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Immigration and Anti-Immigrant Sentiments – Evidence from the 2017 German Parliamentary Election

Kim Leonie Kellermann/Simon Winter
Abstract
We empirically examine the relationship between shares of foreigners in a district and the share of votes cast in that district for the Alternative für Deutschland (AfD), the major anti-immigrant party in the 2017 German parliamentary election. The classic theory on the political economy of migration supposes that immigration fosters opposing sentiments among the natives due to fiercer competition for jobs, housing and public goods. Notably, the vote distribution in the 2017 election suggests that AfD vote shares are higher in districts with fewer foreign inhabitants. We exploit administrative data on election results and district-specific features to study a potentially causal effect. As the share of foreigners in a district may be endogenous, we apply an IV approach, using the number of working permits as an instrument for the share of foreign residents. Our results corroborate the Contact Theory, which states that more intensive exposure to and contact with immigrants reduce the propensity for anti-immigrant voting. We find that a 10 % increase in the population share of foreigners is associated with a 2.6 % lower vote share for the AfD. By contrast, a strong increase in the number of asylum seekers positively adds to AfD support.

JEL-Codes: D72, D91, J15
Keywords: migration, anti-immigrant parties, contact theory, ethnic competition, economic competition
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1 Introduction

The 2017 parliamentary election in Germany marked a turning point in the political history of the country. Beforehand, due to the large and sudden inflow of asylum seekers between 2014 and 2016, the issue of immigration dominated the highly controversial and heated political debate. In the course of serious concerns about the federal government’s ability to manage the so-called refugee crisis, the Alternative für Deutschland (AfD) achieved remarkable political successes. It was the first immigration-opposing party to enter the federal parliament in the post-war period. While the AfD obtained an overall vote share of 12.6% (about 5.9 million votes), support for the party substantially varied over constituencies, where it received less than 5% of votes in the western part of Germany and up to 35% in the far eastern part. Right after the election, the notable geographical distribution of AfD votes aroused widespread interest, as electoral support was relatively higher in districts with a lower population share of foreigners.

We present a first analysis of a potentially causal impact of immigration on electoral support for the major anti-immigrant party in the 2017 German parliamentary election. Our data set, obtained from the German Federal Statistical Office, the Federal Institute for Research on Building, Urban Affairs and Spatial Development and the Federal Labor Office, comprises official election results as well as social, economic and geographical characteristics of the 401 German administrative districts. In order to isolate the causal effect, we rely on an IV strategy, using the number of working permits granted in a district as an instrument for the district share of foreign residents.

The related literature generally agrees on the fact that immigration can shape voting results, yet the direction of the effect is theoretically ambiguous. The classic theory on the political economy of migration suggests a positive relationship between the presence of immigrants and the advocacy for anti-immigrant parties. According to this theory, a labor supply shock induced by immigration may reduce wages and employment prospects of the low-skilled native population. Therefore, a higher vote share for anti-immigrant parties should be observed in areas with a constrained labor market (Borjas 2017; Borjas et al. 1997; Johnson 1980). Further, fiercer competition for public goods and housing may additionally foster resistance against immigration (Söllner 2017). By contrast, however, is the Contact Theory, which supposes the opposite to be true. Contact Theory assumes that the larger the foreign community, the more regularly personal interactions and cultural exchanges occur between immigrants and natives. Prejudices are hereby
reduced so that the native population is less prone to electorally oppose immigration (Allport 1954; Golder 2003; Pettigrew & Tropp 2008; Rustenbach 2010).

The empirical evidence gained by testing these theories is fairly mixed. A small number of studies provide evidence for the Contact Theory (Bridges & Mateut 2014; Steinmayr 2016; van der Waal, de Koster & Achterberg 2013), yet the majority of studies shows a positive correlation between immigration and anti-immigrant voting among the natives. In particular, the fast-growing body of empirical research studying the effects of the refugee crisis in Europe finds immigration to be one cause for the recent rise of nationalist and right-wing parties there (Altindag & Kaushal 2017; Dustmann, Vasiljeva & Damm 2016; Gerdes & Wadensjö 2008; Hangartner et al. 2017; Harmon 2017; Mendez & Cutillas 2014; Sekeris & Vasilakis 2016).

The main issue with empirical investigations in this field is the non-random distribution of immigrants throughout the country. Larger migrant communities are expected to be found in urban areas with affordable housing, better economic conditions or a large pre-existing community of compatriots. Most of the recent related studies take this endogeneity into account, following various strategies to instrument the share of foreigners in a region (Altindag & Kaushal 2017; Bratti et al. 2017; Dustmann, Vasiljeva & Damm 2016; Hangartner et al. 2017; Harmon 2017; Mayda, Peri & Steingress 2016; Mendez & Cutillas 2014; Sekeris & Vasilakis 2016; Steinmayr 2016). These approaches, however, are not applicable to our setting.

Therefore, we apply a new approach and use the number of working permits granted as an instrument for the district-specific share of foreigners right before the election. Non-EU immigrants are required to obtain a residence and working permit, so that the number of such permits should be higher in districts with larger immigrant inflows. In order to disentangle potentially different effects of distinct immigrant groups, we additionally include the percentage increase in the number of asylum seekers between 2014 and 2016 as an explanatory variable. We hereby tackle unequal perception or treatment of immigrants depending on their cultural backgrounds and motives to leave their home country (Mendez & Cutillas 2014).

Our results support the Contact Theory argument, whereby a 10 % increase in the population share of foreigners was associated with a decline in the AfD vote share of about 2.6 %. Yet, a large increase in the number of asylum seekers was associated with greater support for the anti-immigrant party. While these results may seem contradictory, they can still be interpreted in a coherent way. Regular personal contact with immigrants reduces the natives’ propensity to generally oppose immigration. By
contrast, because an increase in asylum applications was linked with greater AfD sup-
port, this positive relationship might be a sign of the public’s general discontent with
the incumbent political parties’ management of pressing political issues. Well-settled
immigrants may not be perceived as direct competition for public goods and expenses,
but the opposite may be true for asylum seekers, who at least temporarily rely on public
support when still waiting for official permission to work in the receiving country.

The remainder of this paper is organized as follows. Section 2 highlights the determi-
nants of anti-immigrant voting as pointed out in the related literature and outlines the
hypotheses to be tested. Section 3 operationalizes anti-immigrant sentiments by means
of the AfD vote share and elaborates on our empirical strategy and data. Estimation
results are presented in Section 4. Section 5 finally concludes.

