

# Asylum Seekers in the European Union: **Building Evidence to Inform Policy Making**



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# Table of Contents

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<b>Acknowledgements</b>	<b>5</b>
<b>Acronyms</b>	<b>7</b>
<b>Overview</b>	<b>9</b>
<hr/>	
<b>I. Finding Evidence to Support Policy Making</b>	<b>13</b>
The Policy Challenge	14
Study Objective and Main Findings	15
<hr/>	
<b>II. Context, Data, and Methodology</b>	<b>17</b>
The Context	17
Data Sources	21
Methodology	24
<hr/>	
<b>III. Sociodemographic Profiles of Asylum Seekers</b>	<b>27</b>
Three Broad Groups of Asylum Seekers	27
Nationals of High-Recognition Countries	30
Nationals of Low-Recognition Countries	35
The Decision to Migrate	38
Primary Movers, Secondary Movers, and Stayers	38
<hr/>	
<b>IV. The Migration Experience</b>	<b>45</b>
A Long and Perilous Journey	45
The Financial Cost	47
The Physical and Emotional Toll	48
Intended Destinations	52
Few Planned to Return Home	52
<hr/>	
<b>V. Education, Skills, and Work Experience</b>	<b>55</b>
Education and Country of Origin	56
Work Experience	58
Speakers of European Languages	60
Literacy Proficiency Levels Compared	61
Asylum Seekers and Other Recent Migrants in Europe	62
<hr/>	
<b>VI. Anxiety and Depression</b>	<b>67</b>
Anxiety, Depression, and Exposure to Violence in Transit	68
<hr/>	
<b>VII. Conclusions and Insights into Policy</b>	<b>73</b>
<b>References</b>	<b>76</b>
<b>Appendix</b>	<b>79</b>



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# Acronyms

<b>CTRPI</b>	Commissione Territoriale per il Riconoscimento Protezione Internazionale [Regional Commission for the Granting of International Protection]
<b>CFR</b>	Council on Foreign Relations
<b>EASS</b>	Euro Asylum Seekers' Survey 2017
<b>EC</b>	European Commission
<b>EU</b>	European Union
<b>FGD</b>	Focus group discussion
<b>GSI</b>	Global Severity Index
<b>ICD</b>	International Statistical Classification of Diseases and Related Health Problems
<b>IDI</b>	In-depth interview
<b>ILO</b>	International Labour Organization
<b>IOM</b>	International Organization for Migration
<b>KRI</b>	Kurdistan Region of Iraq
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PIAAC</b>	Programme for the International Assessment of Adult Competencies
<b>PTSD</b>	Post-traumatic stress disorder
<b>UNHCR</b>	UN Refugee Agency, Office of the United Nations High Commissioner for Refugees

## Distinctions

*Asylum seekers:* Individuals who are the subjects of this study because they have applied for international protection and are awaiting a decision.

*Migrants:* All people on the move, regardless of their presence or legal status in Europe.

*Refugees:* Individuals who have been granted asylum or another form of international protection.

*Primary or first movers:* Those who moved from their home countries directly to Greece or Italy.

*Secondary movers:* Those who had settled in another country foreign to them before moving to the EU.

*Recognition rate:* The ratio of asylum applicants granted protection to the total number of asylum decisions in a given year.

*High-recognition country:* Those with recognition rates of 40 percent or more.

*Low-recognition country:* Those with recognition rates below 40 percent.



# Overview

## The need to build evidence

Policy needs to be informed by facts: the more that is known about those who may be affected, the more realistic and achievable a policy's goals will be. However, while there have been massive movements of people across borders in recent years, many entering the European Union (EU), there is little systematic data about them available. Most of the evidence that is available is anecdotal and journalistic; it deals primarily with the tragedies of migrants in transit rather than providing hard data on which policy-makers can base policies.

In 2015 and 2016, migrant flows into the EU surged, with Greece and Italy the main entry points. Many of the migrants applied for international protection in Europe, becoming asylum seekers. This spike in EU asylum seekers, as well as the increasing numbers of those granted refugee status, brought a need for information on who they are—their sociodemographic characteristics; their education and work experience; their experience on the journey to Italy and Greece; and what it cost them not only financially but also physically and emotionally to get there.

This study took a rigorous approach to ensure that it produced hard data to support policy decisions—decisions made not only in receiving countries but also in countries of origin and transit. The first step, in early 2017, was to survey adults in asylum centers in Greece and Italy, to learn more details about them and about their experience on the journey. The study made two novel contributions:

an assessment of skills through a computer-based literacy test comparable to the OECD adult literacy test, and an evaluation of the respondents' symptoms of anxiety and depression. The skills assessment complements the self-reported educational attainment data. The screening of anxiety and depression has implications for how asylum seekers can be helped to adapt to new situations.

## Who are the asylum seekers?

The asylum seekers in Greece are different from those in Italy. Those in Greece mostly came as families from the Syrian Arab Republic, Iraq, and Afghanistan and, based on past EU recognition rates, are more likely to be granted international protection status. Those in Italy were mainly single young men, a large share from West Africa, with many facing a low probability of being granted any legal status in Europe.

The journey to the EU followed a few main routes: through Niger for West Africans or Sudan for East Africans on their way to Libya to make the sea crossing to Italy; or through Turkey, passing through Iran for Afghans, to make the sea crossing to Greece. The journey was much longer for those in Italy, who spent about a month and a half in each of about three main transit points, compared to over a week in each for those in Greece. Particularly on the routes towards Italy, asylum seekers encountered violence in transit—that happened to nearly half of those in Italy, even before the perilous crossing of the Mediterranean in inflatable boats.

Where there are data for comparison, it appears that many of the asylum seekers surveyed were wealthier than those who stayed at home and did not migrate—a finding that is perhaps not surprising considering that for Sub-Saharan Africans the average cost of the journey was about three years of income for a person living in extreme poverty.

However, not all moved directly from their country of origin to the EU. Some had previously settled in third countries, such as Libya and Iran, before embarking on a second migration journey. For example, one in five asylum seekers in Italy was one of these “secondary movers.” Of those, 43 percent were Sub-Saharan Africans who had been living in Libya and departed when Libya itself erupted in conflict. For many Sub-Saharan Africans, the conflict likely turned Libya from a destination into a transit country. Among those in Greece, about one in four were secondary movers, mostly Afghans who had been living in Iran (of whom about a third had been born there) and Syrians who had been living in Turkey.

Asylum seekers in Greece and Italy had on average low levels of education—only 32 percent of those in Italy and 29 percent in Greece had completed secondary school or above. In most cases, this reflects the education levels in their countries of origin.

Many asylum seekers speak a European language, usually English; 80 percent of those in Italy and 45 percent in Greece speak at least one. Many Sub-Saharan Africans, of course, come from countries where English or French are official languages. The literacy test, administered in official languages by country of origin, found that in general asylum seekers have limited proficiency in the designated language. Not surprisingly, the better-educated did better in the literacy assessment. It is worth noting that the literacy profiles of asylum seekers do not differ from those of other migrants who

have settled in Europe for the past five years. In other words, they were similar to recent migrants already living in Europe.

A large share of asylum seekers in Italy, about 62 percent, had work experience. Among those who had held a job, most had worked in basic occupations, like construction and agriculture, before arriving in Italy and nearly 70 percent did some work in transit. Many West Africans worked without pay during the journey. Among those in Greece, work experience was minimal, partly because of gender gaps in employment: the population of asylum seekers there is more balanced between men and women, and about 70 percent of the women from the Syrian Arab Republic, Iraq, and Afghanistan had no work experience. Overall, younger asylum seekers (18–25) are less likely to have ever had a job, possibly because they have only recently entered the labor market.

Anxiety and depression can affect the ability of asylum seekers to exploit their abilities. Instances of mental distress were widespread, possibly caused by a combination of stresses back home, during their journey, and in waiting for a decision in reception centers. About 70 percent of the asylum seekers in Greece and almost 50 percent of those in Italy showed elevated levels of severe mental distress.

## Insights into Policy

While a comprehensive policy agenda on migration and forced displacement is beyond the scope of this report, the evidence presented here—based on a large representative sample of adult asylum seekers in Italy and Greece in 2017—can help inform policymaking:

- A response to the European influx of migrants needs to combine humanitarian with development approaches, particularly when there

is a context of protracted conflict in countries of origin. But the same can be said for those not coming from conflict settings: despite the financial, physical, and emotional difficulties of their journey, many still make the journey. It is important to thoroughly understand and tackle the vulnerabilities that had confronted people in their countries of origin or where they had initially settled. This is critical in efforts to find sustainable resolutions of migration flows. In other words, whether or not they come from countries in conflict, asylum seekers tend to come from circumstances where, from their point of view, despite the costs and dangers of the journey to Europe, the opportunities to be attained were worth the risk.

- The design of interventions to help these migrants lead productive lives—either in Europe for the many who will be granted protection or in their countries of origin for those who will return—can be informed by findings on education and skills. Delivery of schooling or training and promotion of their engagement in the labor market as part of EU integration policies, for example, need to be adapted to their initial skills and, importantly, to the needs of the labor market that is expected to absorb them.
- The support that these asylum seekers need goes beyond traditional interventions. The anxiety and depression findings, which provide an important policy-relevant dimension, make it clear that the mental health of many in the groups studied is compromised. The asylum process can offer a unique opportunity for early identification and intervention; certainly, those in asylum centers could benefit directly from targeted psychological support.

This report, then, contributes to knowledge of aspects of migration and forced displacement, but much more has yet to be learned.

First, the response by Governments, civil society, development partners, and other stakeholders will require reinforcement of the evidence base, so that the response can be adapted to changes in the situation and to support more effective interventions. The difficulties of collecting the information needed to support policies that affect transient and vulnerable populations are obvious—among them resolving methodological and ethical considerations—and they apply in many countries worldwide that have had to deal with large migrant populations and forced displacement. Efforts to collect data and build evidence need to be sustained, both by systematic collection of administrative data and by survey work that also profiles host communities.

Second, additional data collection and analysis would be valuable for (1) comparing EU host community data with refugee, asylum seeker, or other migrant data to analyze impacts on host communities and attitudes toward migrants of all types; (2) profiling asylum seekers and refugees in other EU countries with special attention to vulnerable groups and on countries where earlier there were large influxes of migrants; (3) exploring how to capitalize on current data collection efforts, particularly administrative, to capture more timely policy-relevant information; and (4) evaluating the cost-effectiveness of policies as they are being considered and after they are adopted, such as integration policies, transit country measures to curb the flows, and roll-out of voluntary return packages.



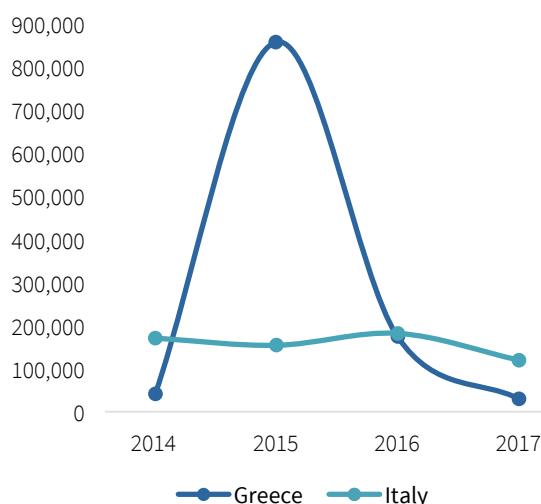
## I. Finding Evidence to Support Policy Making

The last few years have seen a surge in immigrants into the European Union (EU), mainly through Greece and Italy. In 2015 alone, over 1 million people came in, the majority through Greece and of Syrian nationality. About 1.1 million people have entered Greece since 2014, and another 630,000 have crossed the sea to Italy (Figure 1.1). The sudden massive inflow of migrants has impressed a sense of urgency in policymakers in host countries—not only EU Member States but also others like Turkey, Jordan, and Lebanon—and attracted attention worldwide through international press reports of sea disasters and fatalities among migrants struggling to reach the EU. Since 2014 an estimated 16,000 people have

died or disappeared crossing the Mediterranean (UNHCR 2018).

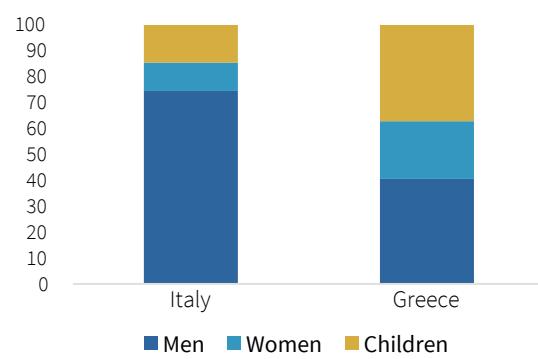
Women, men, and children from numerous countries have entered the EU. Africans mostly came through Italy, 75 percent of them adult men (Figure 1.2). In 2016, when arrivals in Italy peaked, 20 percent of the immigrants were from Nigeria and 11 percent from Eritrea (Figure 1.3). Arrivals in Greece (Figure 1.4) were dominated by Syrians (56 percent in 2016), Afghans (24 percent), and Iraqis (11 percent). More children entered through Greece than through Italy. UNHCR data (2018) shows, however, that in 2017 the composition of immigrant flows began to change and broaden.<sup>1</sup>

**Figure 1.1. Sea Arrivals, Italy and Greece, 2014–17**



**Source:** UNHCR (2018).

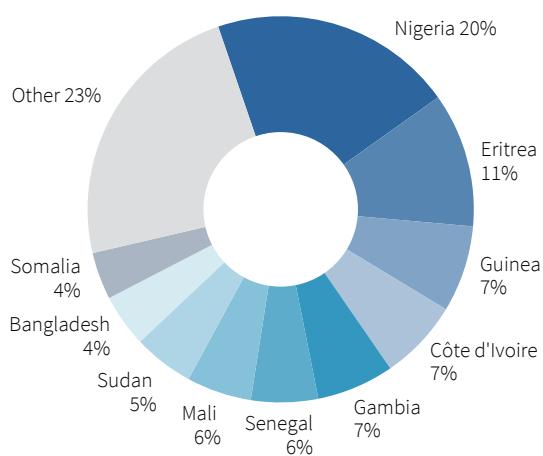
**Figure 1.2. Demographics of Sea Arrivals, 2014–17, Percent**



**Source:** UNHCR (2018).

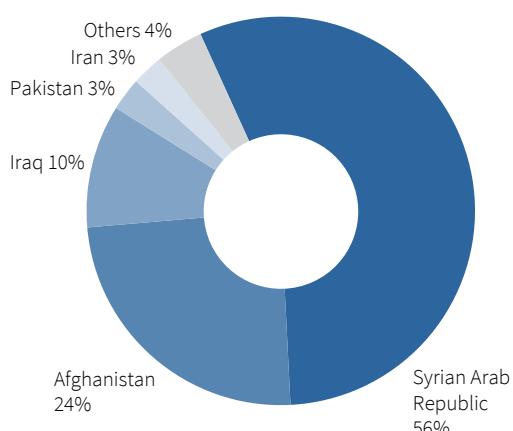
<sup>1</sup> In 2017 and 2018, immigrants from other countries of origin began to enter, such as those from Bangladesh (8 percent of the flow in the first quarter of 2018), Tunisia (6 percent) and Morocco (5 percent).

**Figure 1.3. Nationality of Sea Arrivals, Italy, 2016, Percent**



Source: UNHCR (2018).

**Figure 1.4. Nationality of Sea Arrivals, Greece, 2016, Percent**



Source: UNHCR (2018).

## The Policy Challenge

The policy response to the migrant crisis in the EU must continue to evolve. With flows from Africa into Italy persisting, over 3,000 dead or missing in

the Mediterranean in 2017 alone,<sup>2</sup> and the protracted Syrian crisis, countries of migrant origin, transit, and destination must all prepare for humanitarian and development responses.

However, the evidence on which to base policy actions is minimal. Early in the European migrant crisis, administrative data collected by governments and international agencies captured only the total number of immigrants entering the EU and some very basic demographics. This data scarcity was, unavoidably, then supplemented by anecdotal evidence and media reports on their tragic experiences, the rescue efforts, and the complexity of managing the rapid and large influx of people into host countries. Today, although increased data collection and analysis have expanded knowledge of the backgrounds and experiences of refugees, asylum seeker, and other migrants,<sup>3</sup> there are still significant gaps in the information needed to support formulation of effective development responses for any group entering the EU. The gaps are even more worrisome given the variety of countries of origin and the contexts the immigrants come from. One-size-fits-all policies are unlikely to work.

The need to build a solid foundation of knowledge to fully understand migration and forced displacement is not limited to the EU; numerous countries worldwide are confronted by similar challenges. In 2016 the number of displaced persons reached 65.6 million people, 22.5 million of whom are refugees and 44.1 million displaced within their own country. In 2016 about 17 percent of refugees worldwide were estimated to have reached Turkey

<sup>2</sup> <http://data2.unhcr.org/en/situations/mediterranean>.

<sup>3</sup> For example, IOM (2016) analyzes the socioeconomic background of migrants and refugees in Italy; as does Buber-Ennser et al. (2016), who studied the human capital, among other aspects, of refugees in Austria.

and 14 percent were in the rest of Europe.<sup>4</sup> Other regions are also hosting a large share of refugees, such as the 30 percent in Sub-Saharan Africa and 16 percent in the Middle East and North Africa.<sup>5</sup> The scarcity of data is even more of a problem for developing countries.

### **Study Objective and Main Findings**

The objective of this study is to systematically analyze data on asylum seekers in Italy and Greece to inform migration and forced displacement policies being formulated by policymakers in countries of origin, transit, and destination. It draws on a large sample of asylum seekers to rigorously survey adults in asylum centers in Italy and Greece and analyze the information elicited on their sociodemographic characteristics and the migration experience. One novel aspect of this study was to assess asylum seeker skills using a computer-based literacy test comparable to the OECD adult literacy test; a second was to screen for anxiety and depression. Although this report does not attempt to formulate a comprehensive policy agenda on migration and forced displacement, the evidence it records may be helpful to policymakers in a variety of ways.

Asylum seekers are not a monolithic group: Over 90 percent of those reaching Greece are from the Syrian Arab Republic, Iraq, and Afghanistan, who all have a high probability of being granted refugee status given past EU recognition rates, and most travelled in families. In contrast, Italy has attracted significant flows from West African countries, for the most part single young men with probably a low chance of receiving international protection.

For asylum seekers, migration was very expensive: for Sub-Saharan Africans the average payment is equivalent to about three years of income for a person living in extreme poverty (the US\$1.9/day poverty line of low-income countries). Other costs are also significant: Among the African young men reaching Italy, nearly half experienced violence en route even before the perilous crossing of the Mediterranean. Yet many still expressed hope for a future in Europe and few were willing to return to their country of origin.

In general, immigrants into the EU have mainly left circumstances that, in their views, made the costs and dangers of the journey to Europe worthwhile. This realization can have implications for the design of policies to curb the flows—combating smugglers, breaking down human trafficking networks, and deterrent border control policies—but still ensure that those in need of international protection have access to it and also avoid raising the costs and dangers of the journey.

The study's innovative skills assessment validated the self-reported educational achievements: Asylum seeker literacy scores in both Italy and Greece are very similar to those of migrants in other European countries. For those with work experience, it is mostly in low-skill jobs. These insights can inform policies both for integration and for return of migrants to their countries of origin for reintegration. Yet it is important to keep in mind that the study does not cover all entrants before 2017 or those who did not pass through Italy and Greece to enter Europe. Other groups may have more skills and job experience than those surveyed here.

This study also illustrates that the policy agenda needs to take into account the mental health dimension. Anxiety and depression levels are high and nearly 70 percent of the asylum seekers in Greece and around 40 percent of those surveyed in Italy suffered from severe mental distress.

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<sup>4</sup> As reported by UNHCR and based on the 17.2 million refugees already under UNHCR mandate. <http://www.unhcr.org/5943e8a34.pdf>.

<sup>5</sup> Ibid.

Finally, the study sheds light on the dynamics of migration and selection patterns by comparing those who moved from their home countries directly to Greece or Italy (first movers) with those who first moved to another country before moving on to Europe (secondary movers). It also distinguishes asylum seekers from the national population in their countries of origin. For example, where data for home countries allowed comparisons, the study found asylum seekers to be wealthier than those who did not migrate. Thus, cost may be a barrier to migrating for some, even though so many consider the benefits to outweigh the costs.

In what follows, Chapter II sets out asylum policies and processes at the time of the survey, and describes the data collected for this study. Chapter III describes the sociodemographic profiles of asylum seekers and offers insights into why people chose to migrate. Chapter IV details the migration experience itself, in terms of transit, cost, and exposure to violence. Chapter V describes the education, work experience, and skills of asylum seekers, and Chapter VI discusses the extent of their mental distress. Chapter VII concludes with general insights into policy gleaned from the analysis.

## II. Context, Data and Methodology

### The Context

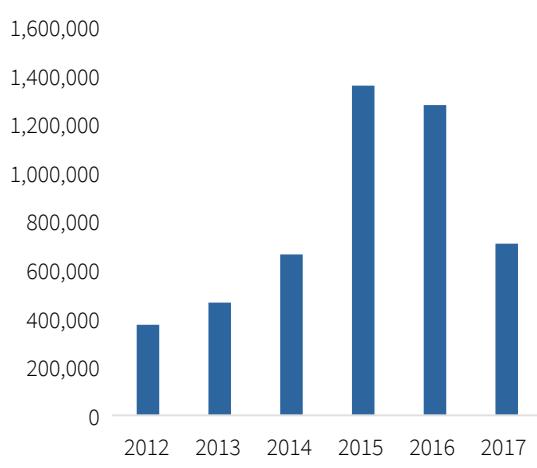
#### **EU Policy Responses to Date**

Early EU responses to the migrant crisis were directed to immediate action to prevent further loss of life at sea and to manage and curb the rapid inflows (EC 2015). The budget for sea search and rescue operations was expanded, and the EU moved to undercut smuggling networks by targeting their vessels and limiting their online reach to potential migrants (EC 2015). Part of this immediate response, reflected in the “European Agenda of Migration” put forward in mid-2015, entailed efforts to share the pressures of the migration flows between Member States and work with countries

of origin to tackle migration. The Agenda outlined short- and medium-term areas of action on migration policy centered on reducing incentives for migration; border management for saving lives and securing external borders; and strengthening both asylum and legal migration policies. There followed detailed packages of proposals,<sup>6</sup> such initiatives as setting up hotspots and relocation mechanisms, and partnerships with countries outside the EU, like the action plan agreed between the EU and African heads of State at the Valletta Summit on migration in November 2015.<sup>7</sup>

Migration flows into Greece plunged after the EU and Turkey agreed on a joint action plan.<sup>8</sup> The plan consisted of EU financial support and humanitarian assistance to Turkey to support Syrian refugees and host communities there and to stem illegal migration. On March 18, 2016, the parties executed the formal agreement.<sup>9</sup> The number of migrants moving from Turkey to Greece plunged from 124,471 in January and February 2016 to 26,971 in March and 3,650 in April (UNHCR 2018).

**Figure 2.1. Applications for EU Asylum, 2012–17**



**Source:** EASO (2018).

<sup>6</sup> See for example, [http://europa.eu/rapid/press-release\\_IP-15-5039\\_en.htm](http://europa.eu/rapid/press-release_IP-15-5039_en.htm) and [http://europa.eu/rapid/press-release\\_IP-15-5596\\_en.htm](http://europa.eu/rapid/press-release_IP-15-5596_en.htm).

<sup>7</sup> [http://www.consilium.europa.eu/media/21839/action\\_plan\\_en.pdf](http://www.consilium.europa.eu/media/21839/action_plan_en.pdf).

<sup>8</sup> <http://www.consilium.europa.eu/en/press/press-releases/2015/11/29/eu-turkey-meeting-statement/>.

<sup>9</sup> <http://www.consilium.europa.eu/en/press/press-releases/2016/03/18/eu-turkey-statement/>.

From May to December 2016, on average fewer than 3,000 people reached Greece monthly.

Although flows to Greece dropped, sea arrivals in Italy held steady, and efforts were made to increase cooperation with Libya—the main point of departure for most migrants who reached Italy<sup>10</sup>—and to work with countries of origin for a development response to migration (EU Partnership Framework under the European Agenda for Migration, EC 2015). These efforts continue; for example, the European Investment Bank has approved an increase in lending of about €3.7 billion for public and private projects to respond to the root causes of migration.<sup>11</sup>

Efforts to facilitate integration of refugees have also increased. The European Parliament in April 2016 passed a resolution that spoke of “accommodation, literacy and language courses, inter-cultural dialogue, education and professional training, and also effective access to democratic structures in society.”<sup>12</sup> Most Member States have adopted their own policies on integration of asylum seekers and refugees,<sup>13</sup> and the European Commission (EC) Action Plan on the integration of third-country nationals (adopted in June 2016) included actions for integrating refugees.<sup>14</sup>

## Asylum and Relocation Processes

As migrant flows spiked in 2015, the number of applications for asylum in the EU peaked (Figure 2.1). Asylum seekers are those who have applied for international protection and await a decision. The 1951 Refugee Convention (Geneva Convention, amended by the 1967 New York Protocol), defines who is a refugee, refugee rights, and the obligations of receiving States (Box 2.1).<sup>15</sup> Because EU Member States are signatories of the Geneva Convention and adhere to EU rights and directives,<sup>16</sup> their asylum processes begin with determining refugee status. The EU registered 1.4 million applications for international protection in 2015, 1.3 million in 2016, and 707,000 in 2017. The vast majority were submitted by first-time applicants, although in 2017 there was an 8 percent increase in re-applications. The main countries of origin for EU asylum seekers were the Syrian Arab Republic, Afghanistan, Iraq, Kosovo, and Albania; in 2016, because there was a relative decline in Western Balkan applications, the main countries of origin were the Syrian Arab Republic, Afghanistan, Iraq, Pakistan, and Nigeria. Applications from West Africans increased from 2016 into early 2017, particularly from nationals of Nigeria, Guinea, Côte d’Ivoire, and The Gambia (EASO 2018).

In 2017 about 40 percent of asylum seekers were granted international or national protection (EASO 2018). How long a case awaits a decision on an international protection application varies by case and country. An application may be rejected; granted giving refugee status or subsidiary protection (international protection); or granted autho-

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<sup>10</sup> See, for example, <http://www.consilium.europa.eu/en/press/press-releases/2017/02/03/malta-declaration/>.

<sup>11</sup> <http://www.consilium.europa.eu/en/press/press-releases/2018/02/27/eib-council-approves-extra-3-7-billion-to-address-migration-issues/>.

<sup>12</sup> European Parliament resolution of 12 April 2016 on the situation in the Mediterranean and the need for a holistic EU approach to migration (2015/2095(INI)).

<sup>13</sup> See the tables mapping Asylum Seekers and Refugees Integration Policies across EU Member States: <http://ec.europa.eu/social/main.jsp?catId=1274&langId=en&intPageId=4316>

<sup>14</sup> [https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/proposal-implementation-package/docs/20160607/communication\\_action\\_plan\\_integration\\_third-country\\_nationals\\_en.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/proposal-implementation-package/docs/20160607/communication_action_plan_integration_third-country_nationals_en.pdf).

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<sup>15</sup> 1951 Refugee convention: <http://www.unhcr.org/en-us/1951-refugee-convention.html>.

<sup>16</sup> EU Charter of Fundamental Rights: <http://fra.europa.eu/en/charterpedia/article/18-right-asylum>, and Council Directive 2004/83/EC <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004L0083:EN:HTML>

### Box 2.1. Legal Framework for Refugee Status

**The 1951 Convention** on the status of refugees consolidates previous international policies and codifies their international rights. Article 1 of the Convention endorses a single definition of the term “refugee” that emphasizes protecting persons from political or other forms of persecution. It states that a refugee is someone who “is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion.” The Convention is based on such fundamental principles as nondiscrimination, nonpenalization, and *non-refoulement*. It also sets out basic standards for the treatment of refugees (States may grant more favorable treatment), such as access to the courts, primary education, and employment opportunities, and provides for refugee travel and other documentation. The Office of the United Nations High Commissioner for Refugees (UNHCR), founded in 1950, is charged to provide international protection to refugees and, in cooperation with governments, seek durable solutions for them.

**The 1967 Protocol**, which amends the Convention, removed its geographic and temporal limits, thus giving it universal coverage. The Convention has since been supplemented by refugee and subsidiary protection regimes in several regions and by progressive development of international human rights law. The Protocol obliges States to comply with the 1951 Convention with respect to all persons covered by the refugee definition in Article 1, with no restrictions.

**The European Union Dublin Regulation<sup>a</sup>** is an EU law that requires asylum-seekers to register their application in the country where they first enter the EU. It identifies the EU country responsible for examining an asylum application using a hierarchy of criteria, such as family unity, possession of residence documents or visas, irregular entry or stay, and visa-waived entry. In practice, however, the criterion most often applied is irregular entry, which means that the Member State where the asylum-seeker first entered the EU is responsible for examining the asylum application. The Dublin system assumes that, as Member State asylum laws and practices are based on the same common standards, asylum seekers will enjoy similar protection in all EU Member States. In practice, however, asylum legislation and practice are still heterogeneous, so that asylum-seekers are treated differently from one EU State to another. The European immigrant crisis has triggered calls for general reform of the Common European Asylum System, especially the Dublin rules. The Dublin Regulation also proposes a corrective allocation mechanism to streamline and supplement current rules that would be triggered automatically if a Member State were confronted by disproportionate numbers of asylum-seekers.

<sup>a</sup> The Dublin Regulation was originally established by the Dublin Convention, signed in Dublin, Ireland, in 1990. In 2003, the Dublin Convention was replaced by the Dublin II Regulation. In 2013, the Dublin III Regulation was adopted, replacing the Dublin II Regulation.

### Box 2.2: Criteria for Asylum Decisions

**Refugee status:** a person is granted refugee status (see Directive 2004/83/EC and the Geneva Convention), if he or she, “owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, political opinion or membership of a particular social group, is outside the country of nationality and is unable or, owing to such fear, is unwilling to avail himself or herself of the protection of that country, or a stateless person, who, being outside of the country of former habitual residence for the same reasons as mentioned above, is unable or, owing to such fear, unwilling to return to it.” Further details are provided in the Directive.

**Subsidiary protection status:** a person is granted subsidiary protection (Directive 2004/83/EC) if he or she is “a third country national or a stateless person who does not qualify as a refugee but in respect of whom substantial grounds have been shown for believing that the person concerned, if returned to his or her country of origin, or in the case of a stateless person, to his or her country of former habitual residence, would face a real risk of suffering serious harm.” Further details are provided in the Directive.

**Authorization to stay for humanitarian reasons:** a person is granted authorization under national law to stay for humanitarian reasons if he or she is not eligible for international protection but is “nonetheless protected against removal under the obligations that are imposed on all Member States by international refugee or human rights instruments or on the basis of principles flowing from such instruments.”

**Source:** Directive 2004/83/EC <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004L0083:EN:HTML> and Eurostat, [http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Asylum\\_decision](http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Asylum_decision)

rizing a stay for humanitarian reasons, as happens with certain unaccompanied minors (Box 2.2). Of cases pending at the end of 2017, 61 percent had been in process for six months or more, and 40 percent of those who did receive a response that year were granted international protection. Types of decision varied by nationality: for example, in the third quarter of 2017, 77 percent of Nigerian applications were rejected (14 percent were authorized to stay for humanitarian reasons), as were 52 percent of Afghan and 7 percent of Syrian applications (EUROSTAT 2018).

