



From hell to heaven? Evidence of migration trajectories from an Italian refugee centre

Manuela Stranges, François-Charles Wolff

► To cite this version:

Manuela Stranges, François-Charles Wolff. From hell to heaven? Evidence of migration trajectories from an Italian refugee centre. *Demographic Research*, 2018, 39, pp.963-990. 10.4054/Dem-Res.2018.39.36 . hal-03709655

HAL Id: hal-03709655

<https://nantes-universite.hal.science/hal-03709655>

Submitted on 12 Nov 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



DEMOGRAPHIC RESEARCH

A peer-reviewed, open-access journal of population sciences

DEMOGRAPHIC RESEARCH

VOLUME 39, ARTICLE 36, PAGES 963–990

PUBLISHED 25 OCTOBER 2018

<https://www.demographic-research.org/Volumes/Vol39/36/>

DOI: 10.4054/DemRes.2018.39.36

Research Article

From hell to heaven? Evidence of migration trajectories from an Italian refugee centre

Manuela Stranges

François-Charles Wolff

© 2018 Manuela Stranges & François-Charles Wolff.

This open-access work is published under the terms of the Creative Commons Attribution 3.0 Germany (CC BY 3.0 DE), which permits use, reproduction, and distribution in any medium, provided the original author(s) and source are given credit.

See <https://creativecommons.org/licenses/by/3.0/de/legalcode>.

Contents

1	Introduction	964
2	Background	965
2.1	Literature review	965
2.2	The Italian context	967
3	The migrant population in the Sant'Anna centre	969
3.1	Description of the data	969
3.2	The dynamics of entry to the Sant'Anna centre	971
3.3	From entries to population estimates	974
4	Outflows of migrants from the Sant'Anna centre	976
4.1	Length of stay in the centre	976
4.2	The pattern of reasons for departure	977
4.3	Estimates from a competing risk model	980
5	Concluding comments	985
6	Acknowledgements	986
	References	987

From hell to heaven? Evidence of migration trajectories from an Italian refugee centre

Manuela Stranges¹

François-Charles Wolff²

Abstract

BACKGROUND

In recent years, large numbers of migrants have attempted to reach Europe by crossing the Mediterranean Sea. Italy plays a central role as a receiving country, particularly because of its relative proximity to the coast of North Africa.

OBJECTIVE

This paper investigates the trajectories of migrants from their entry into a refugee centre to their departure, with evidence on the timing of the departure decision.

METHODS

Using 2008–2014 data from a reception centre for refugees and asylum seekers located in Calabria (Italy), we use survival analysis tools to explore the timing and reasons for departure from the centre.

RESULTS

We find large variation in migrant inflows, with peaks associated with political crises and wars in certain countries. There are substantial differences in outflows between groups of countries, in both the timing and reasons for departure.

CONCLUSIONS

Our results provide a better understanding of migrants' trajectories from a reception centre in Italy. They show that a huge number of migrants leave the centre voluntarily.

CONTRIBUTION

Overall, our study contributes to knowledge of displaced migrants, providing detailed empirical evidence on migrants' trajectories.

¹ Corresponding author. Department of Economics, Statistics and Finance "Giovanni Anania," University of Calabria, Arcavacata di Rende, Italy. Email: manuela.stranges@unical.it.

² LEMNA, Université de Nantes, France and INED, Paris, France. Email: francois.wolff@univ-nantes.fr.

1. Introduction

Due to the many war and conflict situations worldwide, a growing number of people are leaving their home country to look for better living conditions, free from persecution, violence, or war. According to the most recent data (Caritas 2015; UNHCR 2017) there were over 65 million forced migrants across the world in 2016.³ In recent years many migrants have attempted to cross the Mediterranean, mostly heading for Europe aboard unseaworthy boats and dinghies, with dramatic consequences in terms of loss of life (UNHCR 2015). In this framework, Italy has played a central role as a receiving country of this massive inflow of migrants, particularly because of its relative proximity to the coast of North Africa.

In this paper we use a unique data set collected from a reception centre located in Crotona on the eastern coast of Calabria, the most southern region of the Italian peninsula. The centre that we consider hosts migrants who apply for refugee status, but with no certainty that their claim will be accepted. These are displaced individuals who have entered Italy without any legal documents. If their claim is eventually accepted they acquire the status of refugee; otherwise they will receive notification of expulsion and will not be legally entitled to reside in the country. We cover the 2008–2014 period characterized by intense migrant inflows to Italy. Most individuals in the centre were rescued at sea or intercepted after landing on the Sicilian and Calabrian shores.⁴ Since we are not sure that all the individuals in the centre we examine will obtain refugee status or any other form of humanitarian protection, we will refer to them as ‘displaced persons’ or use the more general term of ‘migrants’.

Due to its geographical position, Calabria is very attractive as a migrant gateway to Italy and Europe. At the same time, the region is not very attractive as a place to live because it offers very few economic opportunities. Calabria is the poorest region of Italy. According to Istat (2017), Calabria had a GDP per capita of 15,309.5 euros in 2015 (versus 25,586.4 euros in Italy as a whole), an incidence of poverty at the household level of 26.9% (10.4% in Italy as a whole), and an unemployment rate of 19.4% (11.7% in Italy as a whole). This economic situation has not improved in recent years. While Italy is one of the main entry points to Europe, most migrants do not really want to stay in Italy and when they are not able to escape immediately after landing they do so from the reception centres.

To date, these migration patterns have mainly been documented by journalistic investigations and daily news reports, and there are no official figures on the

³ Out of this total, 2.8 million were asylum seekers, over 22 million were refugees, and the remainder were internally displaced persons.

⁴ When analysing our data it should be borne in mind that not all rescues correspond to arrivals by sea, and the latter do not represent all arrivals of migrants in Italy. Furthermore, not all asylum seekers are rescued by sea (Bonifazi 2013; Bonifazi and Strozza 2017).

phenomenon. Available data is based on the number of untraceable individuals among the total number of asylum applications, meaning that they underestimate the phenomenon because many migrants escape before submitting their application.⁵ This occurs because migrants know that under the Dublin Regulation they will be forced to stay in the country where they first apply, so they try to reach the country where they wish to live after they have landed in Italy (in some cases before applying for international protection).⁶ As documented by Kasperek (2016), migrants have tried to circumvent the strict rules of the Dublin System using a wide variety of strategies, which include attempts to cross the European External Border clandestinely and to travel to the desired destination country in Europe while evading police controls.

Our data offers a unique opportunity to document these migrants' trajectories at the micro level, from their entry into the centre to their departure. We provide a dynamic empirical analysis with evidence on inflows, length of stay in the centre, and outflows. The rest of our contribution is organized as follows. In the next section we briefly review the literature on displaced migrants' trajectories and describe the Italian situation regarding the asylum system. In Section 3 we present the data and analyse inflows to the centre. We focus on outflows in Section 4 where we study the length of stay in the centre, reasons for leaving, and timing of departure. Finally, Section 5 concludes.

2. Background

2.1 Literature review

The issue of refugees and asylum seekers has assumed a central place in the European Union political agenda, especially after the summer and autumn of 2015 when media attention focused on the situation at the southern borders of Europe (Guiraudon 2018). Migrants' characteristics as well as migration intentions and trajectories have also become an important topic in academic debate and have been widely studied, especially

⁵ Official aggregate data (Commissione Nazionale per il diritto di asilo 2016) shows that from 2008–2014 between 3% (in 2014) and 10% (in 2013) of migrants in the centres were untraceable at the end of the year (meaning that they had escaped after submitting their asylum application, but before knowing if it had been accepted).