2 Determinants of anti-immigrant voting

Support for anti-immigrant parties has been on a steep rise throughout Western Europe
over the past three decades. By the term *anti-immigrant parties*, we refer to political
movements whose program includes or is solely based on a firm disapproval of foreigners
permanently residing in their countries. This critical attitude towards foreign immigra-
tion is mostly found among parties classified as *nationalist* or *radical right-wing* (Polk
et al. 2017; Volkens et al. 2017). Right after the Second World War, immigrants were
overtly welcome in Germany and other Western European countries to satisfy the in-
creasing labor demand. The situation started to change in the aftermath of the 1973
energy crisis, which caused growing unemployment. Further, after the fall of the Iron
Curtain, which coincided with the rise of fundamentalistically motivated terror attacks
on Western soil, and in reaction to increased migration flows to Germany in the 1990s,
opposition against immigration has strongly grown. Ever since, political parties that
firmly reject immigration – specifically from non-EU countries – have emerged and have
registered increasing support within the electorate (Mudde 2004, 2013).

The scientific literature has extensively examined the factors that motivate voters
to provide support for anti-immigrant parties. The causes are manifold and comprise
individual as well as contextual factors. By and large, the literature distinguishes be-
tween economic, socio-cultural and psychological motives for holding an anti-immigrant
attitude. With regard to the economic dimension, the *Economic Competition Theory*
suggests a positive relationship between economic grievances and the opposition to im-
migration. According to this theory, the native population competes with immigrants
for scarce resources, such as state transfers, housing and job opportunities. Further, a majority of migrants is usually considered to be a potential substitute for low-skilled native workers, meaning that these workers may be at higher risk for unemployment with increasing immigration (Borjas 2017; Borjas et al. 1997; Söllner 1999). Therefore, the low-skilled native workforce and the unemployed are expected to favor a more restrictive immigration policy (Bridges & Mateut 2014; Golder 2003; Mayda 2006; O’Rourke & Sinnott 2006; Rustenbach 2010). High-skilled workers and capital owners, by contrast, gain from a rise in immigrant labor supply, such that these groups of voters have a more open attitude toward immigrants (Johnson 1980; Söllner 1999, 2017). From these considerations, we deduct our first hypothesis:

**Hypothesis 1. Economic Competition Theory.** A higher level of unemployment in a region leads to a higher level of support for anti-immigrant parties due to fiercer labor market competition.

Irrespective of economically motivated concerns, a sudden influx of foreigners may also cause reservations for social and cultural reasons. Anti-immigrant movements often refer to immigrants as a “threat” to the national identity and customs of the receiving country. Similar to the struggle for economic and material resources, the corresponding theory regarding social and cultural concerns is known as Ethnic Competition Theory (Golder 2003; Hatton 2016; Lucassen & Lubbers 2012; Rustenbach 2010; Werts, Scheepers & Lubbers 2012). When immigrants intend to permanently settle in their host country, with them comes many cultural habits and customs that are unknown to the native population. Some examples are differences in language, religion, physical appearance, moral values and rights, behavior in public and daily routines. Anti-immigrant parties often emphasize that the immigrants’ cultural values and the host country’s national identity are mutually exclusive (Golder 2003; Mudde 2004; Oesch 2008). According to them, the traditions and values of the home country may fade if more immigrants arrive who bring their own culture and do not adopt the lifestyle habits of the native population. The Ethnic Competition Theory is reflected in Hypothesis 2a.

**Hypothesis 2a. Ethnic Competition Theory.** A higher level of immigration into a region leads to a higher level of support for anti-immigrant parties.

Another strand of literature referring to cultural motives reverses the reasoning of the Ethnic Competition Theory. First brought forward by Allport (1954), the Contact

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1 However, the effect on wages and employment levels of low-skilled workers crucially depends on the elasticity of substitution of native and foreign labor (Grossman 1982; Palivos, Xue & Yip 2011).
Theory supposes the relationship between increasing immigration and anti-immigrant attitudes to be negative. The argumentation is based on the assumption that regular, direct contact between immigrants and natives forges personal relationships and helps both groups to acquire better knowledge about one another. By getting a deep insight into the immigrants’ lifestyle and culture, the native population realizes that their own identity is not endangered by the presence of another ethnic group and they may even take pleasure in the exchange (Golder 2003; Pettigrew & Tropp 2008; Rustenbach 2010; van der Waal, de Koster & Achterberg 2013). The closer the personal contact is, the less inclined the natives are to support political movements harming the interests of immigrants. We accordingly formulate the following hypothesis:

**Hypothesis 2b.** Contact Theory. A higher level of immigration in a region leads to a lower level of support for anti-immigrant parties.

The literature finally examines a third group of driving forces, which comprise psychological motives and issue perception. First, voting for anti-immigration parties may, unsurprisingly, be a likely electoral choice for individuals with truly xenophobic attitudes (de Vries, Hakhverdian & Lancee 2013; Rydgren 2008; van der Brug, Fennema & Tillie 2000). There is consistent empirical evidence indicating that individual preferences for an anti-immigrant party can be accounted for by generally negative attitudes towards people of foreign origin. These attitudes are further shaped by the salience of migration. The propensity for anti-immigrant voting increases with the number of newly arriving migrants (Boomgarden & Vliegenthart 2009; Lubbers, Gijsberts & Scheepers 2002; Pardos-Prado, Lancee & Sagarzazu 2014), especially when there is extensive media coverage of immigration-related issues (Beyer & Weldon 2018; Schärdel 2016). A negative tone in immigration-related reporting adds to the corresponding negative attitude (Boomgarden & Vliegenthart 2009). Moreover, high real salience and high media salience of immigration interact to stimulate immigration-opposing voting behavior (Boomgarden & Vliegenthart 2009). The media plays a vital role in introducing radical movements and their leaders to the public, both with respect to quality and quantity (Bos, van der Brug & de Vreese 2011; Lubbers, Gijsberts & Scheepers 2002; van der Brug, Fennema & Tillie 2000). We neglect this third line of argumentation regarding perception in our analysis, as perception is best scrutinized at the individual level; here, we intend to examine anti-immigrant voting at an aggregate level.

The latest empirical studies related to our question mostly find a positive correlation between immigration and support for anti-immigrant movements (Barone et al. 2016; Bridges & Mateut 2014; Dustmann, Vasiljeva & Damm 2016; Gerdes & Wadensjö 2008;
Hangartner et al. 2017; Harmon 2017; Mayda, Peri & Steingress 2016; Mendez & Cutillas 2014; Meuleman, Davidov & Billiet 2009; Sekeris & Vasilakis 2016). Explicitly testing the Economic Competition Theory, the respective evidence corroborates the supposition that individuals with unsatisfactory labor market positions tend to hold hostile attitudes towards migrants and to sympathize with nationalist movements (Lubbers, Gijsberts & Scheepers 2002; Lubbers & Scheepers 2000; Lucassen & Lubbers 2012; Werts, Scheepers & Lubbers 2012). Immigration policies also appear to be more restrictive when immigration increases inequality (Timmer & Williams 1998).  

