

Herbert Brücker\*, Yuliya Kosyakova\*\* and Ehsan Vallizadeh\*\*\*

## Has there been a “refugee crisis”?

New insights on the recent refugee arrivals in Germany and their integration prospects\*\*\*\*

**Abstract:** Approximately 1.2 million refugees arrived in Germany between 2015 and 2016. The national and international public discourse surrounding the arrival of these refugees covers the full spectrum of opinions. These opinions range from sceptical assessments regarding the 2015 influx as a “refugee crisis” to optimistic appraisals considering the immigration of refugees to be a solution to demographic change and labour shortages. These views are often driven by ideology and emotions rather than grounded in evidence. In this paper, we use data from a unique, nationally representative household survey of refugees who came to Germany between 2013 and 2016 to describe who these refugees are, focusing particularly on demographic and skill characteristics relevant for their successful and sustainable economic integration. We also discuss German public policies and institutional environments to promote refugees’ integration. Our descriptive analysis shows that the processing of asylum applications and the overall provision of accommodations, safety-nets, and integration programs by German authorities have advanced the refugees’ integration process, although the initial shortcomings have been widespread. Over the years, German institutions have generally been open to helping refugees and other immigrants gain ground in Germany. However, there are still challenges for policymakers. One such issue is the gender gap that is reflected in the support for female refugees with childcare obligations, which delays their language acquisition and slows their integration. Nevertheless, the empirical evidence has – contrary to the expectations – given no indications that the influx of refugees in 2015 led to a “refugee crisis” in Germany.

\* Prof. Dr. Herbert Brücker, Humboldt-Universität zu Berlin, Berlin Institute for Integration and Migration Research (BIM) and Institute for Employment Research (IAB), Regensburger Str. 104, 90478 Nuremberg, E-Mail: Herbert.Bruecker@iab.de.

\*\* Dr. Yuliya Kosyakova, University of Bamberg, University of Mannheim and Institute for Employment Research (IAB), Regensburger Str. 104, 90478 Nuremberg, E-Mail: Yuliya.Kosyakova@iab.de.

\*\*\* Dr. Ehsan Vallizadeh, University of Bamberg and Institute for Employment Research (IAB), Regensburger Str. 104, 90478 Nuremberg, E-Mail: Ehsan.Vallizadeh@iab.de.

\*\*\*\* We would like to thank Raji Jayaraman, Alexandra Spitz-Oener and Steffen Sirries for their support and engaging in insightful discussions at various stages of the research process. Herbert Brücker gratefully acknowledges support of the DFG within the SPP 1764 project “The German Labor Market in a Globalized World: Trade, Technology and Demographics.”

**Keywords:** Refugees; Labour Market Integration; Social Inclusion; Asylum Procedure; IAB-BAMF-SOEP Survey Of Refugees In Germany

## Hat es eine „Flüchtlingskrise“ gegeben?

### Neue Erkenntnisse über die jüngste Einwanderung von Geflüchteten nach Deutschland und deren Integrationsperspektiven

**Zusammenfassung:** Rund 1,2 Millionen Geflüchtete sind 2015 und 2016 nach Deutschland gekommen. Der nationale und internationale öffentliche Diskurs über die Aufnahme dieser Geflüchteten deckt das gesamte Meinungsspektrum ab. Diese Auffassungen reichen von der skeptischen Charakterisierung des Anstiegs der Fluchtmigration 2015 als „Flüchtlingskrise“ bis hin zu optimistischen Einschätzungen, wonach die Zuwanderung von Geflüchteten eine Lösung für den demografischen Wandel und den Arbeitskräftemangel darstellt. Diese Meinungen und Einschätzungen werden oft von Ideologie und Emotionen getrieben, sie sind in der Regel nicht durch Evidenz fundiert. In diesem Beitrag verwenden wir Daten aus einer einzigartigen, national repräsentativen Haushaltsbefragung von Geflüchteten, die zwischen 2013 und 2016 nach Deutschland gekommen sind. Auf dieser Grundlage beschreiben wir die Eigenschaften der Geflüchteten, insbesondere ihre demografischen Charakteristika und Qualifikationsmerkmale, die für eine erfolgreiche und nachhaltige wirtschaftliche Integration relevant sind. Wir diskutieren auch das institutionelle Umfeld und verschiedene Politiken in Deutschland in Hinblick auf ihre Rolle bei der Förderung der Integration. Unsere deskriptive Analyse zeigt, dass die Bearbeitung von Asylanträgen und die Bereitstellung von Unterkünften, die soziale Unterstützung und verschiedene Integrationsprogramme durch Politik und Verwaltung die Integration insgesamt vorangetrieben haben, obwohl zahlreiche Mängel anfangs weit verbreitet waren. Im Laufe der Jahre haben sich die Institutionen jedoch verstärkt dafür geöffnet, die Integration von Geflüchteten und anderen Migrantinnen und Migranten dabei zu unterstützen, in Deutschland Fuß zu fassen. Die Entscheidungsträger in Politik und Verwaltung stehen jedoch weiterhin vor erheblichen Herausforderungen. Ein solches Problem sind die Genderdifferenzen in verschiedenen Dimensionen der Integration, die unter anderem auf der geschlechtspezifischen Arbeitsteilung bei der Betreuung von Kindern beruhen und den Spracherwerb und andere Fortschritte bei der Integration von Frauen behindern. Die empirische Evidenz bietet jedoch, im Unterschied zu vielfältig geäußerten Erwartungen, keine Hinweise darauf, dass die Zuwanderung von Asylbewerberinnen und -bewerber im Jahr 2015 zu einer „Flüchtlingskrise“ in Deutschland geführt hat.

**Stichworte:** Geflüchtete; Arbeitsmarktintegration; Soziale Integration; Asylverfahren; IAB-BAMF-SOEP-Befragung von Geflüchteten

## 1 Introduction

In 2015, Germany experienced the largest influx of refugees<sup>1</sup> since the wave of displacements and migration movements in the aftermath of World War II. The initial surge of public and private efforts to welcome refugees and ease their inclusion in German society was quickly overshadowed by a discourse dominated by ideologies and emotions (Horn 2015). Some views were rather sceptical, describing a “refugee crisis” that threatened to overburden the capacity of the economy and society in Germany (Anon 2015). Other views were more optimistic vis-à-vis the arrivals of refugees, indicating a net benefit in economic and social terms that might inter alia help solve demographic challenges and labour shortages (Cohen 2015). Against this background, the objective of this paper is to provide evidence based on novel data sources to inform this debate.

Understanding the socioeconomic and demographic characteristics of refugees, as well as their motives, norms, and values, is a crucial prerequisite to any informed discussion about policy instruments aimed at facilitating integration. Empirical evidence on the composition and traits of *newly* arrived refugees and how well they fare in the labour market is, however, scarce, due not least to the lack of appropriate data. Fortunately, Germany has initiated a comprehensive, nationally representative survey of refugees at the time of their arrival.<sup>2</sup> This longitudinal household survey of refugees – the IAB-BAMF-SOEP-Refugee Survey<sup>3</sup> – was conducted in 2016, 2017, and 2018.

Using this novel survey, this paper aims to provide comprehensive stylized facts about the refugee population arriving recently in Germany. Our aim is to describe integration achievements thus far, while also investigating prospects for successful and sustainable integration in the coming years. To this end, it is necessary to describe and study the resources and structure of Germany’s refugee population, as well as look at the institutional capacities provided by German federal agencies. Extensive descriptive data allow closer examination of factors critical to structural integration. For the refugee population, these include sociodemographic composition, human capital components, and cultural factors such as religious affiliation. We consider the provisions of the receiving country by examining both the effici-

- 1 The term “refugee” is used here as a category covering all individuals seeking asylum outside their home countries or any other form of protection irrespective of their legal status.
- 2 Most of the existing surveys conducted during this phase of mass influx of refugees have, understandably, relied on convenience samples (see, for example, AFAD Survey of Syrian refugees in Turkey, AFAD 2013) and the FIMAS study in Austria, a survey drawn from employment services data (see, though, see and the FIMAS -study in Austria, a survey drawn from employment services data, Hosner, Vana, and Khun Jush 2017).
- 3 This study uses the factually anonymous data of the IAB-BAMF-SOEP Survey of Refugees, wave 2. Data access was provided via a Scientific Use File supplied by the Research Data Centre (FDZ) of the German Federal Employment Agency (BA) at the Institute for Employment Research (IAB). DOI: 10.5684/soep.iab-bamf-soep-mig.2017.

ency of asylum procedures and the use of educational opportunities, childcare, and language courses as catalysts for structural integration. If integration is understood as a dynamic reciprocal process, it is essential to consider both contexts – arriving and receiving. In the final discussion, we address changes in the German labour market in recent decades. Overall, the findings contribute to a better understanding of the challenges the German society and economy faced after the surge of refugees in 2015 and provide new insights regarding the progress of economic integration and social inclusion.

## 2 State of the Research and the Scope of this Paper

Our study is related to recent advances in the theoretical and empirical migration literature as well as to recent research on refugee migration and integration. We focus on the structural, social and cultural dimensions of the refugees' integration process (e.g., Esser 2001). Refugees are forced to leave their origin countries due to war, persecution, and oppression (Dustmann et al. 2017). These circumstances affect the level of selectivity of refugees and their economic success in a host country (Borjas 1987; Chiswick 1999). Whether refugees are positively or negatively selected depends necessarily on factors such as the personal and economic risks in home and transit countries, the costs and risks of fleeing, and the nature of human capital resources (e.g., Aksoy/Poutvaara 2019; Guichard 2020; Spörlein et al., this volume). Using the IAB-BAMF-SOEP Refugee Sample, Guichard (2020) demonstrates that recently arrived refugees from Iraq and Syria are positively selected with respect to their education, while refugees from Albania and Serbia are negatively selected. Our analyses aim at complementing these findings by showing that across all refugee source countries, members of ethnic minorities or religious groups that face severe persecution and oppression are overrepresented in the recently arrived refugees to Germany.