Given the high volume of asylum applications, in 2015 the EU introduced a relocation mechanism

to more equitably distribute asylum applications across EU Member States.<sup>17</sup> In 2016 EU open cases peaked at about 1.13 million, 7 percent higher than in 2015 and 121 percent higher than in 2014 (EASO 2016). When 2017 ended, about 460,000 cases were still open. The relocation program, which transferred asylum seekers to other EU Member States for faster case review, applied to those from countries whose average EU recognition was higher than 75 percent—mostly Syr-

<sup>17</sup>This is in the context of the Dublin Regulation that establishes the Member State responsible for the examination of the asylum application.

ians, Eritreans, and Iraqis—and operated from September 2015 through September 2017.<sup>18</sup> The original target was to relocate about 63,000 people from Greece and 35,000 people from Italy, although it is argued that the EU-Turkey Agreement and the low recognition rate of those coming into Italy influenced the need for relocation.<sup>19</sup> As of February 2018, almost 12,000 cases had been relocated from Italy and about 22,000 from Greece (UNHCR 2018a).

### Data Sources

This study collected three sources of data from asylum seekers who had arrived in Italy and Greece. See Appendices 1 and 2 for details on methodologies and rationales and for preliminary descriptive statistics.

First, a quantitative asylum-seeker survey was conducted between January and May 2017 in Italy and Greece (EASS 2017: Euro Asylum Seeker Survey). It collected information from a random sample of adults in asylum centers on (1) basic demographic and socioeconomic characteristics; (2) the migration experience; and (3) respondents' plans and aspirations. Box 2.3 describes the asylum process as context for the data collection and the sample population.

In Italy, data were collected from 2,444 asylum seekers (2,139 men and 305 women) who were at least 18 and were from one of the top 9 nationalities of arrivals entering: Nigeria, The Gambia,

Senegal, Eritrea, Mali, Côte d'Ivoire, Guinea, Somalia, and Sudan—countries that accounted for 72 percent of total 2016 arrivals (UNHCR 2017<sup>20</sup>). Though some of those interviewed had reached Italy as early as 2012, 75 percent had arrived in 2016.

In Greece, data were collected from 1,680 adult respondents (1,101 men and 579 women) from one of the top 3 countries of origin (UNHCR 2017<sup>21</sup>): the Syrian Arab Republic, Afghanistan, and Iraq, which accounted for 91 percent of total 2016 arrivals. Though those interviewed had arrived in Greece at various times between 2015 and 2017, 95 percent had come in 2016. Data were collected in the Attica, Central Greece, and Thessaly regions, where most asylum seekers were housed in centers run by the government or UNHCR. (The sampling frame excluded asylum seekers hosted in the Greek islands.)

The survey instruments took into account the complexity of the samples. The survey was administered in 6 languages (English, French, Arabic, Bambara, Tigrinya, and Farsi). Some modules (transit, aspirations) were designed to support comparisons between asylum seekers; others (assets, dwelling characteristics), were designed to support comparisons with the populations at home and borrowed questions from household surveys in every home country covered in the study. Finally, some modules (anxiety/depression, education, self-reported literacy and numeracy) used standardized questions that allow for international comparisons. The survey was administered using electronic tablets to simplify handling of all these conditions.

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<sup>18</sup> [https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/20170906\\_relocation\\_and\\_resettlement-sharing\\_responsibility\\_and\\_increasing\\_legal\\_pathways\\_to\\_europe\\_en.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/20170906_relocation_and_resettlement-sharing_responsibility_and_increasing_legal_pathways_to_europe_en.pdf).

<sup>19</sup> [https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/20170906\\_relocation\\_and\\_resettlement-sharing\\_responsibility\\_and\\_increasing\\_legal\\_pathways\\_to\\_europe\\_en.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/20170906_relocation_and_resettlement-sharing_responsibility_and_increasing_legal_pathways_to_europe_en.pdf).

<sup>20</sup> <http://data2.unhcr.org/en/situations/mediterranean>.

<sup>21</sup> <http://data2.unhcr.org/en/situations/mediterranean>.

### **Box 2.3 Legal Process, Waiting Times, and Life in a Center or Camp**

All asylum seekers interviewed reached Italy or Greece by sea. They had already applied for international protection and were being hosted in formal reception centers or camps. However, the process and its duration differed somewhat for the two countries. Describing these processes is useful for understanding both the methodological aspects of the survey (e.g., sampling strategy) and how asylum seekers were living when interviewed.

**Italy:** The Italian Coast Guard and Border Police typically were the first to reach migrants during rescue operations at sea.<sup>a</sup> Since early 2016, rescued individuals have been brought to a hotspot in Southern Italy; exceptions are rare. Hotspots, first entry points into the EU, are where pre-identification, registration, and photo and fingerprinting operations take place; arrivals cannot leave the facility. When this study was conducted, stays in hotspots varied from 48 hours to weeks (the latter more likely if individuals refused to be fingerprinted). At this stage, individuals rescued declared their intention to apply for international protection, though they could not yet formally lodge a claim.

When hotspot procedures were completed, individuals were transferred to temporary reception centers. Which center they went to depended on quotas given to each region based on its population and economy and on the availability of slots. For first reception, this might be a Governmental Centre for Accommodation of Asylum Seekers (CARA) managed by the Ministry of Interior, or a Temporary Reception Center (CAS), which is private, and was originally temporary (to respond to emergency situations); those granted protection went to centers of second reception. CARAs typically host more individuals. Some centers (typically CASs) host only particularly vulnerable entrants, such as unaccompanied minors, vulnerable women, or families. As the number of migrants shot up, center boundaries blurred, but during the survey those just beginning the asylum process went to a CAS or a CARA. The time spent there was longer than the terms originally set: centers at first meant to respond to emergency situations have since had to deal with all stages of the immigration and asylum application process.

Asylum applications are initially lodged at border control or local police stations (some areas have large reception centers), which transmit the documentation to the *Commissione Territoriale per il Riconoscimento Protezione Internazionale*, which is responsible for asylum examinations and interviews for a certain province or group of provinces. The time between lodging an asylum claim and receiving a decision may range from a few months to two-and-a-half years. A longer time is usually because a denial decision has been appealed. Throughout the process, adult asylum seekers are provided with accommodation, food, a per diem, and medical care. Accommodations vary greatly, from converted containers in areas controlled by the military to small privately-owned buildings in the center of villages or cities. Most asylum seekers receive some training in Italian and occasionally some vocational training or are offered recreation options. Although all asylum seekers were free to go in and out, often center staff were their main point of contact with the outside world. Ties between asylum seekers seemed weaker in Italy than in Greece.

**Greece:** As sea arrivals on the Greek islands soared in 2015 and early 2016, a large number of institutions responded. UNHCR, the International Organization for Migration (IOM), and the Greek authorities set up and managed first reception units to identify and register those who reached the islands, where temporary facilities were set up. People then made their way to the mainland. In winter 2015–16, the situation was fluid and uncertain as migrants gathered in large numbers on the Greek border with the Former Yugoslav Republic of Macedonia hoping to make their way to Central and Northern Europe. Those who remained were mostly accommodated in mainland reception centers managed by the Ministry of Interior and private accommodations managed by UNHCR. Allocation was mainly by nationality. In 2016 UNHCR embarked on a major effort to register asylum applicants.

Migrants could claim asylum in Greece or lodge a claim for EU relocation or family reunification, as all the survey respondents had done; 70 percent of this group of asylum seekers had reached Greek territory in the first quarter of 2016—before the EU-Turkey agreement entered into force and all refugees on the Greek islands were transferred to the mainland. At the time of the survey the vast majority of those who arrived before January 2016 had moved on to other EU Member States, although a few might still be in Greece but not in asylum seeker facilities.

Most asylum seekers were housed within tents or containers in reception centers, but some were in UNHCR-managed regular buildings. Facilities were very basic. Packaged meals were provided, but rudimentary cooking facilities were often available. Residents were usually clustered by country of origin. Communities were re-created, and families often formed close ties, which happened rarely in Italy. There was a high number of children of all ages in the centers and they attended schools or informal classes in the centers organized by volunteers. During the day, asylum seekers were free to go in and out.

<sup>a</sup> In some cases, NGO vessels or cargo ships may have been the first to respond to help refugees to reach the Italian coast or authorities.

This study is a snapshot of the asylum seekers in Greece and Italy at a given time; it is by no means designed to provide a comprehensive picture of the entire European migrant crisis. For instance, it does not cover those in Greece and Italy who were outside of centers, much less the earlier wave of refugees and migrants mainly resident in other EU Member States; migrants who did not make it to Europe; or unaccompanied minors.

After the quantitative phase, the study carried out a computer-based literacy assessment of a ran-

dom sub-sample of those who responded to the first phase, to complement self-reported data on education and skills. The study team collaborated closely with the Organisation for Economic Co-operation and Development (OECD) to get results comparable to the OECD Programme for the International Assessment of Adult Competencies (PIAAC) test. In Italy the assessment was conducted in English or French, and in Greece in Farsi or Arabic. This phase covered 578 asylum seekers, 202 in Italy and 376 in Greece. (See Chapter V for details.)

Finally, in both countries qualitative surveys were carried out between January and March 2017 in both semi-structured focus groups and individual interviews, supplemented by interviews with center staff. The objective was to explore the context of decisions to leave home; the experience of the journey and displacement; life in the reception system; and asylum seeker plans and aspirations. The gender dimensions of these areas were given special attention. To avoid interview fatigue, the qualitative sample had no overlap with that for the quantitative survey. This phase spoke with 257 adult asylum seekers (149 men and 108 women) hosted in 16 centers in the Athens and Thessaloniki areas of Greece and in Lazio and Lombardy in Italy. There were 118 in-depth individual interviews (IDIs) and 26 focus group discussions (FGDs), organized by gender and language or nationality. Respondents in Italy were from Nigeria, Eritrea, Somalia, Senegal, Mali, Guinea, The Gambia, and Côte d'Ivoire; and in Greece from the Syrian Arab Republic (some of them Kurdish), Afghanistan, and Iraq (some of them Yazidi). Participants were selected to ensure diversity in age, marital status, and (in Italy) length of stay in Europe. Women were oversampled in Italy, where most asylum seekers were male.

## Methodology

First, the study constructed two profile groups. Every year, Eurostat publishes statistics on the recognition rate: the ratio of approved asylum applications (for refugee, subsidiary, or humanitarian status) to the total number of decisions that year. In this study countries of origin are ranked by their 2016 recognition rates (Figure 2.2): those with rates above 40 percent are considered *high-recognition-rate* countries, and those with lower rates are *low-recognition-rate* countries.<sup>22</sup> The first distinction between

asylum seekers is thus based on the 2016 recognition rates for their home countries.<sup>23</sup> Over the period of interest, 58 percent of the study sample were from high-recognition and 33 percent from low-recognition countries (see Chapter III, Figure 3.1).

Variations in recognition rates tend to reflect differences in the human rights situations in asylum seeker countries of origin. They also correlate with conflict intensity as measured by conflict-related casualties per capita and with the World Bank classification of fragile States: There is a positive relationship between recognition rate, conflict intensity,<sup>24</sup> and the Human Rights Risk Score.<sup>25</sup> Human rights in all high-recognition countries are deemed at "extreme risk." All except Iran are considered fragile.

The second distinction this report makes is between asylum seekers who migrated to the EU directly from their country of origin and those who settled in a different foreign country first. *Primary or first movers* are those who were still in their home country two years before the survey interview date. *Secondary movers* are those whose last permanent residence had been different from their country of origin for at least two years before the survey. In Italy 21 percent of asylum seekers were secondary movers (Figure 2.3), and 43 percent of those were Sub-Saharan Africans who had been living in Libya. About 25 percent of asylum seekers in Greece were secondary movers, mostly Afghans who had been living in Iran (of whom 34 percent had been born in Iran) and Syrians living in Turkey (Figure 2.4).

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group members are as similar as possible, while the groups themselves are as dissimilar as possible.

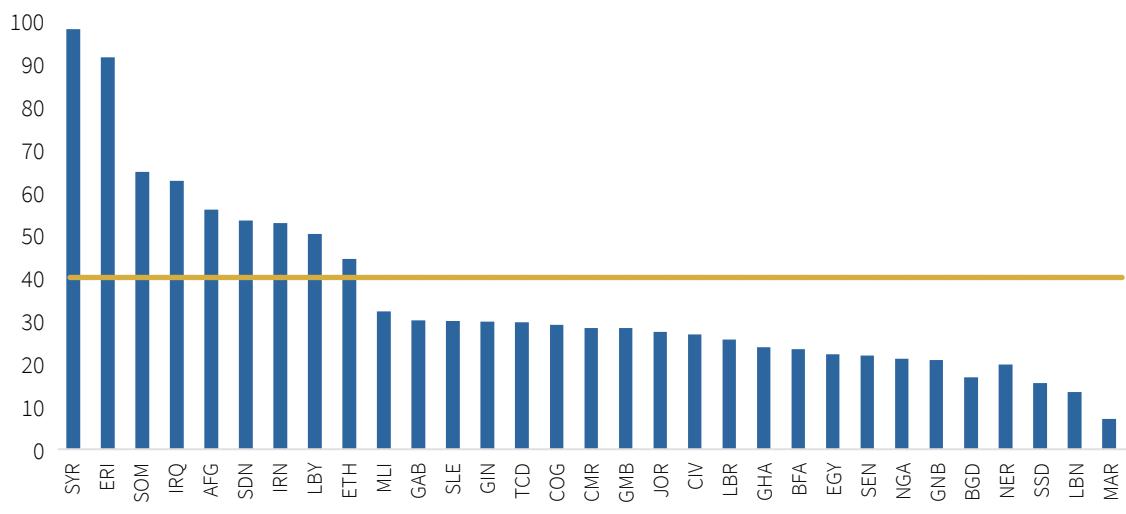
<sup>23</sup> [http://ec.europa.eu/eurostat/cache/metadata/en/migr\\_asyapp\\_esms.htm](http://ec.europa.eu/eurostat/cache/metadata/en/migr_asyapp_esms.htm)

<sup>24</sup> The number of estimated casualties estimated by the Uppsala Conflict Data Program divided by total population.

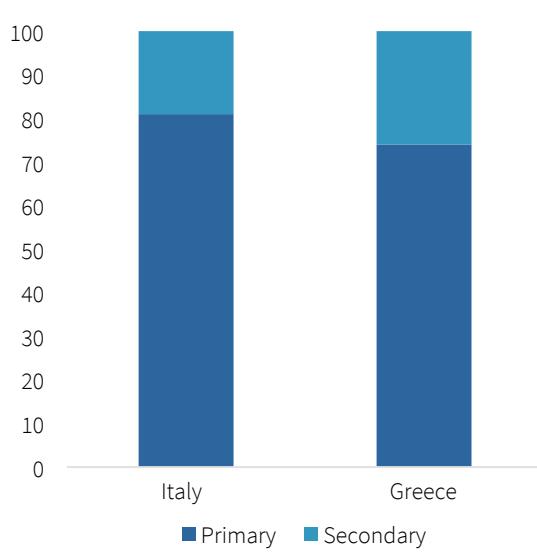
<sup>25</sup> Defined and measured by Verisk Maplecroft (Reliefweb 2016).

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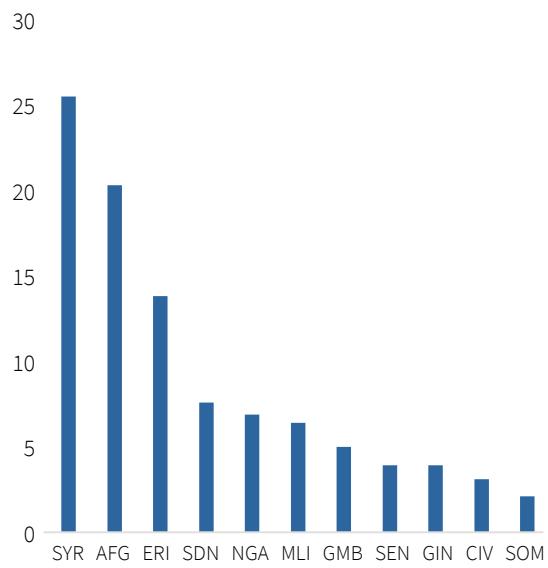
<sup>22</sup> The choice of the 40 percent cutoff is determined by "optimal clustering", whereby groups are constructed to ensure that

**Figure 2.2. Recognition Rates, 2016, Percent of Asylum Applications Approved**

**Source:** Eurostat 2016. Country codes listed in Table A1.1

**Figure 2.3. Primary and Secondary Asylum Seekers in Italy and Greece, Percent**

**Source:** Data from EASS 2017.

**Figure 2.4. Top Nationalities of Secondary Movers, Percent of All Secondary Movers**

**Source:** Data from the EASS 2017. Country codes listed in Table A1.1. Statistics for Sudan are computed from 33 observations and should thus be interpreted with caution.



### III. Sociodemographic Profiles of Asylum Seekers

All asylum seekers are not alike: To capture the diversity of migration experiences while highlighting what they have in common, this section presents sociodemographic profiles of asylum seekers. There are three distinct profile groups: unaccompanied minors, those from high-recognition countries, and those from low-recognition countries. By combining administrative data on unaccompanied minors (a vulnerable group not studied here) and survey data from the EASS 2017,<sup>26</sup> this section quantifies the share of each group in the flows into Italy and Greece, using 2016 as the reference year.

Asylum seekers in Italy differ considerably from those of the sample in Greece. Among those least likely to be granted legal status (low-recognition nationals) are West Africans, who constitute about 75 percent of those reaching Italy; they are primarily young single men. More likely to gain legal status (high-recognition nationals) are Syrians, Afghans, and Iraqis, who constitute nearly all those reaching Greece and generally travel with their families, and East Africans reaching Italy, who are often men traveling ahead of their spouses. The third group, unaccompanied minors, although not part of the study, is discussed

briefly because this vulnerable group constitutes a large part of total flows.<sup>27</sup>

The chapter concludes by analyzing patterns of those migrating: Primary and secondary movers are similar to each other but, particularly in Italy, their demographic profile (mainly single young men) is very different from the population at home. There are also patterns of education, particularly among Syrians, that suggest differences in the education profiles of different waves of migrants. Finally, using complementary data for Afghanistan, Nigeria, and Senegal, it is estimated that those who migrated from these countries on average come from wealthier households than a typical one at home (which may relate to the cost of the trip).

#### Three Broad Groups of Asylum Seekers

In 2016 unaccompanied minors accounted for 9 percent of the total flow into Italy and Greece: 25,846 of the 171,309 who reached Italy and 5,192 of the 165,574 who reached Greece, according to UNHCR data. They are considered “the most exposed and vulnerable victims of migration,” and

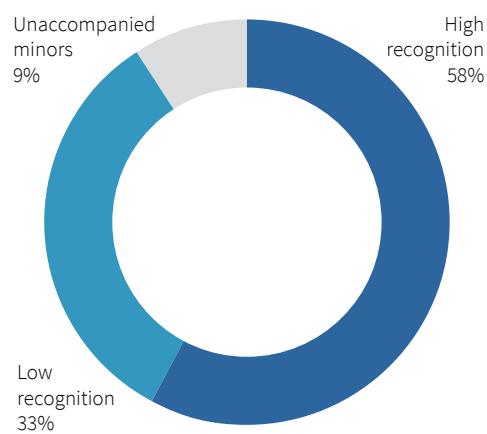
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<sup>26</sup>We estimate unaccompanied minors from UNHCR data, then estimate the shares of the categories using the weighted proportions in our sample.

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<sup>27</sup>Unaccompanied minors were deliberately left out of the study due to ethical issues related to consent.

**Figure 3.1. Share of Each Group Entering Italy and Greece, Percent, 2016**



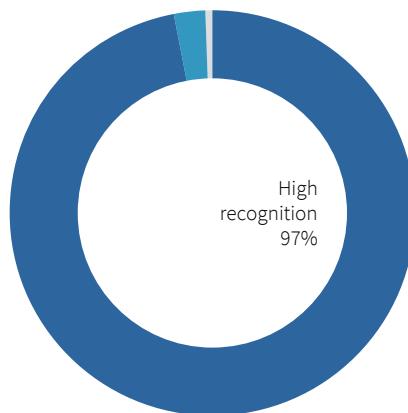
**Source:** Data from EASS 2017, weighted sample, and UNHCR administrative data.

Italy, among other countries, has passed laws forbidding their return to the border and has introduced “volunteer guardians.”<sup>28</sup> This group is discussed here because of their high share in the inflows into Italy and Greece, the unique policy challenges they represent, and their vulnerability; the hope is to give a more comprehensive picture of the total flow.

Except for unaccompanied minors, other vulnerable cases are inevitably part of the survey samples but are not singled out, partly for want of a precise working definition (see Box 3.1) and partly because a survey instrument eliciting self-reported information has limited ability to screen for such cases.

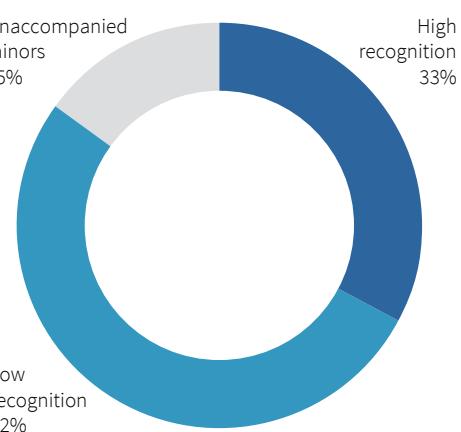
The asylum-seeking populations in Italy and Greece differ dramatically. In Greece (Figure 3.2), 97 percent of asylum seekers are from high-recognition countries—the Syrian Arab Republic, Iraq, and Afghani-

**Figure 3.2. Share of Each Group Entering Greece, Percent, 2016**



**Source:** EASS 2017—weighted sample and UNHCR administrative data for unaccompanied minors.

**Figure 3.3. Share of Each Group Entering Italy, 2016, Percent**



**Source:** EASS 2017—weighted sample and UNHCR administrative data for unaccompanied minors.

stan—and the other 3 percent are unaccompanied minors. The picture in Italy is more nuanced. While more than 52 percent of those arriving are from low-recognition countries, a substantial 33 percent are nationals of high-recognition Eritrea, Somalia, or Sudan (Figure 3.3). The rest, 15 percent, are unaccompanied minors, a category identified from administrative data.

<sup>28</sup> <http://eumigrationlawblog.eu/the-new-italian-law-on-unaccompanied-minors-a-model-for-the-eu/>; <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX-52010DC0213>.

### Box 3.1. Defining Vulnerable Cases

Policy makers try to respond to the needs of asylum seekers and refugees who are also vulnerable on dimensions other than the specific ones that inspired them to migrate. Policymakers and others have adopted policies to recognize added risks that might require special attention and procedures for asylum applications and international protection processes.

However, the notion of a “vulnerable person” is ambiguous. Because there is as yet no internationally-recognized definition, there have been calls to formulate “a working definition of migrants in *vulnerable situations*” (UN 2017). The Asylum Procedures Directive, adopted in 2013 by the European Parliament and the Council, recognizes the need of special procedures for applicants due to “*age, gender, sexual orientation, gender identity, disability, serious illness, mental disorders or as a consequence of torture, rape or other serious forms of psychological, physical or sexual violence*”; it calls on Member States to strive to identify these types of applicants. It also calls for ensuring that interviewers in the asylum process are competent to account for vulnerability as a special circumstance,<sup>a</sup> and it references the definition of vulnerability in Directive 2013/33 (on standards for reception of applicants) as the one to be used to prioritize applications for international protection. Directive 2013/33 describes a nonexhaustive list of vulnerable persons, “*such as minors, unaccompanied minors, disabled people, elderly people, pregnant women, single parents with minor children, victims of human trafficking, persons with serious illnesses, persons with mental disorders and persons who have been subjected to torture, rape or other serious forms of psychological, physical or sexual violence, such as victims of female genital mutilation.*”<sup>b</sup>

Beyond EU legislation, other definitions of vulnerability are also quite broad. UNHCR distinguishes between “situation vulnerability”—risks during the journey and in the host country—and “individual vulnerability”: *individual characteristics or circumstances which place a person at particular risk such as that experienced by: children, particularly those who are unaccompanied or have been separated from family; older people; those with mobility, sensory, intellectual, or other disabilities; those with chronic illnesses or other medical needs; victims or survivors of trafficking who do not fall within the scope of the refugee definition; or survivors of torture or trauma en route*” (UNHCR 2017).

The scope and the variability of definitions of vulnerability and the difficulty of identifying some categories considered vulnerable suggest that detecting and acting on these cases is far from simple. Nevertheless, EU Member States have been striving to put measures in place to identify and offer protection to vulnerable persons (EASO 2017 Section 4.11.).

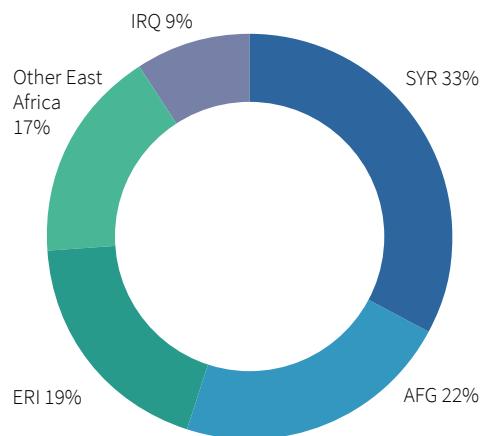
<sup>a</sup> DIRECTIVE 2013/32/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 on common procedures for granting and withdrawing international protection (recast). <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013L0032&from=en>.

<sup>b</sup> Article 21 of the DIRECTIVE 2013/33/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL, of 26 June 2013 laying down standards for the reception of applicants for international protection (recast), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013L0033>

## Nationals of High-Recognition Countries

This section discusses the profile of asylum seekers from high-recognition countries and how they compare to the people back home. Figure 3.4 shows the nationalities of origin. Asylum seekers from the Syrian Arab Republic and Iraq, countries suffering from civil war and sectarian tensions, represent 33 and 9 percent of the flow; Afghans 22 percent, Eritreans 19 percent, and other East Africans, mostly from Somalia and Sudan, 17 percent.

**Figure 3.4. Flows from High-recognition Countries by Nationality, Percent, 2016**



**Source:** Data from EASS 2017 – weighted sample.

### Asylum Seekers from the Syrian Arab Republic

Syrians fleeing into the EU are a recent phenomenon associated with the Syrian Civil War. In 2011, what started as peaceful protests became a full-fledged civil war, involving the army, opposition forces, militias with diverse allegiances, and foreign States. This conflict has led to the largest outflow of refugees in recent history, 5.5 million, in addition to some 6.1 million internally displaced. By 2016 there were an estimated 470,000 casualties (Human Rights Watch 2016). Figure 3.5 illustrates how Syrian migrant outflows are also large in terms of worldwide forced displacement.

*"I was happy, but after the war all problems started. No job and destruction everywhere. Before the war...Syria was a paradise. We had everything..."*

**Syrian man**

Most Syrian refugees worldwide are not in the EU but in neighboring countries. At the time when most asylum seekers interviewed in our sample were arriving to Greece, according to UNHCR (2016), Turkey hosted 2.7 million Syrian refugees (50 percent of the total), Lebanon 1 million (18 percent) and Jordan more than 660,000 (11 percent).<sup>29</sup> This underestimates the total number of Syrians forcibly displaced because not all are registered refugees. However, between 2011 and 2016, 889,675 Syrians requested asylum in the EU (Eurostat 2016). Germany, with more than 484,920 cumulated applications, and Sweden, with 110,380, lead European countries. The rest of the applications are distributed among the other European countries, with 31,780 having been processed in Greece.

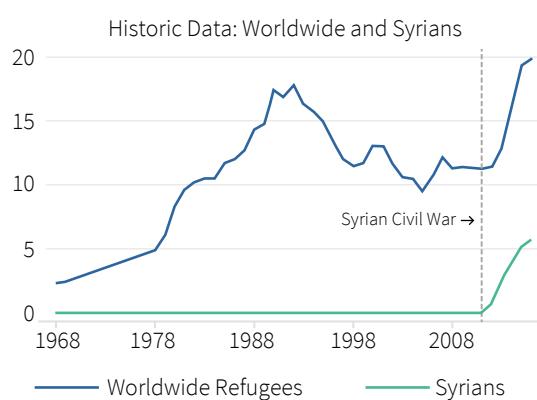
Twenty-seven percent of the Syrians seeking asylum in the EU were settled in Turkey or Iraq before deciding to travel to Greece. Reasons for undertaking the second leg of the journey are many. It appears that Syrians in Turkey still find it difficult to access the labor market, and in 2016, of an estimated 900,000 of school age, 400,000 were still not in school (Crisis Group 2016). The study's qualitative interviews with Syrian asylum seekers confirm that difficulties in making a living were an incentive to leave Turkey, as was the hope of securing better education opportunities for children.

<sup>29</sup> More recent numbers show that Turkey hosts 3.59 million Syrian refugees, Lebanon around 987,000 and Jordan more than 666,000. <http://data2.unhcr.org/en/situations/syria>

*"I wanted to give my children a better education and decided to go to Germany... Many people where I was in the camp in Turkey had already left for Germany."*

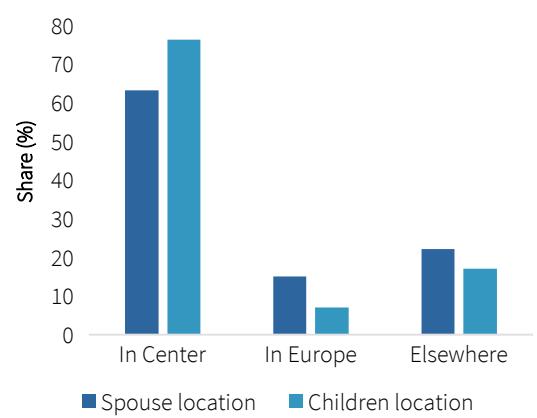
**Syrian woman**

**Figure 3.5. Refugees and Asylum Seekers Worldwide and from the Syrian Arab Republic, 1951–2016, Millions**



**Source:** UNHCR 2018.

**Figure 3.6. Share of Syrians Reaching Centers with Families, by Location, 2016**



**Source:** Data from the EASS 2017.

Most Syrian asylum seekers in Greece migrated with family members: 66 percent of asylum seekers from the Syrian Arab Republic are in Greece with family members, and 14 percent of those married already have a spouse elsewhere in Europe (Figure 3.6). Their average age is 33, and 35 percent have a high school or university education. Younger unmarried Syrian asylum seekers are more educated (39 percent have a high-school education or more) than older ones arriving with their families (28 percent with at least a high school education).

### Asylum Seekers from Afghanistan

Refugees began to leave Afghanistan starting in the late 1970s during the Soviet-Afghan war. They peaked in 1990 at 6 million (Figure 3.7), but after the war the numbers decreased substantially as returnees made their way home. However, more episodes of forced displacement accompanied waves of violence during the Taliban war and the United States invasion. Political instability in recent years has also contributed to outflows of refugees.