Current empirical evidence in favor of the Contact Theory, however, is rather scarce (Bridges & Mateut 2014; van der Waal, de Koster & Achterberg 2013). Of the studies that might support the theory, Steinmayr (2016) finds that support for the populist right-wing FPÖ in Upper Austria is greater in communities that accepted only few refugees during the latest crisis. Barone et al. (2016) find no effect of immigration on support for right-leaning movements in bigger Italian cities, which could be because natives and foreigners have more frequent contact there. Similarly, Gehrsitz & Ungerer (2017) find no evidence of an asylum influx being positively related to vote gains for the AfD in the 2017 German state elections. Yet, they attribute this finding to data shortcomings.

The main challenge when designing an empirical strategy to test these hypotheses is to isolate the causal impact of higher immigration on voting behavior. We apply an IV strategy, as most previous studies do, but we introduce the number of working permits as a new instrument. We elaborate on our identification as well as on potential confounders in the following section.

3 Methodology and data

3.1 Operationalization of anti-immigrant sentiments

Anti-immigrant sentiments can be measured in different ways, e. g. by surveys on the prevalence of racist or xenophobic prejudices, by studying how and to what extent immigration is covered by the media and by politics (in particular with respect to the tone and used language) as well as by election results of parties with pro-immigrants or anti-immigrant manifestos. While the two former are directly and more exclusively linked to immigration-opposing attitudes, the use of election results comes with other practically relevant advantages. They are usually complete without any data gaps and

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2 Blau & Kahn (2015) provide an overview on the extant literature on the effects of immigration on the overall distribution of incomes.
can be analyzed at various geographical levels. A potential disadvantage is the fact that they only serve as a proxy of anti-immigrant attitudes: voters may have a number of motives to support a party, of which an anti-immigrant attitude may be only one. If a party, however, presents itself as explicitly opposing immigration, we can assume that its success can mainly be traced back to the expression of anti-immigrant sentiments among its voters. We focus on the evolution of anti-immigrant positions within the Alternative für Deutschland (AfD; English: Alternative for Germany) which was founded in 2013 and currently is the major anti-immigrant party in Germany.

As its name suggests, the party considers itself to be an alternative to mainstream parties and well-established political leaders. Initially, the AfD was a special-issue party, being highly critical of the EU policies providing financial support to indebted member states. The AfD proclaimed a liberal economic policy, called for a German withdrawal from the Eurozone and was characterized as “pro-European but anti-Euro” (Grimm 2015, p. 265). The party first ran in general elections in 2013 but failed to pass the required threshold of 5% of votes. The early AfD, its positions, candidates and supporters have been analyzed at length in different qualitative and quantitative studies. Research finds that the early AfD could hardly be seen as a radical right-wing, extremist or populist party (Arzheimer 2015; Jankowski, Schneider & Tepe 2015) but as a party with populist tendencies that gradually began to emerge during the Federal Election campaign in 2013 already (Franzmann 2014; Schmitt-Beck 2014). This finding, along with the geographic division of the party between its ordoliberal and Eurosceptic founders in western Germany and their conservative and nationalist supporters in eastern Germany, led the AfD to gain support in regions where extreme right-wing parties (such as NPD, Die Rechte etc.) had traditionally been stronger (Jankowski, Schneider & Tepe 2015). Therefore, from the very beginning, the AfD served as a “functional equivalent for a right-wing populist party in a country where right-wing politics are strongly stigmatized” (Berbuir, Lewandowsky & Siri 2015, p. 154).

In the aftermath of the 2013 federal election, support for the AfD kept growing while the party itself developed its political program towards a right-wing, nationalist agenda, demanding strict rules for immigration. In 2013, the AfD was recognized as an ordoliberal, Euro-critical coalition made up especially of economists; however, criticism of the Euro – although common sense among large groups of economists – has traditionally been a topic of the far right in Germany, and many of the leaders after the right-wing populist backlash within the AfD were party members from the very beginning. This personnel continuity suggests that the AfD already had the potential to be
an anti-immigrant party back in 2013. Its perception in public, however, only started
to change during the so-called refugee crisis in 2015. While campaigning for the general
election in 2017, the AfD harshly criticized the government’s management of the latest
refugee inflow and called for more restrictive asylum laws as well as an immediate stop
to accepting immigrants from non-EU countries (Hambauer & Mays 2018). The AfD
nowadays makes use of typical populist rhetoric, referring to immigrants as a risk to
the national identity and security in Germany and as a burden for the German welfare
state. While the party had previously been compared to the British Conservatives in
2013-2015 (Arzheimer 2015; Berbuir, Lewandowsky & Siri 2015), lately it has become
more similar to parties like UKIP in Great Britain, Rassemblement National in France
or the Austrian FPÖ – not least because of its nationalist and xenophobic focus.

Although nationalism and right-wing radicalism are delicate issues in German politics
and society, the AfD quickly achieved considerable electoral results. The party entered
all 16 German state parliaments within five years and became the largest oppositional
party in the federal parliament after the 2017 elections.³ The AfD is now generally
perceived as a right-wing populist party (Decker 2016; Franzmann 2016; Lees 2018;
Lewandowsky, Giebler & Wagner 2016) with the potential to become a lasting force in
German politics (Art 2018; Dudášová 2017; Schwarzbőzl & Fatke 2016). More recently,
the AfD has also been discussed in the context of right-wing extremism and the so-called
New Right (Salzborn 2016) as well as radical right-wing parties (Art 2018; Berning 2017;
Dilling 2018). AfD vote shares in the 2017 parliamentary elections therefore seem to be
a suitable indicator for anti-immigrant sentiments among the electorate.

3.2 Identification strategy

In order to test the hypotheses formulated in Section 2, we use the following baseline
regression model:

\[
VoteShareAfD_{ij} = \beta_0 + \beta_1 VoteShareAfD_{2013,ij} + \beta_2 ForeignShare_{ij} \\
+ \beta_3 \Delta Asylum_{ij} + \beta_4 Unemp_{ij} + \beta_5 X_{ij} + \lambda_j + u_{ij},
\]  

(1)

where \(VoteShareAfD_{ij}\) denotes the percentage of votes obtained by the AfD in dis-
trict \(i\) located in federal state \(j\) in the 2017 parliamentary election. The variable
\(VoteShareAfD_{2013,ij}\) denotes the vote share obtained in the same district in the pre-

³ The AfD furthermore has one representative in the European Parliament following the respective
2014 election.
vious parliamentary election held in 2013. We hereby control for inertia in party preferences. Our main explanatory variable $\text{ForeignShare}_{ij}$ denotes the population share of foreigners in district $i$ in state $j$. In line with Hypothesis 2a, we should find that $\beta_2 > 0$. Likewise, in line with Hypothesis 2b, we should find $\beta_2 < 0$. We control for the percentage increase in the number of asylum seekers in the two years preceding the election ($\Delta \text{Asylum}_{ij}$), which allows us to isolate the impact of long-established foreigners from the impact of newly arriving immigrants. In doing so, we are able to distinguish different effects on electoral outcomes induced by multiple groups of migrants who left their home countries for various reasons. First, the level share of foreigners captures a familiarization effect with respect to a permanent exposure to people from foreign origin. Second, the inflow of asylum seekers allows to additionally examine the impact of a sudden shock in population composition.