The structural dimensions capture the advances in refugees' integration into the education system and the labour market. In this context, institutional characteristics of the host country, including immigrant integration policies and active labour market programs, are crucial predictors of the immigrants' integration prospects (e.g., Reitz 1998). Our argument here also builds on new developments in integration theories emphasizing that migrants' resources and structural opportunities in labour markets and education systems must work together to facilitate structural and social integration (Alba/Nee 1997; see also Kogan/Kalter, this volume). The cultural dimension encompasses factors such as religious affiliation or ethnicity (e.g., Esser 2001). In this paper, we address the level of selectivity in these dimensions across source countries of refugees and compare it with the population in the home countries.

The handful of studies examining Germany's recent refugee immigration (Brenzel et al. 2018; Brenzel/Kosyakova 2019; Brücker et al. 2016, 2019; Brücker/Rother/

Schupp 2017) have focused on the nature of the refugees' arrival process, motives and values, and access to public integration programs. We expand on these contributions in three ways. First, we examine the demographic composition of refugees and compare that to the overall demographic structure in Germany. Second, we explore gender differences regarding family and household structure upon arrival and support by social networks prior to arrival. In doing so, we discuss the importance of social networks regarding information and migration costs (Koser/Pinkerton 2002) and social and economic integration (Crisp 1999; Hein 1993; Kalter/Kogan 2014; Koser 1997; Massey et al. 1998; Scalettaris 2007; Williams 2006). Third, we elaborate the reception of refugees in Germany, which ensures the provision of integration programs and the access to welfare benefits (safety-net coverage) and housing services.

### 3 The Scale of the Recent Refugee Immigration Surge

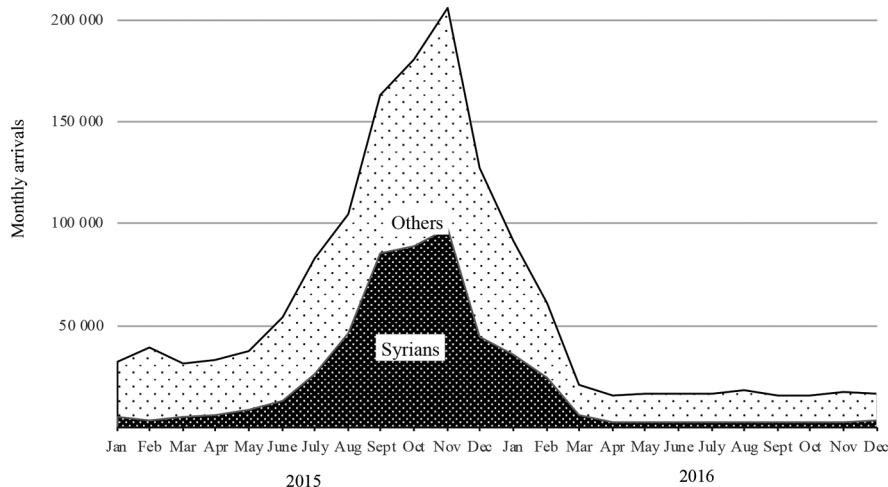
The most basic question to start with is certainly: how large is the number of recent refugees? According to the Federal Office for Migration and Refugees (*Bundesamt für Migration und Flüchtlinge*, BAMF), which maintains official records of all new arrivals, approximately 1.2 million refugees came into the country between 2015 and 2016.<sup>4</sup> Figure 1 indicates the monthly inflow of refugees to Germany over this period. In the first half of 2015, approximately 40,000 refugees arrived each month. This number rose dramatically in June of that year, driven primarily by Syrian refugees. There are three likely reasons for this increase. First, as Jordan, Lebanon, and Turkey – Syria's neighbours that previously absorbed the refugees – became overwhelmed, they tightened restrictions on refugees. In tandem, local residents exhibited greater hostility toward the refugees, and international aid agencies cut their support. Second, transport costs on the Eastern Mediterranean and Balkan routes decreased substantially. Third, Southern European countries began redirecting arrivals straight to Germany.

Germany's refugee influx reached its peak with 210,000 arrivals in November 2015. Thereafter, the numbers declined more precipitously than they had risen, settling at a relatively stable 10,000 to 15,000 per month from March 2016 onward. It is difficult to say what drove this decrease. The onset of winter probably played a part, as did entry hurdles imposed by countries along the Balkan route. The stable low rate in spring 2016 was likely cemented by institutional arrangements, such as the clo-

4 The data come from the so-called EASY system, which digitally records refugee arrivals in Germany and assignments to federal states (*Länder*). Counting refugees and refugee arrivals in a country is notoriously difficult, and this system also suffers from double-counting and other measurement error. Nevertheless, it is widely used as a proxy for arrivals. While the EASY system counts 1,091,819 arrivals in 2015 and another 321,371 in 2016, the German Ministry of Home Affairs estimates actual arrivals at 890,000 and 280,000, respectively. If this is true, the EASY figures tend to overstate the actual refugee influx by approximately one-fifth (see BMI 2017 for details).

sure of the Balkan route and the EU-Turkey migration agreement in March 2016 to discourage refugees from entering the European Union.

**Figure 1: Refugee Arrivals in Germany, 2015 and 2016**



Source: BAMF (2017 b), authors' calculations.

Is the number of arrivals in Germany large? Yes and no. At 1.2 million, it represents the largest refugee influx since the aftermath of World War II.<sup>5</sup> It is also in absolute terms four times the numbers of refugees taken in by France (367,000), Sweden (313,000), and Italy (247,000), which are the other top EU recipient countries.<sup>6</sup> However, the numbers pale in comparison with the volume of refugees hosted by Turkey (3,116,000), Lebanon (1,031,000), Iran (980,000), and Jordan (721,000) over this period. In per-capita terms, these smaller, more resource-challenged neighbouring countries have clearly borne the brunt of the 20 million refugees who were externally displaced by the end of 2016.<sup>7</sup> The influx to Germany is also modest when viewed against the 12 million to 14 million displaced ethnic Germans who immigrated to the country in the aftermath of World War II (DESTATIS 1953; Faulenbach 2012). In relative terms, the 1.2 million refugees amount to 1.5 percent of Germany's population. Again, this is large compared to most EU and OECD countries. Only Sweden (3.2 percent), Malta (2 percent), and Austria (1.9 percent)

5 The fall of the Iron Curtain and the Balkans War also sparked a large influx of refugees, reaching a height of 438,000 in 1993 (BAMF 2017).

6 In comparison, the stock of refugees, people in refugee-like situations, and asylum-seekers numbered 816,000 in the United States, 121,000 in Canada, and 71,000 in Australia by the end of 2016 (UNHCR 2017).

7 These figures refer to people in refugee-like situations and refugees whose cases are not yet decided who left their home countries by the end of 2016 (UNHCR 2017).

report a higher share. Nevertheless, Germany hardly merited the moniker “refugee nation.”<sup>8</sup>

Given these figures on the net-arrival rate and the stock of refugees, the evidence seems to counter the widespread perception of a “refugee crisis” that might overstrain the capacities of the German economy and society. However, the situation in today’s Germany is hardly comparable with that of Germany after World War II or of the main refugee destinations neighbouring the origin countries, affected by war, persecution and other forms of violence. In particular, the advanced German economy and its highly skilled labour force as well as the highly developed welfare state may create both resources for and impediments to structural integration and social inclusion. Thus, although the refugee debate has been dominated by *how many people* have arrived in Germany, *who* the refugees are might be much more relevant to assessing their opportunities and risks. So far, the public discussion on the characteristics of the refugee population has been largely speculative, informed by news stories, personal experience, or anecdotes. To paint a fuller picture of these new arrivals and their potential for successful integration in Germany, we will use the IAB-BAMF-SOEP Refugee Survey (2019), which is briefly described in the next section.

#### 4 Data on Recently Arrived Refugees

The IAB-BAMF-SOEP-Survey of Refugees is a longitudinal study of individuals who have sought asylum in Germany in the recent years (Brücker et al. 2016, 2019, 2017). The first wave of the survey was conducted in 2016 and covered 4,465 adult refugees living in 3,289 households in Germany. The survey also collected basic information on 5,350 minor children living in the surveyed households. The anchor persons in the survey were drawn from the Central Register of Foreigners (*Ausländerzentralregister*, AZR), the national registry of all foreign citizens in Germany (Kroh et al. 2017; Kühne/Jacobsen/Kroh 2019). The sample frame targeted registered adult refugees who arrived in Germany between January 1, 2013, and January 31, 2016, and were recorded by the Central Register of Foreigners no later than June 30, 2016.<sup>9</sup> The survey covered all individuals seeking asylum or any other form of protection irrespective of their legal status. To facilitate the analysis of specific subgroups, the survey oversampled females, older persons, and nationals of countries with presumptive eligibility for asylum status. The survey was carried out in 169 representatively selected sampling points all over Germany. This allows us to draw representative conclusions at regional levels. The gross participation rate was

8 Figures in this paragraph are from UNHCR (2017). Refugee shares in Jordan and Turkey are 7.6 percent and 3.9 percent, respectively.

9 Note that registration is mandatory in Germany. The Central Register for Foreign Nationals contains contact details along with information on the legal status of all registered foreigners in Germany, including refugees. The sample frame does not include unaccompanied minors. Between 2013 and 2016, approximately 100,000 unaccompanied minors arrived in Germany (DESTATIS 2017).

approximately 50 percent of the addresses originally drawn, substantially higher than in comparable surveys of the German population (Brücker et al. 2017; Kroh et al. 2017).