⁶ The asylum system in Europe is administered under the Dublin System, which consists of the Dublin Regulation (Regulation No. 604/2013) and the EURODAC Regulation. The Dublin Regulation is a European Union law that determines which EU Member State is responsible for examining applications by refugees seeking international protection under the Geneva Convention and the EU Qualification Directive, within the European Union. The EURODAC system includes a Europe-wide fingerprinting database for unauthorised entrants to the EU.

in ethnographic and geographic research (Bloch, Sigona, and Zetter 2011; Valenta, Zuparic-Iljic, and Vidovic 2015).

Focusing on Sudanese and Nigerian migrants heading to the European Union, Schapendonk and Steel (2014) conclude that the migration process does not follow the conventional order of uprooting–movement–regrounding. Migrants' trajectories often involve more than two locations and in some cases the migrants' destinations turn into transit places during the process of movement. Using data from a transit migration hub in Turkey, Wissink, Düvell, and van Eerdewijk (2013) show that transit migration is not necessarily simply a pause in a linear migration pathway but offers a context in which new migratory intentions arise as a consequence of changed social networks and policy interventions. Schuster (2005) documents the high mobility of migrants from Italy to other European countries, attributing this behaviour to the increasing likelihood of asylum claims being rejected.

Valenta, Zuparic-Iljic, and Vidovic (2015) conducted qualitative interviews with asylum seekers in Croatia. They find that most people end up as reluctant asylum seekers in Croatia because they were channelled there by smugglers and apprehended by the police. Nevertheless, many of them decide to continue their journey or make plans to migrate to other receiving countries in Europe, despite the constraints of the Schengen borders and the Dublin Regulations. Several studies have also demonstrated that irregular migrants often did not have an intended destination when leaving their country of origin (Collyer 2007; Grillo 2007; Papadopoulou-Kourkoula 2008; Schapendonk 2012; Düvell 2014; Kuschminder, de Bresser, and Siegel 2015).

The existing quantitative literature on displaced individuals has mainly used aggregate data (Carling 2007; Toshkov 2014). There are also examples of case studies from single refugee centres in Europe, but they focus on specific nationalities and are based on a limited number of interviews (Wijers 2011). An interesting study conducted by a team of researchers led by the Centre for Trust, Peace, and Social Relations at Coventry University and based on 500 interviews with migrants and over 100 interviews with stakeholders conducted in Italy, Greece, Malta, and Turkey reveals that the decision about where to go is made ad hoc along the route (Crawley et al. 2016). In most cases the choice is based on a number of intervening variables and on opportunities that arise during the journey, or that are communicated by agents or smugglers.

Focusing on Italy, a team of researchers at the Department of Economics of the University of Bari conducted field research in 2003 (commissioned by AGIMI-Otranto) named Survey on Illegal Migration into Italy (SIMI). Via a questionnaire the authors collected information on the main demographic and socioeconomic characteristics of a representative sample of 920 illegal immigrants spread in reception centres throughout

Italy. This survey describes the characteristics of migrants and shed light for the first time on migrants' motivations and future expectations (Chiuri et al. 2004, 2007, 2008).

2.2 The Italian context

Policies aimed at regulating immigration in Italy were not introduced until the late 1980s (Ambrosetti and Cela 2015). In the previous fifty years, immigration issues were regulated only by the T.u.l.p.s (Testo Unico delle leggi di pubblica sicurezza, Unique Text of public order laws) of 1931, which aimed to control the movements of foreigners in relation to public security and order. The topic of refugees and illegal migrants was mostly ignored in Italian legislation since the laws concentrated mainly on the regularization of migrant workers, assuming that Italy was affected by the pull of labour-demand migration. Only recently has Italy implemented some legal measures specifically targeting refugees and illegal migrants (Ambrosetti and Cela 2015).

In Italy there is a variety of centres that welcome, accommodate, identify, or detain foreign citizens who enter the country (Leo 2014). These centres have different legal statuses, depending on the purpose for which they were established. The regulations governing the creation and activities of these structures form a set of fragmented legal measures, contained in a series of laws and decrees. In the case of applicants for international protection, some of these centres are responsible for implementing the assessment procedures and ensuring that applicants meet the relevant requirements. Currently, the system of migrant shelters and detention centres in Italy consists of four different types of structure, all managed by different types of private entities (cooperatives, religious organizations, associations, etc.) under the supervision of the Italian government, which provides financial support.

There are currently three types of residence permits that provide international protection in Italy. The first certifies the "status of refugee". It is the most secure for migrants and is automatically renewed every five years, upon receipt of a simple renewal request form. The two other types – the "permit for subsidiary protection", which under Law 18 of 2014 is comparable to that of the "status of refugee" (the first was valid only for 3 years), and "humanitarian protection", which expires after one year – are subject to longer bureaucratic formalities. A problematic aspect of these types of permit is that after they expire there is no simple renewal form to fill in. Applicants must return to a police station, not necessarily at the place of landing – it may be anywhere on Italian soil – to apply for permit renewal. However, very often the police from other cities send the migrants back to the police station that issued the initial permit and request documentation that is difficult for a foreigner to obtain.

Due to its central position in the Mediterranean Sea, Italy is an important landing place for legal and illegal migrants. Italy has a long history as a receiving country for migrants, although the flows have increased dramatically, especially in recent years. In Table 1 we present aggregate data on migrant inflows to Italy from 2008 to 2017. Until 2008 the country received around 23,000 migrants per year on average, with a peak of 50,000 in 1999 due to the Albania and Kosovo conflict. In 2008 there was another upsurge of inflow to the country, with a peak of 37,000 migrants, attributable to the conflict and famine situations in Eritrea, Nigeria, and Somalia. In 2009 and 2010 the numbers declined, with 9,573 and 4,406 migrants, respectively, arriving by sea.⁷

The Arab Spring of 2011 caused an upturn in landings in Italy, with 63,000 arrivals on the Italian coast in 2011. The humanitarian crisis produced a sharp increase in 2013 and 2014, with over 170,000 arrivals in Italy by sea in 2014. Most African migrants started their journey to Europe from Libya. As instability increased in Libya, this gateway became the one most used by human traffickers. There was a temporary downturn in 2015 (153,842 landings) due to more migrants choosing the alternative Balkan route, followed by an upturn in 2016 (181,436) and a further downturn in 2017 (119,369).

Table 1: Number of migrants landing (by sea) in Italy 2008–2017

Year	Arrivals in Europe by Mediterranean Sea	Migrants landing in Italy	Share of total arrivals by sea in Italy	Asylum application	Asylum application examined
2008	59,000	36,951	62.6	31,723	23,175
2009	56,252	9,573	17.0	19,090	25,113
2010	9,654	4,406	45.6	12,121	14,042
2011	70,402	62,692	89.0	37,350	25,626
2012	22,439	13,267	59.1	17,352	29,969
2013	59,421	42,925	72.2	26,620	23,634
2014	216,054	170,100	78.7	64,886	36,330
2015	1,015,078	153,842	15.2	83,970	71,117
2016	362,753	181,436	50.0	123,600	91,102
2017	172,301	119,369	69.3	130,119	81,527

Source: For data in column 1, UNHCR (2018) <http://data2.unhcr.org/en/situations/mediterranean>; for data in columns 2, 4, and 5, ISMU's elaboration (2018) on data from the Ministry of Interior (Ministero dell'Interno, Dipartimento della Pubblica Sicurezza, Direzione Centrale dell'Immigrazione e della Polizia delle Frontiere) and Commissione nazionale per i diritto di Asilo; data in column 3 are author's elaboration of data in columns 1 and 2.

⁷ This decline may be linked to Italian government policies aimed at strongly countering illegal immigration by intensifying border controls and turning back boats at sea.