Strikingly, the related literature rarely mentions that different groups of migrants might be seen differently by a native population. Mendez & Cutillas (2014) find evidence that cultural proximity of migrants to the native population matters for their impact on political outcomes in the host country. For example, in Spain, while Latin American immigrants tend to inspire feelings of solidarity among the Spanish, immigration from Africa is associated with higher vote shares for right-wing parties. Further, people who migrate for work or personal reasons may not evoke strong feelings in natives, but asylum seekers who rely on tax-based public expenditures may cause natives to feel injustice.

As a third variable of major interest, $\text{Unemp}_{ij}$ denotes the unemployment rate in the pre-election year 2016. In order not to reject Hypothesis 1, we should find that $\beta_4 > 0$. $X_{ij}$ denotes a vector of district-specific control variables. Among these are the proportions of females, married people, academics, Christians and 18- to 24-year-olds. We furthermore include the mean disposable income, population density and voter turnout in the 2017 elections. Finally, $\lambda_j$ is a vector of federal-state dummies.

The estimation in Equation (1) may yield biased estimates due to endogeneity, for which the related literature identifies three major sources. First, immigrants may preferentially settle in areas with high economic prospects, primarily because these areas offer a higher likelihood of finding a job. To at least partly address this concern, we control for such district-specific features in our specification. Second, immigrants tend to choose to live in a residential area in which their corresponding diaspora is large. These contacts

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4 The number of asylum seekers is assumed to be sufficiently exogenous, conditional on the included district-specific demographics. Asylum applicants arriving in Germany are distributed according to allocation coefficients based on population size and economic performance of the administrative units. For a similar argumentation, see Gehrsitz & Ungerer (2017).
facilitate the settlement process in the host country by allowing for information exchange or the use of professional and personal networks. Third, distinct anti-immigrant attitudes – either among political leaders or the native population – may cause immigrants to avoid certain areas and move to more open and welcoming parts of a country (Bracco et al. 2017; Harmon 2017; Mayda, Peri & Steingress 2016; Mendez & Cutillas 2014; Otto & Steinhardt 2014). If this is the case, our model suffers from reverse causality.

Only a small number of related empirical studies is able to avoid endogeneity in their explanatory variable by exploiting the random assignment of asylum seekers to a region of living (Gehrsitz & Ungerer 2017; Gerdes & Wadensjö 2008). These studies assume the number of refugees in a region to be exogenous in order to capture the unbiased immigration impact on voting outcomes. Refugees waiting for their asylum application to be processed are not free to choose their residence but are placed in a housing facility by the administrative unit in charge. Since we, however, intend to explicitly separate the impact of the refugee inflow from the general impact of immigration salience, we cannot replace the share of foreigners with the exogenous share of asylum seekers.

The alternative is to apply an IV strategy and instrument the explanatory variable. Previous studies using an IV approach can be grouped according to three approaches. One reasonable instrument is the historic distribution of immigrants, due to the tendency of new immigrants to follow the earlier settlement decisions of their compatriots. Card (2001) first introduced this approach, being concerned with native labor market outcomes following sudden immigrant influxes. The idea has been transferred to the examination of election outcomes, normally in a more simplified fashion by interacting a historic share of immigrants from one country in a region with the current total inflow of immigrants from the same country (Altindag & Kaushal 2017; Barone et al. 2016; Mendez & Cutillas 2014; Otto & Steinhardt 2014).

Another popular instrument is housing options, captured either by the availability of group housing or rental homes, or by housing prices. When hosting refugees, the administrative units in charge are more likely to place them in areas with large, vacant facilities which meet group housing standards (Steinmayr 2016). Harmon (2017) emphasizes the importance of affordable rental housing for newly arriving immigrants in Denmark who are legally prohibited to buy real estate. Higher shares of immigrants can thus be expected in regions with lower housing prices and more apartment buildings.

The third group of studies uses various distance measures to capture the likelihood of places to serve as a permanent location of settlement for migrants from different origins. Considering Greece during the European refugee crisis, Sekeris & Vasilakis (2016) as
well as Hangartner et al. (2017) instrument the number of refugees in a Greek island municipality by the inverse distance to the Turkish border. Mayda, Peri & Steingress (2016) employ a similar instrument for analyzing migration flows in the United States. They use the inverse distance of earlier settlers’ final location to their home countries as a proxy for the current number of immigrants arriving from the same country. The inverse distance to the Mexican border may serve as an additional instrument for the share of illegal immigrants in a region.

Historic settlement patterns appear to be the most appropriate instrument for the foreign population share. However, due to data limitations, we are unable to employ the kind of instrument proposed by Card (2001) and those who adopted his approach. Administrative districts in Germany have been restructured several times since the German reunification. Computing Card’s instrument requires historic figures of immigrants to Germany, which are not available for the current district structure.5

We therefore propose a new IV strategy and instrument the potentially endogenous share of foreigners by the number of working permits granted in a district. The instrument is obviously relevant because applying for a working permit is necessary only for foreign residents. Provided that all immigrants are equally likely to intend to work, a higher number of foreigners results in a higher number of working permits. The instrument comes with two other interesting features: it specifically captures foreigners intending to permanently settle in Germany. This appears to be a necessary condition for the effects proposed by the Contact Theory to manifest. A second advantage is that applications for working permits are only made by immigrants of non-EU origin, as EU citizens are free to work in Germany without an officially granted permit. Therefore, with this instrument, we are able to focus on migrants of a different cultural and/or ethnic background, and these groups may particularly be perceived as being foreigners, in line with the above-presented theory.