*"I weighed it all up and thought to myself, when a country has been at war for 38 years there is no hope for the future."*

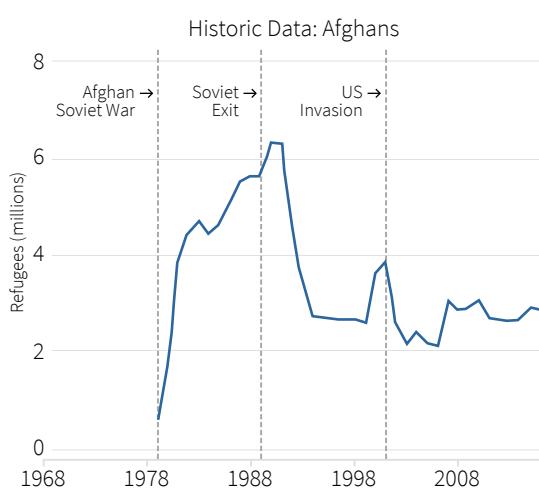
**Afghan man**

In 2016, UNHCR reported that Afghan asylum seekers and refugees were mostly in Pakistan (1,356,607), Iran (951,149), Europe (406,000), and Turkey (118,116).<sup>30</sup> The mean length of exile for Afghan refugees is estimated at 24 years (Devictor and Do 2018). Although Europe is now hosting more than 400,000, very few have been resettled

<sup>30</sup> [http://popstats.unhcr.org/en/time\\_series](http://popstats.unhcr.org/en/time_series).

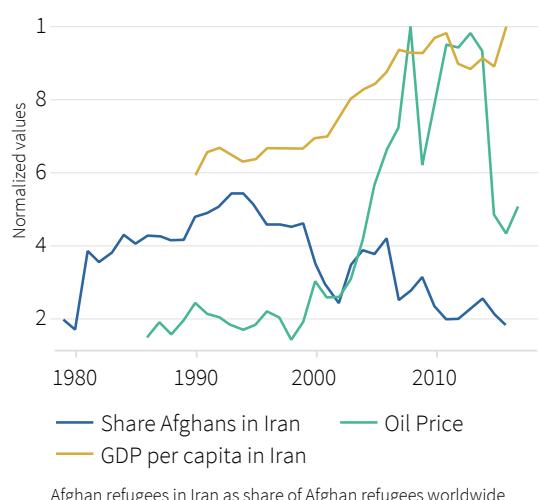
elsewhere through the UNHCR resettlement process since the flows of Afghan refugees began. From the 1980s to 2016, 8,100 Afghan refugees were resettled in Europe, compared to 15,000 Iraqis and 20,000 Syrians resettled.

**Figure 3.7. Afghan Refugees and Asylum Seekers, 1979–2016**



Source: UNHCR 2018.

**Figure 3.8. Iran GDP, Oil Prices, and Share of Afghan Refugees in Iran, 1980–16**



Afghan refugees in Iran as share of Afghan refugees worldwide

Source: UNHCR 2018, World Bank *World Development Indicators*, and US Energy Information Administration.

*"None of us had any papers [in Iran] and we could have been deported at any time."*

Afghan woman who left Iran

Of Afghan asylum seekers in the EU, 34 percent are secondary movers, mostly from Iran. The first wave of Afghan refugees that reached Iran dates to the 1980s and the Soviet-Afghan war. Figure 3.8 captures how that population peaked in the mid-1990s when the Taliban started ruling most of the country. The number plunged after the September 11 attacks and the subsequent overthrow of the Taliban by a U.S.-led coalition. In the qualitative interviews, Afghans who had lived for a long time in Iran as refugees or undocumented migrants explained that they had come to Europe because they had few rights to asset ownership and education and few employment opportunities; those who had lived in Iran as undocumented migrants feared deportation.

**Figure 3.9. Spouses and Children of Afghan Asylum Seekers by Location, Percent**



Source: Data from EASS 2017.

Notes: The figure refers to spouses and children of household heads surveyed.

Since the mid-2000s, the number of Afghan refugees worldwide has held steady at about 2.5 million people (see Figure 3.7), but the number in Iran has been trending down. In Figure 3.8, the green line plots the price of oil and the yellow line Iran's GDP. Economic circumstances in Iran do not seem to explain the departure of the Afghan refugees who had been living there. Correlations of the share of Afghan refugees in Iran to the price of oil is (minus) -0.74 and to Iran's GDP is -0.85.

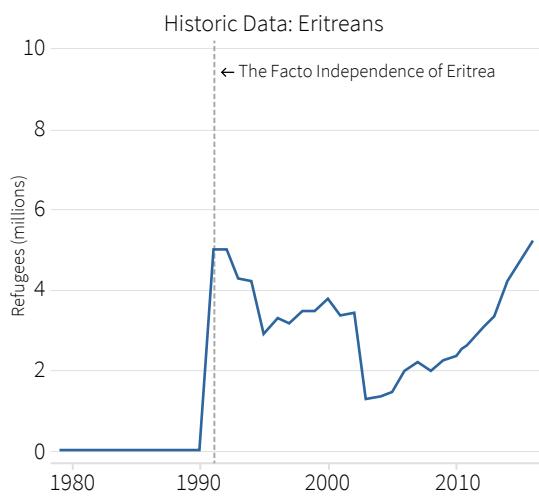
Afghans reaching Greece are mostly families travelling together. Some families (10 percent) already have a spouse or child in Europe (Figure 3.9), but in 85 percent of the cases children are in Greece with their parents. About 25 percent of the Afghan group have secondary education or higher; and the average age is 33.

### **Asylum Seekers from Eritrea**

In Eritrea, military conscription is mandatory for both men and women until age 40, and since 1998 its duration has been open-ended. After 30 years of fighting annexation by Ethiopia, Eritrea became independent in 1993. In 1995 its president, Isaias Afewerki, introduced compulsory military service; Kibreab (2013), who surveyed 190 Eritreans living abroad, found that the average duration of military service was 5.8 years. A UN commission interviewed 550 Eritreans residing in third countries and solicited written submissions; it concluded that some of the human rights violations in the country "may constitute crimes against humanity" (UN 2015).

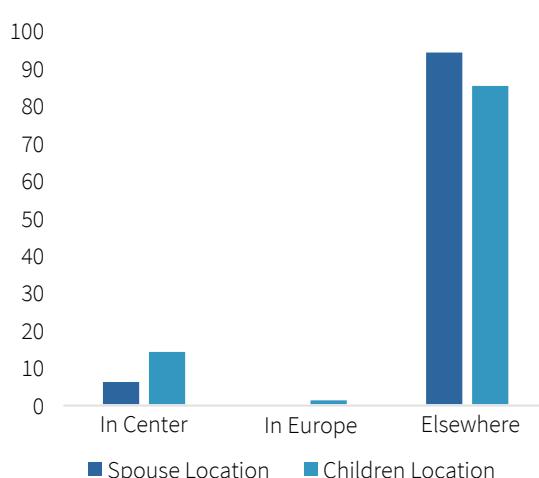
Of the complex factors underlying a migration decision, the reason most Eritreans often cite is military service. Among those in Italy, some 57 percent reported fleeing conscription and 13 percent left because of security risks. At 35 percent, military service is also the primary reason for driving the emigration decision reported by Eritrean women

**Figure 3.10. Eritrean Refugees and Asylum Seekers, 1980–2016**



**Source:** UNHCR 2018.

**Figure 3.11. Location of Eritreans Spouses and Children, Percent**



**Source:** Data from the EASS 2017.

who reached Italy. Other factors often mentioned were such human right violations as extrajudicial killings, torture, rape, and forced labor (UN 2015).

Eritreans reaching Italy are different from citizens of other high-recognition countries. Adults are

*"The soldiers started to come to my house in 2007. The third time they came I decided to leave because I understood they wouldn't leave me in peace. In Eritrea, I could only be a soldier for all my life, without a salary and the possibility to see my family."*

Eritrean woman

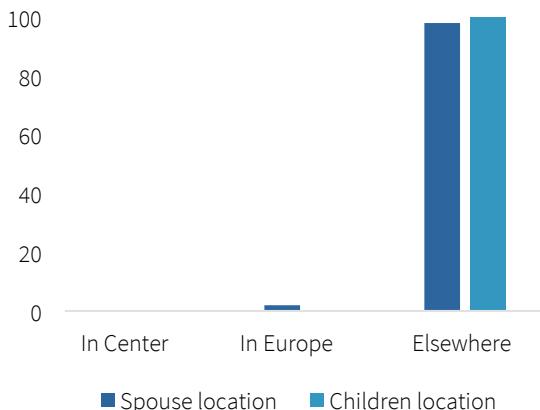
younger, with an average age of 26. Most are unmarried, and those who are married have left their families behind (Figure 3.11). Some Eritreans have tried to settle elsewhere, 24 percent in Libya or Sudan, before moving to Europe. Among Eritrean asylum seekers, 33 percent are women (married or single) and 15 percent of them are single—a relatively high proportion of single women compared to Syrians (6 percent), Afghans (8 percent), and Iraqis (7 percent).

#### **Asylum Seekers from East African Countries other than Eritrea**

The East Africans surveyed were mostly from Somalia and a few from Sudan. Natural hazards and 25 years of armed conflict have driven out a large number of Somalis. According to UNHCR, over 870,000 Somalis are registered as refugees elsewhere in the Horn of Africa and in Yemen.

The other East African asylum seekers interviewed were on average aged about 26. They were more likely to be married than those from Eritrea, but they travelled alone, leaving families back home (Figure 3.12), and 23 percent had settled somewhere else, usually Libya, before continuing to Italy. About 86 percent were men.

**Figure 3.12. Location of Families of Asylum Seekers from East African Countries Other than Eritrea, Percent**



#### **Asylum Seekers from Iraq**

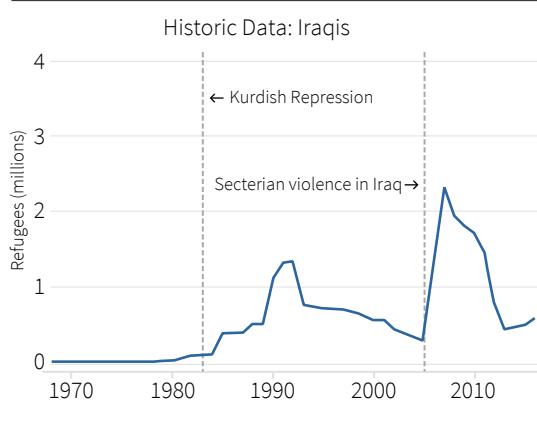
Although first waves of Iraqi refugee flows date back to the Iraq-Iran war in the 1980s, refugee flows increased significantly after the Second Gulf War in 1991 due to economic sanctions and the regime's reaction to uprisings both in the south and north of Iraq. Since the mid-2000s and after the invasion of Iraq by U.S.-led forces, as sectarian tensions and security instability escalated, more refugees made their way to neighboring countries (Figure 3.13). In 2007, UNHCR estimated that 450,000–500,000 Iraqis were residents of Jordan. In 2014, the self-proclaimed Islamic State in Iraq and the Levant (ISIL, also known as ISIS, IS, or Daesh) took control of Mosul and large territories in the West, and in the direct aftermath more than 3 million were internally displaced while others decided to leave the country.<sup>31</sup> In 2016, 126,756 Iraqis were registered in Turkey as either asylum seekers or refugees (UNHCR 2016), and between 2008 and 2016, 344,885 applied for asylum in the EU (Eurostat 2016).

<sup>31</sup> As of date, IOM, the UN Migration Agency, identified more 3.7 million people who returned to their place of origin in Iraq. <http://iraqdpm.iom.int/>

*"We started thinking of leaving when my brother-in-law was killed by a car bomb that was placed on his car in 2014"*

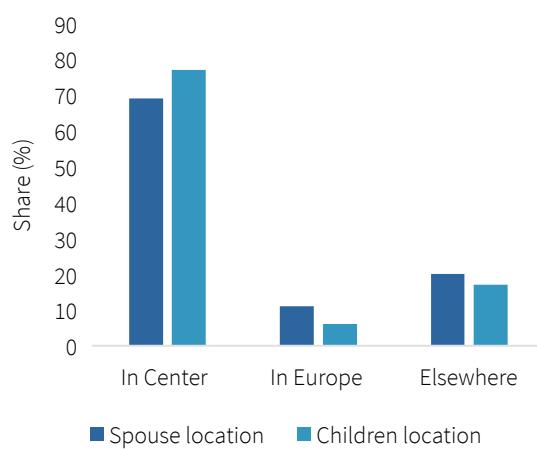
Iraqi woman

**Figure 3.13. Iraqi Refugees and Asylum Seekers, 1980–2016**



Source: UNHCR 2018.

**Figure 3.14. Location of Iraqi Spouses and Children, Percent**



Source: Data from the EASS 2017.

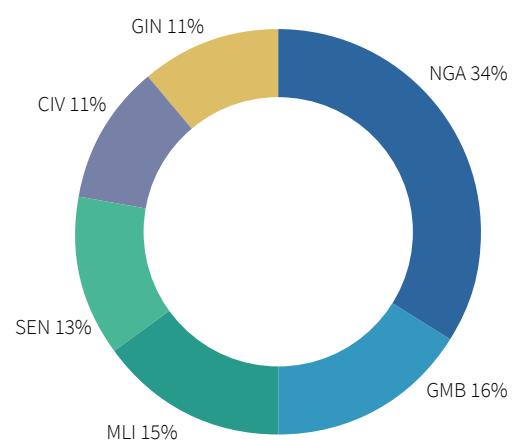
The Iraqis arriving to Greece mostly came as families: 70 percent of those surveyed were traveling with family members (Figure 3.14). Of the rest, spouses were either already in Europe (17 percent) or elsewhere, such as Iraq or Turkey. The average age of Iraqis seeking asylum in Greece was 33, and 18 percent had a high school or university education. Most Iraqis reaching Greece were first movers: only 4 percent had settled in another country before reaching Europe.

### Nationals of Low-Recognition Countries

The large majority of asylum seekers from low-recognition countries started in Sub-Saharan Africa and entered Italy via Libya (Figure 3.15). They are almost exclusively from West African countries, mainly Nigeria (34 percent) followed by The Gambia (16 percent), Mali (15 percent), Senegal (13), and Guinea, and Côte d'Ivoire (about 11 percent each).

These asylum seekers tend to be unmarried men, aged on average 24. More than 27 percent have secondary education or more, and about 18 percent were secondary movers, 10 percent from

**Figure 3.15. Low-recognition Group, by Nationality, Italy, 2016, Percent**



Source: Data from the EASS 2017.

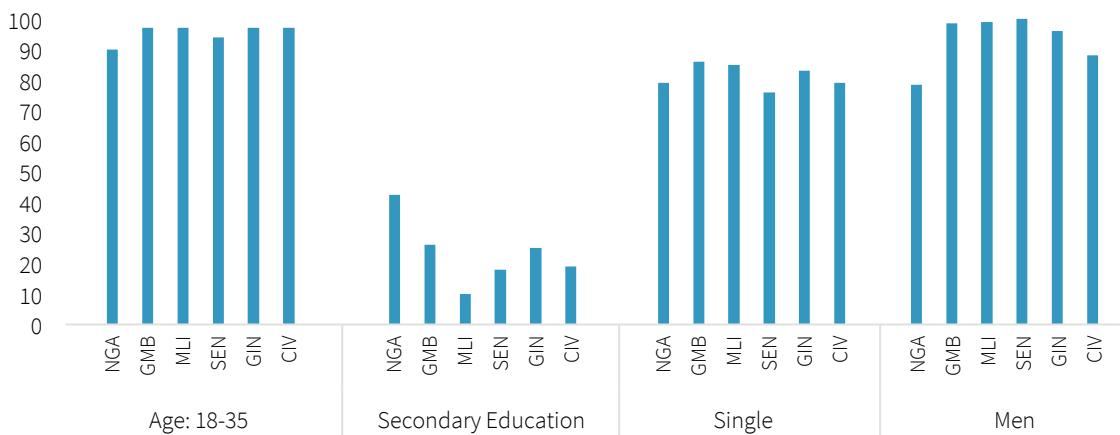
Libya. Almost all in this group traveled alone, with those married leaving their families behind.

Of asylum seekers reaching Italy from low-recognition countries in Sub-Saharan Africa, 90–97 percent are young, 18 to 35 but mostly under 26. Women constitute 24 percent of this group; 21 percent of all women were Nigerians and 75 percent were single. Young single women make up 13 percent of Nigerian asylum seekers. Qualitative surveys suggest that many may have been trafficked—reportedly Nigeria is the non-EU country

with the most trafficking victims entering the EU (European Commission 2017). IOM (2017) estimates that 80 percent of Nigerian women landing in Italy may be or become sexually exploited, and the number has been rising in recent years; extrapolating from the administrative data suggests that up to 4,880 asylum-seeking Nigerian women are at risk—undoubtedly an underestimate because few of them are likely to apply formally for asylum.

Finally, 8 percent of asylum seekers from low-recognition countries had lived in Libya for at least

**Figure 3.16. Asylum Seeker Sociodemographic Characteristics, Italy, Percent**



**Source:** Data from the EASS 2017. Country codes listed in Appendix 1.

**Table 3.1. Comparison of Sociodemographic Characteristics, Asylum Seekers from High- and Low-Recognition Countries, 2016, Percent**

Category	Country	Secondary Migration	Male	Single	Secondary Educated	Average Age
High Recognition	Syrians	27	64	29	35	33
	Afghans	34	70	32	25	33
	Iraqis	4	61	27	19	33
	Eritreans	24	67	57	39	26
	Other East Africans	23	86	44	40	26
Low Recognition	West Africans	18	90	81	27	24

*Source:* Data from EASS 2017.

### Box 3.3. Migration and the Libyan Conflict

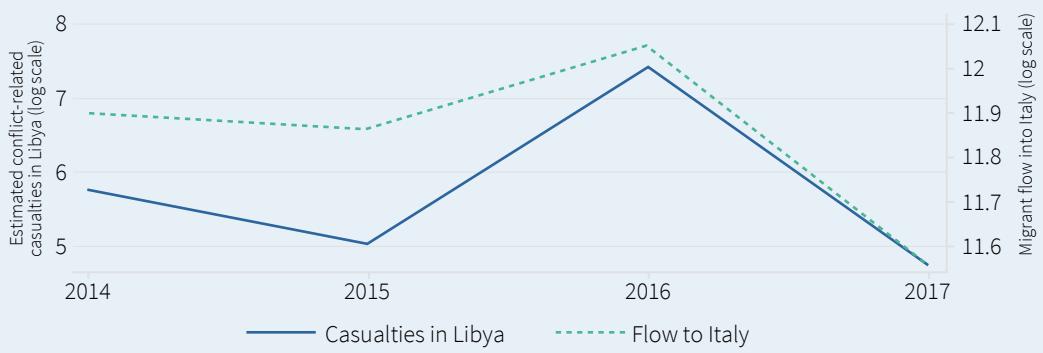
In 2011, Libyan rebels brutally executed Muammar Gaddafi, ending his 41-year rule. By 2010, some 2.5 million African migrants were settled in the country and were at risk during the crisis. Rumors of African mercenaries being hired by Gaddafi to counter the uprising, led to a wave of anti-migrants sentiment in the country (IOM 2012).

Since 2011, pervasive violence has hampered the democratic transition with an estimated 1,700 armed militia groups fighting for power.

By 2015 the resulting violence had led to internal displacement of 434,869 Libyans (CFR 2016). According to the Uppsala Conflict Data Program, the violence, measured by the number of casualties, peaked in 2016 with 1,600 deaths (Figure B3.3.1).

The increase in violence was mirrored by displacement flows: In 2016, 82 percent of the internally displaced persons (IDPs) identified were displaced in 2014–16, compared to 13 percent displaced in 2011, and 5 percent in 2012–14. The number of individuals transiting through Libya to reach Europe also went up, peaking in 2016.

**Figure B3.3.1. Estimated Deaths in Libya and Flow of Asylum Seekers to Italy, 2014–17**



**Source:** Allansson et al. (2017), and UNHCR 2018.

two years before entering Italy and were thus secondary movers. The conflict in Libya (Box 3.3) not only triggered migration for them, but also made it a transit rather than a destination country for other waves of migrants. Notably, the demographic profiles of these primary and secondary movers are not very different. These are mostly from low-recognition West African countries (82 percent)

and are men (90 percent) and single (69 percent). About 27 percent have secondary education; 35 percent report having been exposed to violence; and 42 percent suffer from severe mental distress.

Thus, the sociodemographic profile of asylum seekers differs by group. As summarized in Table 3.1, asylum seekers in Greece, mostly from

high-recognition countries, are slightly older, travel in families, and include both men and women. Those in Italy, mostly from low-recognition countries, are primarily single young men. A fraction of nationals from both groups had previously settled elsewhere.

### The Decision to Migrate

With more than 60 percent of asylum seekers arriving in Greece in families, it is not surprising that asylum seekers interviewed there report considerable family consultation before migrating. Family discussions, as registered in the qualitative survey, covered whether to leave and whether to do so together or sequentially. In most cases they also reached beyond the spouse or the head of household to seek counsel or rally support for migration in the form of emotional support, information on options, or funding. Both men and women described leveraging extended families and social networks for material support, taking out loans, or selling land within their families or social networks. One Afghan woman, travelling with her husband, said, “I sold everything, even the doormat. I also borrowed €15,000 from my relations.” In Afghanistan funding within social networks has been found to intensify social obligations to repay loans on return, to the point of discouraging return or encouraging remigration on deportation (Schuster and Majidi 2013).

For those in Italy, the decision to migrate seems to have relied less on family and more on conversations with peers and friends. Focus group discussions (FGDs) suggest that beyond concerns about security, migration may have been motivated by desires to realize hopes for the future. Discussing the move with friends and social media underscores the prevalence of the information-sharing and aspiration formation among the young that Hernandez-Carretero and Carling (2012) have linked to migration by Sub-Saharan youth.

Except for Eritreans, Somalis, and Nigerians, asylum seekers in Italy generally described less direct connection to diasporas in Europe than those in Greece. However, use of social media sometimes narrowed this gap. Moussa from Côte d’Ivoire relayed how friends made on Facebook heavily influenced his decision to leave: “There are persons from Côte d’Ivoire on Facebook who told me Italy is a good place. Once you are in Italy, you will have no problem, and you will find work.” Moussa was not the only person to discuss the move with friends made online; it is not always clear whether such contacts were sought out or generated by social networks.

### Primary Movers, Secondary Movers, and Stayers

Who actually undertakes the journey and reaches Europe? What types of peoples are more inclined to migrate? To find answers, the research first compared primary with secondary movers among asylum seekers. It then compared asylum seekers with the populations in their countries of origin if there was a relevant comparator household survey and there were enough observations in the EASS 2017 as for Afghanistan (accounting for 24 percent of asylum seekers in Greece in 2016), Nigeria (20 percent of those in Italy), and Senegal (6 percent of those in Italy). Section 3 in the Appendix discusses the methodological steps to allow such comparisons. Also compared were Syrian asylum seekers in Greece and Syrian refugees in Jordan and Lebanon; this sample was also compared with refugees in other EU countries based on available studies.

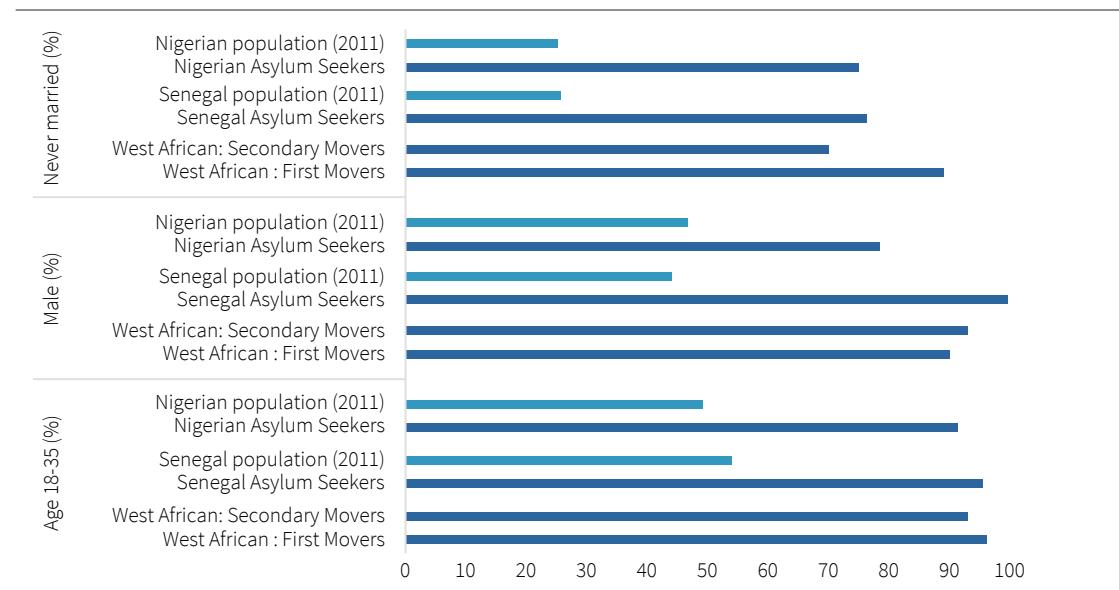
The profile of first and secondary movers from low-recognition countries is distinctly different from that of populations at home. West African asylum seekers, both primary and secondary movers, are mainly young, male, and single (Figure 3.17). The main difference is that secondary movers in Italy who had been settled in Libya were more likely than first movers to be married.

Asylum seekers from Senegal and Nigeria, whether first or secondary movers, are mostly young and male; 91 percent of the Senegalese and 96 percent of the Nigerians are aged 18–35, while those in this young group constitute only about 50 percent of the population back home aged 18–65; in fact, at 18–26, 64 percent of Nigerian and 64 percent of Senegalese asylum seekers are even younger. Unlike populations at home, asylum seekers are

mainly men, as are nearly all the Senegalese and a high share of the Nigerians, and in both cases the majority are single. However, 22 percent of Nigerian asylum seekers are women, about 66 percent of them single, and they are very young (18–26).

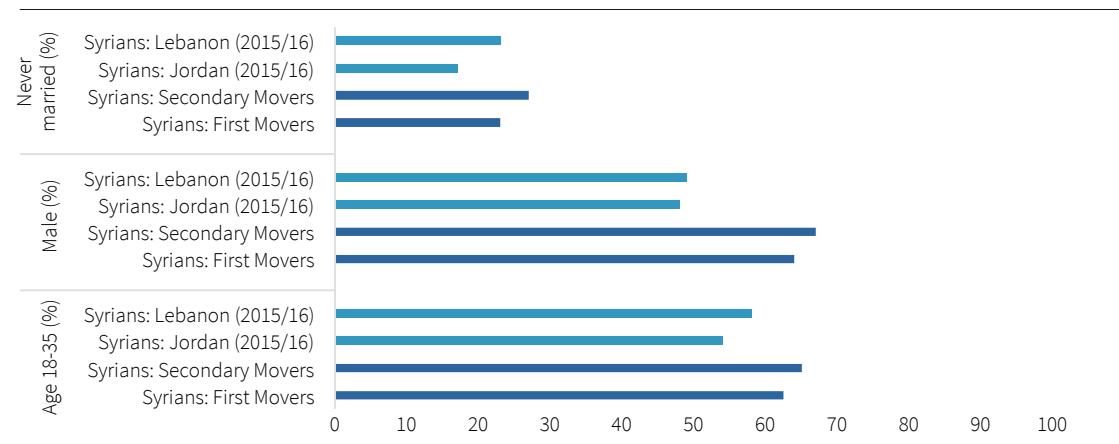
For high-recognition Afghanistan and the Syrian Arab Republic, differences between first and second movers are small (Figure 3.18). However,

**Figure 3.17. Asylum Seekers and Population in Country of Origin Compared, Percent**

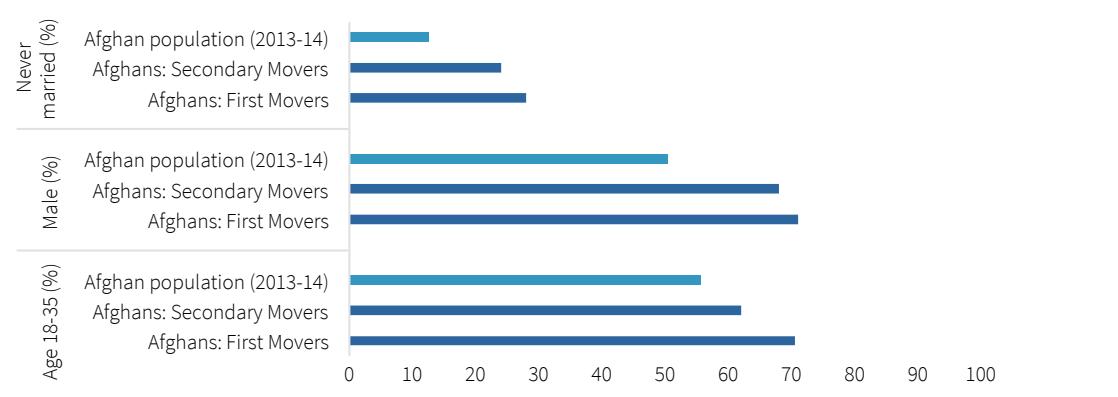


**Source:** EASS 2017, Nigeria 2011 Living Standard Measurement Survey; Senegal 2011 ESPS II.

**Figure 3.18. Syrian Asylum Seekers and Population in other countries Compared, Percent**



**Source:** EASS 2017 and 2015-16 Syrian Refugees and Host Communities Data for Jordan, KRI, and Lebanon.

**Figure 3.19. Afghan Asylum Seekers in Greece and Population in Afghanistan Compared, Percent**

**Source:** EASS 2017 and 2013-14 Afghanistan Living Conditions Survey.

when Syrian asylum seekers are compared with Syrian refugees in Lebanon and Jordan, there are more men among the asylum seekers. Afghan asylum seekers are slightly more likely than the population back home to be male, young, and single. Nevertheless, compared to asylum seekers from low-recognition countries, Afghan and Syrian asylum seekers traveled mostly in families, and differences between the groups are smaller.

First mover and secondary mover asylum seekers are quite similar, but both differ from the populations at home, particularly those from low-recognition countries. This suggests that those with certain demographic characteristics are more likely to leave home, and the similarities between first and secondary movers suggests that once someone leaves, other issues—related to the timing of that decision or factors explained below—might be relevant to the migration path.

### **Region of Origin**

Except for Nigerians, within their countries asylum seekers were not highly concentrated in a region. About 70 percent of Nigerian asylum seekers lived in urban areas, which contain only about 40 percent of the Nigerian population. The urban pro-

portion of Senegalese asylum seekers, by contrast, is similar to Senegal's urbanization rate.

