indicating death of partner, child, mother, father and other household member in last 2 years. (3): Regressions including controls as in (2) and dummy indicating separation from partner in last 2 years. (4): Regressions include dummy indicating if respondent left household and moved within county. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.8: Adding Potential Confounders

|                           | (1)           | (2)       | (3)       | (4)       |
|---------------------------|---------------|-----------|-----------|-----------|
| Panel A: Feel German      |               |           |           |           |
| Post                      | $0.199^{***}$ | 0.203***  | 0.137     | 0.114     |
|                           | (0.0410)      | (0.0417)  | (0.123)   | (0.119)   |
| Post * $\Delta$ Ref_share | -0.00675      | -0.00830  | -0.0115   | -0.0114   |
| _                         | (0.0165)      | (0.0181)  | (0.0126)  | (0.0125)  |
| Panel B: Connect Home     |               |           |           |           |
| Post                      | -0.0406       | -0.0400   | 0.0766    | 0.0752    |
|                           | (0.0400)      | (0.0398)  | (0.134)   | (0.137)   |
| Post * $\Delta$ Ref_share | 0.0629***     | 0.0620*** | 0.0666*** | 0.0666*** |
|                           | (0.0180)      | (0.0182)  | (0.0166)  | (0.0166)  |
| Basic Controls            | Yes           | Yes       | Yes       | Yes       |
| Individual FE             | Yes           | Yes       | Yes       | Yes       |
| Time FE                   | Yes           | Yes       | Yes       | Yes       |
| German Mig. Controls      | Yes           | Yes       |           |           |
| Foreigner Mig. Controls   |               | Yes       |           |           |
| Voting                    |               |           | Yes       | Yes       |
| Turnout                   |               |           |           | Yes       |
| N                         | 5384          | 5384      | 5351      | 5351      |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. Apart from adding potential confounders, all regressions are specified as those in Table 2, column (2). Column (1): Regressions include the number of Germans migrating into and migrating out of the county as a share of German county population. (2): Regressions as in (1), but also including the number of foreigners migrating into and migrating out of the county as a share of foreign county population. (3): Regressions include vote shares for the major parties (CDU/CSU, SPD, Grüne, FDP, Linke, AfD) in the most recent federal election, respectively. (4): As in (3), but also including turnout rates in the most recent federal election. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.9: Adding Region-Specific Fixed Effects

|                           | (1)           | (2)            |
|---------------------------|---------------|----------------|
|                           | State-Year FE | County-Year FE |
| Panel A: Feel German      |               |                |
| Post * $\Delta$ Ref_share | 0.00149       | -0.0689***     |
|                           | (0.0141)      | (0.0219)       |
| Panel B: Connect Home     |               |                |
| Post * $\Delta$ Ref_share | 0.0574***     | 0.0629**       |
| _                         | (0.0163)      | (0.0265)       |
| Basic Controls            | Yes           | Yes            |
| Individual FE             | Yes           | Yes            |
| Time FE                   | Yes           | Yes            |
| Year x State FE           | Yes           |                |
| Year x County FE          |               | Yes            |
| N                         | 5384          | 5384           |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. Apart from adding region-specific time fixed-effects, all regressions are specified as those in Table 2, column (2). Column (1): Regressions include state-year fixed effects. Column (2): Regressions include county-year fixed effects. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

Table A.10: Binary Logit Regressions

|                           | (1)        | (2)           | (3)         |
|---------------------------|------------|---------------|-------------|
|                           | Low Cutoff | Medium Cutoff | High Cutoff |
| Panel A: Feel German      |            |               |             |
| Post * $\Delta$ Ref_share | -0.0164    | 0.00612       | 0.00979     |
|                           | (0.0198)   | (0.00915)     | (0.0272)    |
| Panel B: Connect Home     |            |               |             |
| Post * $\Delta$ Ref_share | 0.0267     | $0.0283^*$    | $0.0221^*$  |
|                           | (0.0206)   | (0.0155)      | (0.0126)    |
| Basic Controls            |            |               |             |
| Individual FE             | Yes        | Yes           | Yes         |
| Time FE                   | Yes        | Yes           | Yes         |
| N (Panel A)               | 1280       | 2216          | 1932        |
| N (Panel B)               | 1892       | 2296          | 1424        |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. Column (1): The three most affirmative responses ("In Some Respects", "For the Most Part"/"Strong", "Completely"/"Very Strong") are coded equal to 1, and all other options coded equal to 0. Column (2): The two most affirmative responses ("For the Most Part"/"Strong", "Completely"/"Very Strong") are coded equal to 1, and all other options coded equal to 0. Column (3): The most affirmative response ("Completely"/"Very Strong") is coded equal to 1, and all other options coded equal to 0. All logit regressions include individual and time fixed-effects. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_ share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.11: Clustering at Household Level