Our analysis is based on the second wave of the IAB-BAMF-SOEP-Survey of Refugees, conducted between July 2017 and March 2018. The second wave covered 67 percent of the participants in the first wave (Brücker et al. 2019). An additional sample was conducted in the second wave, covering refugees who arrived in Germany through December 31, 2016, and were recorded by the Central Register of Foreigners no later than January 1, 2017. Altogether, the second wave consisted of 2,559 panel respondents living in 2,071 households and 2,897 first-time respondents living in 2,090 households. Using appropriate sample waves, the data allow us to make representative inferences for refugees who arrived in Germany from the beginning of 2013 through the end of 2016 and resided in Germany at the interview time (IAB-BAMF-SOEP Survey of Refugees 2019). Most of the second-wave-respondents – 62 percent – arrived in Germany in 2015. Refugees who arrived in 2014 and 2013 represented 14 percent and 3 percent of the sample, respectively. Refugee arrivals in 2016 made up 20 percent of the sample, while those arriving after 2016 accounted for less than 1 percent.

The interviews were carried out face to face with computer assistance (CAPI).<sup>10</sup> The questionnaire was available in seven languages (Arabic, English, Farsi/Dari, German, Kurmanji, Pashtu, and Urdu) as well as with auditory instruments for surveying people who were illiterate (Jacobsen 2019). If needed, the interviews were supported by translators.

The survey was based on three questionnaires: a personal-biographical questionnaire that each participant had to answer, a household questionnaire that was answered by the head of the household, and a brief interviewer questionnaire. The personal-biographical questionnaire contained approximately 450 questions and covered a wide array of topics: the participants' entire migration, education, and employment biographies in their home and transit countries and in Germany. In addition, it encompassed information regarding motives, personality traits, health conditions, participation in language courses integration programs, and many other topics. The average length of the personal-biographical interview was approximately 80 minutes. The household questionnaire addressed all issues relevant to the household, such as the receipt of benefits, the housing situation, access to public transport, and infrastructure. Finally, the interviewer questionnaire covered the context of the interview, the housing environment, the language proficiency of the interviewees, and so forth.

10 We are aware of the data from inappropriately conducted interviews; we relied on data cleaned of any such interviews (Kosvakova et al. 2019).

## 5 Characteristics of Refugees

Integration of immigrants is a two-sided process shaped by the newcomers' resources and the host-country environment. We start by describing the sociodemographic composition of the newcomers as well as their human, cultural, and social capital – resources often considered vital to the successful long-term integration of immigrants into host societies (see Alba/Nee 1997; Esser 2006; Kogan 2016; Kogan/Kalter, this volume).

### 5.1 Country of Origin, Gender and Age

Table 1 shows the basic demographic composition of the refugees. The sample is split by year of arrival; the final column, Total, provides summary statistics for all the arrival cohorts combined. The table provides context for interpreting Figure 1.

**Table 1:** Characteristics of Refugees, by Year of Arrival (in Percent)

	(1) 2013	(2) 2014	(3) 2015	(4) 2016 <sup>1)</sup>	(5) Total
<b>Country of origin</b>					
Syria	18	41	47	40	44
Afghanistan	15	12	19	20	18
Iraq	4	4	15	8	11
Eritrea	9	13	3	4	5
Iran	1	2	2	5	3
West Balkan	5	3	1	0	1
Other countries	49	25	13	23	18
<b>Age</b>					
Under 20	1	1	4	9	5
20 – 35	65	61	66	61	64
36 – 50	29	33	24	22	25
51 – 65	4	5	5	7	5
Over 65	0	1	0	1	1
<b>Gender</b>					
Male	77	81	76	57	73
Female	23	19	24	43	27
<b>Arrival status</b>					
Alone	63	49	35	41	39
With family	32	36	58	50	52
With friends and/or others	6	14	7	9	8
<b>Support by networks in Germany prior to immigration</b>					
No support by friends or relatives	85	81	82	82	82
Support by friends or relatives	15	19	18	18	18
<b>Religion</b>					
Christian	17	26	12	13	14

	(1) 2013	(2) 2014	(3) 2015	(4) 2016 <sup>1)</sup>	(5) Total
Muslim	71	66	82	82	79
No religious affiliation	9	7	6	5	6
Others	3	1	0	1	0
Schooling					
No school	19	7	15	17	15
Left without degree	28	23	26	21	25
Secondary-school degree	12	21	22	17	20
Upper secondary-school degree	26	42	28	38	32
Other school degrees	3	3	3	3	3
No response	11	5	5	4	5
Higher education					
None	74	72	74	80	75
Left without professional degree	4	8	7	4	7
Company-based training /vocational school degree	3	3	6	4	5
University/ technical-college degrees	12	16	11	9	11
No response	6	1	1	2	2
Language proficiency before migration <sup>2)</sup>					
None at all or poor	97	97	98	99	98
Fair	1	1	1	1	1
Good or very good	1	2	0	0	1
Language proficiency after migration <sup>2)</sup>					
None at all or poor	30	17	33	46	34
Fair	33	34	32	36	33
Good or very good	37	49	34	18	33
N	298	867	3253	1010	5428

Note: All calculations account for sample weights (see Data). <sup>1)</sup> Refers to those arrived in 2016 and afterwards. Less than 1 percent of the respondents arrived after 2016. <sup>2)</sup> Self-reported German language proficiency.

Source: IAB-BAMF-SOEP Refugee Sample, V34.

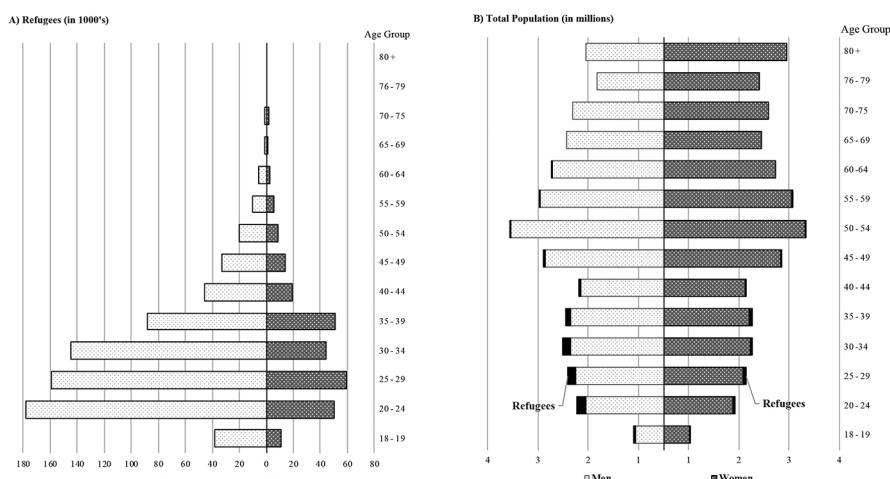
Panel (a) of the table shows a pronounced change in the arrivals’ origin country since 2014. In 2013, arrivals came predominantly from “Other countries,” which included African countries (predominantly Gambia, Nigeria, and Somalia), MENA countries (predominantly Palestine), former Soviet-bloc countries (predominantly Russia), and Asian countries (predominantly Pakistan). In 2014, arrivals from Syria started to pick up. By 2015, they accounted for almost half the influx. In total, 44 percent of refugees arriving between 2013 and 2016 were Syrian, 18 percent were Afghani, 11 percent were Iraqi, 5 percent were Eritrean, and 3 percent were Iranian. These countries were the five highest contributors to the refugee influx; six countries from the Western Balkans together accounted for a further 1 percent of the arrivals.

Table 1 also documents six salient demographic characteristics of recent refugees. First, they are relatively young. Second, they are overwhelmingly male. Third, particularly among men, they tend to be single. Fourth, they are overwhelmingly Muslim. Fifth, they have modest levels of education. Sixth, almost none spoke German at the time of their arrival (see also Brücker et al. 2016, 2019). We discuss each of these features in turn.

We begin with age composition. The share of refugees under the age of 35 is 69 percent (Table 1, panel (b)). The corresponding proportion within the German population is only 21 percent. Figure 2A describes the age distribution of refugees in more detail. Approximately 178,000 male refugees are between 20 and 24; for female refugees, the corresponding figure is 50,000. Almost 73 percent of refugees are male, and they tend to be younger than female refugees (Figure 2A; Table 1 panel (c)).

On the surface, this age composition seems promising given the ballooning pension costs and labour market shortages precipitated by Germany's aging population (Fuchs et al. 2018); Figure 2B shows the demographic pyramid for the total population living in Germany in 2017. However, this promise is illusory. The absolute number of refugees is too modest to resolve Germany's demographic crisis. As indicated by the black segment at the end of each gender-specific bar in Figure 2B, the refugees barely make a dent in the country's population pyramid. The potential contribution of the refugee population to overcome current and future labour shortages is thus limited purely for quantitative reasons.