The exogeneity condition for our instrument is also satisfied, since there is no way in which the number of working permits can directly impact on the AfD vote share. A causal impact in the opposite direction is conceivable, e.g. AfD politicians in relevant offices may influence the criteria or the process when deciding to grant or reject work permit applications. We therefore use the number of work permits granted in 2013. This

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5 Another suitable alternative could be immigrant settlement patterns from the period of guest worker recruitment in the 1960s and 1970s. Workers did not choose their region of living and working themselves but were assigned to a company in need of labor supply. However, as Germany was divided at this time, data for the former German Democratic Republic are either unavailable or their quality is highly questionable.
is the most recent figure available which must be unaffected by AfD members, because the AfD did not hold any political offices at that time. Furthermore, decisions to grant or reject a work permit are made based on personal characteristics of the applicant (e.g. education, permit of residence, length of stay, personal aptitude), while level of analysis is the administrative districts. Thus, by controlling for economic and social conditions, the individual probability to be granted a working permit can be assumed to be uncorrelated with unobserved district-specific features. Finally, the share of foreigners is a relative measure, so we likewise express the instrument as the district number of working permits per 1,000 inhabitants.

We apply a 2SLS approach of which the first stage reads

$$\text{ForeignShare}_{ij} = \delta_0 + \delta_1 \text{VoteShareAfD}_{2013,ij} + \delta_2 \text{PermitShare}_{ij} + \delta_3 \Delta \text{Asylum}_{ij} + \delta_4 \text{Unemp}_{ij} + \delta_5 X_{ij} + \mu_j + e_{ij}. \quad (2)$$

Fitted values are then used in the second-stage estimation

$$\text{VoteShareAfD}_{ij} = \beta_0 + \beta_1 \text{VoteShareAfD}_{2013,ij} + \beta_2 \hat{\text{ForeignShare}}_{ij} + \beta_3 \Delta \text{Asylum}_{ij} + \beta_4 \text{Unemp}_{ij} + \beta_5 X_{ij} + \lambda_j + u_{ij}, \quad (3)$$

### 3.3 Data and descriptive statistics

Our database includes data from the German Federal Statistical Office (*Statistisches Bundesamt*), the Federal Institute for Research on Building, Urban Affairs and Spatial Development (*Bundesinstitut für Bau-, Stadt- und Raumforschung*) as well as the Federal Labor Office (*Bundesagentur für Arbeit*) and combines electoral results and socio-demographic features of the administrative districts.\(^6\) Our vote share measure refers to the second votes (*Zweitstimmen*) only, which determine the distribution of seats in the German parliament.\(^7\) With regard to the control variables, we include the latest available data prior to the 2017 election.\(^8\)

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\(^6\) Constituencies slightly differ from administrative districts, so election results have correspondingly been converted.

\(^7\) We ignore the *first vote*, which represents the majoritarian part of the mixed German electoral system. While voters support a party list with their second vote, the first vote is given to the preferred local candidate to represent the constituency. Because not every party nominates a local candidate in every constituency, data from the first vote may be limited. Moreover, other candidate-specific features may play a role in the first vote, e.g. local renownness or personal relations.

\(^8\) The population share of foreigners is a statistical projection based on the 2011 census. The available data refer to all groups of non-German residents, including asylum seekers. We yet consider the
Table 1 displays summary statistics for the used variables. Electoral participation in German federal elections is traditionally high as shown by voter turnout rates of up to 84%. The mean AfD vote share exhibits a strong upward trend for the last two elections. While in 2013 the party received less than the legally required 5% of total second votes to enter the parliament, in 2017 the AfD failed to clear this hurdle in only one of the 401 districts. The population share of foreigners varies widely across districts (between 1.9 and 39.8%). The extent of the refugee inflow between 2014 and 2016 becomes obvious in looking at the average percentage increase in the number of asylum seekers, which was about 145%.

Table 1: Summary Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
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<tbody>
<tr>
<td>Voter Turnout 2017 (%)</td>
<td>401</td>
<td>75.84</td>
<td>3.71</td>
<td>64.08</td>
<td>84.39</td>
</tr>
<tr>
<td>AfD Vote Share 2017 (%)</td>
<td>401</td>
<td>13.39</td>
<td>5.33</td>
<td>4.94</td>
<td>35.47</td>
</tr>
<tr>
<td>AfD Vote Share 2013 (%)</td>
<td>401</td>
<td>4.71</td>
<td>1.09</td>
<td>2.23</td>
<td>8.68</td>
</tr>
<tr>
<td>Share of Foreigners 2016 (%)</td>
<td>401</td>
<td>10.30</td>
<td>5.60</td>
<td>1.86</td>
<td>39.74</td>
</tr>
<tr>
<td>Working Permits 2013 (#/1,000 inhab.)</td>
<td>401</td>
<td>0.53</td>
<td>0.66</td>
<td>0.00</td>
<td>5.96</td>
</tr>
<tr>
<td>Δ Asylum Seekers 2014-2016 (%)</td>
<td>401</td>
<td>145.13</td>
<td>78.74</td>
<td>−29.80</td>
<td>908.10</td>
</tr>
<tr>
<td>Unemployment Rate 2017 (%)</td>
<td>401</td>
<td>5.77</td>
<td>2.60</td>
<td>1.40</td>
<td>14.70</td>
</tr>
<tr>
<td>Population Density 2016 (inhab./km²)</td>
<td>401</td>
<td>531.32</td>
<td>699.07</td>
<td>36.00</td>
<td>4.71</td>
</tr>
<tr>
<td>Share of Females 2016 (%)</td>
<td>401</td>
<td>50.61</td>
<td>0.65</td>
<td>48.35</td>
<td>52.70</td>
</tr>
<tr>
<td>Share of Academics 2011 (%)</td>
<td>401</td>
<td>5.77</td>
<td>2.76</td>
<td>2.07</td>
<td>17.38</td>
</tr>
<tr>
<td>Share of Christians 2011 (%)</td>
<td>401</td>
<td>62.28</td>
<td>21.65</td>
<td>5.93</td>
<td>91.90</td>
</tr>
<tr>
<td>Share of Married 2011 (%)</td>
<td>401</td>
<td>46.60</td>
<td>3.38</td>
<td>34.73</td>
<td>52.00</td>
</tr>
<tr>
<td>Share of Youth 2016 (%)</td>
<td>401</td>
<td>7.55</td>
<td>1.71</td>
<td>3.63</td>
<td>13.74</td>
</tr>
</tbody>
</table>

Notes: Share of Youth refers to the population share of 18- to 24-year-olds. There is only one common foreigners’ office in charge of the six districts in the state of Saarland, for Kassel city and the surrounding district Kassel as well as for the city of Cottbus and the Spree-Neiße district, respectively. Therefore, Share of Foreigners in 2016 takes the same value for all observations that are serviced by the same administrative unit.

 multicollinearity with respect to the percentage increase in the number of asylum seekers negligible for three reasons. First, we do not include the population share of asylum seekers, which may be a linear combination of the population share of foreigners. Second, the number of foreigners is a projection and is subject to inaccuracies. Not all foreigners are required to subscribe to the National Register of Foreign Residents. The number of asylum seekers is therefore exact, whereas the more general number of foreign residents is not. The number of non-asylum seekers cannot be precisely calculated by subtracting the number of asylum seekers from the total number of foreigners. Third, the overall number of foreigners as a projection is based on population counts from 2011. It is highly questionable that this projection perfectly reflects the unexpected influx of asylum seekers between 2014 and 2016. To be sure, we repeated our analysis with a net share of foreigners, for which to construct we simply subtract the number of asylum seekers in a district from the total number of foreigners. Our empirical results remain qualitatively unchanged. We therefore decided to stick with the original data on the overall number of foreigners.
The right-hand panel of Figure 1 depicts the district distribution of AfD vote shares. There is a clear pattern, indicating that the AfD generally obtained higher vote shares in the eastern part of Germany than in the western part. The left-hand panel of Figure 1 depicts the regional shares of foreigners. At first glance, the negative correlation is evident, suggesting that the AfD vote share is higher in districts with a lower share of foreigners.