|                           | (1)            | (2)           |
|---------------------------|----------------|---------------|
|                           | Original HH ID | HH ID in 2014 |
| Panel A: Feel German      |                |               |
| Post                      | 0.201***       | $0.201^{***}$ |
|                           | (0.0355)       | (0.0359)      |
| Post * $\Delta$ Ref_share | -0.00715       | -0.00715      |
| _                         | (0.0225)       | (0.0223)      |
| Panel B: Connect Home     |                | . ,           |
| Post                      | -0.0482        | -0.0482       |
|                           | (0.0394)       | (0.0395)      |
| Post * $\Delta$ Ref_share | 0.0631**       | 0.0631**      |
|                           | (0.0309)       | (0.0309)      |
| Basic Controls            | Yes            | Yes           |
| Individual FE             | Yes            | Yes           |
| Time FE                   | Yes            | Yes           |
| N                         | 5384           | 5384          |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. Apart from clustering, all regressions are specified as those in Table 2, column (2). Column (1): Standard errors clustered by original household ID. Column (2): Standard errors clustered by household ID in 2014. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_ share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.12: Alternative Treatment Specifications

|                                   | (1)                                 | (2)                  |
|-----------------------------------|-------------------------------------|----------------------|
|                                   | $\Delta_{13,15} \text{ Ref\_share}$ | Over Working Age Pop |
| Panel A: Feel German              |                                     |                      |
| Post                              | 0.201***                            | 0.202***             |
|                                   | (0.0394)                            | (0.0379)             |
| Post * $\Delta_{13,15}$ Ref_share | -0.00653                            |                      |
| , _                               | (0.0153)                            |                      |
| Post * $\Delta$ Ref share (WAP)   |                                     | -0.00508             |
| _                                 |                                     | (0.00914)            |
| Panel B: Connect Home             |                                     | , ,                  |
| Post                              | -0.0537                             | -0.0474              |
|                                   | (0.0364)                            | (0.0360)             |
| Post * $\Delta_{13,15}$ Ref_share | 0.0584***                           |                      |
|                                   | (0.0174)                            |                      |
| Post * $\Delta$ Ref share (WAP)   |                                     | 0.0391***            |
| _                                 |                                     | (0.0116)             |
| Basic Controls                    | Yes                                 | Yes                  |
| Individual FE                     | Yes                                 | Yes                  |
| Time FE                           | Yes                                 | Yes                  |
| N                                 | 5384                                | 5384                 |

Note:. In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. Apart from using different treatment variable, all regressions are specified as those in Table 2, column (2). Column (1): Treatment variable change in asylum seekers over population between 2013 and 2015 ( $\Delta_{13,15}$  Ref\_share). Column (2): Treatment variable change in asylum seekers over working age population (between 18 and 64) between 2014 and 2015 ( $\Delta$  Ref\_share (WAP)) Post indicates time after September 4 2015. Post \*  $\Delta_{13,15}$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2013 and 2015. Post \*  $\Delta$  Ref\_share (WAP) is the interaction of Post with the change in asylum seekers over working age population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.13: Effect by Age Group

|                           | (1)         | (2)           | (3)           | (4)      |
|---------------------------|-------------|---------------|---------------|----------|
|                           | <30         | 30-44         | 45-59         | 60+      |
| Panel A: Feel German      |             |               |               |          |
| Post                      | $0.235^{*}$ | $0.199^{***}$ | $0.274^{***}$ | 0.0467   |
|                           | (0.121)     | (0.0563)      | (0.0656)      | (0.106)  |
| Post * $\Delta$ Ref_share | -0.0209     | -0.0198       | -0.000449     | 0.142    |
|                           | (0.0763)    | (0.0319)      | (0.0231)      | (0.117)  |
| Panel B: Connect Home     |             |               |               |          |
| Post                      | -0.165      | -0.0575       | 0.0586        | 0.0132   |
|                           | (0.116)     | (0.0562)      | (0.0632)      | (0.0993) |
| Post * $\Delta$ Ref_share | 0.176**     | 0.0605        | 0.0725*       | -0.110   |
|                           | (0.0881)    | (0.0383)      | (0.0391)      | (0.103)  |
| Basic Controls            | Yes         | Yes           | Yes           | Yes      |
| Individual FE             | Yes         | Yes           | Yes           | Yes      |
| Time FE                   | Yes         | Yes           | Yes           | Yes      |
| N                         | 732         | 2480          | 1340          | 832      |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents were between the age of 18 and 29 in 2012. Column (2): Respondents were between the age of 30 and 44 in 2012. Column (3): Respondents were between the age of 45 and 59 in 2012. Column (4): Respondents were 60 or older in 2012. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.14: Effect by Religious Affilitation and Religiosity