**Figure 2: Demographic Composition of Refugees and Total Population in 2017**



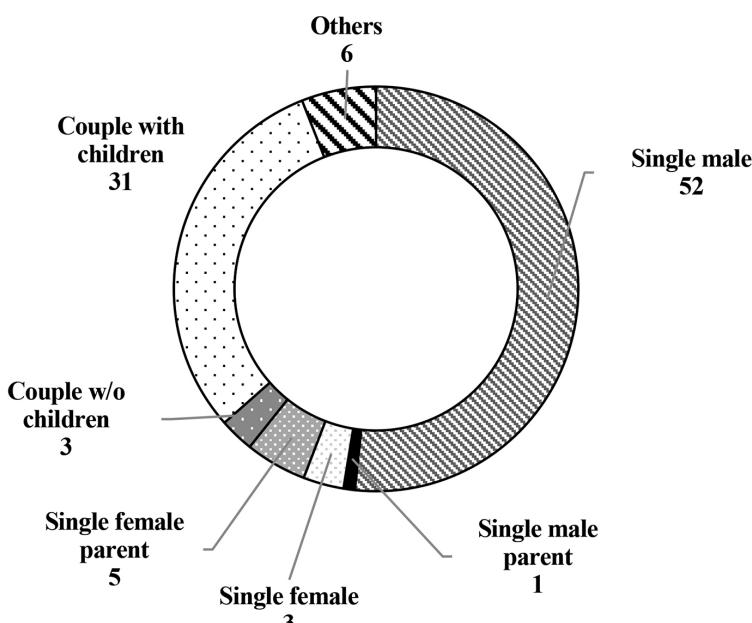
*Note:* All calculations account for sample weights (see Data).

*Source:* IAB-BAMF-SOEP Refugee Sample, V34 (Figure A), and Socio-Economic Panel v34 (Figure B).

## 5.2 Family and Household Structures

Approximately half of the refugees arrived in Germany with their families. Another 39 percent arrived alone, and 8 percent came with friends or others (Table 1, panel (c)). At the same time, 18 percent report having premigration support from relatives or friends who lived in Germany (Table 1, panel (e)). These figures are slightly lower for earlier cohorts and higher for later ones. On the other hand, stratified analyses show that these factors are mainly true for men. Women, in contrast, tended to arrive with very distinct social support structures, mainly their families (Table A1, panel (d)). In addition, panel (d) of Table A.1 shows that women had much higher premigration social network support. These patterns are correspondingly reflected in household composition. As shown in Figure 3, more than half of households are single-person households, i.e., individuals living without their spouses or children. Thirty-four percent of households consist of couples, and most of them have children in their households. Six percent of households are single-parent households, with more single refugee mothers than fathers. The remaining 6 percent include three-generations households (1 percent) or some other combinations without children (5 percent). Further analyses (not shown here) reveal that approximately one-third of male refugees and more than two-thirds of female refugees have

**Figure 3: Household Structure (in Percent)**



*Note:* All calculations account for sample weights (see Data).

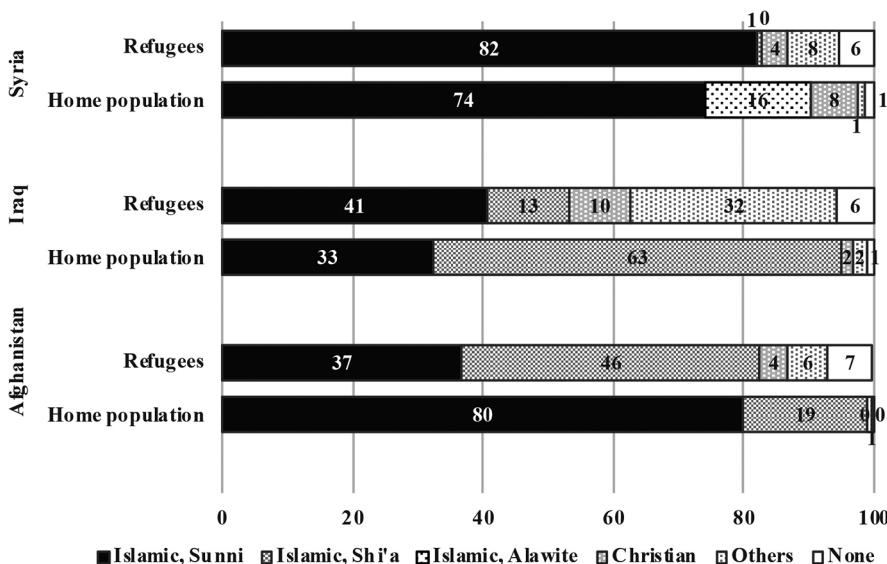
*Source:* IAB-BAMF-SOEP Refugee Sample, V34.

minor children in their households (see also Brücker et al. 2019).<sup>11</sup> Moreover, there are more single refugee mothers than fathers. This places potential constraints on women's ability to participate in formal integration programs (Koyama 2015). We will return to this later.

### 5.3 Religion and Human Capital

Given their countries of origin, it is unsurprising that 79 percent of new arrivals are Muslim (Table 1, panel (f)). Interestingly, as Figure 4 shows, religious minorities are overrepresented in the refugee population relative to their home countries. For example, the share of Syrian refugees who belong to religious minorities (e.g., Christians or other non-Muslim religions) or have no religious affiliation exceeds 15 percent. That is compared with 10 percent within Syria. By contrast, the ruling Alawite minority in Syria is barely represented within the refugee population. Among Iraqi refugees, the share of religious minorities (largely Yazidi) and individuals with no religious affiliation is 48 percent, compared with 5 percent in the home population.

**Figure 4: Religious Affiliations of Home Country Population and of Refugee Population in Germany (in Percent)**



*Note:* All calculations account for sample weights (see Data). The religious affiliations of the refugee population are taken from the IAB-BAMF-SOEP-Refugee Survey; those of the home country populations are from Maoz and Henderson (2013).

*Source:* IAB-BAMF-Refugee Sample, V34 and Maoz/Henderson (2013).

11 The figures deviate from those reported by Brücker et al. (2019), since we consider the structure of households only. Brücker et al. (2019) described the family situation of male and female respondents separately even if they belonged to the same household. Here, the figures count only separate households.

In regard to education, there is some evidence of positive selection, with adult refugees aged 18–64 tending to be better educated than their counterparts in their home countries. For example, approximately 17 percent of the refugees from Syria have a tertiary degree (11 percent of all refugees have a university degree, see Table 1 (h)), while the corresponding proportion in Syria is only 6 percent (Guichard 2020).<sup>12</sup> By the same token, educational attainment among refugees is low in both absolute terms (Table 1, panels (g) and (h)) and relative to the German population. The proportion of German university graduates is approximately 18 percent – almost double that of the general refugee population. Similarly, very few refugees (5 percent) have vocational training degrees. Owing to Germany’s dual apprenticeship program, 59 percent of the German population have apprenticeship degrees.<sup>13</sup>

At the bottom end of the education spectrum, 15 percent of refugees arriving in Germany have no education at all (7 percent among refugees from Syria), while 25 percent have only primary education or incomplete secondary school education (22 percent among refugees from Syria).<sup>14</sup> Altogether, 40 percent of the refugees have no secondary schooling degree (29 percent among refugees from Syria). In Germany, which has compulsory schooling requirements, only 4 percent of the population falls into this category.

Language also presents a challenge. Among refugees, 98 percent had no German language proficiency upon arrival (Table 1, panel (i); see also Brücker et al. 2019). This is not surprising given that Germany was not a major colonial power, and widespread use of the German language is confined to Germany, Switzerland, and Austria. Nevertheless, it is one of the most important prerequisites for successful economic integration.

The demographic features described do not suggest any “refugee crisis.” Apart from the fact that the inflow constitutes a small fraction of the population, the age and gender composition of the refugees is likely to facilitate, rather than hinder, labour market integration. This is because younger cohorts are easier to (re)train than older ones, and men, statistically, tend to have higher labour force participation than women. The fact that fully half of the younger cohort has a secondary education is promising in this respect.

Nevertheless, education is likely to require active policy engagement. The education levels of refugees are generally low, and the skills of the better-educated segments are unlikely to transfer readily to the German economy (Brücker et al. 2018; Kogan

12 See also Kristen et al. (this volume). The information on educational degrees of the newly arrived refugees was also previously discussed by Brücker et al. (Brücker et al. 2016, 2019, 2017).

13 The German figures are taken from the 2017 Microcensus and refer to the population without migration background from 15 years of age (DESTATIS 2018 a).

14 These proportions are comparable in older (over 35 years of age) and younger (35 and under) cohorts.

2012). This implies that investment in education and training is crucial. Language – as a key component of cultural integration – is a crucial ingredient here. German is a notoriously difficult language to learn, even more so for people coming from a non-Latin-based script such as Arabic (Isphording/Otten 2011, 2014; Melitz/Toubal 2014). As we will discuss later, the numbers related to language acquisition look promising, but they are self-reported and participation in language courses is not commensurate with language requirements in the formal labour market. We will also discuss later how women, especially those with children, are disadvantaged in regard to language acquisition.

## 6 Context of Refugee Reception and Integration Policy

Whether a refugee inflow constitutes a “crisis” also depends on the preparedness of the host country and its institutions. In this section, we discuss refugees’ legal situation in Germany upon their arrival and their access to Germany’s institutional supports, including public services, entitlements to education and training, and social safety-net coverage. We try to provide a broad picture to illustrate the general institutional environment.

### 6.1 Arrival, Allocation and Asylum Process

Economic integration is only feasible to the extent that refugees’ legal status allows for it. In this section, we discuss how this process unfolds. When refugees first arrive in Germany, they are registered by German border police or staff of the BAMF (for further details see BAMF 2016 b). Upon registration, they are issued a landing document by the regional authority. This document also serves as a temporary ID that must be used when applying for public benefits such as housing, medical care, and food.

Within a few days of arrival, refugees are sent to a predesignated federal state (a *Bundesland*) based on a quota system: the so-called *Koenigsteiner Schluessel*.<sup>15</sup> Each state runs its own reception facilities for newly arrived refugees. The asylum procedure itself is administered by BAMF and ends with a decision on whether the refugee is allowed to stay in Germany, or the asylum application is denied. German law affords four types of protection that permit a refugee to remain in the country: (i) asylum for the politically persecuted (*Asylstatus*, based on Article 16a of the German Constitution), (ii) refugee protection (*Flüchtlingschutz*, based on the Geneva

15 This quota is adjusted on a yearly basis and determines the number of refugees that every federal state receives (and is responsible for). To calculate the quota, tax contributions and population are taken into account. In determining the allocation of refugees across Germany, the home country of the refugee also plays a role, as some centers are responsible for specific home countries. Depending on their home country, refugees in the application process can stay up to six months or until the decision has been made about their application in a reception center. Under certain circumstances, such as family reunification, the refugee can be transferred within this time frame to another reception facility.