3. The migrant population in the Sant'Anna centre

3.1 Description of the data

Our empirical analysis is based on unique data collected from the Sant'Anna centre. This is a multipurpose CDA/CARA⁸ centre located in Crotona, one of the five provincial capitals of Calabria in the South of Italy. Crotona is a port city (over 63,000 inhabitants in January 2017) located on a promontory overlooking the Ionian Sea directly opposite the Greek coast. The centre is located in an old military airport, in front of the current airport and about 15 kilometres from the city centre. It has been operative since 1998 and has a declared capacity of 1,252 places, 256 inmates for the CARA and 956 for CDA. At the time our data refers to it was managed by a religious brotherhood (Misericordia) under the supervision of the Italian government.⁹ Migrant arrivals occur through either direct landings on the Calabrian coast near the centre or through inflows from the island of Lampedusa and reception centres in Sicily. At the end of 2014 the Sant'Anna refugees and asylum seekers' centre was one of the largest migrant reception centres in Europe.¹⁰

Upon arrival in the centre, migrants go to the police headquarters where they receive a card with an identification number. They are assigned accommodation and talk to social workers who identify and support those who are in need of assistance, such as victims of trafficking or torture, unaccompanied minors, pregnant women, and women with children. Migrants also receive legal information along with a description of the various services in the centre (legal assistance, mediation activities, leisure, Italian courses and so on). The space per capita in the centre is below the standard prescribed for emergency refugee camps.¹¹ Sant'Anna is not a detention centre, so migrants are free to leave the centre whenever they want between 8a.m. and 8p.m. To our knowledge, there are no specific or differentiated controls by origin country and all migrants receive the same attention.

⁸ CDAs (Centri di Accoglienza, Centres of Hospitality) are centres where newly arrived migrants, regardless of their legal status, are transferred to receive first aid and be registered. Migrants are issued with a decision which legitimates their presence on the Italian soil or with an order for their expulsion from the country. CARAs (Centri di Accoglienza per richiedenti asilo, Reception Centres for Asylum Seekers) are centres where asylum seekers without identity documents or who refuse to undergo border controls are sent in order to be identified and to apply for recognition of their refugee status.

⁹ It is currently managed by Consorzio Opere Misericordie.

¹⁰ It hosted 13% of total migrants residing in the 13 reception centres (CARA/CDA and CPSA) operating in Italy, with 1,236 migrants out of a total of 9,592 present in the structures throughout the country (authors' calculation using data from Italian Ministry of Interior 2015).

¹¹ According to the international standards, in the early stages of a humanitarian emergency, refugee camps must have at least one toilet for every 20 people, the water points should be at no more than 150 meters away from the accommodation, and there should be at least 3.5 m² of space per person in the rooms.

Our data corresponds to the exhaustive list of migrant entries to the Sant'Anna centre between 1 January 2008 and 31 December 2014. Unfortunately we do not have data on the most recent years. After obtaining special permission from the Ministry of Interior to collect and use data from the centre for research purposes, we obtained the administrative registers filled in by the officers working in the centre. Our dataset is different from a census since it does not provide exhaustive information on the population living in the centre at a given date. Instead, it focuses on entries to and exits from the centre over a period of seven years. For each migrant we have the following information over the period: gender, date of birth, origin country, place of origin (if they come directly from the sea, from another reception centre, etc.), date of entry, date of exit (if any), and reason for departure.¹²

The record of exit data and reasons for departure is extremely precise. There are three possible reasons for departure: transfer to another centre, obtaining any kind of protection (in this case the type is specified: humanitarian protection, political asylum, subsidiary protection, temporary residence permit), and escape. Since migrants hosted in the centre are free to leave the centre during the day but are obliged to come back every evening, those who do not come back for several days are considered as 'escaped' and recorded as having voluntarily departed.¹³ Although we have few individual characteristics (there is no information on education or social status in the origin country) we can describe accurately the trajectories of migrants who spent time in the centre, from entry to exit, at least for those who have left.

Overall, the data covers 26,666 entries to the centre: 5,661 in 2008, 2,621 in 2009, 2,451 in 2010, 6,555 in 2011, 1,701 in 2012, 3,250 in 2013, and 4,427 in 2014.¹⁴ In Table 2 we provide a description of the gender, age, and nationality of migrants who entered the Sant'Anna centre between 2008 and 2014. In our data 38.9% of migrants come from sub-Saharan Africa and 17.2% from Northern Africa. The main contributing countries from Africa are Tunisia (14.2%), Nigeria (8.0%), Eritrea (7.8%), and Somalia (7.4%). Migrants from Asian and Middle East countries mainly come from Afghanistan (15.0%), Pakistan (9.5%), Iraq (6.1%), and Syria (5.9%). The overall proportion of male migrants is 88.7%, with an average age of 25.1 years. Almost all Asian migrants are male, but women account for 20% of migrants from Palestine and 22.9% from

¹² Data on date of birth and country of origin are those reported in registers, but we cannot exclude the presence of measurement errors if migrants provide incorrect information on their age or their country of origin.

¹³ When we use the term 'escaped' we refer to those who decided to leave the centre voluntarily, whether or not they escaped before knowing the decision of the commission about their asylum application or even before applying for protection. This is often the case when the voluntary departure takes place in the first few days after arrival.

¹⁴ The original sample includes 26,675 entries. We exclude two observations with missing information on date of birth and seven observations with incoherent information (the date of entry was posterior to the reported date of exit).

Syria. Migrants aged below 16 most frequently come from Syria (18.8%), Palestine (15.8%), and Egypt (13%). The composition of migrants by country of origin suggests that landings in Italy mainly involve people fleeing conflict and persecution (Bonifazi 2017).

Table 2: Descriptive statistics of entries to the Sant'Anna centre

Origin country	Number of migrants	Proportion (in %)	Proportion of men (in %)	Age (mean)	Proportion of individuals below 16 (in %)
Asia	7,131	26.7	96.6	24.9	5.3
Afghanistan	4,008	15.0	94.6	22.7	8.5
Pakistan	2,546	9.5	99.5	28.1	0.7
Bangladesh	474	1.8	99.6	25.5	0.3
Middle East	4,551	17.1	85.0	26.0	12.2
Iraq	1,629	6.1	91.5	25.7	7.2
Syria	1,565	5.9	77.1	26.0	18.8
Palestine	641	2.4	80.0	26.4	15.8
Turkey	393	1.5	94.9	26.1	6.4
Iran	254	1.0	91.7	27.4	2.8
Sub-Saharan Africa	10,361	38.9	81.0	24.7	2.9
Nigeria	2,130	8.0	64.3	24.2	2.7
Eritrea	2,087	7.8	79.1	24.5	6.5
Somalia	1,963	7.4	77.7	24.1	1.8
Ivory Coast	883	3.3	91.5	27.5	0.5
Mali	594	2.2	99.7	24.7	0.8
Ghana	547	2.1	96.0	25.8	0.8
Gambia	537	2.0	99.4	22.5	1.0
Senegal	323	1.2	99.4	23.9	0.5
Ethiopia	280	1.1	54.3	23.7	6.5
Sudan	231	0.9	88.3	25.8	1.4
Northern Africa	4,581	17.2	97.8	25.7	1.4
Tunisia	3,787	14.2	99.2	26.1	0.1
Egypt	423	1.6	93.6	21.4	13.0
Morocco	314	1.2	87.3	27.3	1.3
All	26,666	100.0	88.7	25.1	5.0