|                           | (1)       | (2)      | (3)         | (4)      | (5)                   |
|---------------------------|-----------|----------|-------------|----------|-----------------------|
|                           | Christian | Muslim   | No Religion | Low      | $\operatorname{High}$ |
| Panel A: Feel German      |           |          |             |          |                       |
| Post                      | 0.228***  | 0.0472   | 0.301***    | 0.231*** | 0.180***              |
|                           | (0.0389)  | (0.0886) | (0.0893)    | (0.0472) | (0.0526)              |
| Post * $\Delta$ Ref_share | -0.00698  | 0.000862 | -0.0655     | 0.00700  | -0.0111               |
|                           | (0.0195)  | (0.0372) | (0.0754)    | (0.0255) | (0.0232)              |
| Panel B: Connect Home     |           |          |             |          |                       |
| Post                      | -0.0656   | 0.109    | -0.133*     | -0.0880* | -0.0313               |
|                           | (0.0475)  | (0.0989) | (0.0775)    | (0.0489) | (0.0477)              |
| Post * $\Delta$ Ref_share | 0.0542**  | 0.0308   | 0.110***    | 0.0307   | 0.113***              |
|                           | (0.0250)  | (0.0739) | (0.0357)    | (0.0249) | (0.0348)              |
| Basic Controls            | Yes       | Yes      | Yes         | Yes      | Yes                   |
| Individual FE             | Yes       | Yes      | Yes         | Yes      | Yes                   |
| Time FE                   | Yes       | Yes      | Yes         | Yes      | Yes                   |
| N                         | 2944      | 904      | 1284        | 2548     | 2824                  |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents are Christian (reported in 2015). Column (2): Respondents are Muslim (reported in 2015). Column (3): Respondents do not have a denomination (reported in 2015). Column (4): Low importance placed on religion (reported in 2016). Column (5): High importance placed on religion (reported in 2016). Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.15: Effect by Gender

|                           | (1)       | (2)           |
|---------------------------|-----------|---------------|
|                           | Male      | Female        |
| Panel A: Feel German      |           |               |
| Post                      | 0.136**   | $0.253^{***}$ |
|                           | (0.0577)  | (0.0433)      |
| Post * $\Delta$ Ref_share | 0.0286    | -0.0413**     |
|                           | (0.0364)  | (0.0189)      |
| Panel B: Connect Home     |           |               |
| Post                      | -0.0169   | -0.0666       |
|                           | (0.0471)  | (0.0464)      |
| Post * $\Delta$ Ref_share | 0.0593*** | 0.0676***     |
|                           | (0.0169)  | (0.0255)      |
| Basic Controls            | Yes       | Yes           |
| Individual FE             | Yes       | Yes           |
| Time FE                   | Yes       | Yes           |
| N                         | 2316      | 3068          |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents are male. Column (2): Respondents are female. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.16: Effect by Education

|                           | (1)      | (2)       | (3)      |
|---------------------------|----------|-----------|----------|
|                           | Low      | Medium    | High     |
| Panel A: Feel German      |          |           |          |
| Post                      | 0.209**  | 0.181***  | 0.303*** |
|                           | (0.0828) | (0.0430)  | (0.0618) |
| Post * $\Delta$ Ref_share | -0.0476  | -0.00432  | -0.00260 |
|                           | (0.0349) | (0.0223)  | (0.0290) |
| Panel B: Connect Home     |          |           |          |
| Post                      | -0.00270 | -0.167*** | 0.0276   |
|                           | (0.0763) | (0.0511)  | (0.0684) |
| Post * $\Delta$ Ref_share | 0.144*** | 0.0542    | 0.0232   |
|                           | (0.0314) | (0.0376)  | (0.0238) |
| Basic Controls            | Yes      | Yes       | Yes      |
| Individual FE             | Yes      | Yes       | Yes      |
| Time FE                   | Yes      | Yes       | Yes      |
| N                         | 1376     | 2504      | 1408     |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents have low educational attainment, i.e., they attained a degree from the intermediate secondary school (textitRealschule) or lower or did not graduate. Column (2): Respondents have medium educational attainment, i.e., an upper secondary school degree giving access to university studies (textitAbitur), a certificate of aptitude for specialized short-course higher education (textitFachhochschulreife), finished an apprenticeship (textitLehre or attained a degree from a specialized vocational school (textitBerufsfachschule). Column (3): Respondents have high educational attainment, i.e., a university degree or similar. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.05, \*\*\* p < 0.01