Convention), (iii) subsidiary protection (*Subsidiärer Schutz*, based on German asylum law), and (iv) prohibition of deportation (*Abschiebeverbot*, based on the German residency law). Individuals whose asylum applications are rejected are assigned the status of temporary toleration (*Duldung*, based on German residence law) – which can be withdrawn on short notice – or must leave the country immediately (*Ausreiseverfügung*).

If the person falls within categories (i) or (ii), he or she is granted a three-year residence permit that includes a work permit and allows him or her to apply for permanent residence status. Legal entitlements for those in categories (iii) and (iv) are weaker. Residence permits in these cases last for only one year, although renewal may be possible. These refugees are eligible to apply for permanent residence status after five years, but the criteria are stringent: Applicants need to demonstrate German language proficiency and show that they are economically self-sufficient. Refugees who fall into categories (iii) and (iv) are given unrestricted work permits for the duration of their residence permit. In contrast, individuals with a temporary refugee status need continued approval of the immigration offices (*Ausländerämter*) to work (see Brenzel/Kosyakova 2019; see also Kosyakova/Brenzel, this volume, for further details).

In the first three months of the application process, refugees have no legal access to the labour market. After that, they are entitled to work once they obtain formal permission from the Federal Employment Services and the immigration offices.<sup>16</sup> BAMF classifies asylum applicants by country of origin, with citizens of some countries receiving presumptive eligibility for refugee status. At the time of the survey, citizens from Eritrea, Iran, Iraq, Somalia, and Syria had presumptive eligibility (see also Kosyakova/Brenzel, this volume, for further details).

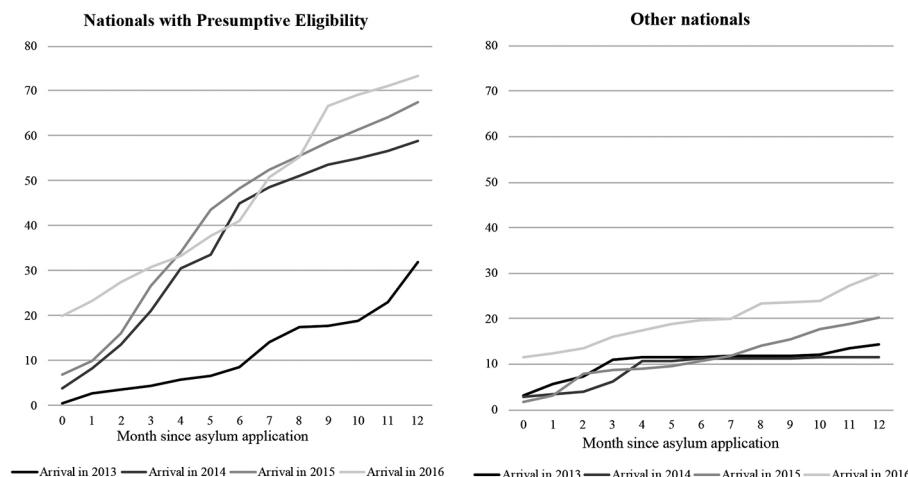
Figure 5 shows how time consuming the asylum process can be. Only 32 percent of refugees with presumptive eligibility arriving in 2013 received a decision on their asylum application within 12 months. Increased bureaucratic capacity then led to substantial improvements in the processing of applications: Among 2015 arrivals, 68 percent received decisions within 12 months. Overall, the asylum process for nationals with presumptive eligibility was relatively efficiently managed from fall 2015 onward, with considerable declines in processing times. For refugees without presumptive eligibility, however, long delays persisted. Only 20 percent of 2015 arrivals in this group received a decision within 12 months of their application.

Delays in resolving asylum status are economically costly. Hainmueller, Hangartner, and Lawrence (2016) show that in Switzerland, which has labour market institutions and language barriers similar to Germany, one additional year of waiting for a decision on asylum status reduces subsequent employment rates by up to 5 percent.

16 The Federal Employment Service verifies whether wages and other working conditions adhere to legal standards. In labor market districts with high unemployment rates, it also ascertains that no German or EU citizen can fill the position.

tage points (or more than 20 percent of the average employment rate). Likewise, Kosyakova and Brenzel (this volume) find for Germany that a six-month delay in asylum processing reduces the transition rate to the first job by 11 percent; they observe a similar relationship for the transition to the first language course.

**Figure 5: Asylum Application Processing Time (Probability of Recognition of Asylum Requests by Waiting Time in Months, in Percent)**



**Note:** All calculations account for sample weights (see Data). The calculations are based on Kaplan-Meier estimation of the probability of recognition of the asylum requests at a specific point in time (failure function). Presumptive eligibility refers to asylum applicants from, Eritrea, Iran, Iraq, Somalia, and Syria.

**Source:** IAB-BAMF-SOEP Refugee Sample, V34.

Overall, the administrative capabilities of the German asylum system were clearly overexerted in the beginning of the 2015 surge in the number of asylum applications. The system adjusted, however, relatively quickly to the new situation and was able to reduce processing times within a brief period, thereby promoting the integration of approved refugees.

## 6.2 Participation in Education and Training

Germany has free and compulsory schooling for children between the ages of 6 and 16 to 18 (depending on the federal state). Consequently, 91 percent of refugee children between the ages of 6 and 17 are in primary and secondary schools (Table 2, b). In this context, school-aged refugee children are best placed to catch up with natives in terms of language proficiency and primary- and secondary-school completion.

Public provision of childcare and education for youngsters under the age of 6 (Table 2 (a)) is more challenging. In principle, all children in this age group are entitled to childcare. In practice, there is not enough public childcare to satisfy even domestic demand. While the proportion of refugee children aged 3 to 5 presently enrolled in kindergarten is relatively high – 79 percent on average and up to 86 percent for those who arrived in 2014 – only 18 percent of the children under 3 years of age who arrived in 2013 are in childcare. Given that early childhood language and education deficits cast a long shadow in terms of later schooling and labour market success, this warrants attention (see, for example, Elango et al. 2015). Moreover, restricted childcare opportunities might particularly affect female refugees’ participation in integration and language programs (Kosyakova/Brenzel 2017).

**Table 2:** School Participation Rates, by Year of Arrival (in Percent)

	2013	2014	2015	2016 <sup>1)</sup>	Total
<b>Childcare</b>					
0 – 2 years old	18	14	13	31	18
3 – 5 years old	72	86	80	69	79
<b>School</b>					
6 – 17 years old	95	93	90	91	91
<b>Vocational Training, University or Technical Colleges</b>					
18 – 35 years old	15	15	12	6	11
18 – 35 years old with secondary schooling degree	18	22	17	8	16

*Note:* All calculations account for sample weights (see Data). <sup>1)</sup> Refers to those arrived in 2016 and afterwards. Less than 1 percent of the respondents arrived after 2016.

*Source:* IAB-BAMF-SOEP Refugee Sample, V34.

Universities and technical college programs are open to refugees in older age groups, as are dual apprenticeship programs (BAMF 2016 a; BMBF 2018). Indeed, sectors such as nursing and elder care have actively tried to recruit young refugees into dual apprenticeship programs to respond to skills shortages in the workforce. However, de facto entry barriers can be formidable. Universities and technical colleges require German proficiency and attestations of prior learning to admit students. These formal requirements are aggravated by the challenges that come with settling into a new country, particularly one in which the rules, language, and culture are unfamiliar.

Consequently, up to 16 percent of refugees in the 18-35 age group with a secondary school education are enrolled in postsecondary educational institutions (Table 2 (c)); only 38 percent of those are participating in vocational training. Resettling in a new country is a laborious process. The fact that only 22 percent of the 2014 cohort was enrolled in postsecondary educational institutions in 2017 – three years after the refugees’ arrival – suggests that the issue may be more structural. Nevertheless, refugees’ self-reported aspirations regarding professional education are high: 80 percent of the refugees with a secondary school education in the 18-35 age group

report that they aspire to participate in vocational or university education in the future.

In addition to granting refugees access to extant educational infrastructure, the German government has also instituted a portfolio of targeted training initiatives. Public language programs incorporate “integration courses” that include both German language instruction and orientation classes that introduce refugees to German institutions.<sup>17</sup> Additional language programs, funded by the European Social Fund (ESF) and BAMF, are focused on groups with more advanced language skills. Several labour market training programs are provided by the Federal Employment Agency (*Bundesagentur für Arbeit*, BA).<sup>18</sup> Beyond that, private actors and government institutions at the municipal level offer further language and training programs. Approximately three-quarters of refugees took part in at least one of these classes.<sup>19</sup> At the time of the survey in the second half of 2017, some 84 percent of the refugees participated in at least one language program, or were still participating, while 54 percent had finished at least one language program.

A striking aspect of the participation in language and labour market programs is the gender gap (see also Brücker et al. 2019; Kosyakova/Brenzel 2017). As demonstrated in Figure 6, this disparity is closely correlated with the need for childcare (see also Koyama 2015 for the United States). For example, the participation of women without children in public language classes is 11 percentage points lower than that of males. It is merely 3 percentage points lower for women with children in childcare but up to 36 percentage points lower for women with children who are not in childcare. This gender gap is also mirrored in private language courses and in participation in job-training programs.<sup>20</sup>

Program enrolment matters to the extent that it facilitates integration. An encouraging piece of evidence in this respect is language acquisition. The proportion of refugees who report having no knowledge of German falls from 98 percent upon entry into Germany to under 50 percent within the first two years of arrival (Table 1, panels (i) and (j)). It drops a further 33 percentage points for those who have

17 This includes the legal system, history and culture, and their rights and obligations, as well as common values such as religious freedom, tolerance, and equal rights.