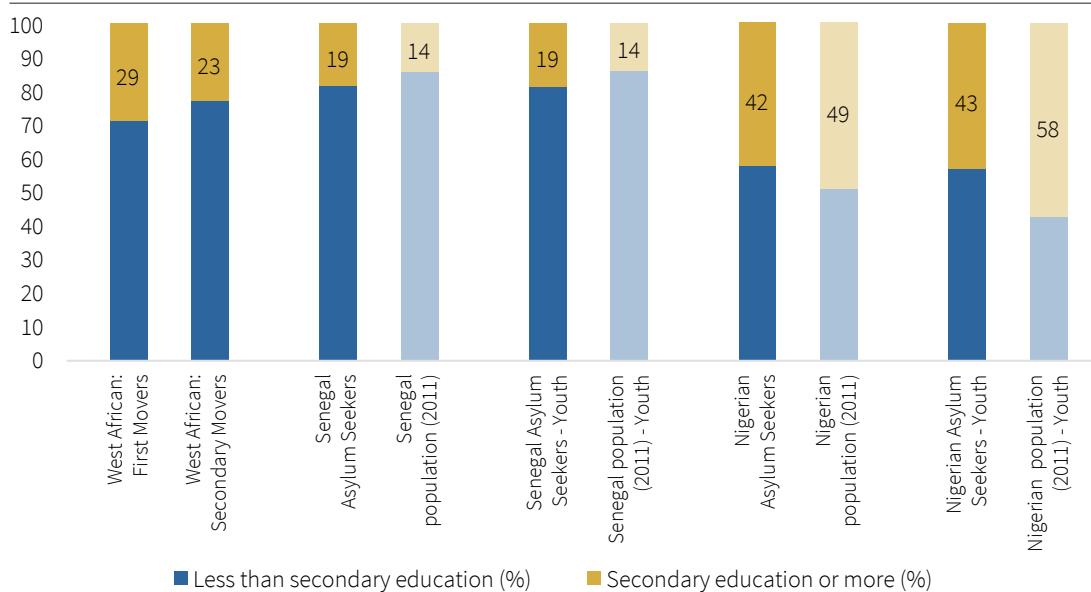
Nearly all Nigerian asylum seekers had been living in the Southern part of the country before migrating, and 84 percent of those for whom information was available<sup>32</sup> had been in the South-South region, where 17 percent of Nigerian are to be found; a high concentration of asylum seekers are from Benin City. It may be that social networks there facilitate migration, or it could relate to smuggling or human trafficking networks.

About 60 percent of Afghan asylum seekers who are primary movers were from the East region of the country—the most highly populated region (47 percent of total) and containing the capital city. Moreover, while 69 percent of resident Afghans live in rural areas, only 19 percent of asylum seekers did.

### ***Education***

Education levels are similar for first and secondary movers from West African countries. Less than

<sup>32</sup>Information on region of origin has missing values. This statement assumes that the region distribution reflects the full sample of asylum seekers and is thus not correlated with patterns that might have been found in missing information,

**Figure 3.20. West African Asylum Seekers by Educational Attainment, Percent**

**Source:** EASS 2017, Nigeria 2011 Living Standard Measurement Survey; Senegal 2011 (ESPS II).

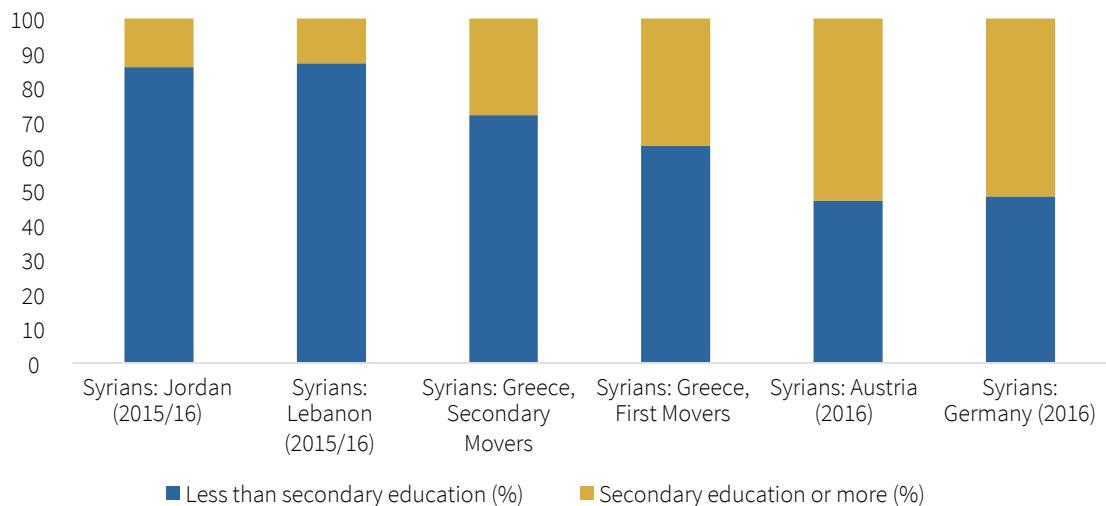
**Notes:** Youth = those aged 18–35 years.

30 percent of asylum seekers from West African low-recognition countries had secondary education or more, with those who moved from temporary settlement in Libya being slightly less educated (Figure 3.20). For Senegal the profile is not very different, but the average Nigerian asylum seeker aged 18–35 is less likely to have secondary education (43 percent) than peers at home (58 percent). This may partly be because there are more women Nigerian asylum seekers, and 68 percent of them are young, with less than secondary education. The Nigerian asylum seeker educational gap (Figure 3.20) widens by 17 percentage points when the home comparison is with only the South-South region where most asylum seekers are from.<sup>33</sup>

Syrians seeking asylum in the EU are more educated than Syrian refugees in other countries. Of Syrians forcibly displaced, the least educated are in neighboring countries like Jordan and Lebanon and the more educated have moved on to European countries beyond Greece, likely in an earlier wave (Figure 3.21). Moreover, among asylum seekers in Greece, those who had first settled in Turkey are slightly less educated than first movers. The education of both first and secondary asylum seekers in Greece is on average more comparable to the average Syrian in 2011. Comparing results gives a dynamic picture of choices to settle in Jordan, Lebanon, Turkey, Greece, or Austria and Germany.

Afghan asylum seekers who first settled in Iran have less education than peers at home, first movers, and asylum seekers in other European countries. The education profile of the total Afghan asylum-seeking population is relatively similar to that of those who moved from Iran. For instance, 75 percent of asylum seekers aged 18–65 had less than secondary education, compared to 80 percent back

<sup>33</sup>This region of Nigeria has the highest educational attainment: 19 percent of the labor force has tertiary education compared to less than 33 percent in some Northern regions and 70 percent has some junior secondary education or higher. Returns to secondary education and above are also higher in the South than in other regions of the country (World Bank 2016).

**Figure 3.21. Education of Syrian Asylum Seekers in Greece and Italy, Percent**

**Source:** EASS 2017; for Jordan, KRI, and Lebanon: 2015-16 SRHCS; for Austria, Buber-Ennser et al. 2016 (limited to population 20-59 years); and for Germany, the 2016 IAB-BAMF-SOEP Refugee Survey.

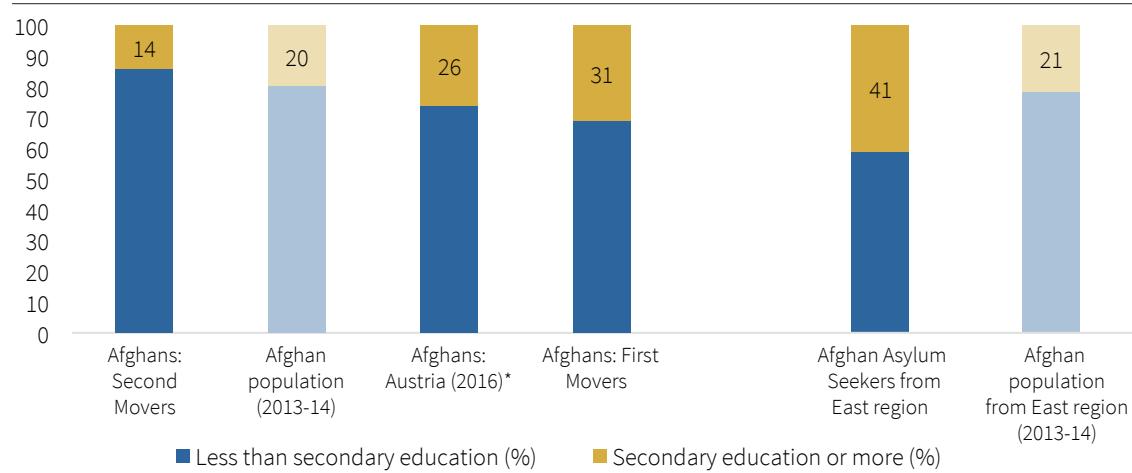
home. However, this masks other patterns: (1) Secondary movers from Iran were much less educated than primary movers: only 14 percent had secondary education or above, compared to 31 percent of first movers (Figure 3.22). They were also less educated than those at home (20 percent). (2) First movers who left the East region, where a large share of asylum seekers come from, are better-educated than the average: 41 percent of working-age asylum seekers had secondary education or more against 21 percent of those still in the region.

In sum, there are no systematic education patterns associated with the decision to emigrate. Among those from high-recognition countries, first movers to Greece are relatively better-educated than those in other countries or secondary movers but less-educated than the first wave of asylum seekers (see Figure 3.21). Among those from low-recognition countries, differences between groups are less stark but it appears that the young Nigerians who reached Italy have less education than the average young person in Nigeria. (Chapter V discusses the education and skills of asylum seekers in more detail.)

### ***Living Standards***

Welfare simulations for Afghanistan, Nigeria, and Senegal suggest that the average asylum seeker comes from a wealthier household than the average household back home. These findings are based on techniques that draw on known welfare aggregates for countries of origin to impute welfare for these countries (see Appendix 3). It is estimated that the average Nigerian asylum seeker, for example, comes from a household with daily consumption that is about 35 percent higher than the average in Nigeria, and even 24 percent higher than in the better-off South-South region (Figure 3.23).

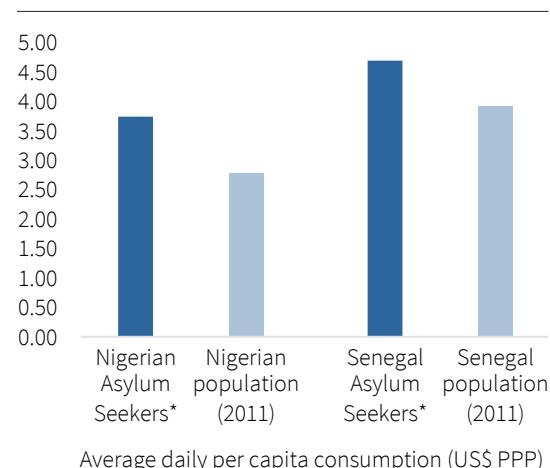
Moreover, asylum seekers seem to be among the richest in their countries of origin: an estimated 58 percent of the Nigerians come from the top 40 percent in the welfare distribution and 34 percent from the top 20 percent (Figure 3.24). Similarly, an estimated 50 percent of Senegalese asylum seekers and 63 percent of Afghans come from the top 40 percent of households in the country; 29 percent of Senegalese and 43 percent of Afghans are from the top 20 percent (Figure 3.24).

**Figure 3.22. Education of Afghan Secondary Movers from Iran, Percent**

**Source:** EASS 2017 and 2013-14 Afghanistan Living Conditions Survey; for Austria: Buber-Ennser et al. 2016, limited to ages 25+ years.

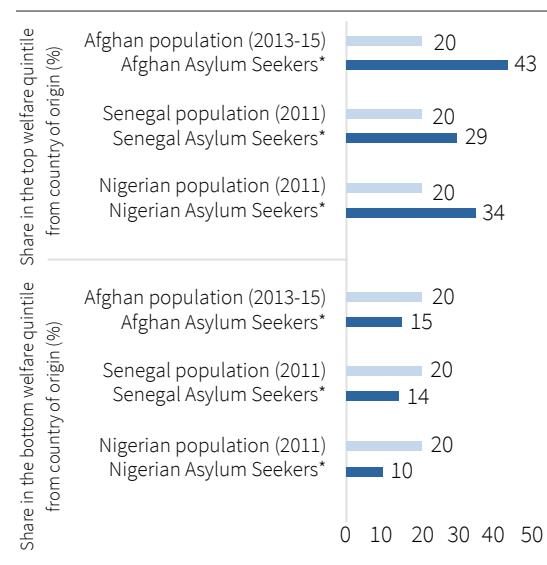
The fact that the average asylum seeker comes from a better-off household suggests that for some still at home affordability might be a barrier to migration. At about US\$1,600 for those taking the Agadez/Tripoli route, the average financial cost of the journey for Nigerians and Senegalese is equivalent to over a year of consumption for an average person at home

(1.1 years in Senegal, 1.6 years in Nigeria). The total cost is even higher for Afghans, who travel in families. In sum, not all may be able to afford the trip or to forego, even temporarily, the contribution of a household member to the family income.

**Figure 3.23. Average Daily per Capita Consumption, Nigeria, Senegal, and Asylum Seekers, US\$ at Purchasing Power Parity (PPP)**

**Source:** EASS 2017; Nigeria 2011 Living Standard Measurement Survey; Senegal 2011 (ESPS II).

**Notes:** \* Data imputed. welfare aggregates for Nigeria and Senegal are based on consumption, and for Afghanistan on assets.

**Figure 3.24. Asylum Seekers in Top and Bottom Welfare Quintiles at Home, Percent**

**Source:** EASS 2017; Nigeria 2011 Living Standard Measurement Survey; Senegal 2011 (ESPS II).

**Notes:** \* Data imputed. welfare aggregates for Nigeria and Senegal are based on consumption, and for Afghanistan on assets.



## IV. The Migration Experience

This chapter tracks the long, treacherous, and costly journeys of the asylum seekers who reached Italy and those who reached Greece. No matter what the route, the journey was dangerous and expensive not only financially but also physically and emotionally. Because violence characterized the journey through Africa particularly, it deeply affected asylum seekers in Italy: 45 percent of them reported experiencing violence in transit compared to just 5 percent in Greece. Nevertheless, the inflows suggest that many still considered emigration to have net benefits.

### A Long and Perilous Journey

Although asylum seekers came from about 30 countries worldwide, of those who traveled to Italy most took one of three routes (Figure 4.1).

- **West Africans** (most of the Nigerians, Gambians, Senegalese, Malians, Ivoirians, and Guineans) travelled overland to Agadez, Niger, and then continued up to Tripoli, Libya, to get boats to Italy. About 36 percent of those arriving in Italy took this route (green on the map),
- **East Africans** (Eritreans, Somalians, and Sudanese) travelled to Khartoum, Sudan, then north to Tripoli to cross the sea. About 18 percent of asylum seekers in Italy came by this route (purple on the map).

- **Other:** The rest, primarily West Africans, took a different route, through Ouagadougou, Dakar, Bamako, Gao, Tamanrasset, and Niamey, apparently bypassing Agadez or Khartoum. Some of these did not report traveling through any major city before Tripoli.

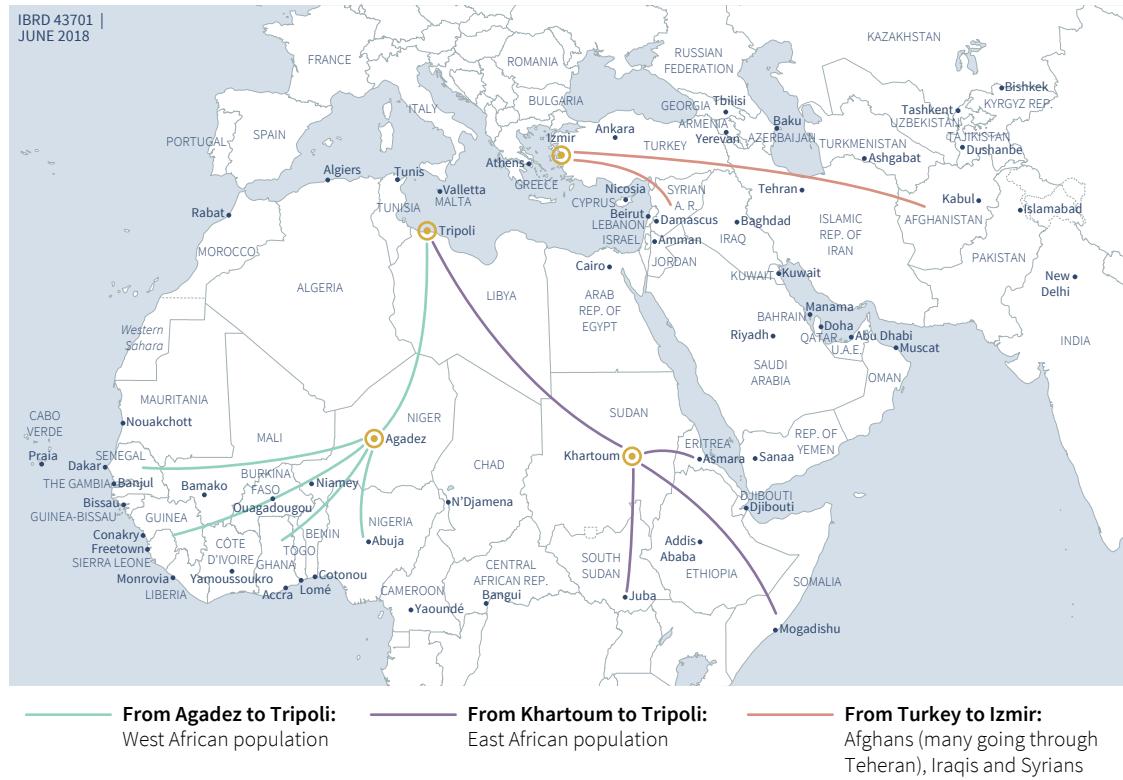
The majority of asylum seekers in Greece (77 percent)—mostly Afghans, Iraqis, and Syrians—travelled to Izmir, Turkey, to get boats to Greece (orange on the map). The other 23 percent apparently sailed from smaller coastal cities. (Almost 70 percent of those interviewed reached Greece in the first quarter of 2016, before the EU-Turkey joint action plan was operational.) Before arriving in Izmir or another Turkish embarkation point their routes varied, Syrians mainly entering Turkey

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*"I knew from Satellite TV and the news that the route was dangerous. We had heard all the stories about people drowning in the Mediterranean. I personally know an entire family who drowned. But our lives were in danger so we had no choice."*

**Afghan man**

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**Figure 4.1. The Three Main Asylum-Seeker Routes to the EU**

**Source:** Data from the EASS 2017.

**Note:** This map was produced by the Cartography Unit of the World Bank Group. The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of the World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

through the Syrian Arab Republic's southern border with Turkey, Afghans consistently travelling overland through Iran.

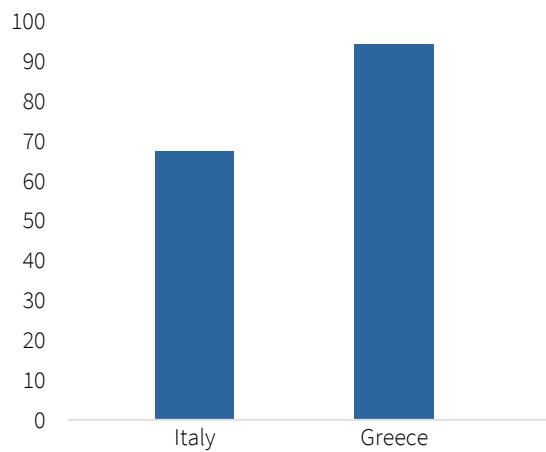
On average, asylum seekers traveled through three relatively large transit points and spent a median of 26 days in each. Those reaching Italy stayed longer, a median of 46 days, than those who travelled to Greece (8 days). Many survey respondents, particularly those in Italian reception centers, worked at the transit points, either because they expected to settle there or because they needed more money to continue their journey.

Travelers typically used a combination of modes to reach their destination: about 53 percent used pri-

vate cars and buses for at least part of the journey and 34 percent used some form of public transportation. About 36 percent traveled "off road" for part of the way, via walking or informal methods of smuggling; the off-road method was fairly similar in the eastern routes to Greece (34 percent) and the route to Italy via Libya (39 percent).

The sea leg of the journey was most perilous. It took about three days to reach Italy by boat, but only two hours to reach Greece. For 67 percent of those who reached Italy and 94 percent who reached Greece, the boats were inflatable (Figure 4.2), often necessitating a rescue at sea (Figure 4.3). Among those arriving in Italy, 96 percent needed to be rescued, as did 66 percent arriving in Greece.

**Figure 4.2. Asylum Seekers Reaching the EU via Inflatable Boat, Percent**



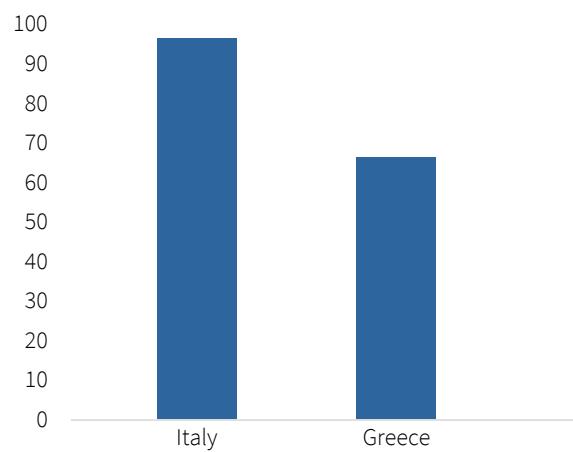
**Source:** Data from the EASS 2017.

While the Italy route took longer, both routes were dangerous. In the qualitative interviews, many travelers spoke of their fear as their boats slowly filled with water or they spent hours adrift in the sea. “*The boat was the most difficult thing,*” described one Syrian woman who travelled with her children, “*I could not breathe and spent four hours praying. I did not even look at the sea. In the middle of the journey the boat stopped working.*”

Some described panicking when they saw the poor quality of the boats they would be traveling in, and how overcrowded they were. One Nigerian man said, “*We did not do up to one hour of the journey, the woods of the boat started breaking. After another while, the engine stopped working. In the deep sea, water started entering the boat, but we poured it out. We were still doing this when the boat started to compress. There were over a hundred of us...The risk involved in the journey was beyond my wildest imagination.*” About 5,096 people are reported to have gone missing or died at sea in 2016 alone.<sup>34</sup>

<sup>34</sup> <https://data2.unhcr.org/en/situations/mediterranean>. Accessed on May 21 2018.

**Figure 4.3. Asylum Seekers in Italy Rescued at Sea, Percent**



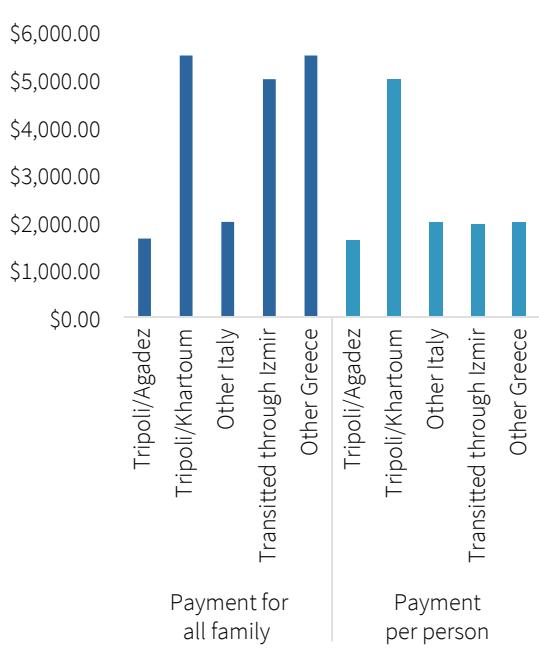
**Source:** Data from the EASS 2017.

### The Financial Cost

The median transit cost for asylum seekers was US\$3,500. To put this in perspective, the median payment by Sub-Saharan Africans was US\$2,250, equivalent to more than three years of income for a poor person (low-income-country poverty line: US\$1.90/day). For those reaching Greece from the Middle East or South Asia (see Figure 4.4), the median travel cost of US\$5,000 would be over four years of income for a poor person (low-middle-income country poverty line: US\$3.20/day).

About 42 percent of those who reached Italy and 17 percent of those who reached Greece worked along the way (Figure 4.5). Most of those who worked during transit were men (90 percent) and younger than 35 (93 percent in Italy and 70 percent in Greece). The work tended to be manual labor: construction for nearly 30 percent of those who worked and manufacturing for 9 percent (Figure 4.6).

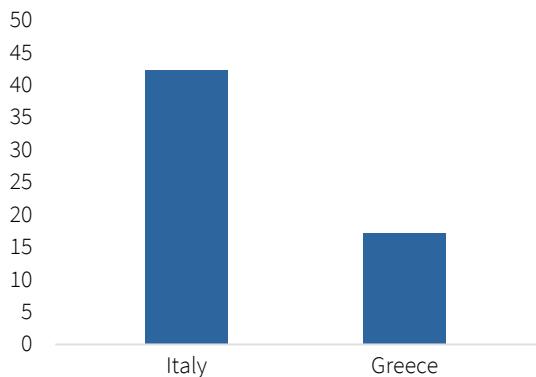
In qualitative interviews, several West Africans reported leveraging personal networks to find jobs in neighboring countries before the journey. However, other West Africans described travelling first

**Figure 4.4. Cost of the Journey, US\$**

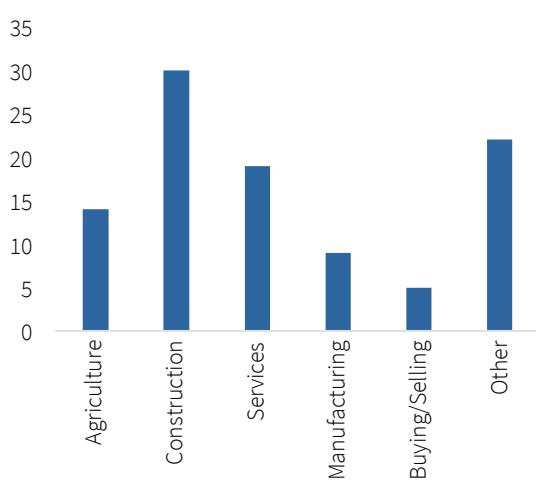
**Source:** Data from the EASS 2017.

and seeking work upon arrival—a strategy that seemed to add to their vulnerabilities en route and lent itself to ad hoc and precarious work. Many described falling victim to criminal networks in West Africa, especially as they sought work opportunities linked to further migration. Moreover, many reported working without pay—they worked either to get reduced transit costs or to escape imprisonment or crime syndicates. While they are particularly rampant in Libya, practices of unpaid labor can be found throughout the journey from West Africa.

Unpaid labor is most common on the West African Tripoli-via-Agadez route. Figure 4.7 shows the share of those who worked without pay among those who worked in transit. Of those reaching the Mediterranean through Tripoli-via-Agadez, nearly 61 percent worked without pay, versus only 25 percent travelling through Khartoum and 18 percent through Izmir. Thus, the lower “cash price paid” to

**Figure 4.5. Asylum Seekers Who Worked in Transit, Percent**

**Source:** Data from the EASS 2017.

**Figure 4.6. Employment of Those Who Worked in Transit, Percent**

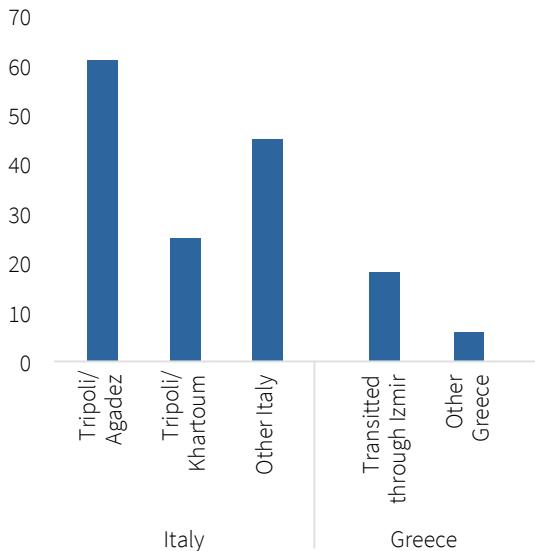
**Source:** Data from the EASS 2017.

reach Italy via Agadez (Figure 4.4) may be due to the fact that individuals financed for part of their journey by working without pay.

## The Physical and Emotional Toll

The journey imposed a physical toll on many asylum seekers. Many who were interviewed spoke of their exhaustion. Walking for days in the mountains and crossing borders on foot in midwinter,

**Figure 4.7. Asylum Seekers Who Worked without Pay During Transit, Percent of all Who Worked En Route**

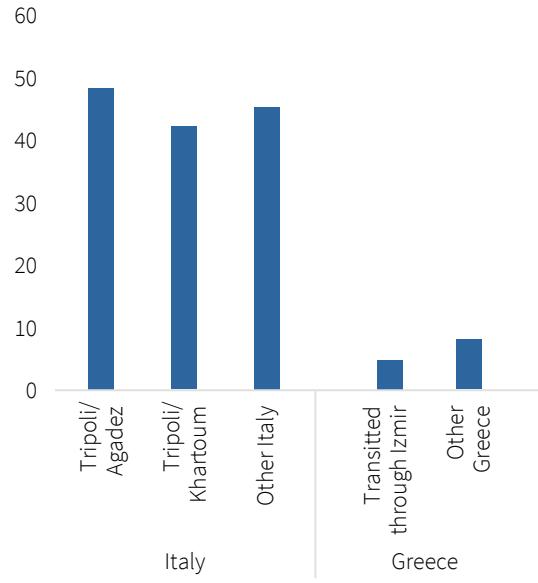


**Source:** Data from the EASS 2017.

often with children, were common stories among Syrians and Afghans during qualitative interviews. Many described seeing others die or suffering serious injuries. Respondents in Italy also described deadly high-speed jeep journeys through the Saharan desert, hunger and dehydration, and seeing fellow travelers die and their bodies left on the road side.

Almost all respondents described journeys that were much more challenging than they expected, although they had had some prior knowledge of the risks. Yet many believed the expected benefits still outweighed the costs. Wintah from Eritrea said, “*I had heard many bad things about the journey. I knew there was death: in Libya, they kill people; in the Sahara, you can die of starvation; if you fall on the way, they leave you there.*” She decided to come anyway, sure that her life in Europe would be better: and “*I also wanted to do it my way and go, even knowing nothing about Europe.*”

**Figure 4.8. Physical Violence en Route to Italy and Greece, Percent**

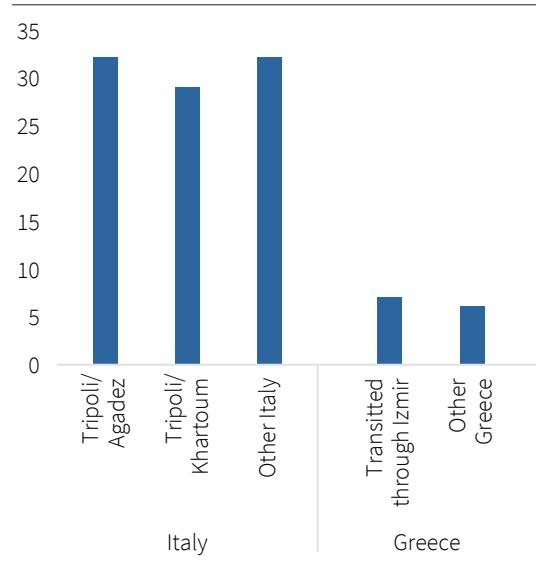


**Source:** Data from the EASS 2017.

A large group of asylum seekers, especially among those in Italy, described an even greater shock when faced with the challenges of the journey. Many had little information about the journey and the situation in Libya, and it was often gleaned from smugglers.

Many asylum seekers were exposed to physical violence in transit. This was a particularly striking feature of the journey through Africa to Italy—45 percent of survey respondents reported experiencing physical violence on the way, no matter which route they took—compared to only 5 percent of those who travelled to Greece (Figure 4.8). Eritreans especially were at risk: 42 percent reported being physically victimized, compared to 5 percent of Afghans and Syrians and 10 percent of Iraqis.