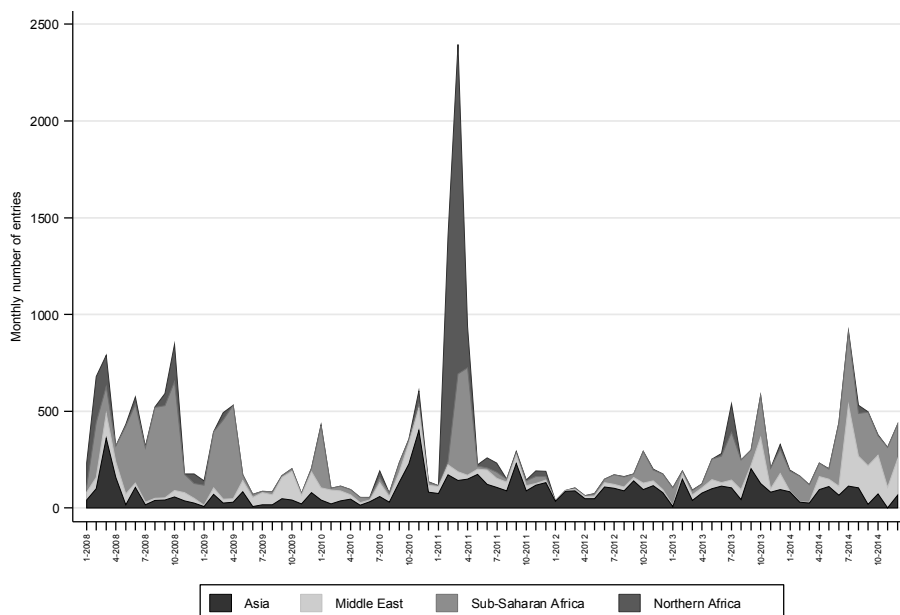
Source: Data from Sant'Anna centre 2008–2014, authors' calculations.

3.2 The dynamics of entry to the Sant'Anna centre

Figure 1 presents the monthly number of entries to the Sant'Anna centre and shows large variation in inflows. Between 2008 and 2014 the average number of entries per month is 317, with a standard deviation of 331. The periods with the lowest inflow are summer 2009, spring 2010, and the first semester of 2012. Monthly inflows of migrants

range between 37 entries (January 2012) and 2,395 entries (March 2011), with a median value of 204. It is expected that the time profile of inflows is influenced both by political crises and wars that force people to leave their origin country, and by the availability of places in the centre, which determines whether local authorities can host new migrants.

Figure 1: Monthly number of entries to Sant'Anna centre



Source: Data from Sant'Anna centre 2008–2014, authors' calculations.

The peak in March 2011 is a very good illustration of the role played by the political context. In January a total of 116 migrants entered the Sant'Anna centre. The number then rose very sharply, from 1,406 in February to 2,396 in March, before falling to 937 in April and 222 in May. The peak is essentially explained by a huge increase in the number of migrants coming from Northern Africa due to the Arab Spring, and also to a lesser extent from sub-Saharan Africa in March and April. Another peak concerns migrants from Tunisia in 2011: There were 1,167 entries from Tunisia in February 2011 and 1,701 in March, in contrast to a total of just 633 between 2008 and 2010. These inflows are connected to the Jasmine Revolution, which began in mid-December 2010. A state of emergency was declared after the departure of president Ben Ali on January

14, 2011, but violence and looting continued for a couple of weeks. Starting in mid-February 2011, about 5,000 Tunisian migrants landed on the island of Lampedusa.¹⁵

A less pronounced peak is observed for migrants from Syria between 2013 and 2014. This is attributable to the increase in the number of conflicts in this country, which doubled from three in 2011 to six in 2012 and reached seven in 2013 and 2014, when the conflict reached the highest level of gravity and intensity (Conflict Barometer 2013, 2014).¹⁶ The Syrian civil war, with approximately 125,000 deaths since its start in 2011, is the conflict with by far the most casualties during the period studied. It displaced more than six million people, causing an increase in the numbers seeking international protection. Over the same period Syria was also affected by conflict with the Islamic State in Iraq and Syria. The battle between Syria and Israel, permanently engaged in a border crisis over the contested Golan Heights, also flared up again, with exchanges of fire between militants on Syrian territory and Israeli Defence Forces. The effect of this last conflict is also evident in the inflow of migrants from Palestine. Additionally, the peak of migrants from Palestine in 2014 can be linked to the increased intensity of the historical conflict between Hamas and the Israeli Government since 1988.

Our dataset includes the Italian city from which migrants came, which are generally places near to the landing area (this information is available for 78.4% of migrants). The most frequent cities are Crotona (29.8%), Lampedusa (15.2%), Agrigento (7.4%), and Siracusa (2.8%). Migrants coming from Lampedusa, Agrigento, Siracusa, and other cities are those transferred from other centres. Location often depends on migrants' origin country. Most migrants entering Italy through Crotona, on the Eastern coast of Calabria opposite Greece, come from Asia or the Middle East. The four most frequent origin countries of migrants arriving in Crotona are Afghanistan (24.1%), Pakistan (21.5%), Iraq (11.7%), and Syria (7.5%). Conversely, the Island of Lampedusa, located in the middle of the Mediterranean Sea (between Malta and Tunisia), is the main entry point for migrants from Tunisia (65.7%), Somalia (10.4%), and Nigeria (7.9%). Finally, Agrigento and Siracusa in Sicily mainly attract migrants from sub-Saharan Africa (28.3% from Eritrea and 19.4% from Somalia).

¹⁵ This forced Italy to declare a state of emergency on Lampedusa and to appeal to other European Union members for help. There were suspicions that some of these arrivals were former supporters of the ousted regime of President Ben Ali.

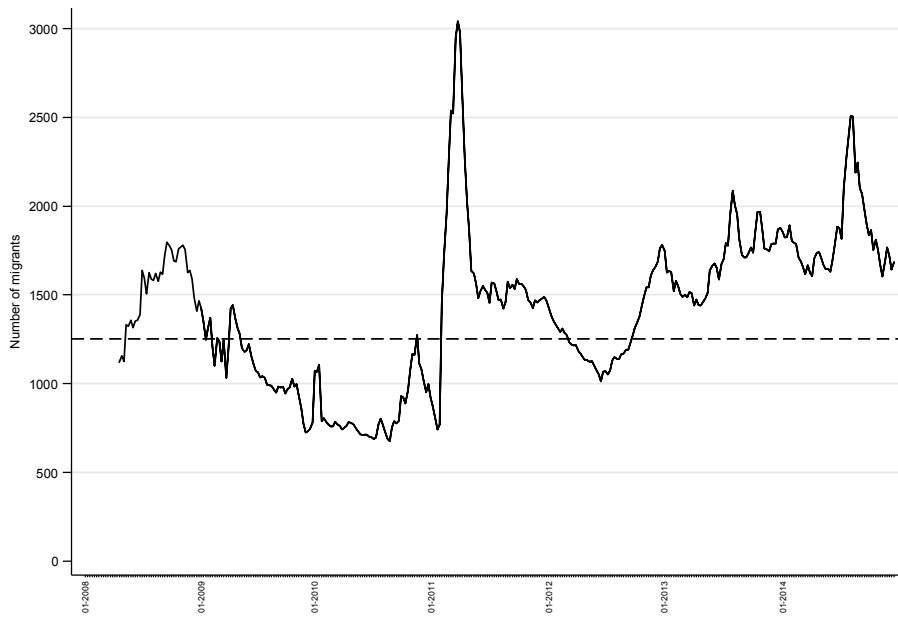
¹⁶ The Conflict Barometers, published since 1992 by The Heidelberg Institute for International Conflict Research (HIK), provide an annual analysis of global conflict events. See <http://www.hiik.de/en/index.html>.