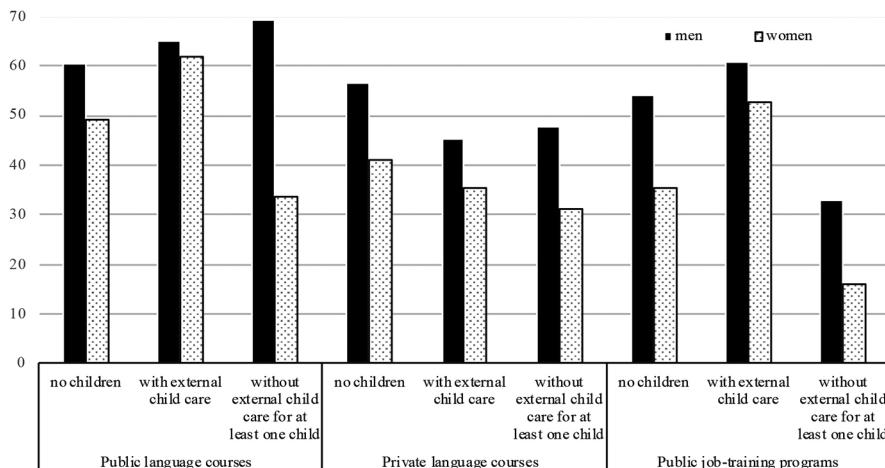
18 Since August 2016, refugees have been required to participate in the integration courses offered by the German government soon after arrival. For most refugees, these courses are provided by the government free of charge. In 2015, the cost to the government was approximately €2,000 per refugee. There are exceptions to this general obligation; see, for example, BAMF (2019).

19 The refugees in the survey were asked about participation in integration and language classes of the BAMF and the BA. They were also asked whether they participated in “other language classes” that were not further specified.

20 Note that this evidence complements Brücker et al. (2019), who did not consider factual childcare support availability, and Kosyakova and Brenzel (2017), who focused on participation in various childcare support programs in 2016.

been in Germany for two or more years, at which point 32 percent of refugees report having a “fair” knowledge of the language and 34 percent report that their German is “good or very good.”<sup>21</sup>

**Figure 6: Language and Job-training Program Participation, by Gender (in Percent)**



*Note:* All calculations account for sample weights (see Data). The category “no children” refers either to persons with no child at all or those with children above age 17. The category “with children” refers to persons with at least one child below the age of 18. External childcare includes nursery, kindergarten, day-care mother, or other paid or unpaid caregivers, including friends, neighbors, or relatives. Public language courses include integration classes, ESF-BAMF language classes and BA language classes. Private language courses include other language programs. Public job-training programs include “Prospects for Refugees,” “Prospects for Young Refugees,” “Prospects for Female Refugees,” and “KompaS” programs, as well as a Labor Market and General Advice by the Employment Agency (BA).

*Source:* IAB-BAMF-SOEP Refugee Sample, V34.

Given the gender gap in language course participation, it will come as no surprise that men make substantially more progress on this front than women. At the time of the survey, 37 percent of the males – but only 21 percent of the females – report good or very good German language skills (Appendix Table A-1, panel (i)). More than one-fifth of women who have one or more children but lack childcare report no improvement in their German language acquisition since arrival; for men this share is approximately 10 percent. This suggests that the dearth of childcare may play an important role in explaining the gender gap in language acquisition.

21 Self-reported German language proficiency correlates positively with the interviewers’ judgement of the respondents’ German skills: Pearson’s correlation coefficient is 0.64, statistically significant at 1 percent.

### 6.3 Social Safety Net Coverage

The federal state to which a refugee has been assigned is responsible for accommodating the refugee. It is also responsible for providing in-kind benefits, although these are largely funded through the national budget. Refugees have the right to housing. Upon arrival in the designated federal state, they stay in reception centres before being assigned longer-term accommodation. More than half of the refugees in the sample live in private, as opposed to collective, housing. This proportion is naturally lower (58 percent) for the 2015 arrival cohort than it is for the 2014 arrival cohort (69 percent; see Table 3, panel (a)). In addition to housing and other in-kind benefits, refugees arriving in 2015 received an average of €327 per month in cash benefits.

Benefits are determined by the Asylum Seeker's Benefits Act (*Asylbewerberleistungsgesetz*) for refugees in the application process or for those denied asylum status.<sup>22</sup> In line with this, 55 percent of refugees in the application process and 58 percent of those rejected received social benefits for refugees in 2017 (Table 3, panel (b)). For those who received a positive decision, mean-tested benefits are provided according to the German Social Code Book II (*Sozialgesetzbuch II*), which comprises the mean-tested German benefit system. Effectively, this group receives benefits analogous to those of natives with the same socioeconomic characteristics. Among approved refugees in the sample, 59 percent received social benefits and 11 percent received other benefits.

In summary, refugees have largely been absorbed into the extant German institutional environment, with supplemental public service provision pertaining to social and cultural integration and language acquisition.

22 This law determines basic benefits and services, including food; accommodation; heating; money for personal necessities; clothes; health care; household goods; money to cover illness, pregnancy, or childbirth; and other payments contingent on individual circumstances. If accommodation is provided in reception facilities, the basic benefits are provided as benefits-in-kind. For other types of accommodation, such as community housing or private housing, the asylum applicant can also receive extra payments. More information about these payments is provided by the responsible city or local government.

**Table 3: Safety Net (at the Household Level, in Percent)**

	Private residence	SGB II benefits <sup>1)</sup>	Refugees benefits <sup>2)</sup>	Child-related benefits <sup>3)</sup>	Other benefits <sup>4)</sup>	Average benefits per household member in EUROS
in % of refugee households						
(a) Arrival Year						
2013	64	27	32	17	10	251
2014	69	42	23	27	8	297
2015	58	47	31	27	12	327
2016 <sup>5)</sup>	43	44	43	23	10	302
(b) Status of the asylum request						
No decision yet	32	19	55	4	10	296
Approved refugees	70	59	19	36	11	328
Rejected ( <i>Duldung</i> )	31	18	58	8	12	296

*Note:* All calculations account for sample weights (see Data). The information on the receipt of benefits by refugee households and the average benefits per household member are provided by the anchor persons of the sample, that is the persons who are drawn from the sampling frame and are the anchors for each household interview. <sup>1)</sup> Mean-tested benefits according Social Code II. <sup>2)</sup> Social benefits for refugees (*Asylbewerber-leistungen*). <sup>3)</sup> Child benefits (*Kindergeld*), Child Supplement (*Kindergeldzuschlag*), Educational Package (*Bildungspaket*). <sup>4)</sup> Compulsory Long-Term Care Insurance (*Pflegeversicherung*), Ongoing Assistance (*Laufende Hilfe*), Basic Security (*Grundsicherung*), Receiving Housing Benefit (*Wohngeld*). <sup>5)</sup> Refers to those arrived in 2016 and afterwards. Less than 1 percent of the respondents arrived after 2016.

*Source:* IAB-BAMF-SOEP Refugee Sample, V34.

## 7 Lessons Learned

The recent refugee influx has dominated German politics and disrupted relations between Germany and her EU partners.<sup>23</sup> Much of the discussion has been coloured by personal biases and political expediency. This paper uses data from a unique, nationally representative household survey of recent refugees to Germany, surveyed soon upon arrival, to deepen our knowledge about this population. We examine the size of the refugee influx, the demographic characteristics of these refugees as they pertain to economic integration, and public policies in place to facilitate integration.

The 1.2 million refugees who arrived in Germany between 2015 and 2016 are, by historical standards, a large group. However, since they constitute only 1.5 percent of the German population, they by no means offer a “solution” to the economic strains imposed by Germany’s aging population. That being said, the timing of their arrival was fortuitous from an economic perspective. Germany was enjoying a sizeable budget surplus in tandem with historically low unemployment rates. It is therefore difficult to argue that the fiscal burden or other economic losses overstrained the capacities of German economy and the welfare state.

Nevertheless, there are numerous challenges that policymakers must address if the refugees are to be successfully integrated into the German economy and society. The first hurdle is the asylum procedures, which are crucial for creating legal certainty and, hence, an important precondition for investments in human capital, employment and other dimensions of economic and social integration (see also Kosyakova/Brenzel, this volume). Low processing figures of asylum applications in the beginning of the influx clearly indicate that the administrative and institutional capabilities of the German asylum system were ill-prepared to handle the sharp rise in the number of asylum applications in 2015. However, the German asylum system adjusted to this challenge within one year and thus established one of the most important preconditions for economic integration and social inclusion. A second relevant hurdle is language acquisition, and here the data are promising. More than 80 percent of refugees have participated in language courses. While only 2 percent of refugees report any knowledge of the German language upon arrival, 64 percent report at least fair knowledge by the second year into their stay. A major issue in language attainment is the gender gap, which is driven by female refugees with childcare responsibilities. Refugee men and women have *de jure* equal access to language and integration classes. However, gender imbalances in childcare obligations together with inadequate public childcare support seem to preclude women’s participation in integration classes and other language or labour-market programs. This

23 Cross-Atlantic relations have not remained immune to the refugee influx. As U.S. President Donald Trump tweeted in June 2018, “The people of Germany are turning against their leadership as migration is rocking the already tenuous Berlin coalition” (Oltermann, Borger, and Boffey 2018).

might put refugee women at a disadvantage, hampering their medium- to long-term prospects for integration.