Table A.17: Effect by Refugee Status

|                           | (1)         | (2)           |
|---------------------------|-------------|---------------|
|                           | Non-Refugee | Refugee       |
| Panel A: Feel German      |             |               |
| Post                      | 0.182***    | $0.456^{***}$ |
|                           | (0.0349)    | (0.168)       |
| Post * $\Delta$ Ref_share | 0.0125      | -0.185***     |
|                           | (0.0151)    | (0.0566)      |
| Panel B: Connect Home     |             |               |
| Post                      | -0.0563     | 0.0312        |
|                           | (0.0353)    | (0.173)       |
| Post * $\Delta$ Ref_share | 0.0517***   | 0.198**       |
|                           | (0.0150)    | (0.0977)      |
| Basic Controls            | Yes         | Yes           |
| Individual FE             | Yes         | Yes           |
| Time FE                   | Yes         | Yes           |
| N                         | 4980        | 404           |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents did not come to Germany as refugees. Column (2): Respondents arrived in Germany as refugees. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1. \* p < 0.10, \*\*\* p < 0.05, \*\*\* p < 0.01

Table A.18: Channel: Experience of Discrimination by Origin

|                           | (1)         | (2)           | (3)         | (4)           |
|---------------------------|-------------|---------------|-------------|---------------|
|                           | E European: | E European:   | TMENA:      | TMENA:        |
|                           | No Discrim. | Exp. Discrim. | No Discrim. | Exp. Discrim. |
| Panel A: Feel German      |             |               |             |               |
| Post                      | 0.200***    | 0.403***      | -0.0939     | 0.159         |
|                           | (0.0652)    | (0.0954)      | (0.142)     | (0.135)       |
| Post * $\Delta$ Ref_share | -0.00837    | -0.0900***    | -0.0187     | -0.123***     |
|                           | (0.0263)    | (0.0309)      | (0.0618)    | (0.0408)      |
| Panel B: Connect Home     |             |               |             |               |
| Post                      | -0.00352    | -0.0798       | -0.0486     | 0.0597        |
|                           | (0.0604)    | (0.106)       | (0.223)     | (0.123)       |
| Post * $\Delta$ Ref_share | 0.0320      | 0.172***      | 0.116       | -0.0178       |
|                           | (0.0350)    | (0.0565)      | (0.110)     | (0.0321)      |
| Basic Controls            | Yes         | Yes           | Yes         | Yes           |
| Individual FE             | Yes         | Yes           | Yes         | Yes           |
| Time FE                   | Yes         | Yes           | Yes         | Yes           |
| N                         | 1200        | 768           | 348         | 576           |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents were Eastern Europeans and reported in 2013 that they never felt disadvantaged in the last two years due to their ethnic origins. Column (2): Respondents were Eastern Europeans and reported in 2013 that they seldom or often felt disadvantaged in the last two years due to their ethnic origins. Column (3): As in column (1), but respondents were TMENA migrants. Column (4): As in column (2), but respondents were TMENA migrants. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.19: Channel: Language of Media Consumed by Origin

|                           | (1)      | (2)           | (3)       | (4)           | (5)      | (6)           |
|---------------------------|----------|---------------|-----------|---------------|----------|---------------|
|                           | Western: | Western:      | E Europe: | E Europe:     | TMENA:   | TMENA:        |
|                           | Only     | At Least Some | Only      | At Least Some | Only     | At Least Some |
|                           | German   | Foreign       | German    | Foreign       | German   | Foreign       |
| Panel A: Feel German      |          |               |           |               |          |               |
| Post                      | 0.188*   | 0.125         | 0.160**   | 0.314***      | -0.0586  | 0.167         |
|                           | (0.0960) | (0.120)       | (0.0613)  | (0.0751)      | (0.166)  | (0.115)       |
| Post * $\Delta$ Ref_share | 0.0461   | 0.188         | -0.0179   | -0.0613**     | -0.0774  | -0.186***     |
|                           | (0.0424) | (0.142)       | (0.0239)  | (0.0310)      | (0.0608) | (0.0510)      |
| Panel B: Connect Home     | 9        |               |           |               |          |               |
| Post                      | -0.0740  | 0.0887        | -0.0273   | -0.0216       | 0.0741   | -0.0376       |
|                           | (0.135)  | (0.108)       | (0.0743)  | (0.0774)      | (0.355)  | (0.115)       |
| Post * $\Delta$ Ref_share | -0.0473  | -0.102        | 0.0216    | 0.130***      | -0.0779  | 0.121*        |
|                           | (0.0521) | (0.108)       | (0.0480)  | (0.0415)      | (0.0488) | (0.0646)      |
| Basic Controls            | Yes      | Yes           | Yes       | Yes           | Yes      | Yes           |
| Individual FE             | Yes      | Yes           | Yes       | Yes           | Yes      | Yes           |
| Time FE                   | Yes      | Yes           | Yes       | Yes           | Yes      | Yes           |
| N                         | 480      | 864           | 800       | 1196          | 144      | 780           |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents were of Western origin and reported in 2014 that they only consumed news media in German. Column (2): Respondents were of Western origin and reported in 2014 that they only consumed at least some foreign news media. Column (3): As in column (1), but for Eastern European migrants. Column (4): As in column (2), but for Eastern European migrants. Column (5): As in column (1), but for TMENA migrants. Column (6): As in column (2), but for TMENA migrants. Post indicates time after September 4 2015, Post \* $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.20: Channel: Language with Family and Friends