3.3 From entries to population estimates

Since our database is not a census we do not know the exact population of migrants living in the camp on a given date. Let $t = 1, \dots, T$ be the set of dates in our sample, t corresponding to a day. For a migrant i , the information that we have is the entry date \underline{t} and the departure date \bar{t} with $\bar{t} \geq \underline{t}$ (or T if the migrant has not left the centre at the end of the period). Let $\mathbb{I}_{i,t}$ be a dummy variable such that $\mathbb{I}_{i,t} = 1$ when the migrant is in the centre at date t and $\mathbb{I}_{i,t} = 0$ otherwise. An approximation of the population inside the camp is thus $P_t = \sum_i \mathbb{I}_{i,t}$. The drawback of this measure concerns the beginning of the period since we have no information on migrants having registered in the centre before $t = 1$, so that P_t underestimates the true population \tilde{P}_t for low values of t . However, if there is no migrant permanently residing in the centre, then P_t will provide a good approximation of \tilde{P}_t , especially as long as t increases.

Starting from July 2008, we describe in Figure 2 the number of migrants living in the centre calculated as $P_t = \sum_i \mathbb{I}_{i,t}$ on a weekly basis. The number of migrants reaches a peak exceeding 1,600 by the end of 2008 (October, November). We also plot (dashed line) the maximum capacity of the Sant'Anna centre ($N = 1,252$). Although we underestimate the exact population living in the camp, our results highlight the overcrowding of the centre since the approximate population exceeded the maximum capacity from August 2008 to the end of 2008. The population then tends to decrease up to January 2011. During that period there were on average more exits than entries to the Sant'Anna centre. There is a second peak in the number of residents in mid-March 2011 due to the political crisis in Tunisia.¹⁷ After reaching a low point of around 1,000 migrants by mid-2012, the upward trend resumed. The number of residents in the centre remained above 1,400 persons after the fourth semester of 2012. In 2014 the average weekly number of migrants was 1,839, 8.7 percentage points higher than in 2013 (43.5 points higher than in 2012).

¹⁷ The centre was severely overcrowded (more than 2,500 migrants) during the 6 weeks from the 10th to the 15th week of 2011.

Figure 2: Weekly number of migrants entering the Sant'Anna centre

Source: Data from Sant'Anna centre 2008–2014, authors' calculations.

Note: We start in July 2008 since we only have information on migrants entering the centre and not on those already in the centre at the beginning of the period.

Knowing the maximum capacity of the centre ($N = 1,252$), we define an indicator of overcrowding which is the number of weeks when the total population exceeds maximum capacity. Between 2009 and 2014 we find that 59.8% of weeks were characterized by an excess of migrants in the Sant'Anna centre.¹⁸ The migrant population was 20% larger than the maximum capacity in 43.1% of weeks and 50% larger in 9.5% of weeks. The fact that periods when the centre was extremely overcrowded remain limited supports two different interpretations. First, management of inflows to the centre may have led to some smoothing of migrant peaks. When square meters available per person become scarce in the centre, the local authorities have to arrange transfers of migrants to other camps. Second, migrants may have found the overcrowding very difficult to endure and chose to leave the camp on their own initiative.

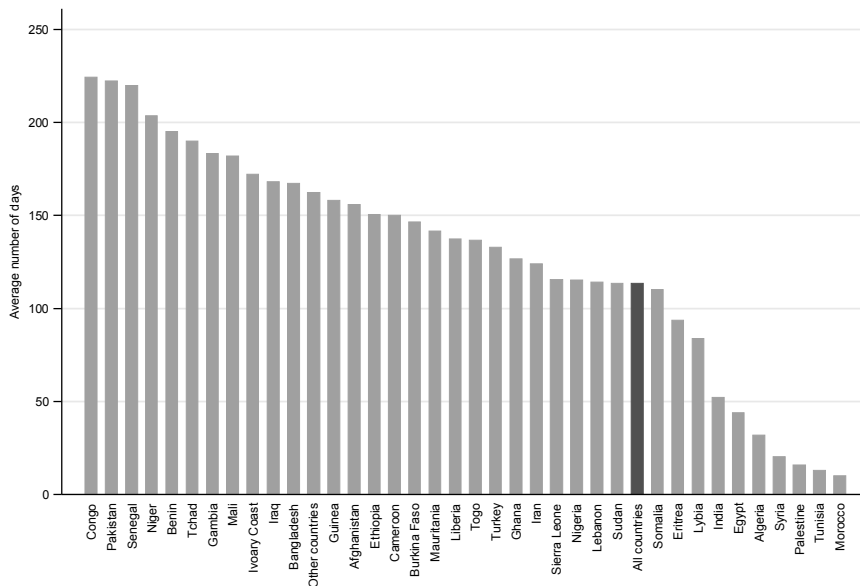
¹⁸ We exclude 2008 from the calculation since our approximation of the population living in the centre is poor in the first semester of that year due to left censoring.

4. Outflows of migrants from the Sant'Anna centre

4.1 Length of stay in the centre

In Figure 3 we present the average number of days (defined as date of exit minus date of entry) spent by migrants in the centre by country of origin, countries being sorted by decreasing duration.¹⁹ The average duration in the centre is nearly four months (113.2 days) with a standard deviation of 127.1 days. The median length of stay is 58 days, but there are large differences in the length of stay: 25% of migrants spent at most 8 days and 25% spent more than 192 days in the centre.

Figure 3: Average length of stay in Sant'Anna centre, by origin country



Source: Data from Sant'Anna centre 2008–2014, authors' calculations.

Note: Countries are sorted by decreasing duration, migrants in the centre at the end of December 2014 (N = 1,357) being excluded.

Migrants from sub-Saharan African countries stay in the centre the longest, with eight countries in the top 10. In particular, the average duration is above 200 days for migrants from Congo, Senegal, and Niger, and exceeds 150 days for migrants from

¹⁹ We excluded the subsample of migrants residing in the centre at the end of December 2014 (N = 1,357). These observations are right-censored since the total length of stay remains unknown.

Benin, Gambia, Mali, Ivory Coast, and Guinea. It is also above 150 days for migrants from Pakistan, Bangladesh, Chad, Iraq, and Afghanistan. Conversely, the shortest durations are observed for migrants from two different regions: the Maghreb, with Morocco (10.1 days), Tunisia (13.0 days), and Algeria (31.9 days); and Middle Eastern countries affected by political crises and wars: Palestine (15.8 days), Syria (20.2 days), and Egypt (44.1 days).

We further investigate differences in the timing of migrants' exit decisions by calculating Kaplan-Meier estimators of the survival function for the main countries of origin. Our results highlight substantial differences between groups of countries.²⁰ More than 80% of migrants from North Africa (Tunisia, Egypt, Morocco) left the centre within 30 days of entering. For migrants from sub-Saharan Africa (Nigeria, Eritrea, Somalia) the percentage leaving within 30 days is at most 40%, and only 30% for migrants from Asia (Afghanistan, Pakistan, Bangladesh). The contrast is greater within the group of Middle Eastern countries. Less than 10% of migrants from Syria and Palestine were still in the centre two months after entry, but the survival function estimates for Iraqi migrants look much more like those found for Asian migrants.

4.2 The pattern of reasons for departure

Migrants may leave the centre either voluntarily or involuntarily and for very different reasons. First, the authorities may transfer migrants arriving in an overcrowded centre to other centres elsewhere in Italy due to space constraints. Second, migrants may have to leave the centre if their asylum application is refused or they do not obtain refugee status. Third, migrants may be expelled from Italy if they come from a country from which migration is perceived as illegal. Fourth, migrants may not be in the right place. In particular, Italy serves as a gateway for certain migrants coming from Africa or the Middle East and wishing to go to another country in Europe (Schuster 2005).²¹ In that case, migrants will be tempted to leave the centre on their own initiative in order to avoid having to stay in Italy. Clearly, the reasons for departure affect time spent in the centre.