In regard to education, refugees tend to be better educated than their counterparts in their home countries (for more on refugee selectivity, see Spörlein et. al., this volume), but their educational attainment is low both in absolute terms and relative to that of the German population. This is not problematic for the approximately 30 percent of this group who are school-aged children or toddlers. Over 90 percent of the school-aged children participate in the regular educational system, and the norm is to mainstream them in German schools, which is likely to foster both language acquisition and cultural acclimatization (for more of refugee children and adolescents’ educational attainment, see Will/Homuth, this volume). However, 70 percent of all refugees are aged 18 or older, and 85 percent of them have no professional qualifications. Without institutional support, large-scale labour market integration of this group is likely to be challenging.

That said, recent figures related to vocation training are promising. The number of Syrians and Afghanis who began vocational training increased from 3,000 in 2016 to 10,000 in 2017, a three-fold jump that occurred soon after their arrival in Germany (DESTATIS 2018 b). The booming labour market is helpful in this respect, as is the shortage of skilled workers in many occupations that require vocational or on-the-job training. German firms, for their part, appear to see potential in employing refugees. Many companies, in fact, are mobilizing to demand easier labour market access for refugees and for the refugees’ right to stay in Germany (for example, the DIHK 2019). German legislators adopted an Immigration Act in summer 2019 that regulated the conditions attached to entry and residence of skilled and highly skilled migrants from 2020 onward. In this context, labour market access for refugees whose asylum applications have been rejected is moderately extended by employment or vocational training, which is granted under restrictive conditions. Germany’s private sector largely advocates expanding the scope of this law to grant more generous employment opportunities and legal security to those whose asylum status is denied.

Since skill requirements in the German labour market have been shifting in recent decades, with the demand for educated workers continuously rising and (even native) low-educated workers facing hurdles to labour market success, the low participation of refugees in higher education might be something to keep an eye on (see Black/Spitz-Oener 2010; Dustmann et al. 2014; Dustmann/Ludsteck/Schönberg 2009; Spitz-Oener 2006, among others). More research is needed to understand why this gap exists. Insufficient language proficiency, as well as financial pressures to enter the labour market sooner rather than later, likely play a role.

The refugees in our sample have been in Germany for four years or less, and it is difficult to learn a language, navigate the bureaucracy, find an apartment, support a family, acclimate to a new culture, and participate in (higher) education within such

a time frame. Legal uncertainties regarding refugees' longer-term work permits may also be a deterrent.

In conclusion, our findings do not provide any indication that the recent influx of refugees to Germany has created severe economic and social disarray, justifying the term "refugee crisis." In contrast, the institutional framework and the provision of language and other programs has adjusted relatively rapidly to the new challenge. Although it is still too early for an overall assessment of the integration process, progress can be seen on many fronts. This progress, in terms of language acquisition, vocational training and labour market integration, has been obviously facilitated by the favourable environment of the German economy and the relaxed fiscal situation of public budgets. However, our descriptive analysis also highlights challenges for policy makers. The economic and social integration of refugees takes a great amount of time. Thus, the success of the integration process depends on the ability of institutions to effectively address issues regarding legal certainty, housing and family support, language, education, and job training. The efforts hitherto made to address these issues are important first steps and can be further improved.

## References

AFAD (2013): *Syrian Refugees in Turkey, 2013, Field Survey Results*. Republic of Turkey Prime Ministry, Disaster and Emergency Management Presidency (AFAD). (<https://data2.unhcr.org/en/documents/download/40157>, accessed: February 2, 2018).

Aksoy, Cevat Giray & Poutvaara, Panu (2019): Refugees' Self-Selection into Europe: Who Migrates Where? *Ifo Working Papers* (289).

Alba, Richard & Nee, Victor (1997): Rethinking Assimilation Theory for a New Era of Immigration. *International Migration Review* 31(4): 826–74.

Anon.(2015): Merkel at Her Limit. Germany's Refugee Crisis. *The Economist* (October, 10). Retrieved November 11, 2019 (<https://www.economist.com/europe/2015/10/10/merkel-at-her-limit>).

BAMF (2016 a): *Hochschulzugang Und Studium von Flüchtlingen. Eine Handreichung Für Hochschulen Und Studentenwerke*. Nürnberg.

BAMF (2016 b): *The Stages of the Asylum Procedure. An Overview of the Individual Procedural Steps and the Legal Basis*. Nuremberg.

BAMF (2017): *Das Bundesamt in Zahlen 2016. Asy, Migration Und Integration [The Federal Office in Figures 2016. Asylum, Migration and Integration]*. Nuremberg.

BAMF (2019): Learning German. Retrieved November 11, 2019 (<http://www.bamf.de/EN/Willkommen/DeutschLernen/deutschlernen-node.html>).

Black, Sandra E. & Spitz-Oener, Alexandra (2010): Explaining Women's Success: Technological Change and the Skill Content of Women's Work. *Review of Economics and Statistics* 92(1): 187–94.

BMBF (2018): Bildung Und Forschung in Zahlen 2017 [Education and Research in Figures 2017]. *Bundesministerin Für Bildung Und Forschung [Federal Ministry of Education and Research]*. Retrieved August 15, 2018 ([https://www.bmbf.de/pub/Education\\_and\\_Research\\_in\\_Figures\\_2017.pdf](https://www.bmbf.de/pub/Education_and_Research_in_Figures_2017.pdf)).

BMI (2017): 280.000 Asylsuchende Im Jahr 2016 [280.000 Asylum-Seekers in the Year 2016]. *Bundes Ministerium Des Innern, Für Bau Und Heimat, BMI [Federal Ministry for the Interior, Building, and Community]*. Retrieved March 28, 2017 (<http://www.bmi.bund.de/SharedDocs/Pressemitteilungen/DE/2017/01/asylanträge-2016>).

Borjas, George J (1987): Self-Selection and the Earnings of Immigrants. *The American Economic Review* 77(4): 531–53.

Brenzel, Hanna, Brücker, Herbert, Guichard, Lucas, Fendel, Tanja, Jaschke, Philipp, Keita, Sekou, Kosyakova, Yuliya, Trübwetter, Parvati & Vallizadeh, Ehsan (2018): *Endbericht Für Das Projekt “Flüchtlingsmonitoring.”*

Brenzel, Hanna & Kosyakova, Yuliya (2019): Geflüchtete Auf Dem Deutschen Arbeitsmarkt. Längere Asylverfahren Verzögern Integration Und Spracherwerb. *IAB Kurzbericht* 2019(6): 1–8.

Brücker, Herbert, Croisier, Johannes, Kosyakova, Yuliya, Kröger, Hannes, Pietrantuono, Giuseppe, Rother, Nina & Schupp, Jürgen (2019): Second Wave of the IAB-BAMF-SOEP Survey: Language Skills and Employment Rate of Refugees Improving with Time. *IAB Brief Report* 2019(3): 1–19.

Brücker, Herbert, Glitz, Albrecht, Lerche, Adrian & Romiti, Agnese (2018): *Occupational Recognition and Immigrant Labor Market Outcomes*. 12030.

Brücker, Herbert, Rother Nina & Schupp, Jürgen (2017 eds.): *IAB-BAMF-SOEP-Befragung von Geflüchteten 2016: Studiendesign, Feldergebnisse Sowie Analysen Zu Schulischer Wie Beruflicher Qualifikation, Sprachkenntnissen Sowie Kognitiven Potenzialen*. Vol. 13/2017. Berlin: DIW Berlin, German Institute for Economic Research.

Brücker, Herbert, Rother, Nina, Schupp, Jürgen, Babka von Gostomski, Christian, Böhm, Axel, Fendel, Tanja, Friedrich, Martin, Giesselmann, Marco, Kosyakova, Yuliya, Kroh, Martin, Kühne, Simon, Liebau, Elisabeth, Richter, David, Romiti, Agnese, Schacht, Diana, Scheible, Jana A., Schmelzer, Paul, Siegert, Manuel, Sirries, Steffen, Trübwetter, Parvati & Vallizadeh, Ehsan (2016): Forced Migration, Arrival in Germany, and First Steps toward Integration. *DIW Economic Bulletin* 6(48): 541–56.

Chiswick, Barry R (1999): Are Immigrants Favorably Self-Selected? *The American Economic Review* 89(2): 181–85.

Cohen, Roger (2015): Germany, Refugee Nation. *The New York Times* (December, 21). Retrieved November 11, 2019 (<https://www.nytimes.com/2015/12/22/opinion/germany-refugee-nation.html>).

Crisp, Jeff (1999): Who Has Counted the Refugees? UNHCR and the Politics of Numbers. *Policy Research Unit UNHCR* (12): 33–62.

DESTATIS (1953): *Statistisches Taschenbuch Über Die Heimatvertriebenen in Der Bundesrepublik Deutschland Und Westberlin*. Wiesbaden: Statistisches Bundesamt (DESTATIS, Federal Statistical Office).

DESTATIS (2017): *Press Release Number 290/17, August 23, 2017*. Wiesbaden: Statistisches Bundesamt (DESTATIS, Federal Statistical Office).

DESTATIS (2018 a): *Bildungsstand Der Bevölkerung. Ergebnisse Des Mikrozensus 2017*. Wiesbaden: Statistisches Bundesamt (DESTATIS, Federal Statistical Office).

DESTATIS (2018 b): *Press Report No. 303, August 15, 2018*. Wiesbaden: Statistisches Bundesamt (DESTATIS, Federal Statistical Office).

DIHK (2019): Netzwerk Unternehmen Integrieren Flüchtlinge. Retrieved November 11, 2019 (<https://www.unternehmen-integrieren-fluechtlings.de/>).