![Figure 1: Share of Foreigners and AfD Vote Share in the 2017 German Federal Election](image)

The cross-correlation matrix in Table 2 supports this observation, reporting a correlation of -0.415 between these variables. Furthermore, the AfD vote share was lower in districts with a larger share of women, youths, persons with academic education and Christians. The AfD had a larger 2017 vote share in areas with relatively high unemployment and those with an already high level of support for the AfD in 2013. Finally, the correlation between the share of foreigners and the number of working permits is 0.585. Figure 2 visualizes the relationship between AfD vote shares and shares of foreigners and numbers of working permits, respectively. The relationship is apparently similar, so we are confident with using working permits as a proxy. The regression estimates further investigating the relationship are reported and discussed in the following section.

4 Estimation Results

Table 3 displays the estimation results for our baseline specification. All variables underwent log-transformation to meet the requirement of an approximately normal dis-
Figure 2: Comparison Share of Foreigners and Relative Number of Working Permits
Table 2: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>AfD Vote Share 2017</th>
<th>Share of Foreigners 2016</th>
<th>Working Permits per 1,000 Inhabitants 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfD Vote Share 2017</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Foreigners 2016</td>
<td>−0.415</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Working Permits per 1,000</td>
<td>−0.232</td>
<td>0.585</td>
<td>1.000</td>
</tr>
<tr>
<td>Inhabitants 2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AfD Vote Share 2013</td>
<td>0.616</td>
<td>−0.040</td>
<td>0.054</td>
</tr>
<tr>
<td>Δ Asylum Seekers 2014-2016</td>
<td>0.240</td>
<td>−0.204</td>
<td>−0.154</td>
</tr>
<tr>
<td>Unemployment Rate 2016</td>
<td>0.266</td>
<td>0.021</td>
<td>−0.203</td>
</tr>
<tr>
<td>Voter Turnout 2017</td>
<td>−0.397</td>
<td>0.036</td>
<td>0.213</td>
</tr>
<tr>
<td>Population Density 2016</td>
<td>−0.208</td>
<td>0.703</td>
<td>0.401</td>
</tr>
<tr>
<td>Share of Females 2016</td>
<td>−0.112</td>
<td>0.164</td>
<td>0.107</td>
</tr>
<tr>
<td>Share of Academic Degrees</td>
<td>−0.175</td>
<td>0.419</td>
<td>0.497</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Christians 2011</td>
<td>−0.628</td>
<td>0.227</td>
<td>0.084</td>
</tr>
<tr>
<td>Share of Married 2011</td>
<td>0.102</td>
<td>−0.384</td>
<td>−0.287</td>
</tr>
<tr>
<td>Share of Youth 2016</td>
<td>−0.680</td>
<td>0.572</td>
<td>0.295</td>
</tr>
</tbody>
</table>

A straightforward and striking finding is that the estimates for the share of foreigners and the increase in asylum seekers differ in signs. Relying on the sufficiently exogenous
Table 3: Baseline Results

<table>
<thead>
<tr>
<th>DV: AfD Vote Share 2017</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLS</td>
<td>OLS</td>
<td>OLS</td>
<td>OLS</td>
<td>OLS</td>
</tr>
<tr>
<td>Share of Foreigners 2016</td>
<td>-0.274***</td>
<td>-0.257***</td>
<td>-0.181***</td>
<td>-0.0872***</td>
</tr>
<tr>
<td>(0.0428)</td>
<td>(0.0441)</td>
<td>(0.0364)</td>
<td>(0.0213)</td>
<td></td>
</tr>
<tr>
<td>Δ Asylum Seekers 2014-2016</td>
<td>0.0606</td>
<td>0.0569***</td>
<td>0.0393***</td>
<td>0.0995</td>
</tr>
<tr>
<td>(0.0359)</td>
<td>(0.0247)</td>
<td>(0.0111)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate 2016</td>
<td>0.0606</td>
<td>0.0670</td>
<td>-0.315***</td>
<td>0.0048</td>
</tr>
<tr>
<td>(0.0787)</td>
<td>(0.0786)</td>
<td>(0.0910)</td>
<td>(0.0885)</td>
<td></td>
</tr>
<tr>
<td>AfD Vote Share 2013</td>
<td>0.830***</td>
<td>0.829***</td>
<td>0.683***</td>
<td>0.502***</td>
</tr>
<tr>
<td>(0.147)</td>
<td>(0.148)</td>
<td>(0.0871)</td>
<td>(0.0523)</td>
<td></td>
</tr>
<tr>
<td>Voter Turnout 2017</td>
<td>-2.637***</td>
<td>-1.503**</td>
<td>-1.067**</td>
<td>-0.484**</td>
</tr>
<tr>
<td>(0.602)</td>
<td>(0.668)</td>
<td>(0.0186)</td>
<td>(0.0032)</td>
<td></td>
</tr>
<tr>
<td>Population Density 2016</td>
<td>0.107***</td>
<td>0.0464**</td>
<td>0.0271*</td>
<td>0.0037*</td>
</tr>
<tr>
<td>(0.0190)</td>
<td>(0.0186)</td>
<td>(0.0371)</td>
<td>(0.0312)</td>
<td></td>
</tr>
<tr>
<td>Share of Females 2016</td>
<td>-3.534***</td>
<td>-3.194***</td>
<td>-1.97***</td>
<td>-1.51***</td>
</tr>
<tr>
<td>(0.910)</td>
<td>(0.793)</td>
<td>(0.0427)</td>
<td>(0.0357)</td>
<td></td>
</tr>
<tr>
<td>Share of Academics 2011</td>
<td>-0.197***</td>
<td>-0.151***</td>
<td>-0.166***</td>
<td>-0.100***</td>
</tr>
<tr>
<td>(0.0271)</td>
<td>(0.0326)</td>
<td>(0.0271)</td>
<td>(0.0326)</td>
<td></td>
</tr>
<tr>
<td>Share of Christians 2011</td>
<td>-0.166***</td>
<td>-0.100***</td>
<td>-0.302**</td>
<td>-0.620**</td>
</tr>
<tr>
<td>(0.0271)</td>
<td>(0.0326)</td>
<td>(0.0304)</td>
<td>(0.0262)</td>
<td></td>
</tr>
<tr>
<td>Share of Married 2011</td>
<td>-0.354***</td>
<td>-0.0339</td>
<td>-0.112</td>
<td>-0.109</td>
</tr>
<tr>
<td>(0.112)</td>
<td>(0.109)</td>
<td>(0.112)</td>
<td>(0.109)</td>
<td></td>
</tr>
<tr>
<td>Share of Youth 2016</td>
<td>1.759***</td>
<td>1.418***</td>
<td>29.66***</td>
<td>18.76***</td>
</tr>
<tr>
<td>(0.367)</td>
<td>(0.462)</td>
<td>(3.464)</td>
<td>(5.394)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>401</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Observations</td>
<td>0.551</td>
<td>0.555</td>
<td>0.768</td>
<td>0.885</td>
</tr>
<tr>
<td>R-squared</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>State Dummies</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