In Table 3 we present the various reasons for departure recorded in our data, by country of origin. The most frequent reason is departure on the migrant's own initiative. This concerns more than 4 migrants in 10 (43.6%). By decreasing order of importance, the other reasons are granting of subsidiary protection (16.1%), transfer to another

²⁰ Migrants still living in the centre at the end of the period are now taken into account and treated as censored observations. These results are available upon request.

²¹ In a study of Croatia, Valenta, Zuparic-Iljic, and Vidovic (2015) conclude that the country is not a preferred destination for asylum seekers.

centre (12.5%), temporary residence permit (9.9%), humanitarian protection (7.0%), and political asylum (6.2%).²² Expulsions from Italy are very infrequent (2.6%).²³ There are substantial differences by country of origin: 73.7% of migrants from North Africa and 63.8% from the Middle East decide to leave the centre on their own initiative, but only half as many migrants from Asia (31.8%) and sub-Saharan Africa (27.7%).

Table 3: Reasons for departure from Sant'Anna centre, by country of origin

Country of origin	Voluntary departure	Subsidiary protection by authorities	Transferred residence permit	Temporary residence permit	Humanitarian Protection	Political asylum	Expulsion	Other reasons	Number of observations
Asia	31.8	24.4	14.1	11.9	10.8	4.7	1.4	0.8	6,735
Afghanistan	32.7	36.0	15.0	0.8	9.0	3.7	2.4	0.3	3,965
Pakistan	25.1	9.3	13.9	29.5	14.2	6.7	0.0	1.1	2,288
Bangladesh	51.6	1.6	10.0	21.8	9.2	1.8	0.0	3.9	380
Middle East	63.8	14.3	7.0	1.3	4.0	8.3	0.9	0.4	4,532
Iraq	35.0	33.8	10.0	0.7	4.9	15.0	0.4	0.2	1,615
Syria	94.2	1.1	1.0	0.3	0.1	2.8	0.5	0.0	1,562
Palestine	83.9	0.9	10.2	0.0	0.6	2.0	2.3	0.0	640
Turkey	40.5	13.2	8.7	8.9	20.4	4.8	0.3	3.3	393
Iran	51.4	8.3	10.3	1.6	4.7	20.6	3.2	0.0	253
Sub-Saharan Africa	27.7	18.7	16.1	17.0	8.6	8.8	0.1	3.0	9,426
Nigeria	23.7	1.8	19.8	37.9	9.6	1.0	0.1	6.2	1,982
Eritrea	51.1	17.2	13.0	0.3	1.2	16.8	0.0	0.3	2,083
Somalia	29.0	48.5	11.0	0.3	1.7	9.5	0.1	0.1	1,960
Ivory Coast	5.2	28.3	14.2	13.0	28.2	8.6	0.0	2.5	802
Mali	12.0	9.9	35.4	23.2	17.7	0.3	0.0	1.6	384
Ghana	12.6	2.9	25.5	43.0	4.3	0.8	0.2	10.6	509
Gambia	21.0	2.4	21.0	35.9	12.1	5.9	0.0	1.7	290
Senegal	9.7	5.8	18.4	33.0	26.7	4.4	0.0	1.9	206
Ethiopia	35.6	16.5	5.8	2.2	19.8	19.4	0.0	0.7	278
Sudan	52.7	6.8	7.2	4.1	2.3	24.8	0.5	1.8	222
Northern Africa	73.7	0.2	7.6	0.8	0.6	1.0	11.2	5.0	4,577
Tunisia	83.4	0.1	2.2	0.3	0.2	0.1	7.7	6.0	3,786
Egypt	26.2	0.2	54.4	5.2	4.7	8.0	1.2	0.0	423
Morocco	26.0	1.3	10.0	0.6	1.0	0.0	60.8	0.3	311
All	43.6	16.1	12.5	9.9	7.0	6.2	2.6	2.3	25,309

Source: Data from Sant'Anna centre 2008–2014, authors' calculations.

Note: Migrants in the centre at the end of December 2014 (N = 1,357) are excluded.

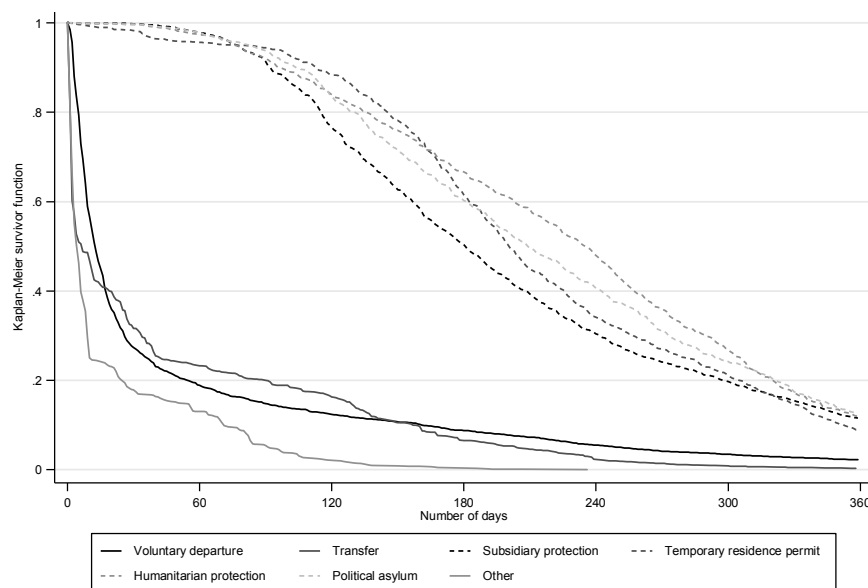
²² The temporary residence permit is issued to those illegal migrants who have to apply for international protection pending a decision about their application.

²³ There is also a residual category of 2.3% of refugees. It includes other reasons such as refusal (those who did not obtain any kind of international protection), electronic residence permit (which may be issued for the purpose of work to those who have obtained refugee status or subsidiary or humanitarian protection), or simulated landing (those who falsely declared they reached Italy by boat when they were already in Italian territory).

There are large differences in reasons for departure, even among countries from the same region. In particular, only one in four migrants from Egypt and Morocco choose to leave the centre on their own, versus 83.4% of Tunisians. The same pattern is found for migrants from the Middle East. Migrants coming from Syria and to a lesser extent Palestine appear to not intend to stay permanently in Calabria, since 94.2% of the former and 83.9% of the latter chose to leave the centre voluntarily. The exit rate for transfer to another centre ranges between 10% and 20% for most countries, a noticeable exception being the case of Egyptians, presumably due to the suddenness of inflows (54.4%). The exit rate for humanitarian reasons is more frequent among migrants from the Ivory Coast (28.2%), Senegal (26.7%), Sudan (24.8%), and Turkey (20.4%). Finally, exit due to political asylum mostly concerns migrants from Sudan (24.8%), Iran (20.6%), and Ethiopia (19.4%).

We expect the various reasons for departure to correlate with the number of days spent in the centre. Migrants who intend to join a third country are likely to leave the centre fairly quickly to reach their final destination. Conversely, those expecting to be granted international protection in Italy will probably have to wait for a long time before receiving an answer and will stay in the centre until they receive an official decision. In Figure 4 we present the Kaplan–Meier survival estimates obtained for the different reasons for departure. The four reasons related to obtaining international protection (refugee status, humanitarian protection, subsidiary protection, temporary residence permit) are characterized by very similar survival functions. Four months after entry, less than 20% of migrants in these categories had left the camp. Conversely, the exit time is considerably shorter for the other reasons for departure. More than 80% of migrants who left on their own initiative were no longer in the camp after two months.