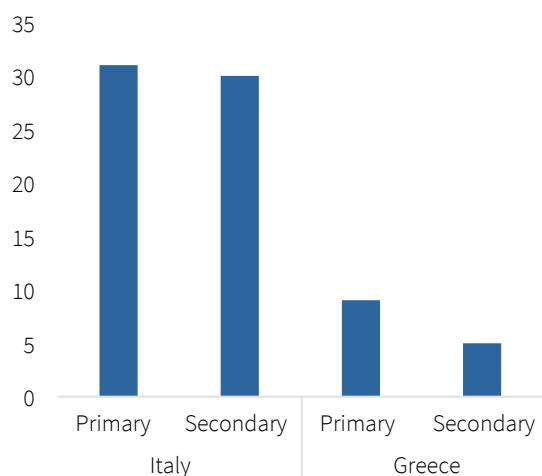
Most of the difference in reported violence appears driven by whether a refugee came to Italy or

**Figure 4.9. Imprisonment on the Way, Percent**

**Source:** Data from the EASS 2017.

Greece.<sup>35</sup> While exposure to violence in transit was generally higher for asylum seekers in Italy than Greece, within both samples those with both high and low education reported similar experiences with violence. However, in Italy those who had paid less than the median price had experienced much more violence (51 percent) than those who paid more (38 percent). For those in Greece, price was not a determinant of whether they experienced violence. Nor is there much difference in the experience of violence between primary and secondary movers.

Men reported more exposure to physical violence. Among those in Italy, 47 percent of men and 40 percent of women had to deal with vio-

**Figure 4.10. Imprisonment of Primary and Secondary Movers, Percent**

**Source:** Data from the EASS 2017.

lence (Box 4.1). However, some of the gender difference may be due to women under-reporting. Almost all of the women interviewed spoke of experiencing or witnessing violence—often sexual, which may be harder to talk about in quantitative surveys. In contrast, the men interviewed in both Greece and Italy often described reacting to violence as a major reason they got into trouble. Reacting to smuggler requests or behavior, whether to themselves or women travelling with them, was described as a cause of beatings or (on the Libya route) outright killing.

Another difficulty along the way was detention, by either authorities or gangs. Detention was quite common along all African routes to Italy, less so along the routes to Greece (Figure 4.9). Among those traveling to Italy, 34 percent of the men and 18 percent of the women reported being detained at some point. In both samples, primary movers were slightly more likely than secondary to be detained (Figure 4.10).

Consistent with other research and journalistic reports, asylum seekers described being sold or

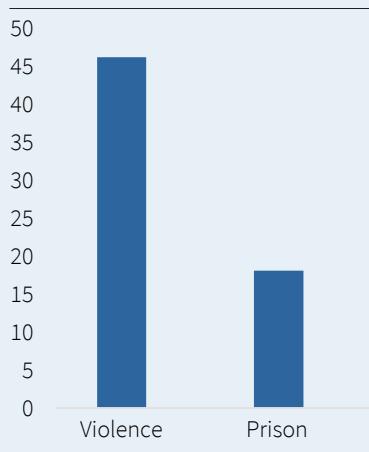
<sup>35</sup> It may appear that those from high-recognition countries confronted less violence, but that is skewed entirely by the Greece sample, which met with much less violence in general on the way and consisted of asylum seekers primarily from high-recognition countries. Within Italy, the rates of violence during transit were similar no matter where the asylum seekers were from.

### Box 4.1. Single Women and the Journey to Italy

In the Italy reception centers, 305 women (12 percent of the sample) were surveyed; of these, 5 percent were married and with their husbands, 28 percent married but traveling alone, and 67 percent unmarried.

Of the single women, 53 percent came from Nigeria, 25 percent from Eritrea, and 11 percent from Côte d'Ivoire. Nearly 63 percent of them were younger than 25 and 96 percent were not yet 35. Their top reasons for migration were that their family was not safe (29 percent) and to escape conflict (21 percent). Others migrated for economic opportunity (13 percent), to avoid military service (13 percent), and to join family (6 percent). In the quantitative survey nearly, 46 percent of the single women reported being confronted by physical violence on the journey and 18 percent also reported being detained for a time, making them more vulnerable (Figure B4.1.1.).

**Figure B4.1.1. Violence Against Women in Transit**



**Source:** Data from the EASS 2017 – weighted sample.

It is possible, however, that these numbers underestimate the true level of violence against women; in interviews many of them visibly struggled to talk about their experiences. It appears from the qualitative interviews that sexual violence affected almost all the women who reached Italy, whether alone or with partners. It occurred mainly at the hands of smugglers and criminal networks in or en route to Libya. Women travelling alone who were interviewed also described being forced into sex work in Libya, where some were physically injured. Very rarely did women in Italy describe sexual violence at the hands of other migrants or anywhere else on the journey before Libya. To the contrary, many male asylum seekers spoke up against the abuses of the women; some even recounted wanting or trying to protect them.

Men and women alike agreed that traveling in groups or with male family members was the most common mechanism to cope with expected risks. While sometimes effective, this did not prevent sexual violence—some women described being raped in front of husbands or co-migrants.

Aside from sexual violence, some cited specific physiological disadvantages of the journey for women. Women described the difficulty of traveling while menstruating or pregnant. Miscarriages were blamed on the difficulty of the journey and were hard to manage. Ella from Eritrea described being “very ill” as she lost her baby and bled throughout her jeep journey across the Sahara. Becoming pregnant was also a risk associated with sexual violence that some in Italy experienced.

*Source:* EASS 2017 and qualitative surveys of this study.

handed by smugglers to criminal gangs in Libya. They would be held captive until their families could transfer money or until their labor could pay their “dues.” There were suggestions of differential treatment by nationality, in terms of what their captors perceived as their ability to pay. “A Somali is like gold in Libya!” explained Abshir, a young Somali man. “Somalis will pay more than the others to leave from Libya, and it has been the same for me. They asked me for US\$7,000 per person to leave, whereas others would pay US\$800-1,000 dollars. My family had to send money; if not they would have killed me. I had no choice, I couldn’t go back, so I paid.”

### Intended Destinations

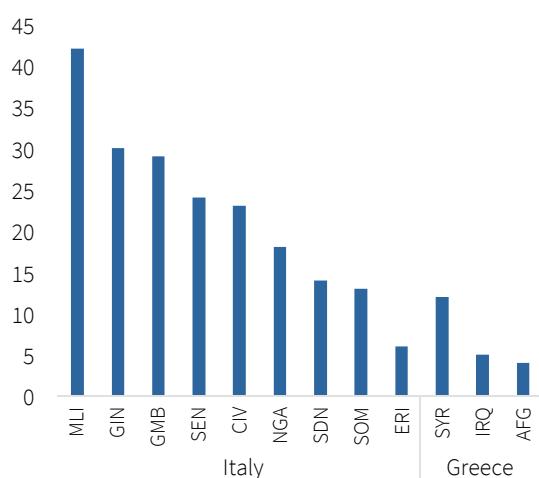
Not all refugees initially intended to settle in the EU. Nearly 20 percent of the asylum seekers interviewed in Italy stated that they originally intended to settle in countries outside of Europe (Figure 4.11). Rates were highest among those from Mali (42 percent) and Guinea (30 percent) and lowest for those from Somalia (13 percent) and Eritrea (6

percent). The qualitative interviews suggest that for many, the other countries were the first practical option or they had already settled in another country, as Afghans did in Iran or West Africans in Libya. They were usually driven to move on by poor working and living conditions. Some had already been living in established refugee programs. Eritreans and Syrians, for example, complained of poor work conditions in Ethiopia (the former) and Turkey (the latter). As one Syrian woman explained: “At first, we thought we would stay in Turkey because we are close to Syria and as soon as the war ended, we would go back to Syria. But the situation got worse, and we lost hope of ever going back. My husband left first because there was no work in Turkey, and I followed him later.”

### Few Planned to Return Home

Despite all they have endured, many expressed hope for a future and opportunities in Europe. Regardless of their reasons for leaving or how onerous they found the journey or prolonged stays in reception centers, respondents interviewed almost unanimously believed that their lives would improve within the next two years, and would be better than they had been at home.<sup>36</sup> Uncertain about where they would be relocated, some in Greece gave a more tempered response but still foresaw improvement. Safety, employment, and

**Figure 4.11. Original Intention to Settle Somewhere Other than the EU, Percent**



**Source:** Data from the EASS 2017. Country codes listed in Table A1.1. Statistics for Sudan are computed from 33 observations and should thus be interpreted with caution.

*“Since I got here, I’ve started to figure out my life, I started to speak Italian. I want to have a job and build my future in Italy.”*

**Guinean man**

<sup>36</sup> During qualitative interviews, respondents were asked to grade their well-being from 0-10 at origin and at present and to predict it two years ahead.

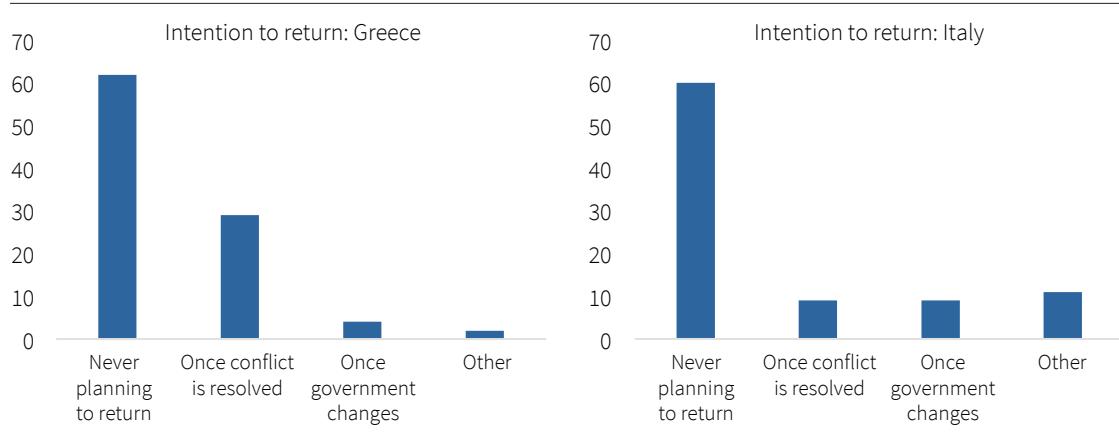
(especially for the young) education were the main reasons for their optimism.

With hopes for a better future in Europe, a majority expressed little willingness to return home. Figure 4.12 plots the future plans of respondents by country of origin. In Italy, nearly 60 percent of asylum seekers interviewed—50 percent of those from high-recognition States and 66 percent of those from low-recognition States—planned never to return. Preferences on return were fairly similar for primary and secondary movers (Figure 4.13).

In both Greece and Italy the rate of those who never planned to return was about 60 percent. The numbers are much higher for those from Afghanistan (88 percent) and Iraq (75 percent) than from the Syrian Arab Republic (42 percent).

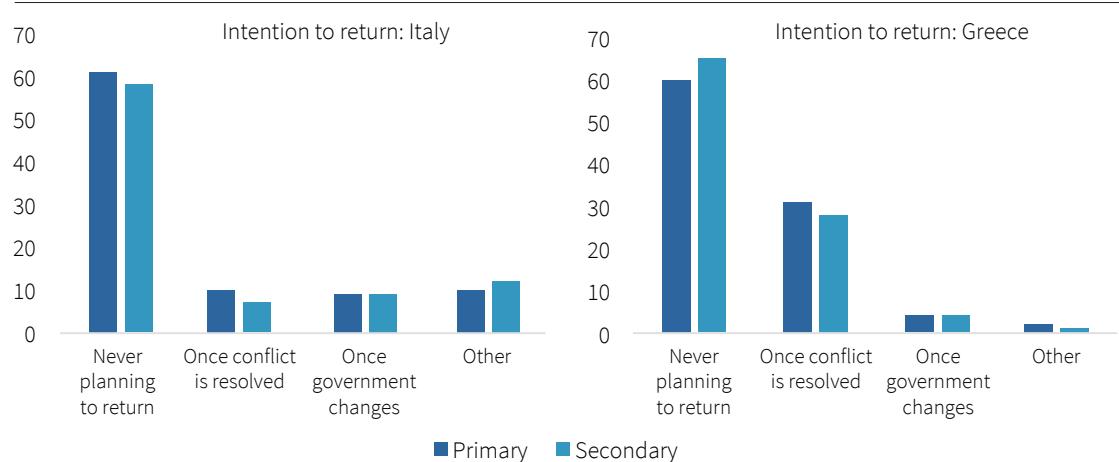
The main reason of Afghans and Iraqis for dismissing return was the security situation: they thought that the conflict and uncertainty that had characterized their countries for such a long time would not be addressed in their lifetime. But other factors may also have been operative. For instance, Af-

**Figure 4.12. Intention to Return to Country of Origin, Percent of Asylum Seekers**



**Source:** Data from the EASS 2017.

**Figure 4.13. Intentions to Return, Primary and Secondary Movers, Percent**



**Source:** Data from the EASS 2017.

ghans interviewed who had spent their formative years living in Iran seemed particularly reluctant to go to Afghanistan: As one young man born and raised in Iran said, “*What type of life am I going to have in Afghanistan . . . a country that I have never seen. A country where I don’t know anyone.*” Awareness and fear of voluntary return programs were common among Afghan asylum seekers in early 2017 when the interviews took place and may have induced a bias in responding to the question.

Asylum seekers identified many obstacles to return. Some cited practical barriers, such as the lack of safety and having nothing to go back to due to conflict. This was common among those from high-recognition countries where conflicts have been recurrent. For example, one Syrian woman interviewed said, “*I don’t believe Syria will go back to what it used to be. It is totally destroyed. If it goes back to what it used to be, I will go back.*” However, there are other practical barriers to return, often financial, especially considering the sizable costs already incurred. The issue is reinforced when the investment was made possible by contributions from relatives, friends, and members of the community with an expectation of remittances as interest payments. Practical barriers often combine with normative ones, generating additional perceptions of pressures to stay. A return might thus translate into both significant debt and social stigma for having failed to generate the expected return on investment. For women who traveled alone, the stigma they can expect at home is also a major deterrent to return.

## V. Education, Skills and Work Experience

An overwhelming majority of asylum seekers in both Italy and Greece view labor market integration as critical for future success. In response to the question: “According to you, what would an asylum seeker need to have a successful integration experience in its host community? (multiple answers possible).” 68 percent cited a job for at least one household member. Others mentioned a good education for self or children. Similarly, 37 percent considered unemployment to be a major obstacle to successful integration, mainly because of language and skills deficiencies. Comparable results emerged from open discussions where both men and women overwhelmingly thought of employment as the key to success, though women in Greece were more likely to refer to jobs for husbands. For many, resolving issues relating to work—the need to speak the language, getting more education, or having work documents—were priorities.

To provide a more complete view of asylum seeker human capital, this report discusses not only their education but also their technical and cognitive skills. The study explored their job history before and during migration and investigated their self-reported skills, such as language, numeracy, and literacy. To allow wider comparisons, the questions on self-reported literacy and numeracy were borrowed directly from survey instruments

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*“The first thing is to get the documents. As soon as I get them I’ll look for some training and I’ll then look for a job.”*

**Guinean man**

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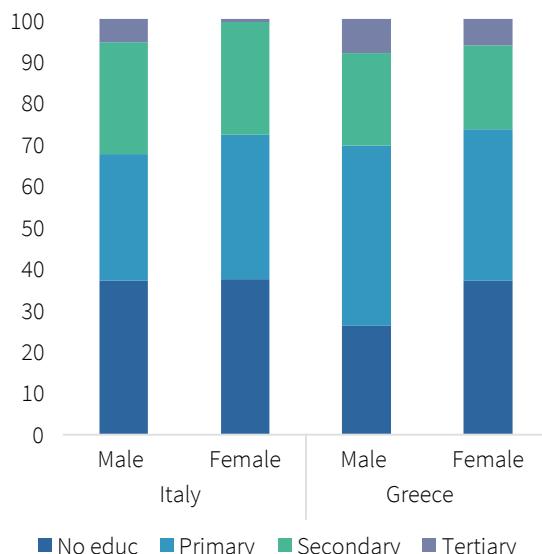
of the World Bank Skills Toward Employability and Productivity (STEP) program.

An important innovation of this study is administration of a formal literacy skill assessment. In close collaboration with the OECD, the study team administered a computer-based assessment, which identifies for the test-taker a proficiency level (below 1, levels 1, 2, and 3 and above). The study tests were designed to determine proficiency at levels comparable to the OECD PIAAC results. Similarly, asylum seeker results are comparable to literacy assessments obtained by the STEP program. This allows for comparing asylum seekers both with one another and with workers in host countries. Notably, the assessment does not rely on self-reported information that may be subject to recall and conformity biases; nor does it assume implicitly that educational attainment is comparable across countries.

## Education and Country of Origin

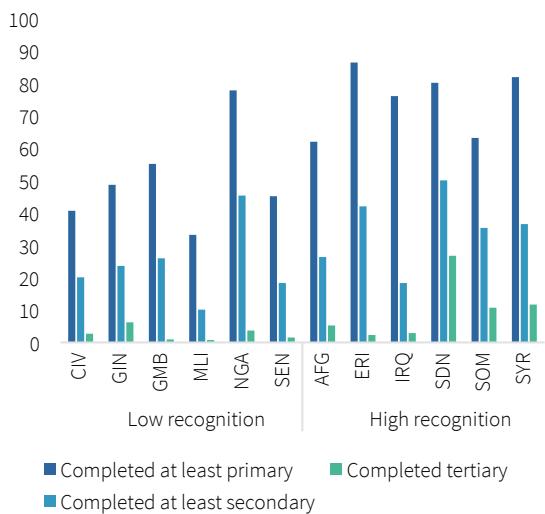
Thirty-two percent of asylum seekers in Italy and 29 percent in Greece had completed secondary school or more. In Italy there were no marked differences between men and women but in Greece a gender gap in education was noticeable. In Italy, 33 percent of men and 28 percent of women reported having completed secondary education (see Figure 5.1). However, 62 percent of asylum seekers in Italy, men and women alike, had completed at least primary school. In Greece primary school completion rates were 74 percent for men and 63 percent for women. The apparent absence of an education gender gap in Italy is mostly driven by the fact that 79 percent of women in the sample there originated from either Nigeria or Eritrea, the two origin countries with the highest levels of education for asylum seekers. When women and men from the same country were compared, Eritrean and Nigerian women averaged 1.4 years of education less than their male co-nationals—about the

**Figure 5.1. Asylum Seekers by Level of Education, Percent**



**Source:** Data from the EASS 2017.

**Figure 5.2. Education Level and Country of Origin**



**Source:** Data from the EASS 2017. Country codes listed in Table A1.1

**Note:** Proportions do not add up to 100% as individuals having completed tertiary education have also completed primary and secondary education.

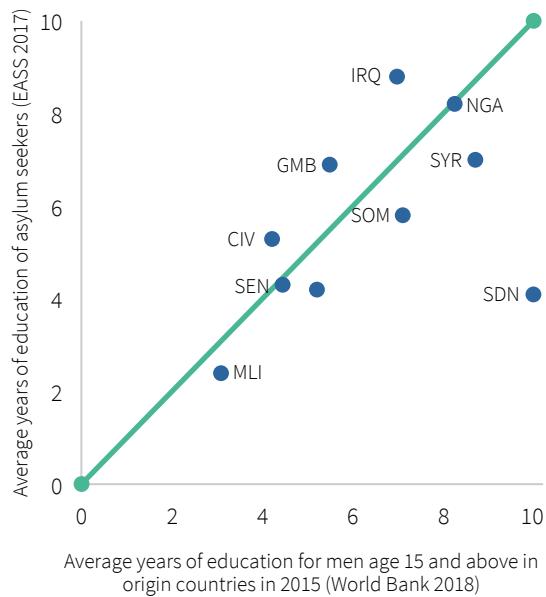
same difference that can be seen domestically in their home countries.<sup>37</sup>

How educated asylum seekers are is mostly a function of schooling in their home countries (Figure 5.2), which can vary greatly. Eritrea, the Syrian Arab Republic, Nigeria, and Iraq had the highest percentages of educated individuals. Nigeria and Eritrea also had the most asylum seekers who completed secondary school or more. Iraqis, however, were less likely than others except Malians to have had any secondary education. But 11 percent of Somali and Syrian asylum seekers had some tertiary education.

Figure 5.3 plots the education of asylum seekers against their countries of origin. Points on the

<sup>37</sup> Among asylum seekers who did not complete primary education, 16 percent of those in Italy and 8 percent of those in Greece had participated in a program to learn to read or write.

**Figure 5.3. Years of Education, Asylum Seekers and Males at Home, 2015**



**Source:** Data from the EASS 2017 and World Bank 2018.

Country codes listed in Table A1.1

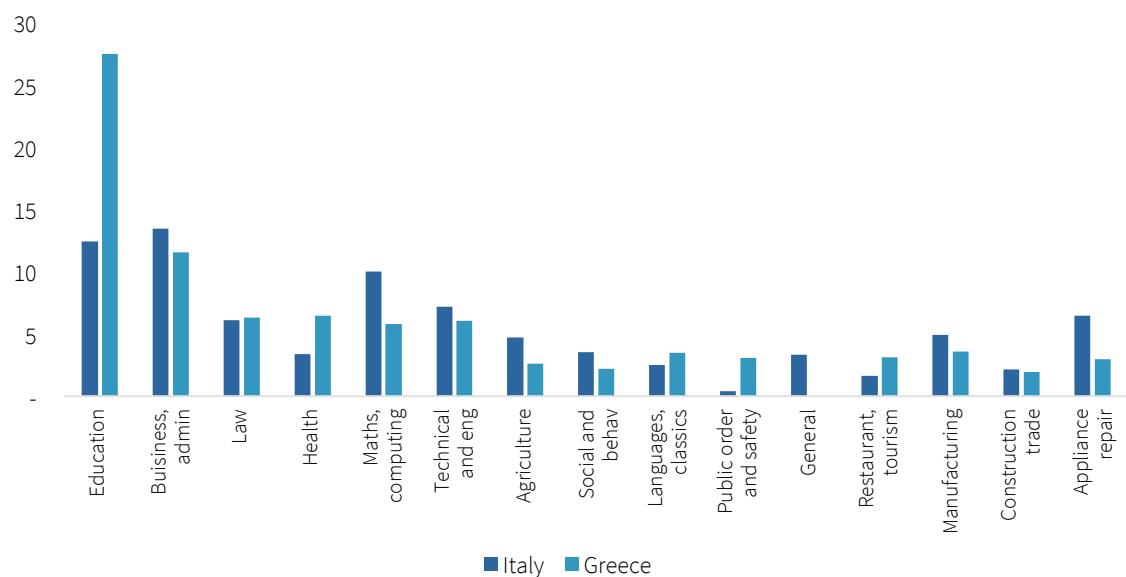
**Note:** Statistics for Sudan are computed from 33 observations and should thus be interpreted with caution.

45-degree line indicate equality between the two; the correlation (excluding Sudan) is a very high 80 percent.

Among asylum seekers who completed at least four years of general and technical education, business administration and education were the main fields of specialization for both men and women. These most educated individuals represented about 12 percent of the total flow and generated 491 study observations. Among them, 12 percent studied business administration, accounting, or commerce, and 12 percent in Italy and almost 28 percent in Greece studied education (see Figure 5.4). Strikingly, education was the area of specialization for 49 percent of the educated women seeking asylum in Greece. Science, mathematics and scientific computing were the main field of study for 10 percent in Italy and manufacturing for 6 percent in Greece.

The study data on training outside the formal education system in the year before leaving for Europe

**Figure 5.4. Fields of Higher Education (General and Technical), Percent**



**Source:** Data from the EASS 2017.

suggest that up to 8 percent of those who went to Italy and 6 percent for those who went to Greece prepared by enrolling in language studies, manufacturing, or science courses (including computer science), a result that echoes Stark, Helmenstein, and Prskawetz (1998).

Finally, self-reported literacy and numeracy rates are consistent with asylum seeker educational attainment. On average only 28 percent of asylum seekers in Italy and 20 percent in Greece reported having read something in the past year, even very short notes.<sup>38</sup> Of those, almost 50 percent of those in Italy and 62 percent in Greece mentioned having read e-mail, a demonstration of computer skills. Moreover, 24 percent in Italy and 15 percent in Greece had written something or filled out forms. For numeracy, 61 percent in Greece and almost 50 percent in Italy reported having used some mathematics, such as estimating size or distance and computing price and cost.<sup>39</sup> About 23 percent in both countries used more advanced mathematics, such as calculating fractions, multiplying, or using algebra or geometry.

## Work Experience

Asylum seekers in Italy had more work experience. About 62 percent there have had jobs, compared to 51 percent in Greece. These numbers matter:

<sup>38</sup> The level of self-reported literacy can be inferred from the *reading, forms and writings* variables—binary variables taking value 1 if the respondent has read something (including very short notes), filled out forms, or written something in the past year.

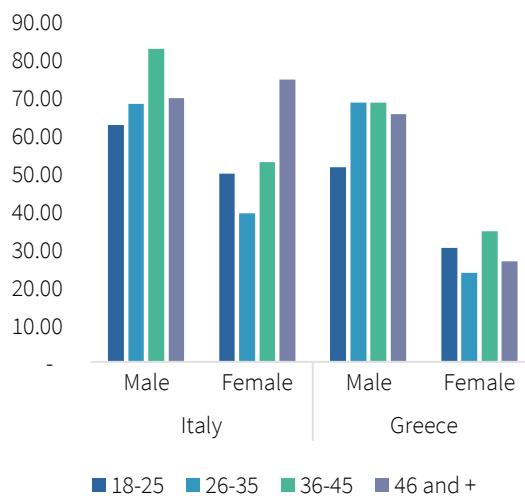
<sup>39</sup> Self-reported numeracy: the maths variable allows assessment of the degree of mathematical complexity applied in the past year. The full question is: *Thinking of your activities over the past 12 months before leaving your country, have you done any of the following?* Measure or estimate sizes, weights, distances, etc.; Calculate prices or costs; Use or calculate fractions, decimals or percentages; perform any other multiplication or division; use more advanced math, such as algebra, geometry, trigonometry, etc.; other maths.

for low-skill workers past employment has been found to increase chances of current employment (Aeberhardt and Pouget 2007; Acemoglu and Autor 2011).

The differences between asylum seekers in Italy and Greece may be driven by the flow's demographics. First, the higher proportion of women in Greece explains the lower rate of previous work: No matter what their age, only about 28 percent of women from the Syrian Arab Republic, Iraq, and Afghanistan had any jobs before migrating. Women from Sub-Saharan Africa who migrated to Italy, however, were almost twice as likely (46 percent) to have had jobs than the women in Greece (28 percent). For the men, 65 percent in Italy and 63 percent in Greece had an employment history.

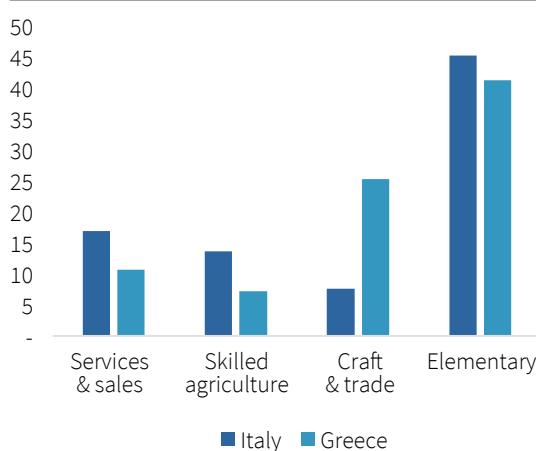
A second difference has to do with age: While men aged 26–36 in both Italy and Greece were equally likely to have previously had a job, the percentages for men aged 18–25 in Greece were much lower (Figure 5.5)—a finding that reflects youth unem-

**Figure 5.5. Past Employment by Age and Gender, Percent**



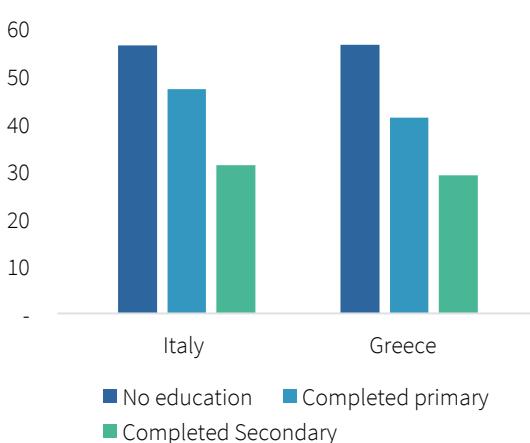
**Source:** Data from the EASS 2017.

**Note:** Display is of asylum seekers who reported having worked at least once before migration.

**Figure 5.6. All Jobs before Migration, Percent**

**Source:** Data from the EASS 2017.

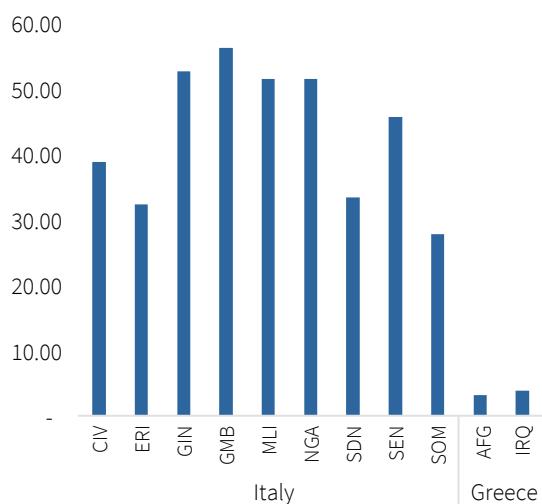
**Note:** Other jobs cited occasionally were armed forces occupations, managers, professionals, technicians and associate professionals, clerical support workers, forestry and fishery workers, and plant and machine operators and assemblers.

**Figure 5.7. Asylum Seekers who Had Had Elementary Jobs, by Education, Percent**

**Source:** Data from the EASS 2017.

ployment rates of 30.6 percent in the Syrian Arab Republic, 32.8 percent in Iraq, and 18.6 percent in Afghanistan (ILOSTAT 2017).<sup>40</sup> Although there were also slight Italy-Greece differences among older

<sup>40</sup><https://data.worldbank.org/indicator/SL.UEM.1524.ZS>.

**Figure 5.8. Male Asylum Seekers who Worked While in Transit, by Country of Origin, Percent**

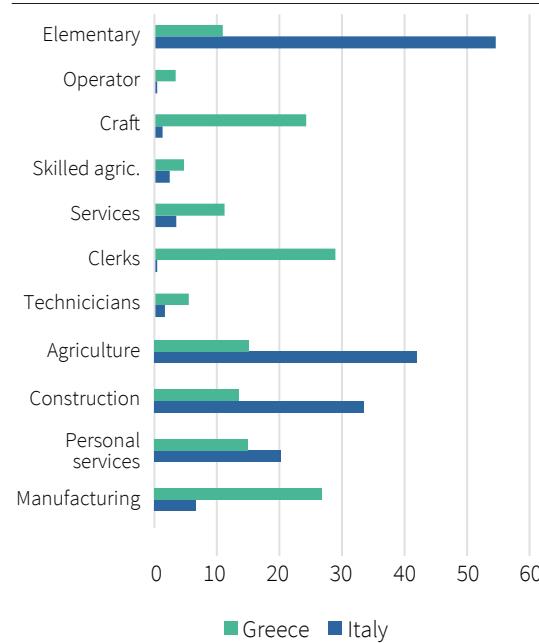
**Source:** Data from the EASS 2017. Country codes listed in Table A1.1. Statistics for Sudan are computed from 33 observations and should thus be interpreted with caution.

cohorts, they represented only a small fraction of the total flow of migrants.