Notes: All variables are log-transformed. Level of analysis: districts (Kreise/Landkreise/kreisfreie Städte). Vote shares refer to the second votes (Zweitstimmen) in German federal elections only. Standard errors are clustered at the federal-state level and reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1.

Assignment of asylum applicants to regions, the results appear to support both the Contact Theory and the Ethnic Competition Theory at the same time. We provide three arguments to explain this result. First, from the point of view of social policy, natives may consider asylum seekers as stronger competitors for public goods and social redistribution than foreigners who migrate for reasons other than asylum. Most asylum applicants have to subsist on state benefits when they first arrive, and some natives may disfavor public funds being spent on this issue rather directly benefiting the population of taxpayers. Second, the share of foreigners captures those immigrants who have lived in Germany for at least a few years, such that they were likely able to integrate into
society. The newly arriving asylum seekers may still be perceived as representatives of an unknown cultural space. Third, the positive coefficient for the increase in asylum seekers could also be interpreted as a sign of discontent with political management of the immigration issue. The variable here measures the percentage increase in the number of asylum seekers within two years. A strong and sudden inflow is often associated with an urgent need to provide accommodation, food and workforce to help and sustain the newly arriving. If these issues have to be addressed at the local level, a politically expressed disapproval may not reflect a rejection of immigration as such but a call for assistance from a higher level or for reforms of the administrative process. An exogenous shock such as the refugee crisis, may also be taken as a welcome opportunity to simply voice political discontent induced by other socio-economic grievances. A factor reinforcing this behavior may be the intensity and type of media coverage given to the immigration issue, which cannot be captured in our framework.

Referring to our endogeneity concerns, we re-estimate our model, applying our above-outlined IV strategy. 2SLS results are displayed in Table 4.

In line with the baseline results, the effect for the share of foreigners is again significantly negative. The estimates are larger in size than those obtained in the OLS estimation, suggesting an upward bias of the baseline estimates. In our preferred full specification in column (4), a 10% increase in the share of foreigners is associated with a 2.6% decrease in AfD support. This observation further corroborates the supposition of the Contact Theory. Electoral support for the major anti-immigrant party is lower in districts exhibiting a relatively high degree of exposure to foreign residents.

The estimates for the increase in asylum seekers are still positive and highly significant, shown in columns (3) and (4). The sudden influx of refugees as an exogenous political shock contributed to the success of the AfD. However, taking into account the opposite effect seen for the share of foreigners, it is again questionable whether the positive coefficient for the increase in asylum seekers reflects xenophobic motives or a more general criticism of policymakers.

In order to further underpin our interpretation, we repeat our preferred IV estimation using as dependent variables the vote shares of all other five parties9 which entered the federal parliament after the 2017 elections. It is conceivable that the negative relationship between immigration and party support is observed at random and has nothing to do with a party’s political position. We therefore examine the relationship between

9 The two conservative parties CDU and CSU are treated as one party. The CSU is the CDU counterpart in Bayern and is not up for election in any other German state. At the federal level, the two sister parties form one fraction, calling themselves the Union.
Table 4: IV Results

<table>
<thead>
<tr>
<th>DV: AfD Vote Share 2017</th>
<th>(1) 2SLS</th>
<th>(2) 2SLS</th>
<th>(3) 2SLS</th>
<th>(4) 2SLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of Foreigners 2016</td>
<td>-0.298***</td>
<td>-0.277***</td>
<td>-0.197**</td>
<td>-0.260**</td>
</tr>
<tr>
<td>(0.0411)</td>
<td>(0.0439)</td>
<td>(0.0768)</td>
<td>(0.109)</td>
<td></td>
</tr>
<tr>
<td>Δ Asylum Seekers 2014-2016</td>
<td>0.0508</td>
<td>0.0559**</td>
<td>0.0417***</td>
<td>0.0681</td>
</tr>
<tr>
<td>(0.0364)</td>
<td>(0.0242)</td>
<td>(0.00829)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate 2016</td>
<td>0.0576</td>
<td>0.0636</td>
<td>-0.318***</td>
<td>0.0417***</td>
</tr>
<tr>
<td>(0.0742)</td>
<td>(0.0731)</td>
<td>(0.0803)</td>
<td>(0.0836)</td>
<td></td>
</tr>
<tr>
<td>AfD Vote Share 2013</td>
<td>0.823***</td>
<td>0.823***</td>
<td>0.688**</td>
<td>0.537***</td>
</tr>
<tr>
<td>(0.133)</td>
<td>(0.135)</td>
<td>(0.0968)</td>
<td>(0.0519)</td>
<td></td>
</tr>
<tr>
<td>Voter Turnout 2017</td>
<td>-2.683***</td>
<td>-1.980***</td>
<td>-0.524</td>
<td>0.527</td>
</tr>
<tr>
<td>(0.524)</td>
<td>(0.527)</td>
<td>(0.0394)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Density 2016</td>
<td>0.0112***</td>
<td>0.0890**</td>
<td>0.0270</td>
<td>0.0394</td>
</tr>
<tr>
<td>(0.963)</td>
<td>(0.700)</td>
<td>(0.0394)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Females 2016</td>
<td>-3.589***</td>
<td>-4.064***</td>
<td>0.0672</td>
<td>0.0277</td>
</tr>
<tr>
<td>(0.0567)</td>
<td>(0.0277)</td>
<td>(0.0432)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Academics 2011</td>
<td>-0.192***</td>
<td>-0.105***</td>
<td>0.0286</td>
<td>0.0432</td>
</tr>
<tr>
<td>(0.0277)</td>
<td>(0.0277)</td>
<td>(0.0432)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Christians 2011</td>
<td>-0.162***</td>
<td>-0.153***</td>
<td>0.364</td>
<td>0.241</td>
</tr>
<tr>
<td>(0.0286)</td>
<td>(0.0432)</td>
<td>(0.0241)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Married 2011</td>
<td>-0.270</td>
<td>0.707***</td>
<td>0.143</td>
<td>0.0792</td>
</tr>
<tr>
<td>(0.364)</td>
<td>(0.241)</td>
<td>(0.0792)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of Youth 2016</td>
<td>-0.337**</td>
<td>0.00590</td>
<td>0.143</td>
<td>0.0792</td>
</tr>
<tr>
<td>(0.143)</td>
<td>(0.0792)</td>
<td>(0.0792)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.827***</td>
<td>1.524***</td>
<td>29.91***</td>
<td>0.312</td>
</tr>
<tr>
<td>(0.312)</td>
<td>(0.369)</td>
<td>(3.198)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>400</td>
<td>399</td>
<td>399</td>
<td>399</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.544</td>
<td>0.549</td>
<td>0.766</td>
<td>0.656</td>
</tr>
<tr>
<td>First-stage F statistic</td>
<td>165.75</td>
<td>90.25</td>
<td>32.25</td>
<td>19.09</td>
</tr>
<tr>
<td>State Dummies</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