Figure 4: Kaplan–Meier survival function estimates of exits from Sant’Anna centre, by reason for departure



Source: Data from Sant’Anna centre 2008–2014, authors’ calculations.

Note: Migrants in the centre at the end of December 2014 ($N = 1,357$) are excluded. The other reason includes expulsions.

4.3 Estimates from a competing risk model

Individual characteristics are likely to influence the type of exit from the centre. When granting refugee status, local authorities are likely to be more sensitive to the situation of more vulnerable people, in particular children or women with young children. Conversely, young adults in their prime may be more tempted to go where they will be able to start a new life and find full-time employment. We use a survival analysis framework to assess the role of migrants’ characteristics in the various risks of leaving the centre. We group together all causes of departure related to obtaining a form of international protection, and consider the four following causes (c): voluntary exit ($c = 1$), transfer to another centre ($c = 2$), international protection ($c = 3$), other reasons ($c = 4$). Since each migrant may be affected by one of these mutually exclusive events, we use a competing risk model (Fine and Gray 1999).

We rely on the flexible parametric survival model originally proposed by Royston and Parmar (2002). The cause-specific hazard for each reason for departure is estimated

using a competing risk setting. Assuming proportional hazards, the cause-specific hazard for a migrant with observable characteristics X depends on a baseline hazard which is specific to each cause c and cause-specific parameters β_c . The cumulative hazard function is modelled as a natural cubic spline function of the logarithm of time. Next, the cause-specific hazards are used to determine the cumulative incidence function associated with each cause. This function will give the proportion of migrants endowed with characteristics X who have left the centre at a given time due to a specific cause c , provided that they may have left the centre for another reason.²⁴

We estimate the survival model for the four reasons for departure simultaneously. The control variables are gender, age group, and country of origin. Results from the flexible model for gender and age are reported in Table 4, where we present hazard ratios obtained from the proportional hazard estimates. The risk of either voluntary departure from the centre or obtaining international protection is 46%–49% higher for women than for men. Conversely, women have a much lower risk of leaving the centre for another reason. Children below 16 are characterized by a higher risk of voluntary departure, transfer, or international protection. The higher risk of being transferred may be related to the fact that when the children are unaccompanied the authorities may decide to move them to a special facility for minors. At the same time, they obtain international protection more easily because foreign minors, even if they have entered Italy irregularly, hold all the rights enshrined in the New York Convention on the Rights of the Child of 1989, ratified by Italy (Law n. 176/91).

The various coefficients associated with origin countries show substantial differences in exit risk by reason. Voluntary departures are more likely among migrants from Palestine, Tunisia, Syria, and Morocco. Conversely, migrants from Ivory Coast, Senegal, Burkina Faso, Mali, Togo, and Guinea are less concerned with voluntary departure. Transfers are less likely among migrants from Syria, Tunisia, and Ethiopia, but the reverse pattern is found for migrants from Egypt and Morocco. The risk of exit because of international protection is much lower for migrants from Bangladesh, Mali, Gambia, Pakistan, and Senegal. Morocco is the origin country with the highest risk of receiving international protection status, followed by many sub-Saharan countries (Somalia, Togo, Burkina Faso, Ghana, Ivory Coast, Nigeria, Eritrea). Finally, the risk of exit for another reason is much higher for migrants from Morocco and Tunisia.

²⁴ The cumulative incidence function depends not only on the cause-specific hazard for cause c , but also on the cause-specific hazards for all other competing causes (Hinchliffe and Lambert 2013a, 2013b).

Table 4: Flexible parametric survival hazard ratios for competing risks of exit from Sant'Anna centre

Variable	Voluntary departure		Transferred by authorities		International protection		Other reasons	
	hazard	t-value	hazard	t-value	hazard	t-value	hazard	t-value
Female	1.463***	(12.31)	1.029	(0.46)	1.489***	(10.32)	0.595***	(-3.98)
Age								
Less than 16	ref		ref		ref		ref	
16–24	0.754***	(-6.62)	0.787***	(-2.86)	0.505***	(-10.13)	0.858	(-0.67)
25–34	0.630***	(-10.74)	0.603***	(-5.84)	0.496***	(-10.42)	0.812	(-0.91)
35 and more	0.660***	(-8.60)	0.561***	(-5.56)	0.512***	(-9.13)	0.915	(-0.37)
Origin: Afghanistan	5.534***	(4.51)	0.526***	(-3.58)	0.563***	(-5.17)	0.397***	(-2.66)
Country								
Tunisia	57.412***	(10.70)	0.172***	(-8.55)	0.604**	(-2.21)	5.068***	(4.80)
Pakistan	3.224***	(3.08)	0.408***	(-4.90)	0.388***	(-8.44)	0.126***	(-5.35)
Nigeria	3.824***	(3.52)	0.721*	(-1.79)	0.896	(-0.97)	0.997	(-0.01)
Eritrea	11.426***	(6.42)	0.601***	(-2.75)	0.856	(-1.35)	0.066***	(-5.39)
Somalia	5.778***	(4.61)	0.448***	(-4.28)	1.479***	(3.47)	0.026***	(-5.47)
Iraq	5.490***	(4.48)	0.346***	(-5.55)	0.628***	(-4.09)	0.083***	(-5.42)
Syria	56.155***	(10.62)	0.074***	(-8.34)	0.830	(-1.14)	0.202***	(-3.27)
Ivory Coast	0.772	(-0.63)	0.471***	(-3.81)	0.900	(-0.91)	0.307***	(-2.94)
Palestine	77.529***	(11.43)	0.943	(-0.27)	0.752	(-1.21)	1.181	(0.39)
Mali	1.234	(0.52)	0.784	(-1.26)	0.334***	(-8.42)	0.135***	(-3.79)
Ghana	2.332**	(2.13)	0.975	(-0.13)	0.938	(-0.51)	1.567	(1.25)
Gambia	1.827	(1.51)	0.378***	(-4.49)	0.352***	(-7.80)	0.126***	(-3.72)
Bangladesh	6.847***	(5.00)	0.285***	(-5.28)	0.297***	(-8.71)	0.428**	(-2.01)
Egypt	11.340***	(6.23)	3.912***	(7.27)	0.705**	(-2.21)	0.418	(-1.56)
Turkey	7.780***	(5.31)	0.341***	(-4.40)	0.758**	(-2.11)	0.543	(-1.43)
Senegal	0.939	(-0.14)	0.383***	(-4.03)	0.425***	(-6.24)	0.161***	(-3.04)
Morocco	28.993***	(8.54)	1.045	(0.18)	1.708	(1.52)	36.488***	(10.45)
Ethiopia	5.004***	(4.11)	0.202***	(-5.22)	0.690***	(-2.74)	0.120***	(-2.71)
Iran	10.636***	(6.09)	0.434***	(-3.18)	0.539***	(-4.08)	0.532	(-1.30)
Sudan	10.779***	(6.11)	0.304***	(-3.91)	0.699**	(-2.32)	0.386*	(-1.71)
Guinea	1.511	(0.90)	0.405***	(-3.14)	0.666***	(-2.66)	0.984	(-0.04)
Togo	1.317	(0.56)	0.638*	(-1.66)	1.330*	(1.90)	1.134	(0.28)
Burkina Faso	ref		ref		ref		ref	
Number of observations	26,057							
Log likelihood	-54310.1							

Source: Data from Sant'Anna centre 2008–2014, authors' calculations.