Most asylum seekers who had work experience before leaving for the EU had been in low-skill elementary jobs in construction, manufacturing, or agriculture or worked as cleaners or street vendors (Figure 5.6). The International Labor Organization (ILO) defines elementary jobs as being based on simple tasks, and mostly requiring the use of hand-held tools or physical effort. As expected, 56 percent of asylum seekers who had had jobs but had little education were in elementary occupations (Figure 5.7). Yet 30 percent of asylum seekers who had some secondary education still worked in elementary jobs.

A substantial fraction of asylum seekers who migrated through Libya took elementary jobs while in transit (Figure 5.8). None who had not had jobs before migrating did so. Among the men who had work experience before departure, however, 69 percent of those who went to Italy

**Figure 5.9. Most Frequent Types of Jobs Taken in Transit, Percent**

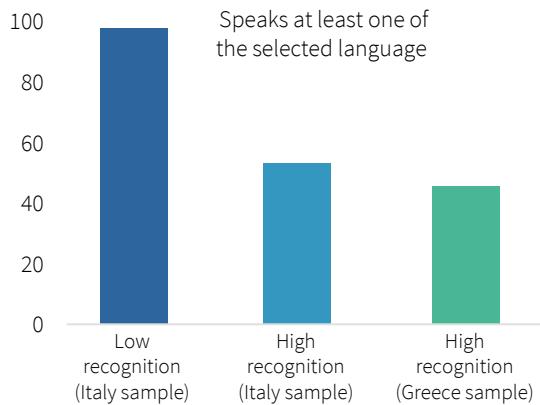


**Source:** Data from the EASS 2017.

**Note:** The percentages of individuals who mentioned a specific job type (1,235 total, 169 of them in Greece). Operator stands for Plant and machine operator, Skilled agric. stands for Skilled agriculture, Services stands for Services workers, shop, market sales.

but less than 20 percent of those who went to Greece found work en route. Among them were also 43 percent of the women in Italy and 28 percent of those in Greece. Both men and women worked mostly in agriculture (36 percent), construction (31 percent), and personal services (19 percent), but the 11 percent of those going to Greece who worked during transit were mainly employed in manufacturing. Among men migrating to Greece, 19 percent of Syrians and 3 percent each of Afghans and Iraqis had work while in transit. The same destination contrast is found with women: while 19 percent worked during transit to Italy, only 6 percent did so on their way to Greece. The likelihood of working during transit was not related to an individual's education.

**Figure 5.10. Asylum Seekers in Italy who Speak at least one European language, Percent**



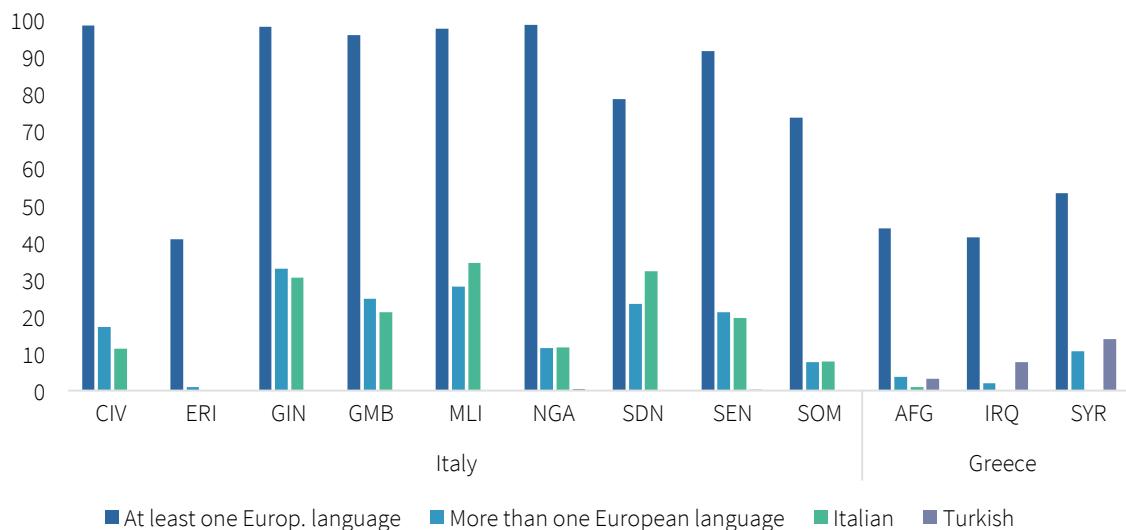
**Source:** Data from the EASS 2017.

**Note:** The main European languages spoken are English, French, Italian, and Turkish.

### Speakers of European Languages

A large number of asylum seekers, 80 percent in Italy and 45 percent in Greece, speak at least one European language, usually English (Figure 5.10). The difference is attributable to the fact that English and French are official languages in many of the home countries of asylum seekers in Italy (English in Nigeria and The Gambia; French in Senegal, Côte d'Ivoire, Mali, and Guinea). Moreover, at least two European languages are spoken by about 30 percent of Guineans and Malians, 20 percent of Ivorians, Senegalese, and Gambians, and 10 percent of Nigerians (Figure 5.11).

Among those from the Middle East and South Asia, 42 percent of Afghans, 35 percent of Iraqis, and 46 percent of Syrians speak English; 14 percent of Syrians also speak Turkish and 11 percent speak two European languages. In Italy, 17 percent of male and 4 percent of female asylum seekers reported speaking Italian; language classes are offered in most asylum seeker centers in Italy. Finally, of 4,136 asylum seekers surveyed, only 33 (0.7 percent) reported speaking German.

**Figure 5.11. European Languages Spoken by Male Asylum Seekers, Percent**

**Note:** Country codes listed in Table A1.1. Statistics for Sudan are computed from 33 observations and should thus be interpreted with caution.

### Literacy Proficiency Levels Compared

In addition to a survey questionnaire, a computer-based literacy assessment was administered to a random sub-sample of the survey respondents. In both Italy and Greece, a smaller and randomly chosen group of survey respondents were invited to take a computer-based literacy assessment based on OECD's Programme for the International Assessment of Adult Competencies (PIAAC). In Italy, given the asylum seeker population's language proficiencies, the literacy test was administered in either (Irish) English or (Canadian) French using the Education & Skills (E&S) online tool.<sup>41</sup> Given their home country languages, Eritreans, Somalis, and Sudanese were not part of the test. In Greece, a shorter version of E&S online was developed for this study using similar items that were translated into Arabic and Farsi.

The assessment is particularly appealing in the study context. Among common measures of human capital are education and experience. However, asylum seekers originate from a vast array of countries where educational attainment and labor market experience might not be comparable. In addition, both variables are self-reported and subject to response bias. In contrast, the literacy assessments deliver proficiency scores (between 0 and 500) and levels (below level 1, level 1, level 2 and level 3 and above) that are comparable to proficiency levels assessed by PIAAC and similar assessments like the World Bank's STEP survey, and may therefore give a better picture of where asylum seekers actually fall in the skills distribution of the EU or that of third countries.

The literacy tests are adaptive assessments: test-takers first respond to six core items that determine whether they can take the full test. The items have varying levels of difficulty, as measured by the fraction of the population providing a correct answer. The core items are:

<sup>41</sup> <http://www.oecd.org/skills/ESonline-assessment/abouteducationskillsonline/>

- “SGIH” consists of identifying a telephone number on a business card.
- “Bottles” consists of counting a stack of bottles.
- “Employment Advertisement” consists of identifying the number of job openings in a one-page employment ad.
- “Election Results I” consists of identifying the candidate with the fewest votes in an election report.
- “Election Results II” consists of stating election turnout from the same election report.
- “Airport timetable” consists of determining the departure time for a flight listed on an airport flight board.

Proficiency is established by calculating the average number of correct answers on the whole literacy test, with more difficult questions carrying more weight. With PIAAC and STEP, and also E&S online, the assessment delivers a continuous proficiency score ranging from 0 to 500. For Greece, in order to be able to administer the test in either Arabic or Farsi, a dedicated assessment was developed. To shorten the length of the assessment, fewer items were used, and given the low levels of education observed among asylum seekers during the pilot phase, it was decided to retain mostly easier items so as to measure proficiency more precisely among low performers, though at the expense of high performers. The proficiency score is therefore a noisier measure of proficiency than PIAAC or STEP and for high performers, it is likely to be biased downward. Most of the analysis thus uses proficiency *levels* rather than scores with levels ranging from -1 or zero through levels 1, 2, 3 and beyond.

Because the test was administered in one of four languages --Arabic, Farsi, French, and English---the proficiency assessment captures both individual skills and command of the target language. For most test-takers in Greece, Arabic and Farsi were native languages; Iraqi Kurds, who comprise

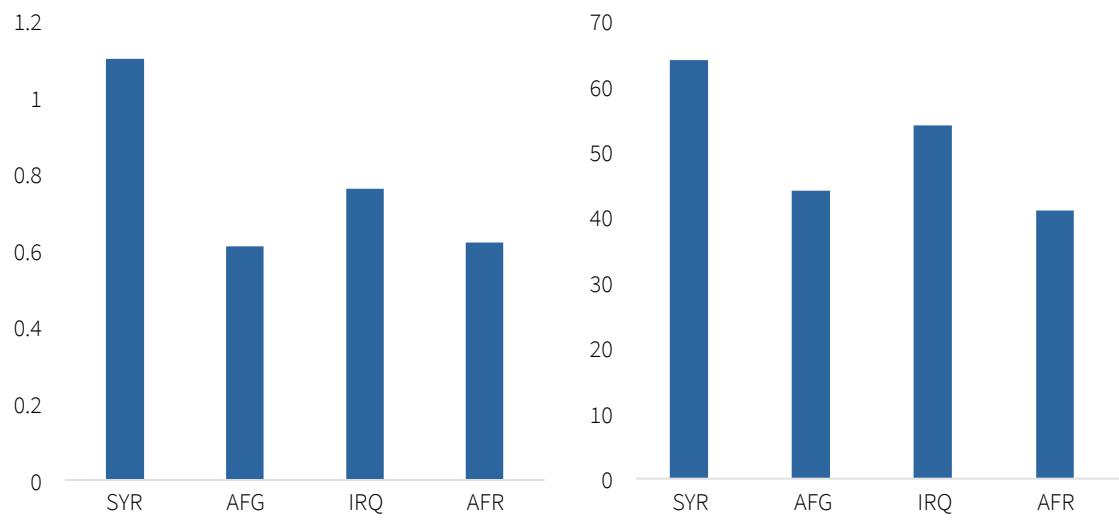
8 percent of the sample, declined to take the test. In Italy, however, while French and English are official languages for countries more asylum seekers had come from, for 26 percent of the respondents, French or English was not a mother tongue or a language spoken at home or at school.

The researchers invited 526 individuals to take the test in Greece and 286 in Italy. However, 15 percent in Greece and 5 percent in Italy refused. Those who claimed they were illiterate (59 in Italy and 62 in Greece) were assigned a proficiency level below 1. For the others (20 in Italy and 79 in Greece), Tables A4.2 and A4.4 in the Appendix 4 suggest that no specific group of asylum seekers (e.g., the less educated or older) was more likely than any other to decline to take the literacy assessment. These cases were dropped from the analysis, but including those who declared themselves illiterate and giving them a below-1 proficiency level does not alter the conclusions significantly. Ultimately, 376 tests were administered in Greece and 202 in Italy. A detailed methodological discussion of sampling, attrition, and validation is provided in the Appendix 4.

### ***Asylum Seekers and Other Recent Migrants in Europe***

The literacy assessment found low general proficiency in the target languages. Giving all individuals at levels below 1 a proficiency level of zero, average proficiency for asylum seekers in Greece was 0.91, with 0.61 for Afghans and 1.1 for the Syrians (Figure 5.12A). In Italy the average proficiency level was 0.62, which, due to small sample sizes, is not broken down by country of origin. From another viewpoint, the test results indicate that the proportion of individuals with proficiency level 1 and above was 57 percent in Greece and 41 percent in Italy.

A STEP survey in Ghana makes it possible to compare asylum seekers from West Africa with urban adults in Ghana. Proficiency levels in urban Ghana

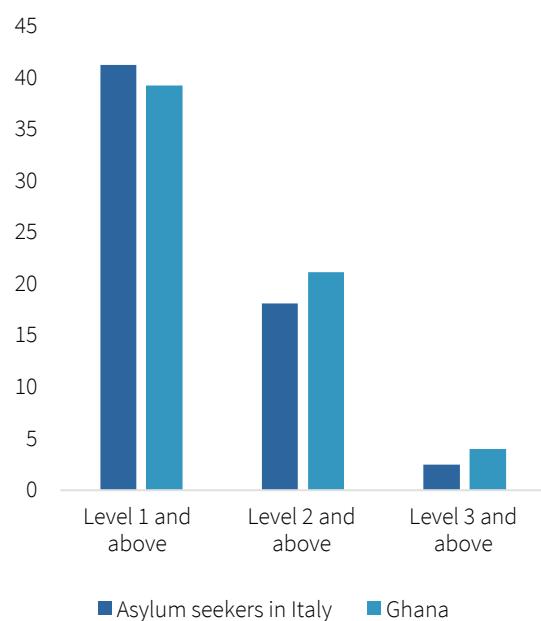
**Figure 5.12. Literacy Proficiency in Target Languages, Greece and Italy**

**Source:** Data from EASS 2017-Literacy.

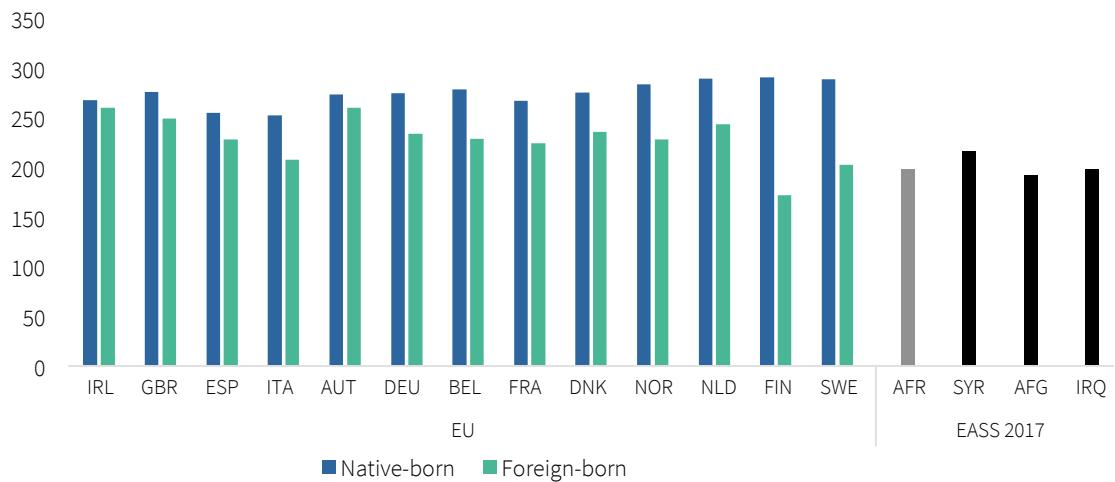
**Note:** AFR represents the weighted average of proficiency levels of test-takers from Côte d'Ivoire, Guinea, The Gambia, Mali, Nigeria, and Senegal.

are relatively low but not too different from those of Western African asylum seekers in Italy (Figure 5.13).

Proficiency levels of asylum seekers in both Italy and Greece are similar to those of other migrants in European countries, particularly those who arrived less than 5 years ago (Figure 5.14). The comparison focuses on the migrants who have been in host countries for less than five years. The average PIAAC scores for asylum track those of migrants in European countries like Finland or Sweden. For validity, the asylum-seeker group in these comparisons is comprised of individuals who agreed to take the assessment and performed well enough on the assessment to obtain a proficiency score. Consequently, asylum seekers who declined to take the test are not taken into account when making the comparisons. Furthermore, the proficiency scores on assessments conducted in Greece need to be interpreted with caution; the scores will be biased downward for top performers and are a much less precise measure of proficiency than those achieved in E&S online, PIAAC, or STEP.

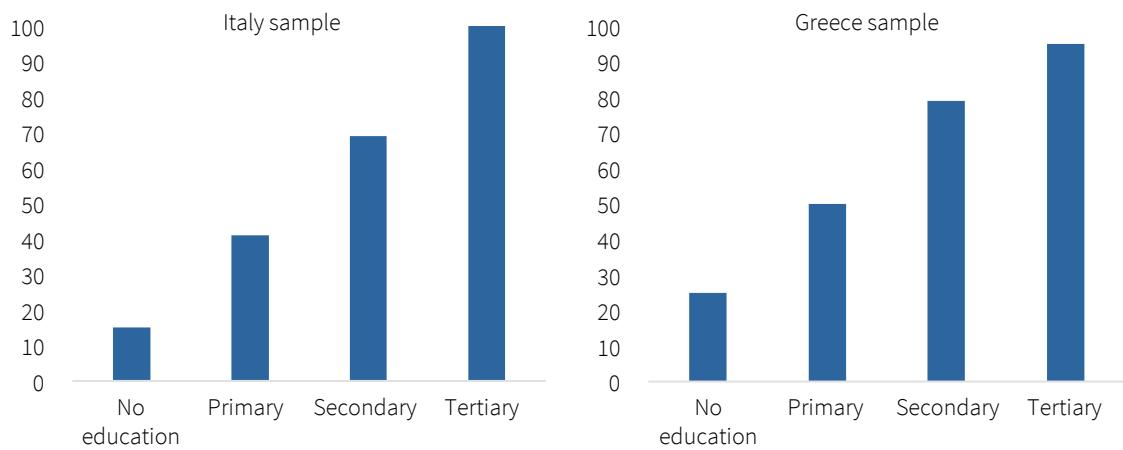
**Figure 5.13. Proficiency Levels, Urban Adults in Ghana and Asylum Seekers in Italy**

**Source:** World Bank STEP Ghana (2017) and EASS 2017-Literacy.

**Figure 5.14. Average PIAAC Scores, Asylum Seekers in Italy and Greece, and Earlier Migrants in Europe**

**Source:** OECD 2016; results of EASS 2017-Literacy.

**Note:** AFR is the weighted average of proficiency levels of test-takers from Côte d'Ivoire, Guinea, The Gambia, Mali, Nigeria, and Senegal. Foreign-born refers only to migrants who have been in the host country for no more than five years.

**Figure 5.15. Proficiency levels, by educational attainment**

**Source:** Data from EASS 2017.

However, the results do suggest that the asylum seekers in Italy and Greece who obtained a proficiency score did not perform any worse than recent migrants to a handful of European countries.

Figure 5.15 suggests a strong positive correlation between asylum seekers' education and their proficiency in the target language. On average, of asy-

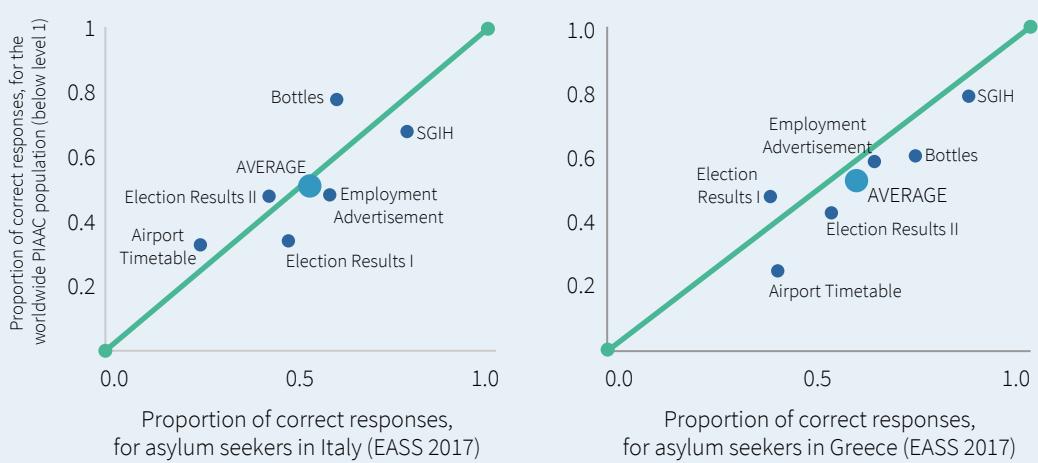
lum seekers in Greece, 25 percent of those with no formal education scored at level 1 or above compared to 95 percent of those with university education. Education is also closely correlated with the proficiency levels of asylum seekers in Italy. However, past labor force participation does not affect tests results; those with work experience are no more proficient than those without.

### Box 5.1. Effect of Validation with Core Items

Analysis of core items makes it possible to assess the reliability of an instrument. Performance to the test might be driven by factors that have more to do with the test design and how it is conducted than the intrinsic proficiency of the test taker. For some the language of the test might not be the native language. Also, a possibly large fraction of asylum seekers might be in psychological distress that affects their ability to take a 45-minute computer-based test. Finally, despite efforts to comply with guidelines for the training of facilitators, the conditions in which the test was administered might have affected individual performance.<sup>a</sup> We made every attempt to reduce disturbances during testing, but having to administer tests in asylum center public spaces, indoors or outdoors, meant that not all disturbances could be minimized.

The proportions of correct answers to core items for asylum seekers in both Italy and Greece exhibit patterns similar to those measured by PIAAC throughout the world and especially among Europeans. In Figure B5.1.1, the horizontal axis represents the fraction of correct answers for the test-takers for each of the six core items. The vertical axis indicates the fraction of correct answers to the same six questions for the entire worldwide population who took a PIAAC test either on paper or on computer and were given a proficiency level below 1.

**Figure B5.1.1. Asylum Seekers and PIAAC Worldwide Population, Scoring below Level 1 on Proficiency**



**Source:** Data from EASS 2017 – Literacy and OECD PIAAC data.

The alignment of the six points along the 45-degree line indicates that in both samples, the proportion of correct answers to an item drops as the item gets more difficult, and for both samples the drops suggest a pattern similar to that of the worldwide population. The low proficiency scores measured by this assessment for asylum seekers are thus not likely to be the result of lack of motivation, the psychological distress of test takers, or the physical conditions of test administration.

<sup>a</sup> [http://www.oecd.org/skills/piaac/PIAAC-NPM\(2014\\_06\)PIAAC\\_Technical\\_Standards\\_and\\_Guidelines.pdf](http://www.oecd.org/skills/piaac/PIAAC-NPM(2014_06)PIAAC_Technical_Standards_and_Guidelines.pdf).

**Figure 5.16. Education, Employment Experience, and Skills**

**Source:** Data from EASS 2017.

### ***Summary Findings***

Figure 5.16 summarizes the findings for asylum seeker education, work experience, and literacy proficiency. Educational attainment and literacy proficiency are higher for asylum seekers from high recognition-rate countries but prior labor force participation and a higher command of some official languages in the EU are higher for those from low-recognition-rate countries.

While this report gives a static assessment of the supply, or potential supply, of labor, further discussion on labor market integration prospects for those who are granted asylum needs to (1) characterize the demand side of the European labor market and (2) acknowledge that skills can be acquired over time. Autor and Dorn (2013) argue that demand for low-skill labor might be increasing in developed countries. On the skill acquisition side, cases of immigrants accumulating skills appropriate to the host country have been documented by LaLonde and Topel (1991) and Stark, Helmenstein, and Prskawetz (1998), among others. Antecol and

Heather (2000) and Clarke and Withers (2002) found that the gender gap in labor force participation fades with time and over generations. These might be reasons why some migrants are eventually integrated into the labor force of hosting countries (see, e.g. LaLonde and Topel 1991; Baker and Benjamin 1994; Adsera and Chiswick 2007; Borjas 2015), and why such integration often results in displacing earlier waves of migrants rather than the native population.

## VI. Anxiety and Depression

There has been growing interest in defining the mental health and psychosocial status of vulnerable populations and the need for early detection and treatment to minimize debilitating or long-term effects. Those affected by unrest, violence, loss, separation, and drastic changes in social and living conditions are likely to have such distressing psychological reactions as hopelessness, helplessness, anxiety, and depression, as well as behavioral and social problems. The most common mental health diagnoses among refugees are emotional problems like depressive and anxiety/depression disorders, such as post-traumatic stress disorder, generalized anxiety, panic attacks, adjustment disorder, and somatization. Such problems make it difficult for people to attend to their physical health needs, routine daily tasks, and relationships with others (World Bank 2016a). In May 2012, the 65<sup>th</sup> World Health Assembly adopted resolution WHA65.4 on the global burden of mental disorders and the need for a comprehensive, coordinated response by national health and social sectors (WHO 2013). The goals of the 2013–20 WHO Action Plan are to promote mental well-being, prevent mental disorders, provide care, enhance recovery, promote human rights and reduce mortality, morbidity, and disability for persons with mental disorders. Mental health is now on the Sustainable Development Agenda adopted at the United Nations General Assembly in September 2015; Target 3.4 requests that countries “By 2030, reduce by

one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and well-being.”

Mental health is defined as a state of well-being in which every individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to positively contribute to the community they live in (WHO 2013). The wide range of mental and behavioral disorders is described in the *International Statistical Classification of Diseases and Related Health Problems* (ICD; 10th and 11th edition, ICD-10 and ICD-11); among them are depression, bipolar affective disorder, schizophrenia, anxiety disorders, dementia, substance use disorders, intellectual disabilities, and developmental and behavioral disorders (WHO 2001).

The analysis discussed in this chapter focuses on the determinants of anxiety and depression measured by the *Global Severity Index (GSI)*. The index is constructed as the mean scores of the following seven indicators.

- *Energy*: During the last week did you feel low in energy, slowed down?
- *Guilt*: During the last week did you accuse yourself of different things?
- *Sleep*: During the last week did you have problems falling asleep or sleeping?

- *Hope:* During the last week did you feel hopeless in terms of the future?
- *Melancholy:* During the last week did you feel melancholic?
- *Worry:* During the last week did you feel that you worried too much about different things?
- *Effort:* During the last week did you feel that everything was an effort?

The scores range from 1 (no symptoms of anxiety/depression) to 4 (severe symptoms of anxiety/depression); the GSI is the average of the seven indicator scores. Box 6.1 documents other studies that aim at screening anxiety and depression and relate results to certain characteristics and shocks.

Among asylum seekers in general, the incidence of severe mental distress is high: 40 percent of

those in Italy and 70 percent in Greece have severe symptoms of anxiety and depression. In addition to stressors like war and violence that may have triggered the decision to migrate, violence during transit caused further deterioration of their mental condition. Moreover, prolonged uncertainty about approval of the asylum application may be an additional source of stress.

### **Anxiety, Depression, and Exposure to Violence in Transit**

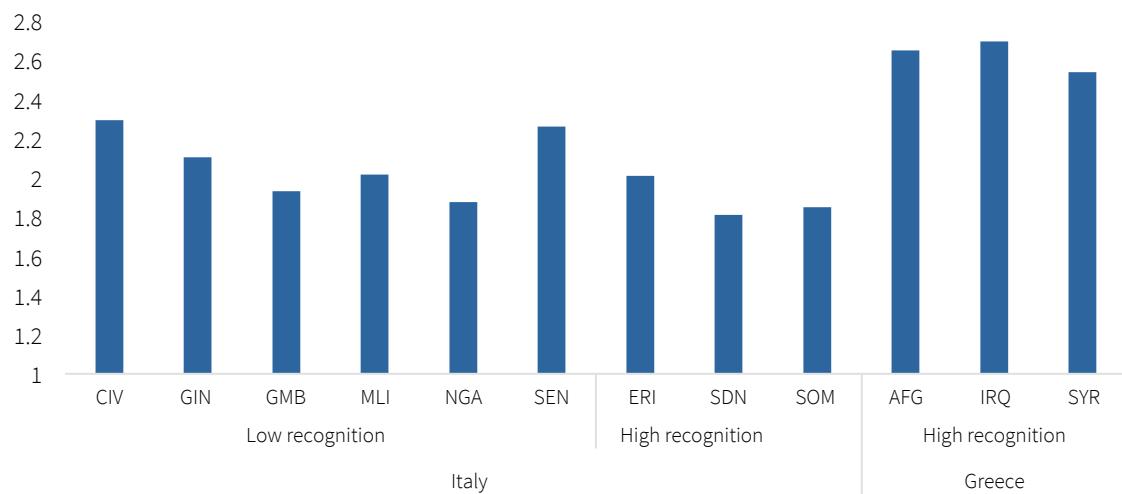
The GSI for this study sample averaged 2.25; 55 percent of respondents were suffering from severe mental distress (Figure 6.1). Since the anxiety and depression screening module has not been validated, the instrument is not designed to identify anxiety disorders or clinical depression. Instead, an individ-

#### **Box 6.1. Studies of Anxiety and Depression and Demographics**

Taking a similar approach to the one used in this report, Das et al. (2008) studied mental health patterns and socioeconomic characteristics of individuals in Indonesia and Mexico. Using a nationally representative survey of more than 10,000 households they used a variation of the General Health Questionnaire (GHQ) measure of anxiety and depression to identify socioeconomic characteristics significantly linked symptoms of anxiety and depression, such as gender, age, and physical health, and shocks that hit households. Not closely linked were poverty and education level.

Based on a 12-question GHQ version of a population-wide survey of a poor and conflict-affected country, Baingana et al. (2004) analyzed links between mental health and socioeconomic outcomes in Burundi. They found that mental health problems due to psychiatric trauma and depression reduce both labor force participation and investment in the education of children.

Starting from the 1997 Indonesian financial crisis, Friedman and Thomas (2007) studied the consequences of such shocks on economic welfare, physical health, and child education. Using the Indonesia Family Life Survey, they conducted a short screening survey adapted from the GHQ to measure the symptoms of depression and anxiety and found that the crisis had undermined the psychological wellbeing of the sample. They also found that the crisis had more impact on less educated groups, the rural landless, and residents of provinces heavily affected by the crisis.

**Figure 6.1.** Severe Mental Distress, GSI by Country of Origin

**Source:** Data from the EASS 2017. Country codes listed in Table A1.1. Statistics for Sudan are computed from 33 observations and should thus be interpreted with caution.