Notes: All variables are log-transformed. Level of analysis: districts (Kreise/Landkreise/kreisfreie Städte). Vote shares refer to the second votes (Zweitstimmen) in German federal elections only. Instrument: Number of Working Permits per 1,000 inhabitants in 2013. Standard errors are clustered at the federal-state level and reported in parentheses; *** p < 0.01, ** p < 0.05, * p < 0.1.

foreigner shares and vote shares of other parties on the broad German political spectrum to see if these are plausible and coherent.

The results in Table 5 clearly support our line of argumentation. While the share of foreigners is negatively related to the AfD vote share, it has a significantly positive impact on voting for two other parties, the FDP (Liberals) and B90/Grüne (Greens). Both favor a liberal immigration policy, so they could be considered pro-immigration parties. The results thus meet the expectations with regard to political positions. The absolute effect is slightly smaller than for AfD support. A 10% increase in the share
of foreigners is associated with a roughly 1% increase in the vote shares of FDP and B90/Grüne. There is no significant relationship between the share of foreigners and vote shares for the CDU/CSU (Conservatives), the SPD (Social-Democrats) and the Linke (Left). These parties may not be perceived as having a decidedly clear stance on the topic of immigration or as having specific expertise in this area. These observations further point to the fact that electoral support for AfD positions is affected by the extent of confrontation with immigration.

Another interesting finding is apparent when considering the coefficient of the percentage increase in the number of asylum seekers. The effect is significant and negative for the CDU/CSU and the SPD only. These two parties formed the government coalition
during the refugee crisis starting 2015, and they obviously suffered electoral losses in districts with a relatively large influx of asylum seekers, while the other parties seem to have been unaffected by this issue. This observation is also in line with the above-outlined interpretation: the rise in AfD support when facing sudden immigration is not necessarily the expression of a profound hostility towards foreigners but of an initial scepticism or an act of political blaming. The incumbent parties were being electorally punished for their political actions. By contrast, a newly emerging, unestablished party, which openly called out the perceived mismanagement, gained from an atmosphere of upheaval triggered by an exogenous shock. The overall results still provide reasonable evidence in favor of the Contact Theory.

Due to our IV strategy, we are generally confident to report causal effects of immigration on anti-immigrant voting in a statistical sense. Nevertheless, we explicitly refrain from interpreting an increase in immigration as a meaningful tool to counteract immigration-opposing attitudes; the results presented here should not be simplified in the sense that immigrant communities should exogenously be expanded in districts with high AfD vote shares in order to promptly change natives’ positions. We deem the duration and the intensity of the cultural exchange to be crucial determinants of a contact effect. Furthermore, the relationship between an individual’s living situation and their political stance is complex, making the impact of such unilateral changes unclear.

5 Conclusion

We investigate the causal effect of regional shares of foreigners on electoral support for the AfD, the major anti-immigrant party, in the 2017 German parliamentary elections. The obviously negative correlation between district-specific shares of the foreign population and AfD vote shares has aroused widespread societal interest. We account for the potentially endogenous location choices of migrants according to settlement decisions of earlier immigrant groups by using the district-specific share of working permits as an instrument. Furthermore, we separate the effects of earlier immigrants and an increase in the number of asylum seekers as an indicator of an exogenous migration shock.

Our results support the argumentation of the Contact Theory, as districts with a relatively larger share of the foreign population exhibit a significantly lower support for the major anti-immigrant party. A 10 % increase in the relative number of working permits is associated with a 2.6 % lower AfD vote share in our preferred specification.
Our results differ from the findings of most related studies, which observe a positive effect of immigration on anti-immigrant voting.

Interestingly, we find the increase in the number of asylum seekers to be positively associated with the AfD vote share. While daily contact with longer-established immigrants promotes cultural exchange and fosters pro-immigration stances, it seems that influxes of asylum seekers do not. The evidence suggesting a refugee-opposing attitude can be explained in two ways: First, in line with the Ethnic Competition Theory, the group of asylum seekers from mainly different, unknown cultures may evoke initial scepticism or rejection by the natives. Second, the refugee crisis, which was a fairly unexpected political shock, may provide an opportunity to electorally criticize the government’s management of immigration or other unrelated political issues. The latter interpretation is underpinned by our observations that in districts with larger refugee inflows in recent years, the incumbent parties suffered electoral losses as a reaction to the refugee influx while at the same time pro-immigration parties gained support.

Not only do we contribute to the literature on the consequences of migration, our findings also add to the research on the root causes of populist and radical right-wing voting. If our interpretation of the positive asylum effect as a sign of general electoral protest is accurate, it is questionable whether the ongoing rise of nationalist movements is motivated by truly radical or xenophobic beliefs. An interesting starting point for further research could be to examine the use of unrelated events as opportunities to express a more general discontent with politics. Future research may furthermore put more emphasis on the idea that immigrants with distinct cultural and social backgrounds as well as migration motives induce different and even conflicting reactions in the native population. Differentiating between immigrant groups and circumstances may explain the ambiguous findings regarding the impact of immigration on voting in the literature and allow for deeper insights into the actual underlying determinants. Finally, we see particular potential in an internationally comparative analysis. Parliamentary elections were held in 2017 not only in Germany but also in Austria, France and the Netherlands. As these countries are comparable with respect to culture, economic situation and being affected by the large refugee inflow, analyzing them together may constitute a promising starting point for research on general or country-specific political effects of immigration.
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