Dustmann, Christian, Fasani, Francesco, Frattini, Tommaso, Minale, Luigi & Schönberg, Uta (2017): On the Economics and Politics of Refugee Migration. *Economic Policy* 32(91): 497–550.

Dustmann, Christian, Fitzenberger, Bernd, Schönberg, Uta & Spitz-Oener, Alexandra (2014): From Sick Man of Europe to Economic Superstar: Germany's Resurgent Economy. *Journal of Economic Perspectives* 28(1): 167–88.

Dustmann, Christian, Ludsteck, Johannes & Schönberg, Uta (2009): Revisiting the German Wage Structure \*. *Quarterly Journal of Economics* 124(2): 843–81.

Elango, Sneha, García, Jorge Luis, Heckman, James & Hojman, Andrés (2015): *Early Childhood Education*. National Bureau of Economic Research (w21766). Cambridge, MA.

Esser, Hartmut (2001): *Integration Und Ethnische Schichtung*. Arbeitspapiere-Mannheimer Zentrum für Europäische Sozialforschung (40).

Esser, Hartmut (2006): *Migration, Sprache Und Integration. AKI-Forschungsbilanz 4*. Berlin: Wissenschaftszentrum Berlin für Sozialforschung gGmbH FSP Zivilgesellschaft, Konflikte und Demokratie Arbeitsstelle Interkulturelle Konflikte und gesellschaftliche Integration -AKI-.

Faulenbach, Bernd (2012): Die Vertreibung Der Deutschen Jenseits von Oder Und Neiße. *Aus Politik Und Zeitgeschichte (APuZ)* 51-52/2002: 44–54.

Fuchs, Johann, Söhlein, Doris, Weber, Brigitte & Weber, Enzo (2018): Stochastic Forecasting of Labor Supply and Population: An Integrated Model. *Population Research and Policy Review* 37(1): 33–58.

Guichard, Lucas (2020): Self-Selection of Asylum Seekers: Evidence from Germany. *Demography*. Advance online publication. <https://doi.org/10.1007/s13524-020-00873-9>.

Hainmueller, Jens, Hangartner, Dominik & Lawrence, Duncan (2016): When Lives Are Put on Hold: Lengthy Asylum Processes Decrease Employment among Refugees. *Science Advances* 2(8): 1–7.

Hein, Jeremy (1993): Refugees, Immigrants, and the State. *Annual Review of Sociology* 19(1): 43–59.

Horn, Heather (2015): The Staggering Scale of Germany's Refugee Project. *The Atlantic*, September 12.

Hosner, Roland, Vana, Irina & Khun Jush, Golschan (2017): *Integrationsmaßnahmen Und Arbeitsmarkterfolg von Flüchtlingen Und Subsidiär Schutzberechtigten in Österreich*. Abschlussbericht des FIMAS-Projekts, Vienna. ([http://research.icmpd.org/fileadmin/Research-Website/Publications/FIMAS\\_Bericht\\_final.pdf](http://research.icmpd.org/fileadmin/Research-Website/Publications/FIMAS_Bericht_final.pdf), accessed: February 18, 2018).

IAB-BAMF-SOEP Survey of Refugees (2019): Scientific Use Files (SUF) v.34.

Isphording, Ingo E. & Otten, Sebastian (2011): *Linguistic Distance and the Language Fluency of Immigrants*. Vol. 274. 274.

Isphording, Ingo E. & Otten, Sebastian (2014): Linguistic Barriers in the Destination Language Acquisition of Immigrants. *Journal of Economic Behavior and Organization* 105: 30–50.

Jacobsen, Jannes (2019): Language Barriers during the Fieldwork of the IAB-BAMF-SOEP Survey of Refugees in Germany, in: Dorothée Behr (Hrsg.), *Surveying the Migrant Population: Consideration of Linguistic and Cultural Issues*. Köln: GESIS – Leibniz-Institut für Sozialwissenschaften. S. 75–84

Kalter, Frank & Kogan, Irena (2014): Migrant Networks and Labor Market Integration of Immigrants from the Former Soviet Union in Germany. *Social Forces* 92(4): 1435–56.

Kogan, Irena (2012): Potenziale Nutzen! : Determinanten Und Konsequenzen Der Anerkennung von Bildungsabschlüssen Bei Zuwanderern Aus Der Ehemaligen Sowjetunion in Deutschland. *Kolner Zeitschrift Fur Soziologie Und Sozialpsychologie* 64(1): 67–89.

Kogan, Irena (2016): Integration Policies and Immigrants' Labor Market Outcomes in Europe. *Sociological Science* 3(August):335-358.

Koser, Khalid (1997): Social Networks and the Asylum Cycle: The Case of Iranians in the Netherlands. *The International Migration Review* 31(3): 591–611.

Koser, Khalid & Pinkerton, Charles (2002): The Social Networks of Asylum Seekers and the Dissemination of Information about Countries of Asylum. *Research Development and Statistics Directorate, Home Office*.

Kosyakova, Yuliya & Brenzel, Hanna (2017): Teilnahme an Maßnahmen Zum Spracherwerb Sowie Zur Bildungsbeteiligung in Deutschland, in: Herbert Brücker, Nina Rother & Jürgen Schupp (Hrsg.), *IAB-BAMF-SOEP-Befragung von Geflüchteten 2016: Studiendesign, Feldergebnisse sowie Analysen zu schulischer wie beruflicher Qualifikation, Sprachkenntnissen sowie kognitiven Potenzialen. IAB-Forschungsbericht. 13/2017*. Nuremberg: IAB. S. 41-53

Kosyakova, Yuliya, Olbrich, Lukas, Sakshaug, Joseph W. & Schwahnhäuser Silvia (2019): Identification of Interviewer Falsification in the IAB-BAMF-SOEP Survey of Refugees in Germany. *FDZ-METHODENREPORT. Methodological Aspects of Labour Market Data* 02/2019.

Koyama, Jill (2015): Constructing Gender: Refugee Women Working in the United States. *Journal of Refugee Studies* 28(2): 258–75.

Kroh, Martin, Kühne, Simon, Jacobsen, Jannes, Siegert, Manuel & Siegers, Rainer (2017): *Sampling, Nonresponse, and Integrated Weighting of the 2016 IAB-BAMF-SOEP Survey of Refugees (M3/M4) – Revised Version*. Berlin.

Kühne, Simon, Jacobsen, Jannes & Kroh, Martin (2019): Sampling in Times of High Immigration: The Survey Process of the IAB-BAMF-SOEP Survey of Refugees. *Survey Methods: Insights from the Field* 1–9.

Massey, Douglas S., Arango, Joaqui'n, Hugo, Graeme, Kouaouci, Ali, Pellegrino, Adela & Taylor, J. Edward (1998): *Worlds in Motion: Understanding International Migration at the End of the Millennium*. Oxford: Oxford University Press.

Melitz, Jacques & Toubal Farid (2014): Native Language, Spoken Language, Translation and Trade. *Journal of International Economics* 93(2): 351–63.

Oltermann, Philip, Borger, Julian & Boffey, Daniel (2018): Trump Says Germans 'Turning against Their Leadership' over Immigration. *The Guardian* (June, 18). Retrieved November 11, 2019 (<https://www.theguardian.com/us-news/2018/jun/18/donald-trump-attacks-angela-merkel-saying-her-coalition-is-rocking>).

Reitz, Jeffrey G (1998): *Warmth of the Welcome: The Social Causes of Economic Success for Immigrants in Different Nations and Cities*. Boulder, CO: Westview Press.

Scalettaris, Giulia (2007): Refugee Studies and the International Refugee Regime: A Reflection on a Desirable Separation. *Refugee Survey Quarterly* 26(3): 36–50.

Spitz-Oener, Alexandra (2006): Technical Change, Job Tasks, and Rising Educational Demands: Looking Outside the Wage Structure. *Journal of Labor Economics* 24(2): 235–70.

UNHCR (2017) *Global Trends – Forced Displacement in 2016*. Genf: UNHCR

Williams, Lucy (2006): Social Networks of Refugees in the United Kingdom: Tradition, Tactics and New Community Spaces. *Journal of Ethnic and Migration Studies* 32(5): 865–79.

## Appendix

**Table A-1: Characteristics of Refugees, by Gender (in Percent)**

	Men	Women
<b>Country of origin</b>		
Syria	44	43
Afghanistan	18	19
Iraq	10	15
Eritrea	5	4
Iran	3	3
West Balkan	1	2
Other countries	19	14
<b>Religion</b>		
Christian	14	15
Muslim	79	81
No religious affiliation	7	4
Others	0	0
<b>Arrival status</b>		
Without family, friends, and others	49	12
With family	41	83
With friends and/or others	10	5
<b>Support by networks in Germany prior to immigration</b>		
No support by friends or relatives	86	73
Support by friends or relatives	14	27
<b>Age</b>		
Under 20	5	4
20 – 35	67	57
36 – 50	23	31
51 – 65	5	7
Over 65	0	1
<b>Schooling</b>		
No school	13	20
Left without schooling degree	25	23
Secondary schooling degree	20	21
Upper secondary schooling degree	33	30
Other schooling degree	4	2
No response	5	5
<b>Higher education</b>		
None	72	83
Left without professional degree	8	3
Company-based training / vocational schooling degree	6	3

	Men	Women
University/ technical-college degree	12	9
No response	2	2
Language proficiency before migration <sup>1)</sup>		
None at all or poor	98	99
Fair	1	1
Good or very good	1	0
Language proficiency after migration <sup>1)</sup>		
None at all or poor	29	47
Fair	34	32
Good or very good	37	21

*Note:* All calculations account for sample weights (see Data). <sup>1)</sup> Self-reported German language proficiency. <sup>2)</sup> Self-reported German language proficiency.

*Source:* IAB-BAMF-SOEP Refugee Sample, V34.