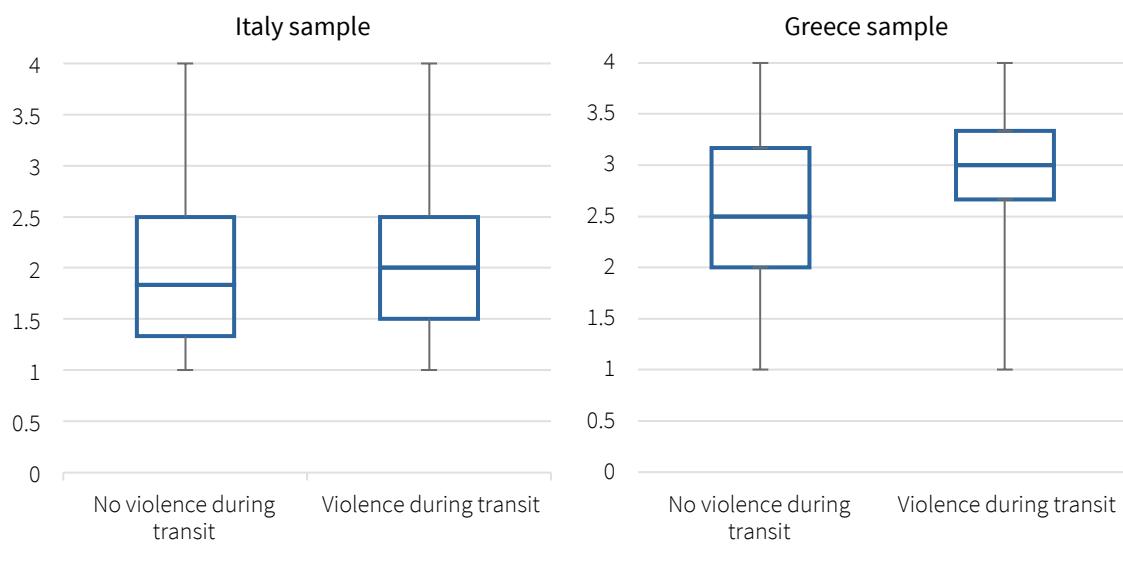
ual was considered in severe mental distress when the measured GSI was above a cut-off of two, which was also used by Das et al. (2009). The levels of mental distress of those refugees in Greece seemed to be worse, with a mean of 2.5.<sup>42</sup> By country of origin, Iraq had the highest score, close to 3, followed by Afghanistan and the Syrian Arab Republic. Senegal, Guinea and Côte d'Ivoire also had mean scores above 2 with Nigeria, Mali, Somalia, Sudan, Eritrea, and The Gambia not far behind at just under 2. In sum, 55 percent of all respondents were deemed in severe mental distress, among them 70 percent of respondents from the Syrian Arab Republic, Iraq, and Afghanistan hosted in Greece and 40 percent of respondents hosted in Italy.

A multivariate regression analysis of risk factors for anxiety/depression among asylum seekers found patterns consistent with earlier studies in which

being older and being a woman are associated with worse GSI (Figure 6.2), although for this group education does not seem to be correlated with levels of anxiety and depression (Figure 6.3). These patterns have been found in both developed and developing countries (Gold 1998; Andrade et al. 2002; Andrews et al. 2001; Awas et al. 1999; Kessler et al. 2005; Patel et al. 1999; Das et al. 2007, 2009). While West African asylum seekers suffer more from anxiety and depression than East Africans, differences in education could explain the gap: East African asylum seekers are on average more educated than West African.

Women migrating to Greece have higher anxiety and depression scores than men: 70 percent of men and 80 percent of women have a GSI above 2. However, unlike the population in Greece, women in Italy do not report more psychological distress than men, and GSI are statistically indistinguishable at 2. Of women reaching Italy, 56 percent were single (against 18 percent in Greece), and 41 percent of women in Italian reception centers reported being single and alone.

<sup>42</sup> Compare: Das et al. (2009) reported mean scores below 2 for all five countries they analyzed Bosnia and Herzegovina 1.495; India 1.535; Indonesia 1.413; Mexico 1.341; and Tonga 1.745.

**Figure 6.2. Mental Health Score by Exposure to Violence in Transit**

**Source:** EASS 2017.

In Greece, however, only 2 percent were women single and travelling alone; the vast majority are married and travelling with spouses and children. Moreover, 79 percent of them report not having ever worked before, making them “tied” movers (Mincer 1978).

Other risk factors of anxiety and depression have been decomposed into the ones associated with each of the three main phases of the asylum-seeker experience: pre-departure, transit, and resettlement (Appendix 5 shows variables for each phase used in the regression analysis). Pre-departure, transit, age, and gender are important drivers of the mental health status of displaced people and refugees (World Bank 2016b).

I. *The pre-departure phase* is defined by events that took place in the country of origin before an asylum seeker departed. These could be loss of a family member, a livelihood, or belongings; or physical and emotional trauma to the individual or family, witnessing of torturing or murder, and social disorder.

II. *The transit phase* covers the entire journey, whatever the route, from country of origin to resettlement site or host country. It refers to difficult travel conditions, temporary settlement in refugee camps, or detention, and often involves further loss and traumatic stressors due to experiences encountered by the refugee at transit points before arriving in the host country.

III. *The settlement phase* covers events or experiences asylum seekers encounter daily in host countries as they compare current living conditions to earlier ones. Among these are the uncertainty associated with the asylum application process and issues related to adapting to a foreign environment.

Multivariate regression analysis (see Table A5.1 to A5.3 in Appendix 5) indicates that respondents who experienced pre-departure shocks such as the death of a family member or the loss of property were more anxious and depressed. Loss of a dwelling seems to have particularly deleterious

effects on the GSI. Note that dwelling loss is not restricted to countries at war, like the Syrian Arab Republic; it also affects 58 percent of Iraqi asylum seekers; in Italy, between 30 and 55 percent of respondents reported having had their home destroyed. Similarly, many respondents from Mali, Côte d'Ivoire, Senegal, and Guinea report having lost a family member.

In both Italy and Greece, asylum seekers with past employment experience have less psychological distress. Accounting for other stressors in the multivariate regression, having worked before migration is found to decrease the GSI by 0.11 (see Appendix 5).

Asylum seekers who experienced violence and other shocks in transit were in more severe mental distress than those not confronted by violence on route. Although the finding holds true for asylum seekers in both Italy and Greece (Figure 6.4), the magnitudes differ: the effect of experiencing violence during transit seems higher in the Greek than in the Italian sample.

Finally, it was not possible to link duration of asylum or living conditions in reception centers with symptoms of anxiety and depression. The survey populations had been in Italy or Greece for about the same amount of time, leaving little variation to test for a correlation between duration and the GSI.

In qualitative interviews, many respondents spoke spontaneously of prolonged uncertainty over the legal status and future residence as being a source of stress. In fact, 77 percent of the sample had spent more than six months since landing, often without a clear idea of what the future holds. As a young Afghan man said: *“Living without knowing your future is very hard. Many are depressed here [in the camp]. My sister has lost her mind here.”* Also, reports of tensions and violence between asylum

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*“I don’t know anything about the future. I don’t know if they will give us asylum here or deport us. I don’t know if they will give us a house. I don’t want to know. I can’t handle any more pressure.”*

Iraqi woman

---

seekers, even within the household, are not uncommon. Fights between husbands and wives, and more rarely episodes of domestic violence were mentioned explicitly by those in the Greece sample; a Syrian woman commented, *“I am fighting more with my husband because I’m impatient. I just want to be reunited with [my son in Germany] but it’s not happening, and I have to take care of everything here.”*



## VII. Conclusions and Insights into Policy

The characterizations in this report of those seeking asylum in the EU, their backgrounds, and their profiles, points out their differences and similarities in terms of needs and prospects, and hence the need for tailored policy responses. While a comprehensive policy agenda on migration and forced displacement is beyond the scope of this report, the evidence presented here—based on a large representative sample of the adult population of asylum seekers in Italy and Greece as of 2017—can inform humanitarian and development approaches to policymaking in the following areas:

### **Data on transient and vulnerable populations**

Evidence-based policies on migration, forced or voluntary, need data to inform their design and evaluate their impact not only on the migrants themselves but also on sending, transit, and receiving communities. Collecting data for this study illuminated the methodological challenges specific to surveying transient populations in a complex situation. Similar challenges confront many countries beyond those in the EU that are dealing with large migrant populations.

Stand-alone surveys, like this study, can provide valuable information, particularly when comprehensive information is needed on specific circumstances, here to assess the transit experience, vi-

olence, mental health status, and cognitive skills. However, cost-effective alternatives need to be politically supported to promote acquisition of (1) data that rigorously capture the population of interest, which often is a small fraction of the population of both sending and host communities and also often geographically dispersed; and (2) data that are collected more often, with sampling that accounts for high geographical mobility. Sustainable approaches to collecting data on refugees, asylum seekers, other migrants, and host communities need to be embedded in national data collection mechanisms. Policies to improve data should build up the quality of both administrative data and monitoring systems; they should also encourage cooperation with national statistics offices to explore how to adapt existing instruments to cover the population of interest effectively. Innovations in data collection can be valuable, such as using mobile phones to capture time-varying dynamics, though such research needs to be carefully designed because it can be difficult to manage even in stable settings.

Given the pervasive vulnerability of the refugee population, some ethical aspects of collecting data about them must be recognized. The following aspects addressed in this study could inform others: taking precautions to guarantee that participation is indeed voluntary; analyzing questions

to identify any that might require respondents to recall potentially traumatic events; and designing protocols for reporting inappropriate behavior by any party involved during the survey.

### **Education and Skills Training**

About 58 percent of asylum seekers are from high-recognition countries and therefore have a high probability of being granted legal status in the European Union. These, and the asylum-seeking population generally, have low educational attainment, low-level cognitive skills, and often language-related barriers to integration. The jobs of those with work experience have mostly been in elementary occupations like construction, manufacturing, and agriculture (45 percent of those in Italy and 37 percent in Greece). It is important to remember that the findings are limited to those surveyed and cannot be generalized to, e.g., earlier waves of asylum seekers. However, it is reasonable to infer that a substantial proportion of asylum seekers are low-skilled, something to be considered in designing and delivering measures to promote labor market engagement and integration. Furthermore, unlike other migrants to the EU, asylum seekers are typically concentrated in reception centers for extended periods of time while waiting for their application decisions, hence offering opportunities to reach them through skill upgrading programs in an efficient and cost-effective way.

A unique contribution of this study was the formulation, with the OECD, of a computer-based literacy test that gives objective information to compare with what is self-reported. The unique context in which the assessment was delivered – multiplicity of native languages, difficult individual experiences, and new living environment—has contributed to high refusal rates and raised the question of the appropriate choice of language of administration of the test. One lesson drawn from this exercise is the need to adapt both assessments and imple-

mentation protocols to the population of migrants to maintain comparability with PIAAC test results.

### **Anxiety and Depression**

In addition to the expected evidence of the monetary and physical costs of migration for these groups, the study findings reveal that the experience induces a severe mental health crisis: 40 percent of the asylum seekers in Italy and 70 percent in Greece had high scores on a standard scale of anxiety and depression. This finding can have implications for policymakers, both those working on integration and those working on return and reintegration policies. The asylum application process provides a unique opportunity for early and systematic identification and intervention, especially for those already in asylum centers where mental health support can be targeted.

### **Combating Smuggling and Trafficking**

The persistence of migration streams and the emergence of new routes make it clear that many still consider the benefits of migration to outweigh the monetary, physical, and emotional costs captured here. This study found, for instance, that 45 percent of asylum seekers in Italy had been exposed to violence in transit, and that asylum seekers pay an average of \$3,500 for transit, some even engaging in unpaid work along the way to afford its cost.

Policies directed at combating smugglers and human trafficking networks could help curb the flows, but they could also have unintended negative consequences: (1) They could make the journey even harsher and more dangerous. As measures are being put in place to reduce flows from Libya, it appears that deaths have increased on the journey not only from Libya to Italy but also from Morocco and Algeria to Spain (UNHCR 2018). (2) Measures like border controls and detention could deter from seeking asylum those who have

powerful needs for international protection—also a human cost (UNHCR 2018). Such considerations could influence how policies to combat smugglers and dismantle human trafficking networks are designed.

### **Towards a Knowledge Agenda on Forced Displacement**

The current initiative for the World Bank–UNHCR Joint Data Center on Forced Displacement can ensure better-quality data and promote cross-learning to address both technical and nontechnical difficulties in collecting and analyzing data. The center is expected to make major contributions to the knowledge base on methodologies and norms that lead to timelier and better-quality data.

Although this report helps to fill gaps in what is known about migration and forced displacement, much more needs to be done. Also useful would be additional research on (1) the impacts on host communities and their attitudes toward refugees, asylum seekers, and other migrants; (2) vulnerable groups of asylum seekers and refugees focusing on those in EU countries, particularly countries that experienced a large influx of migrants in waves previous to the current one; (3) how to capitalize on existing data collection efforts, particularly administrative, to capture more timely policy-relevant information; and (4) the cost-effectiveness of policies being adopted or considered, such as integration policies, measures to curb the flows in transit countries, and the roll-out of voluntary return packages.

## References

- Acemoglu, D. and D. Autor. 2011. Skills, tasks and technologies: Implications for employment and earnings. In *Handbook of labor economics* 4: 1043–1171. Elsevier.
- Adsera, A., and B. R. Chiswick. 2007. “Are There Gender and Country of Origin Differences in Immigrant Labor Market Outcomes across European Countries?” *Journal of Population Economics* 61 (2): 225–30.
- Aeberhardt, R., and J. Pouget. 2007. “National Origin Wage Differentials in France: Evidence from Matched Employer-Employee Data.” *IZA Discussion Paper No. 2779*: SSRN: <https://ssrn.com/abstract=986355>.
- Allansson, M., E. Melander, and L. Themnér. 2017. “Organized violence, 1989–2016.” *Journal of Peace Research* 54(4).
- Andrade L., E. E. Walters, V. Gentil, and R. Laurenti. 2002. “Prevalence of ICD-10 Mental Disorders in a Catchment Area in the City of São Paulo, Brazil.” *Social Psychiatry and Psychiatric Epidemiology* 37(7): 316–25.
- Andrews, G., S. Henderson, and W. Hall. 2001. “Prevalence, Comorbidity, Disability and Service Utilisation. Overview of the Australian National Mental Health Survey.” *British Journal of Psychiatry* 178: 145–53.
- Antecol, H. 2000. “An examination of cross-country differences in the gender gap in labor force participation rates.” *Labour Economics* 7.4 (2000): 409–426.
- Awas, M., D. Kebede, and A. Alem. 1999. “Major Mental disorders in Butajira, Southern Ethiopia.” *Acta Psychiatrica Scandinavia (Supplement)* 397: 56–64.
- Azur, M. J., E. A., Stuart, C. Frangakis, and P.J. Leaf. (2011). “Multiple Imputation by Chained Equations: What is it and how does it work?” *International Journal of Methods in Psychiatric Research*. 20(1): 40–49. <http://doi.org/10.1002/mpr.329>.
- Baingana, F., A. Dabalen, E. Menye, M. Prywes, and M. Rosholm. 2004. “Mental Health and Socio-Economic Outcomes in Burundi.” Health, Nutrition, and Population (HNP) discussion paper; World Bank, Washington:<http://documents.worldbank.org/curated/en/786621468242065057/Mental-health-and-socio-economic-outcomes-in-Burundi>.
- Baker, M., and B. Dwayne. 1994. “The Performance of Immigrants in the Canadian Labor Market.” *Journal of Labor Economics* 12 (3): 369–405.
- Borjas, G. J. 2015. “The Slowdown in the Economic Assimilation of Immigrants: Aging and Cohort Effects Revisited Again.” *Journal of Human Capital* 9 (4): 483–517.
- Buber-Ennser, I., J. Kohlenberger B. Rengs, Z. Al Zalak, A. Goujon and E. Striessnig. 2016. “Human Capital, Values, and Attitudes of Persons Seeking Refuge in Austria in 2015.” *PLoS ONE* 11 (9): e0163481. doi:10.1371/journal.pone.0163481.
- Carling, J., and F. Collins. 2017. “Aspirations, Desire and Drivers of Migration.” *Journal of Ethnic and Migration Studies* 909–26.

- Clarke W., and S. Withers. 2002. "Disentangling the Interaction of Migration, Mobility, and Labor-force Participation." *Environment and Planning* 34: 923, 945.
- Council on Foreign Relations. 2016. *Civil War in Libya*.
- Das J., Q.T. Do, J. Friedman, and D. McKenzie. 2009. "Mental Health Patterns and Consequences: Results from Survey Data in Five Developing Countries." *World Bank Economic Review* 23(1): 31–55.
- Das, J., Q.T. Do, J. Friedman, D. McKenzie, and K. Scott. 2007. "Mental Health and Poverty: Revisiting the Relationship", *Social Science and Medicine*, 65(3):467-80, 2007.
- David, H. and D. Dorn. 2013. The growth of low-skill service jobs and the polarization of the US labor market. *American Economic Review*, 103(5): 1553-97.
- Devictor, X., and Q.T. Do. 2017. How many years have refugees been in exile? *Population and Development Review*, 43(2), 355-369.
- Eurostat. 2018. *First instance decisions on applications by citizenship, age and sex Annual aggregated data*, updated June 14, 2017.
- . 2015. *E. U. Trafficking in human beings*.
- EASO. 2017. *Annual Report on the Situation of Asylum in the European Union 2016*, Valletta: European Asylum Support Office.
- . 2018. *Latest Asylum Trends - Overview 2017*, Valletta: European Asylum Support Office.
- European Commission. 2015. *A European Agenda On Migration*. European Commission: Brussels.
- Eurostat. 2018. *Asylum quarterly report*. (Data extracted on 19 March 2018). Eurostat: Luxembourg.
- Friedman, J., and D. Thomas. 2007. "Psychological Health Before, During, and After an Economic Crisis: Results from Indonesia, 1993–2000." *World Bank Policy Research*, Working Paper No. 4386.
- Gold, J. H. 1998. "Gender differences in psychiatric illness and treatments: A critical review". *Journal of Nervous & Mental Disease*. 186, 769–775.
- Goldberg, D. P., and Y. Lecrubier. 1995. "Form and Frequency of Mental Disorders across Centres." In *Mental Illness in General Health Care: An International Study* (323–34). John Wiley & Sons on behalf of the World Health Organization.
- Human Rights Council, 2015. *Report of the commission of inquiry on human rights in Eritrea*.
- Human Rights Watch, *Syria: events of 2016*, 2017.
- International Crisis Group, *Turkey's Refugee Crisis: The Politics of Permanence*, 2016.
- IOM. 2012. "Migrants caught in crisis: the IOM experience in Libya." [http://publications.iom.int/system/files/pdf/migrationcaughtincrisis\\_forweb.pdf](http://publications.iom.int/system/files/pdf/migrationcaughtincrisis_forweb.pdf)
- . 2015. "Report on Victims of Trafficking in Mixed Migration Flows Arriving in Italy by Sea." [http://www.italy.iom.int/sites/default/files/documents/IOM\\_Report\\_on\\_victims\\_of\\_trafficking\\_2015\\_ENG.pdf](http://www.italy.iom.int/sites/default/files/documents/IOM_Report_on_victims_of_trafficking_2015_ENG.pdf).
- . 2016. "Study on Migrants' Profiles Drivers Of Migration And Migratory Trends." International Organization for Migration: Rome.
- . 2017. "UN Migration Agency Issues Report on Arrivals of Sexually Exploited Migrants, Chiefly from Nigeria." <https://www.iom.int/news/un-migration-agency-issues-report-arrivals-sexually-exploited-migrants-chiefly-Nigeria>.
- Kessler, R. C., W. T. Chiu, O. Demler, and E. E. Walters. 2005. "Prevalence, Severity, and Comorbidity of 12-Month DSM-IV Disorders in the National Comorbidity Survey Replication." *Archives of General Psychiatry* 62(6): 617–27.
- Kibreab, G. 2013. "The National Service/Warsai-Yikealo Development Campaign and Forced Migration in Post-independence Eritrea." *Journal of Eastern African Studies* 7 (4): 630–49.

- König, R. S., and M. De Regt. 2010. "Family Dynamics in Transnational African Migration to Europe: An Introduction." *African and Black Diaspora: An International Journal* 3(1): 1–15.
- LaLonde, R. J., and R. H Topel. 1991. Labor market adjustments to increased immigration. In *Immigration, trade, and the labor market* (pp. 167–199). University of Chicago Press.
- Mincer J. 1978. "Family Migration Decisions." *Journal of Political Economy* 86 (5): 749–73
- Monsutti, A. 2008. "Afghan Migratory Strategies and the Three Solutions to the Refugee Problem." *Refugee Survey Quarterly* 27(1): 58–73.
- Patel, V., R. Araya, M. De Lima, A. Ludermir, and C. Todd. (1999). Women, poverty and common mental disorders in four restructuring societies. *Social science & medicine*, 49(11), 1461-1471.
- Raghunathan, T.E., J. M. Lepkowski, J. van Hoewyk, and P. Solenberger. 2001. "A Multivariate Technique for Multiply Imputing Missing Values Using a Sequence of Regression Models." *Survey Methodology* 27: 85–95.
- Stark, O., C. Helmenstein, and A. Prskawetz. 1998. "Human Capital Depletion, Human Capital Formation, and Migration: a Blessing or a "Curse"?" *Economics Letters*, 60(3): 363–67.
- Schuster, L., and N. Majidi. 2013. "What Happens Post-deportation? The Experience of Deported Afghans." *Migration Studies* 1(2): 221–40.
- Van Buuren, S., and K. Groothuis-Oudshoorn. 2011. "Multivariate imputation by chained equations" in *R. Journal of statistical software*, 45(3).
- Van Buuren, S., J. P. L. Brand, C. G. M. Groothuis-Oudshoorn, and D. B. Rubin. 2006. "Fully conditional specification in multivariate imputation". *Journal of Statistical Computation and Simulation* 76: 1049–1064.
- World Bank. 2016a. Poverty Reduction in Nigeria in the Last Decade. World Bank: Washington DC.
- . 2016b. "Mental Health among Displaced People and Refugees: Making the Case for Action at the World Bank Group." Washington, D.C. Poverty Global Practice.
- . 2018. "World Developement Indicators" updated May 2, 2018.
- World Health Organization. 2001. *The World Health Report 2001: Mental Health: New Understanding, New Hope*. Geneva: WHO.
- . 2013. *Mental Health Action Plan: 2013–2020*, Geneva: WHO.
- UN General Assembly, *Protocol Relating to the Status of Refugees*, 31 January 1967, United Nations, Treaty Series, vol. 606, p. 267.
- . *Report of the Special Representative of the Secretary-General on Migration*, 3 February 2017, A/71/728.
- UNHCR. 2018. *Desperate Journeys*. <https://reliefweb.int/report/world/desperate-journeys-january-2017-march-2018>.
- . 2016. *Population statistics*.
- U.S. Energy Information Administration, 2018. *Spot Prices for Crude Oil and Petroleum Products*.

# Appendix

## **Appendix 1: Survey sampling strategy: assumptions, sampling, and sample weights**

In both Italy and Greece, the basis of the sampling strategy is the quasi-random allocation of asylum seekers across reception centers throughout the country after processing by law enforcement authorities. Thus, in both countries, data collection was carried out through a three-stage stratified sample in four regions of Italy (Lazio, Lombardy, Sicily, and Puglia) and regions in Greece (Attica, Central Greece, and Thessaly). Qualitative interviews were carried out in the Lazio and Lombardy regions of Italy only, with the addition of Central Macedonia in Greece. The qualitative sample does not overlap with that of the quantitative survey, a decision made to avoid interview fatigue and differences in priming.

The number of nationalities covered by the survey was determined prior to field work. One reason was the tradeoff between coverage of the entire population of asylum seekers and sufficient statistical power to conduct country-specific analyses. Besides, the survey instrument had some nationality-specific modules (assets and dwelling for example) that had to be included into the questionnaire beforehand. In Italy, a total of 9 nationalities were picked for coverage. Cote d'Ivoire, Er-

itrea, The Gambia, Guinea, Mali, Nigeria, Senegal, Somalia and Sudan. These nationalities represent 78 percent of the flow into Italy in 2016. In Greece, only three nationalities (Afghans, Iraqis, and Syrians) were included in the sampling frame. These nonetheless represent 86 percent of the flow into Greece in 2016.

The first stage of the sampling strategy entailed the selection of the reception centers in which to conduct the survey in each of the regions in Italy and in Greece. In Italy, this was based on the lists of reception centers provided by the Ministry of Internal Affairs. The selection of centers was conducted to avoid clustering of asylum seekers in one single location because the allocation process makes it possible that individuals from the same country and arrival time into Italy would be allocated to the same center. Furthermore, the choice of centers also aimed at ensuring some level of representation of each type of centers (defined by type – CARA and CAS as per Box 2.3), size and nationality, and a targeted sample size in each region. A second stage created as many strata as the number of countries identified for inclusion in the survey.

Finally, a third stage drew a sample of interviewees of the nationalities of interest to the survey. For the quantitative survey, these were selected

randomly from the most recent list of asylum seekers hosted in the selected centers. The number of respondents for each nationality was determined so that the proportion of cases of a given country in the survey was similar to the actual proportion as calculated using administrative data. Sampling

errors led to imperfectly matched proportions. Furthermore, as illustrated in Table A1.1., some individuals from countries other than the 8 or 3 countries of interest still ended up being interviewed. Reasons include misreporting or absence of citizenship information in administrative listings.

**Table A1.1. Countries of Origin for Respondents to EASS 2017**

Country	Country code	Total	Male	Female
Syria	SYR	976	626	350
Nigeria	NGA	622	488	134
Afghanistan	AFG	502	351	151
Gambia	GMB	340	335	5
Eritrean	ERI	327	220	107
Senegal	SEN	319	318	1
Mali	MLI	285	282	3
Côte d'Ivoire	CIV	211	186	25
Guinea	GIN	183	176	7
Iraq	IRQ	173	105	68
Somalia	SOM	84	65	19
Sudan	SDN	32	30	2
Guinea-Bissau	GNB	16	16	
Iran	IRN	12	9	3
Cameroon	CMR	4	4	
Niger	NER	4	3	1
Sierra Leone	SLE	4	4	
Ethiopia	ETH	3	2	1
Chad	TCD	2	2	
Lebanon	LBN	2	2	
Morocco	MAR	2	1	1
South Sudan	SSD	2	2	
Burkina Faso	BFA	1	1	
Congo	COD	1	1	
Egypt	EGY	1	1	
Gabon	GAB	1	1	
Ghana	GHA	1	1	
Jordan	JOR	1	1	1
Liberia	LBR	1	1	
Libya	LBY	1	1	
Unknown		10	5	5
Total		4,124	3,240	884

Thus, the statistical analysis using quantitative data re-weights asylum seekers from countries that are under-represented in the survey to correct the proportions. All statistics presented in this report are henceforth restricted to the 8 target nationalities and are computed using these sampling weights. Regression analyses however are not weighted and use all available observations in the survey. For the Italian sample, weights are designed by comparing the shares of asylum seekers' nationalities in EASS 2017 with a reference population. The reference population was obtained from monthly EUROSTAT data from the European Commission, on First Time Applicants from 2012 until 2017, for Sea Arrivals to Italy from 2013 until June 2017. The period studied is 2013-2017 for both the EASS 2017 sample and the reference population.

Since the analysis is restricted to the 9 pre-chosen origin countries, i.e. Côte d'Ivoire, Eritrea, Guinea, The Gambia, Mali, Nigeria, Senegal, Somalia and Sudan, sample weights are designed to ensure representativeness of the distribution within this sample of 9 countries and are thus the inverse of the survey ratio as calculated in Table A1.2.

**Table A1.2 Sample weights as the inverse of the Italy Survey Ratio**

Country	Share in administrative data, Percent	Share in survey data, Percent	Italy Survey Ratio (survey/administrative)
Côte d'Ivoire	.065	0.085	1.30
Eritrea	.265	0.172	0.65
Guinea	.065	0.072	1.10
The Gambia	.092	0.129	1.40
Mali	.081	0.108	1.33
Nigeria	.219	0.271	1.24
Senegal	.070	0.120	1.71
Somalia	.081	0.031	0.42
Sudan	.066	0.010	0.15
Total	100	100	.

**In Greece**, a similar stratified random sample to Italy's was drawn. Focusing on the three target origin countries, i.e. Afghanistan, Iraq and Syria, sample weights were calculated by taking the inverse of the survey ratio (see Table A1.3).

**Table A1.3 Sample weights as the inverse of the Greece Survey Ratio**

Country	Share in administrative data, Percent	Share in the survey, Percent	Greece Survey Ratio (survey/admin)
Afghanistan	35.73	31.36	.87
Iraq	14.07	10.43	.74
Syrian Arab Republic	50.18	58.19	1.15
Total	100	100	

As for the case of Greece, summary statistics are restricted to the three countries of focus and were weighted using these sample weights. Regressions will however be unweighted and use the entire available sample.

On the other hand, the qualitative instrument was not designed to be statistically representative of the population of asylum seekers. Rather the qualitative instrument was designed to account for any social relations between interviewees and to promote an appropriate depth of responses. Thus, a mixed approach was adopted, which consisted of selecting interviewees using a combination of random selection from center lists, chain referral sampling and purposive sampling by interviewers. Finally, while the random selection of individuals in the quantitative instrument would lead to a gender mix in the survey that reflects the population mix, the qualitative instrument purposely over-sampled women.

## Appendix 2: Survey instrument

### 2.1. Quantitative instrument

The quantitative survey instrument had several innovative features built-in.

Language: the survey instrument was translated into several languages (French, English, Bambara, Tigrinya, Arabic, and Farsi) to accommodate the target population.

Nationality-specific modules: to allow comparison with the population in the country of origin, the asset and dwelling modules were identical to those used in the most recent household survey available in said country. For example, the asset and dwelling module for asylum seekers from Nigeria was identical to the one used for the 2011 Nigerian Living Standards Measurement Survey.

Standardized modules: on the other hand, some modules were designed to allow comparisons across asylum seekers and between asylum seekers and the world population. The education and job modules were for example borrowed from World Bank STEP background questionnaires.

Context-specific modules: the migration module was specifically designed for this specific project. The questions asked were determined after thorough qualitative work conducted during the summer of 2016.

The survey instrument was programmed into tablets using the World Bank's **Computer-Assisted Personal Interview (CAPI)** software.<sup>43</sup>

### 2.2. Qualitative instruments

Two instruments were used in the collection of qualitative data: one for in-depth individual interviews (IDIs) and another for focus group discussions (FGDs). FGDs allowed analysis of group dynamics and provided additional contextual data to IDIs.

The instruments covered similar themes, and were designed to complement those of the primary instrument. Additional focus was put on gender specific issues, including violence encountered during the journey, and gender dynamics throughout the migration process.

Both instruments were semi-structured: open-ended questions were posed, and field teams were trained in probing responses as relevant.

In addition to FGDs and IDIs, knowledgeable staff was interviewed within each center. They provided details on the population hosted and other contextual information relevant to the logistics or interpretation of the study.

## Appendix 3: Data construction and data validation

### 3.1. Data and Methodology for Constructing Welfare Aggregates

The comparative analysis in this section uses the EASS 2017 collected for this report, in combination with the Nigeria 2011 Living Standard Measurement Survey; the Senegal 2011 Enquête de Suivi de la Pauvreté (ESPS II); and the 2013-14 Afghanistan Living Conditions Survey.

Given lack of information in EASS 2017 about asylum seekers' households living standards before migration, survey-to-survey imputation techniques were used to, based on available wel-

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<sup>43</sup> <https://designer.mysurvey.solutions/account/login?ReturnUrl=%2f>

fare aggregates in surveys of countries of origin, estimate the level of welfare of asylum seekers' households (levels of expenditures for Nigeria and Senegal, and a wealth index for Afghanistan, in line with information available in surveys of countries of origin).