|                           | (1)       | (2)         | (3)        | (4)         |
|---------------------------|-----------|-------------|------------|-------------|
|                           | German    | HC Language | German     | HC Language |
|                           | w/ Family | w/ Family   | w/ Friends | w/ Friends  |
| Panel A: Feel German      |           |             |            |             |
| Post                      | 0.228***  | 0.154       | 0.223***   | 0.126       |
|                           | (0.0382)  | (0.0958)    | (0.0350)   | (0.140)     |
| Post * $\Delta$ Ref_share | -0.0188   | -0.0177     | -0.0155    | 0.0256      |
|                           | (0.0205)  | (0.0495)    | (0.0172)   | (0.132)     |
| Panel B: Connect Home     |           |             |            |             |
| Post                      | -0.0642   | 0.0644      | -0.0834**  | 0.173       |
|                           | (0.0401)  | (0.0781)    | (0.0378)   | (0.113)     |
| Post * $\Delta$ Ref_share | 0.0663*** | 0.0395      | 0.0667***  | -0.0191     |
|                           | (0.0177)  | (0.0438)    | (0.0155)   | (0.122)     |
| Basic Controls            | X         | X           | X          | X           |
| Individual FE             | X         | X           | X          | X           |
| Time FE                   | X         | X           | X          | X           |
| N                         | 4176      | 1084        | 4472       | 788         |

Note: In Panel A, the dependent variable is to what extend respondent feels German. In Panel B, the dependent variable is to what extend respondent feels connected to home country. All regressions are specified as those in Table 2, column (2). Subsample regressions. Column (1): Respondents reported in 2015 that they mainly spoke German with family members. Column (2): Respondents reported in 2015 that they mainly spoke with family members in the language of their country of origin. Column (3): Respondents reported in 2015 that they mainly spoke German with friends. Column (4): Respondents reported in 2015 that they mainly spoke with friends in the language of their country of origin. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table A.21: Effects on Labor Market Outcomes

|                           | (1)        | (2)          | (3)          | (4)                |
|---------------------------|------------|--------------|--------------|--------------------|
|                           | Log Income | Annual Hours | Unemployment | Education in Years |
| Post                      | 0.449***   | 0.0543*      | 0.0533***    | 0.162***           |
|                           | (0.157)    | (0.0287)     | (0.0111)     | (0.0507)           |
| Post * $\Delta$ Ref_share | 0.0198     | 0.00806      | 0.00398      | -0.00967           |
|                           | (0.125)    | (0.0173)     | (0.00432)    | (0.0177)           |
| Basic Controls            | Yes        | Yes          | Yes          | Yes                |
| Individual FE             | Yes        | Yes          | Yes          | Yes                |
| Time FE                   | Yes        | Yes          | Yes          | Yes                |
| N                         | 5384       | 5384         | 5384         | 5384               |

Note: Apart from dependent variable, all regressions are specified as those in Table 2, column (2). Column (1): Outcome is individual income (logged). Column (2): Outcome is annual hours worked. Column (3): Outcome is whether respondent is unemployed (linear probability model). Column (4): Outcome is years of education. Post indicates time after September 4 2015, Post \*  $\Delta$  Ref\_share is the interaction of Post with the change in asylum seekers over population between 2014 and 2015. Population size is fixed at 2012 levels. Standard errors (in parentheses) are clustered at the county (Kreis) level. All estimations conducted with Stata 15.1.

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01