The EASS 2017 was designed so that it included questions on socio-demographic characteristics at the individual and household levels derived from, and which are comparable to, these national surveys. Strategic questions were placed in the asylum seeker's survey which would allow for survey to survey simulation of welfare vectors. These questions aimed at collecting information on dwelling characteristics, among others, as a key predictor of household welfare. Senegal and Nigeria, have surveys which allow for simulation of the household's expenditure, while Afghanistan's survey allows for simulation of a wealth index. The analysis uses the Nigeria 2011 Living Standard Measurement Survey; the Senegal 2011 Enquête de Suivi de la Pauvreté (ESPS II); and the 2013-14 Afghanistan Living Conditions Survey. Multiple imputation techniques were used to simulate welfare vectors on to the asylum seeker's survey.

The goal of survey-to-survey imputation techniques is to obtain the joint distribution of the vector of interest, expenditure in the case of Senegal and Nigeria, and a set of correlates. The set of correlates for Nigeria and Senegal include variables on the household size, share of educated, share of employed members, region, and only for Senegal the number of rooms. The wealth index model for Afghanistan incorporated, in addition, variables on dwelling characteristics on flooring and toilet. The dwelling characteristics included in the instrument could not be fully used in the imputation across all countries. This because, for ethical reasons, the survey did not ask detailed information to individuals who reported loss of assets and de-

stroyed dwelling. Driven by this, the data captured included substantial missing information on those variables initially included to be relevant to the imputation. In some cases, the amount of observations lost, makes traditional imputation methods impractical.

In some instances, the amount of missing information is almost 50 percent (Table A3.1). This is most salient among questions which tried to assess the quality of the respondents dwelling back home, and employment. Lack of information regarding the respondent's location is also absent for numerous observations. Because the goal is to simulate welfare for asylum seekers, the missing information for these correlates can severely limit the total number of viable observations in each country. Consequently, the imputation procedures rely on fully conditional specifications, also known as multivariate imputation by chained equations (MICE).

**Table A3.1: Number of missing observations per variable by country**

	Nigeria	Senegal	Afghanistan
Household size	0	0	0
Share of members under 15	248	140	209
Share of members [15, 65)	248	140	209
Share of members 65+	248	140	209
Share of members female	0	0	71
Child dependency ratio	248	140	209
Total dependency ratio	248	140	209
Share employed	267	151	77
Share with at least secondary education	69	126	108
Improved toilet	150	125	243
Improved floor	172	#N/A	293
Improved roof	288	#N/A	#N/A
Total observations	583	287	503

Multivariate imputation by chained equations (MICE), provides a method to tackle the issue of missing information on multiple vectors. MICE specifies multivariate imputation models iteratively for each variable with missing information. The procedure operates under the assumption that observed information is sufficient to inform the missingness of the specific observations, and that any remaining missingness is completely random (Azur et al. 2011).

In the MICE procedure, each variable is modeled conditional on other variables in the data.<sup>44</sup> Imputed values for each variable are drawn from its modeled distribution conditional upon other variables in the data for each iteration :

$$\begin{aligned} X_1^{t+1} &\sim g_1(X_1|X_2^t, \dots, X_p^t, Z, \phi_1) \\ X_2^{t+1} &\sim g_2(X_2|X_1^{t+1}, X_3^t, \dots, X_p^t, Z, \phi_2) \\ &\dots \\ X_p^t &\sim g_p(X_p|X_1^{t+1}, X_2^{t+1}, \dots, X_{p-1}^{t+1}, Z, \phi_p) \end{aligned}$$

where  $g_i$  could be any type of conditional distribution specified (logistic, linear, Poisson, etc), and  $\phi$  are the model parameters (StataCorp, 2015). As an example, assume we have 3 variables which are missing; 1) whether anyone in the asylum seeker's household was employed, 2) the region of residence of the household, and 3) the welfare. All three models can be specified differently, the first as a logit, the second as a multinomial logit, and the third as an ordinary least squares model. The variable of interest is welfare, and thus the other two are used as correlates for its specification. The process begins with the variable that has the least number of missing observations (for

**Table A3.2: Expenditure OLS models for Senegal (nat. log of adult equivalized expenditure) and Nigeria (nat. log of per capita expenditure)**

	Senegal	Nigeria
Share household members over 65	-0.00470*** (0.00108)	-0.00292*** (0.000475)
Nat log. household size	-0.516*** (0.0220)	-0.467*** (0.0169)
Share of household members under 15		-0.00262*** (0.000434)
Share of adults employed	-0.00235*** (0.000502)	0.000782** (0.000337)
Share of adults with secondary education	0.00848*** (0.000734)	0.00541*** (0.000223)
Dwelling has less than 5 rooms	-0.186*** (0.0232)	
Constant	14.44*** (0.0714)	5.740*** (0.0430)
Observations	5,891	4,907
Adjusted R-squared	0.523	0.489
Robust standard errors in parentheses		

\*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively; region dummies omitted

example employment),<sup>45</sup> and thus sets all other variables with missing observations equal to its mean value. This yields a simulated vector of the first variable which is to be used for all subsequent variables' modeling.

The procedure is reminiscent to the Gibbs sampling algorithm, which is a Markov Chain Monte Carlo (MCMC) method. In similar fashion to MCMC methods. Despite the attractiveness of MICE, it may not converge to any particular distribution, which has led to concerns regarding the method's statistical validity.<sup>46</sup> Nevertheless, the method is

<sup>45</sup>This is not necessarily always the case.

<sup>46</sup>For a thorough discussion on the concerns regarding the methodology readers should refer to van Buren et al. (2006)

<sup>44</sup>For a simple and easy to follow description of MICE refer to Azur, Stuart, Frangakis, and Leaf, 2011.

widely used and has proven quite useful under the current circumstances.

The specific modelling choices for each country are different, given the circumstances of missing information for each of the models, however the model used for expenditure in Nigeria and Senegal is presented in Table A3.2, and for Afghanistan in Table A3.3.<sup>47</sup> All expenditure and wealth index models yield adjusted R squared values close to or above 0.5.

**Table A3.3: Wealth index OLS model for Afghanistan**

VARIABLES	AFG wealth
Share household members over 65	-0.00121**
Dwelling has Concrete/wood floors	1.325***
Dwelling has flush toilet	0.769***
Share of household members under 15	-0.00478***
Share of adults employed	0.00356***
Share of adults with secondary education	0.00815***
Nat.log household size	0.0875***
Constant	-0.530***
Observations	19,667
Adjusted R-squared	0.633
Robust standard errors in parentheses	

\*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively; region dummies omitted

The average welfare for Nigerian, as well as Senegalese asylum seekers is considerably above that of the average individual back home during the survey's period. For Afghanistan, asylum seekers are 0.55 standard deviations above the mean wealth index for the country. Correspondingly,

most asylum seekers are in the upper parts of their country's welfare distribution. This result is robust to multiple specifications and MICE assumptions.

### 3.2. Misreporting

Interviews only proceeded with the explicit and informed oral consent of the interviewee. Interviewees were given information about this study, and told that their personal information would not be passed on to authorities processing asylum requests. In both quantitative and qualitative surveys, consent was obtained orally.

As in any context, and potentially even more so in the case of asylum seekers, responses can be subject to conformity bias especially when the survey is believed to have an effect one's asylum application status. While interviewers reminded interviewees of the independence of the project in multiple occasions, we believe that questions pertaining to questions on triggers of migration, violence, and anxiety and depression should receive particular attention.

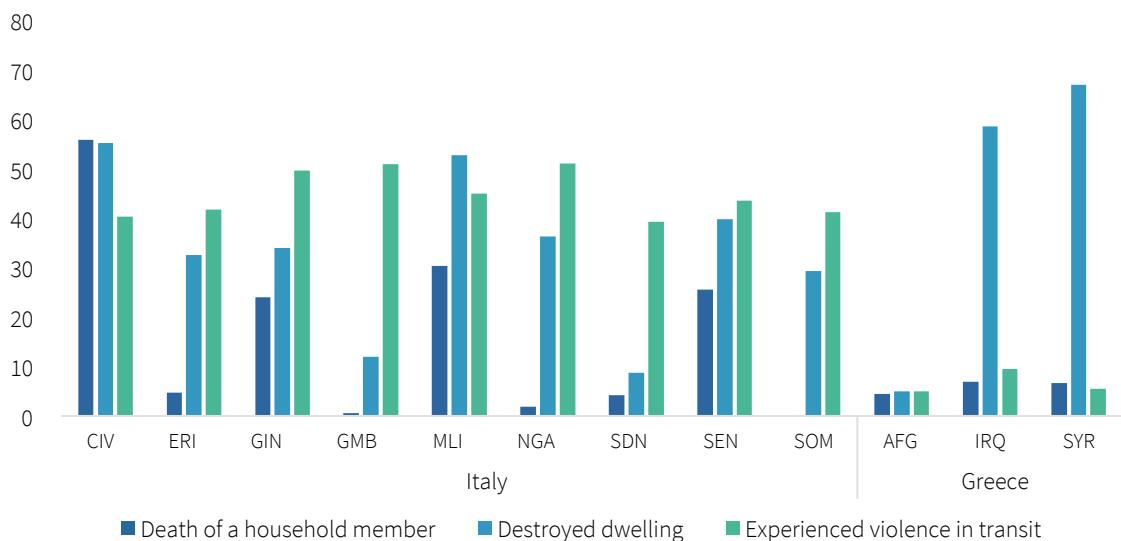
As can be seen in Figure A3.1, an implausibly high proportion of individuals from Cote d'Ivoire, Guinea, Mali, and Senegal (labelled Group 1) reports having at least one deceased household member. These numbers are particularly striking when comparing with percentages for other African countries (Group 2, defined as Eritrea, The Gambia, Nigeria, Somalia, Sudan, alongside with non-targeted countries)<sup>48</sup>, or even conflict-zone countries such as Afghanistan, Iraq or Syria. As one cannot exclude the possibility of an over-reporting bias among the four African countries, we

<sup>47</sup> Models for all imputation steps are available upon request. For most intermediate imputations, we use predictive mean matching techniques with 10 nearest neighbors.

<sup>48</sup> Out of the 1431 individuals in Group 2, 98.25 percent are from Eritrea, The Gambia, Nigeria, Somalia, Sudan and 1.75 percent from non-targeted countries, e.g. Cameroon, Sierra Leone or Ethiopia.

**Figure A3.1. Possible over-reporting of death in household among selected countries**

Proportions of migrants who report having lost a family member, having had their dwelling destroyed, or undergone violence during transit, breakdown by country of origin.



**Source:** EASS 2017. Statistics for Sudan are computed from 33 observations and should thus be interpreted with caution.

test for correlation between reporting a death in the household and other distressing event such as the destruction of assets (dwelling), having received violence during transit, having been detained in prison, and the overall GSI.

There seems to be a positive correlation between reported death in the household and reported destruction of dwellings for countries in Group 1, contrary to other African countries of Group 2, which do not exhibit any correlation. Individuals in Group 1 are more likely to say that their dwelling has been destroyed (in their original location) when they have reported a death amongst their household members. This correlation however does not hold for countries in Group 2. As there are no obvious reason to explain why the death of a member would be correlated with destroyed asset in Group 1 but not Group 2, one should keep this potential bias in mind when analyzing outcomes that are affected by these two distressing events.

There is little evidence of correlation between over-reporting of death in the household and over-reporting of distressing events during transit. Being imprisoned during transit is not correlated with reporting a death in the household, throughout all samples (Group 1, Group 2, and both altogether). When looking at the correlation with reporting violence in transit, the coefficient is either non-significant or slightly negative (when including center or country fixed effect), which contradicts the idea that migrants over-reported all type of distressing events.

There is little difference among Group 1 and 2 regarding the way anxiety/depression symptoms and death of household members are reported. Low GSI levels are correlated with the death of household member when pooling the Italian sample altogether, regardless of whether center and country fixed effects are used. When decomposing by groups, the correlation disappears as soon as fixed effects are included, for both Group 1 and 2.

**Table A3.4. Reported Destroyed Dwelling and Death of a Household Member, Italy Sample**

VARIABLES	Dwelling in past residence currently destroyed								
	Group 1 and 2				Group 1			Group 2	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Death in household	0.387*** (0.0929)	0.366*** (0.0859)	0.350*** (0.0950)	0.452*** (0.0812)	0.371*** (0.102)	0.385*** (0.1000)	0.0160 (0.180)	-0.112 (0.247)	-0.135 (0.276)
Constant	0.186*** (0.0432)	-0 (0)	-0.0719 (0.0646)	0.144*** (0.0351)	-0 (0)	0.0288 (0.0913)	0.206*** (0.0564)	-0 (0)	0.137** (0.0602)
Observations	864	864	864	370	370	370	494	494	494
R-squared	0.114	0.266	0.296	0.223	0.410	0.413	0.000	0.257	0.314
Center fixed effects		Yes	Yes		Yes	Yes		Yes	Yes
Country fixed effects			Yes			Yes			Yes

Source: Authors' calculation using EASS 2017.

Note: Robust standard errors in parentheses, \*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively.

**Table A3.5. Reported Violence in Transit and Death of a Household Member, Italy Sample**

VARIABLES	Has experienced violence during transit								
	Group 1 and 2				Group 1			Group 2	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Death in household	-0.147* (0.0801)	-0.102 (0.0696)	-0.0270 (0.0486)	-0.134** (0.0649)	0.0461 (0.0561)	0.0386 (0.0589)	-0.141 (0.0965)	-0.0890 (0.0947)	-0.0701 (0.101)
Constant	0.488*** (0.0239)	-0 (0)	0.389*** (0.114)	0.473*** (0.0618)	1*** (0)	-0 (0)	0.494*** (0.0318)	1*** (0)	0.649*** (0.0291)
Observations	1,326	1,326	1,326	520	520	520	806	806	806
R-squared	0.011	0.129	0.158	0.016	0.329	0.330	0.002	0.127	0.140
Center fixed effects		Yes	Yes		Yes	Yes		Yes	Yes
Country fixed effects			Yes			Yes			Yes

Source: Authors' calculation using EASS 2017.

Note: Robust standard errors in parentheses, \*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively.

**Table A3.6. Reported Imprisonment during Transit and Death of a Household Member, Italy Sample**

VARIABLES	Has been imprisoned during transit								
	Group 1 and 2				Group 1			Group 2	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Death in household	0.0874 (0.0705)	0.104 (0.0688)	0.0650 (0.0673)	0.00663 (0.0712)	0.0430 (0.0813)	0.0496 (0.0827)	0.0873 (0.0950)	0.0699 (0.0948)	0.134 (0.0955)
Constant	0.324*** (0.0200)	-0 (0)	-0.423*** (0.0563)	0.409*** (0.0353)	0 (0)	0.0236 (0.0810)	0.288*** (0.0242)	-0 (0)	-0.687*** (0.121)
Observations	1,340	1,340	1,340	521	521	521	819	819	819
R-squared	0.004	0.083	0.121	0.000	0.144	0.149	0.001	0.089	0.141
Center fixed effects		Yes	Yes		Yes	Yes		Yes	Yes
Country fixed effects			Yes			Yes			Yes

Source: Authors' calculation using EASS 2017.

Note: Robust standard errors in parentheses, \*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively.

**Table A3.7. Anxiety/Depression and Death of a Household Member, Italy Sample**

VARIABLES	GSI								
	Group 1 and 2			Group 1			Group 2		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Death in household	0.446*** (0.0960)	0.342*** (0.111)	0.246** (0.0921)	0.370*** (0.115)	0.0842 (0.108)	0.0950 (0.106)	0.343* (0.176)	0.262 (0.204)	0.248 (0.276)
Constant	1.972*** (0.0447)	2.167*** (0)	1.757*** (0.0906)	2.065*** (0.0804)	2*** (0)	2.167*** (0)	1.932*** (0.0471)	3*** (0)	2.105*** (0.330)
Observations	1,389	1,389	1,389	536	536	536	853	853	853
R-squared	0.045	0.120	0.168	0.072	0.312	0.324	0.005	0.118	0.157
Center fixed effects		Yes	Yes		Yes	Yes		Yes	Yes
Country fixed effects			Yes			Yes			Yes

Source: Authors' calculation using EASS 2017.

Note: Robust standard errors in parentheses, \*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively.

Consequently, while the answers on migration triggers might be subject to over-reporting, the other questions do not seem to have been affected.

of authorization code, or missing observation on the literacy score). These observations were dropped from the analysis.

## Appendix 4: Literacy assessment

### 4.1. Data and methodology

In Italy, a total of 281 individuals ended up being assigned a literacy proficiency level. E&S online was implemented in Canadian French and Irish English; 450 tests were completed. Attrition categories are shown in Table A4.1. A total of 94 cases stated they were illiterate and hence did not take the test. For these, decision was made to take their statement at face value, and a proficiency level below one was assigned.

Furthermore, the tests conducted in Lazio were dropped from the sample due to some oversight in the administration of the assessment. The implementation of the literacy module of E&S online required manually skipping the numeracy module. When administered in centers in Lazio, both numeracy and core modules were skipped, leaving no information on proficiency.

Finally, 20 refused to take the test. The analysis of the characteristics of those who refused is displayed in Table A4.2 below, where regressions are run on a sample of 281 individuals (202 test-takers, 59 illiterate individuals and 20 refusals). Table A4.2 indicates no clear patterns of selection into refusal. The analysis is now based on 202 test-takers and 59 illiterate individuals.

**Table A4.1. Attrition in Italy sample**

Uptake	Frequency	Percent
Participated	450	78.5
Illiterate	94	16.4
Refuse	29	5.1
Total	573	100

Source: Authors' calculations using EASS 2017 – Literacy.

Among the 450 individuals who participated, 28 tests were unusable (due to repeated Id's, absence

Four hundred and thirty-eight observations on literacy proficiency are available in Greece. A literacy test specifically designed for this analysis was implemented. The test used a subset of items used for E&S online, usually the ones with lower levels of difficulty. The items were then translated into Arabic and

**Table A4.2. From the attrition analysis, no clear patterns stand out amongst those who refused the test.**

VARIABLES	Linear probability estimation of refusing to take the test									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Secondary education	-0.0453 (0.0358)	-0.0547 (0.0356)	-0.0539 (0.0359)	-0.0534 (0.0359)	-0.0528 (0.0360)	-0.0583 (0.0362)	-0.0559 (0.0365)	-0.0701** (0.0319)	-0.0534 (0.0377)	-0.0592* (0.0331)
Mental index		0.0418* (0.0231)	0.0394 (0.0241)	0.0389 (0.0241)	0.0386 (0.0242)	0.0379 (0.0241)	0.0359 (0.0244)	0.00575 (0.0209)	0.0306 (0.0268)	-0.00465 (0.0231)
Has worked			-0.0164 (0.0324)	-0.0183 (0.0325)	-0.0162 (0.0328)	-0.0149 (0.0328)	-0.0161 (0.0329)	-0.0295 (0.0314)	-0.0137 (0.0352)	-0.0134 (0.0339)
Male				0.0748 (0.0991)	0.0742 (0.0994)	0.0766 (0.0992)	0.0762 (0.0994)	0.0383 (0.0877)	0.0691 (0.101)	0.0179 (0.0895)
Age					-0.00160 (0.00321)	0.0328 (0.0261)	0.0327 (0.0261)	0.0279 (0.0240)	0.0371 (0.0265)	0.0330 (0.0244)
Age square						-0.000649 (0.000487)	-0.000661 (0.000488)	-0.000628 (0.000449)	-0.000734 (0.000492)	-0.000702 (0.000453)
Single							-0.0303 (0.0468)	-0.0624 (0.0440)	-0.0331 (0.0477)	-0.0567 (0.0448)
Constant	0.0874 (0.0550)	0.00317 (0.123)	0.0177 (0.147)	-0.0530 (0.277)	-0.0153 (0.344)	-0.448 (0.926)	-0.409 (0.949)	-0.179 (0.345)	-0.414 (0.971)	-0.198 (0.357)
Observations	278	278	277	277	277	277	277	277	277	277
Center fixed effects	NO	NO	NO	NO	NO	NO	NO	YES	NO	YES
Country fixed effects	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES

Source: Authors' calculation using EASS 2017.  
Note: Robust standard errors in parentheses, \*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively. Errors clustered at the center levels, with a parametric Moulton (1986) correction factor.

Farsi. The test is a computer-based that was administered after the survey, possibly days after. A small background questionnaire was filled in at the same time to gather information on the test taker so to allow matching with the rest of the data. In addition, to avoid loss of information in case such matching was not possible, information on age, gender, education, and nationality was also collected.

An initial 526 individuals in Greece were sampled to take the literacy tests. The attrition rates shown in Table A4.3 indicate that 15 percent of

people offered to take the test refused, while others indicated as justification either inability to read or read Arabic specifically or computer-illiteracy.

**Table A4.3 Attrition in Greece sample**

	Frequency	Percent
Participated	376	71
Refused	79	15
Illiterate	62	12
Language (Kurd)	9	2
Total	526	100

Source: Authors' calculations using EASS 2017-Literacy.

Table A4.4 looks at whether refusal to participate is related to any observable characteristics. Although a self-selection of less educated into refusals appears at first, this effect seems driven by the variation of education at the country level. Indeed, the effect of secondary education becomes insignificant once controlling for nationality and/or center fixed effects (keeping in mind that nationalities were clustered in some centers).

When the reason “Illiterate” was invoked, the individual was assigned a proficiency level “below one”, which in analyses is given value 0. Finally, when the language of the test (Arabic) was not appropriate for some Iraqis who spoke only Kurd, these observations were simply dropped from the analysis. Furthermore, we drop individuals from Syrian and Iraq who took the test, but could not perform as they declared that their mother tongue was Kurdish (37 individuals). Literacy proficiency

**Table A4.4. Attrition analysis for Refusals in Greece**

<b>VARIABLES</b>	<i>Linear probability estimation of refusing to take the test</i>									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Secondary education	-0.0925*** (0.0336)	-0.0928*** (0.0336)	-0.0857** (0.0343)	-0.0788** (0.0345)	-0.0730** (0.0345)	-0.0715** (0.0344)	-0.0698** (0.0345)	-0.0608* (0.0325)	-0.0540 (0.0353)	-0.0547 (0.0340)
Mental index		-0.0259 (0.0227)	-0.0215 (0.0231)	-0.0244 (0.0231)	-0.0300 (0.0233)	-0.0306 (0.0232)	-0.0311 (0.0232)	-0.0270 (0.0199)	-0.0342 (0.0217)	-0.0268 (0.0202)
Has worked			0.0383 (0.0364)	0.0590 (0.0389)	0.0541 (0.0389)	0.0563 (0.0388)	0.0553 (0.0388)	0.0351 (0.0344)	0.0535 (0.0377)	0.0397 (0.0353)
Male				-0.0628 (0.0384)	-0.0581 (0.0383)	-0.0591 (0.0382)	-0.0580 (0.0383)	-0.0283 (0.0366)	-0.0543 (0.0386)	-0.0319 (0.0379)
Age					0.00326** (0.00151)	-0.00954 (0.00819)	-0.0121 (0.00905)	-0.0110 (0.00861)	-0.0108 (0.00898)	-0.0110 (0.00874)
Age square						0.000170 (0.000106)	0.000199* (0.000115)	0.000184* (0.000110)	0.000182 (0.000114)	0.000186* (0.000111)
Single							-0.0275 (0.0436)	-0.0422 (0.0393)	-0.0211 (0.0423)	-0.0410 (0.0401)
Constant	0.183*** (0.0401)	0.251** (0.109)	0.218* (0.123)	0.258* (0.132)	0.161 (0.160)	0.379 (0.317)	0.439 (0.362)	0.269 (0.259)	0.366 (0.670)	0.211 (0.410)
Observations	516	516	513	513	513	513	513	513	509	509
Center fixed effects	NO	NO	NO	NO	NO	NO	NO	YES	NO	YES
Country fixed effects	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES

Source: Authors' calculation using EASS 2017.

Note: Robust standard errors in parentheses, \*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively. Errors clustered at the center levels, with a parametric Moulton (1986) correction factor.

levels are therefore available for total of 401 individuals in Greece.

#### 4.2. Sampling weights in literacy assessment

Sampling weights are used to correct both country and education sampling. Throughout the report, sampling weights have been used to correct the proportion of origin countries, so that they would match the actual proportion as calculated using administrative data. For the Italian sample, the literacy test combined another sort of selection, as individuals with higher level of education were specifically targeted. Thus, there is a need to correct for such a selection, and the final weights used in the literacy section interact education weights with previous sampling weights (origin countries) in order to ensure representativeness.

Weights used in the literacy section are generated as the inverse of the Italy Survey Ratio interacted with the inverse of the Literacy Test Ratio (last columns of Tables A1.2 and A4.5).

**Table A4.5. Shares of education levels for the Italian sample, comparing the whole Italian and the 281 individuals who were offered the literacy test**

Educa-tion	Share in the survey, Percent	Share in the literacy test, Percent	Literacy Test Ratio (test/survey)
No educa-tion	36.29	30.94	0.85
Primary	34.20	34.89	1.02
Second-ary	24.58	31.65	1.29
Tertiary	4.93	2.52	0.51
Total	100	100	.

## Appendix 5: Anxiety and Depression

**Table A5.1. Risk factors of anxiety and depression- Full sample**

Variable	(1) GSI	(2) GSI	(3) GSI	(4) GSI
Age	-0.017 (0.014)	-0.001 (0.013)	-0.005 (0.013)	0.002 (0.013)
Age squared	0.000** (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Female dummy	0.217*** (0.058)	0.243*** (0.073)	0.240*** (0.075)	0.257*** (0.070)
Marital status	0.034 (0.055)	-0.027 (0.048)	-0.023 (0.043)	-0.030 (0.045)
Education	-0.066 (0.046)	-0.012 (0.043)	-0.042 (0.052)	0.017 (0.046)
Employed before journey	-0.112** (0.048)	-0.072 (0.044)	-0.108*** (0.038)	-0.069* (0.041)
Destroyed dwelling	0.191*** (0.048)	0.217*** (0.058)	0.260*** (0.079)	0.250*** (0.066)
Death HH member	0.151** (0.076)	0.108 (0.072)	0.088 (0.074)	0.046 (0.063)
Violence during transit	0.124** (0.057)	0.153* (0.082)	0.191*** (0.070)	0.163* (0.084)
Imprison. in transit	-0.002 (0.058)	0.052 (0.066)	-0.029 (0.070)	0.016 (0.072)
Travel not alone	0.090* (0.055)	0.066 (0.053)	0.061 (0.048)	0.068 (0.054)
Duration in center	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Living conditions	0.070*** (0.013)	0.043** (0.020)	0.048** (0.021)	0.048** (0.022)
Alone in center	-0.153** (0.061)	0.147* (0.074)	0.088 (0.079)	0.152* (0.079)
Constant	2.389*** (0.229)	1.838*** (0.237)	2.503*** (0.218)	1.940*** (0.225)
Adjusted R-squared	0.1411	0.2453	0.1865	0.2504
Observations	1229	1227	1227	1227
Center fixed effects	NO	YES	NO	YES
Country fixed effects	NO	NO	YES	YES

Source: Authors' calculation using EASS 2017.

Note: Robust standard errors clustered at the center level in parentheses; \*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively.

**Table A5.2. Risk factors of anxiety and depression – Italy sample**

<b>Variable</b>	<b>(1)</b> <b>GSI</b>	<b>(2)</b> <b>GSI</b>	<b>(3)</b> <b>GSI</b>	<b>(4)</b> <b>GSI</b>
Age	0.003 (0.028)	0.007 (0.020)	0.009 (0.022)	0.002 (0.013)
Age squared	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)
Female dummy	0.071 (0.087)	0.176 (0.114)	0.128 (0.098)	0.257*** (0.070)
Marital status	0.033 (0.064)	0.022 (0.065)	0.010 (0.054)	-0.030 (0.045)
Education	-0.078 (0.054)	-0.008 (0.053)	-0.034 (0.071)	0.017 (0.046)
Employed before journey	-0.087 (0.061)	-0.085 (0.065)	-0.073 (0.064)	-0.069* (0.041)
Destroyed dwelling	0.168*** (0.064)	0.222*** (0.080)	0.195* (0.103)	0.250*** (0.066)
Death HH member	0.237*** (0.082)	0.131 (0.086)	0.163 (0.098)	0.046 (0.063)
Violence during transit	0.198*** (0.059)	0.153* (0.089)	0.203*** (0.074)	0.163* (0.084)
Imprison. in transit	-0.063 (0.062)	-0.002 (0.072)	-0.112 (0.072)	0.016 (0.072)
Travel not alone	0.059 (0.077)	0.109* (0.063)	0.062 (0.069)	0.068 (0.054)
Duration in center	-0.000* (0.000)	-0.000 (0.000)	-0.000** (0.000)	-0.000 (0.000)
Living conditions	0.069*** (0.017)	0.067** (0.027)	0.074** (0.031)	0.048** (0.022)
Alone in center	0.245** (0.106)	0.284** (0.134)	0.228** (0.103)	0.152* (0.079)
Constant	1.781*** (0.405)	0.576** (0.268)	1.701*** (0.374)	1.940*** (0.225)
Adjusted R-squared	0.0683	0.1621	0.0858	0.2504
Observations	733	732	732	1227
Center fixed effects	NO	YES	NO	YES
Country fixed effects	NO	NO	YES	YES

Source: Authors' calculation using EASS 2017.

Note: Robust standard errors clustered at the center level in parentheses; \*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively.

**Table A5.3. Risk factors of anxiety and depression – Greece sample**

<b>Variable</b>	<b>(1)</b> <b>GSI</b>	<b>(2)</b> <b>GSI</b>	<b>(3)</b> <b>GSI</b>	<b>(4)</b> <b>GSI</b>
Age	-0.005 (0.021)	0.007 (0.017)	-0.001 (0.018)	0.007 (0.017)
Age squared	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Female dummy	0.314*** (0.079)	0.307*** (0.076)	0.322*** (0.083)	0.303*** (0.078)
Marital status	-0.024 (0.099)	-0.107 (0.077)	-0.089 (0.081)	-0.111 (0.077)
Education	-0.082 (0.080)	-0.002 (0.073)	-0.039 (0.073)	0.005 (0.072)
Employed before journey	-0.109 (0.077)	-0.021 (0.046)	-0.083* (0.044)	-0.019 (0.049)
Destroyed dwelling	0.101 (0.072)	0.212** (0.076)	0.323*** (0.086)	0.254*** (0.090)
Death HH member	-0.112 (0.169)	-0.059 (0.122)	-0.137 (0.134)	-0.069 (0.126)
Violence during transit	0.354** (0.168)	0.293 (0.177)	0.344** (0.144)	0.279 (0.185)
Imprison. in transit	0.269** (0.133)	0.251*** (0.088)	0.258** (0.093)	0.253*** (0.087)
Travel not alone	0.047 (0.080)	0.028 (0.070)	0.065 (0.060)	0.032 (0.069)
Duration in center	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Living conditions	0.016 (0.021)	0.012 (0.029)	0.012 (0.025)	0.013 (0.029)
Alone in center	-0.017 (0.099)	0.067 (0.102)	0.041 (0.112)	0.081 (0.109)
Constant	2.289*** (0.372)	1.638*** (0.308)	2.361*** (0.344)	1.766*** (0.303)
Adjusted R-squared	0.0808	0.1376	0.1047	0.1370
Observations	496	495	495	495
Center fixed effects	NO	YES	NO	YES
Country fixed effects	NO	NO	YES	YES

Source: Authors' calculation using EASS 2017.

Note: Robust standard errors clustered at the center level in parentheses; \*\*\*, \*\*, \* indicate statistical significance at the 1, 5, and 10 percent level, respectively.