Note: Estimated hazard ratios from a flexible parametric survival model for competing risk. Significance levels are 1% (***), 5% (**), and 10% (*). The model includes a set of origin-country dummies for each cause (not reported). The sample is restricted to countries with at least 100 migrants.

We present in Figure 5 the stacked cumulative incidence functions obtained for migrants' main origin countries. In so doing we can compare both the total probability of exit over time and the specific pattern of exit associated to each cause. Calculations

are made for male migrants aged between 16 and 24, predictions being restricted to a maximum follow-up time of one year.²⁵ For migrants from Afghanistan the probability of exit is 0.277 one month after entry. These quick exits are essentially explained by voluntary decisions to leave the centre (0.169) and to a lesser extent by transfer decisions from local authorities (0.091). At six months the exit probability is 0.594, but the distribution of reasons is different. Voluntary decisions and imposed transfers represent around two-thirds of all causes of exit at that time $[(0.277+0.128)/0.594 = 0.681]$. The exit probability associated with international protection, which was almost negligible at one month, is now 0.165. Afterwards, the refugee cause-specific probability continues to grow, reaching 0.400 twelve months after entry.

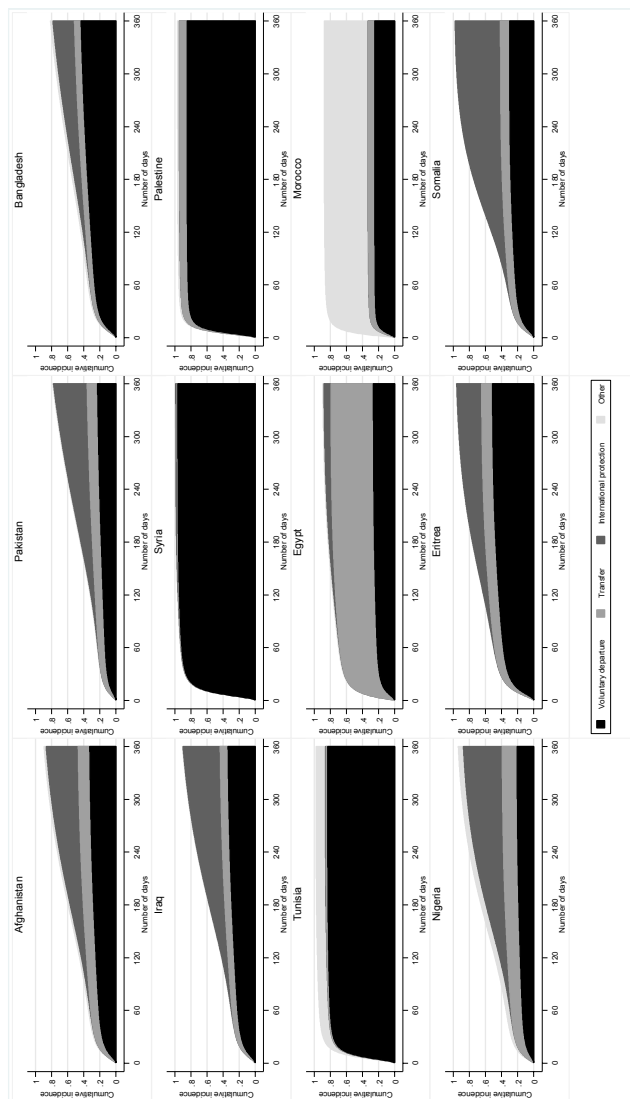
For all countries, the incidence functions associated with transfers to other centres and voluntary exits quickly become horizontal. Clearly, transfers relate to the capacity of the centre. If migrants cannot be accommodated in decent conditions they will presumably be redirected to other centres. Also, it seems obvious that migrants who have fled their country of origin and do not wish to stay in Italy (or at least in Calabria) will seek to leave the camp shortly after their arrival. Migrants who have experienced harsh conditions reaching Italy will take days or weeks to recover the necessary strength for the remainder of the journey to their intended destination. Lastly, the profile of the cause related to international protection starts increasing after 120 days and continues to increase until one year after entry. This is closely related to the time local authorities require to examine refugee claims.

Comparison of the country-specific incidence functions sheds light on substantial differences not only between selected countries but also within countries from the same region of origin. As shown in Figure 5, migrants from Syria and Palestine do not want to stay in the centre. One month after they entered the camp, 86% of Syrian migrants (81.2% of Palestinians) had left the centre of their own accord and 91.5% (83.6%) had left after two months. Conversely, only 17.5% of migrants from Iraq, a country in the same region, had left within one month and only 21.7% within two months.²⁶ The various incidence functions are more similar for migrants from Asia (Afghanistan, Pakistan, Bangladesh): The exit rate from voluntary departure ranges between 15% and 30% two months after entry. For migrants from North Africa the sudden arrivals in February and March 2011 led to a massive number of voluntary exits for Tunisians (about 80% two months after entry), while more than 50% of Egyptians left with refugee status. Finally, the proportion of migrants from sub-Saharan Africa who left of their own accord is substantially higher for Eritreans than for Nigerians and Somalis.

²⁵ Each month is assumed to comprise 30 days, so that the duration of the year is approximated by $12 \times 30 = 360$ days.

²⁶ One year after entry the proportion of residents having left the centre with refugee status was around 46.5% for Iraqis, but only 1.8% for Syrians and 0.3% for Palestinians.

Figure 5: Stacked cumulative incidence of the various reasons for departure from Sant’Anna centre, by origin country



Source: Data from Sant’Anna centre 2008–2014, authors’ calculations.

Note: The cumulative incidence functions are calculated for male migrants aged between 16 and 24.

5. Concluding comments

In recent years the issue of displaced persons has increasingly attracted the attention of the media and policymakers in Europe. However, to date little is known about the trajectories of migrants immediately after arrival. The aim of this paper was to provide an empirical analysis of the trajectories of migrants after their entry into a refugee centre. For that purpose we used administrative data collected between 2008 and 2014 in a migrant centre located in the South of Italy. Although there are very few individual characteristics, we are able to provide an accurate description of the trajectories of migrants passing through the centre, with information on time of entry, time of exit, and reasons for exit.

We find large variation in migrant inflows over the period, with peaks associated with political crises and wars in certain countries. The Sant'Anna centre is often overcrowded: Between 2009 and 2014 there was overcrowding for 60% of the time. There are substantial differences between country groups both in the timing and reason for departure. The risk of both voluntary departure from the centre and obtaining international protection is higher for women than for men and children below 16, but the most important finding is that migrants from Syria and Palestine and to a lesser extent North Africa leave the centre very quickly. This suggests that Calabria (and presumably Italy) is not the intended location of migrants from these origin countries. There is also substantial variation by migrants' characteristics, both in the time spent in the centre and in the reason for departure. Overall, our findings confirm results from previous studies that have highlighted that the journeys and experiences of refugees and migrants are shaped by nationality, economic status and education, gender, ethnicity, and age (Crawley et al. 2016).

As we only have access to data from one refugee centre, our main findings cannot be generalized to elsewhere in Italy. Due to its location in the South, the entry and exit dynamics of this reception centre may differ from migrant inflows and outflows in the rest of Italy. There may be several reasons for this. First, when the reception centre has reached its maximum capacity, entries might differ from general migration trends to Italy. Second, if there are incentives to cluster immigrants from the same origin countries in the same reception centre, then the dynamics of entry and exit may vary between centres. As it stands, our contribution has to be seen as a case study offering some material results on the undocumented trajectories of migrants in a country with large migratory flows. The next step would be to extend such investigation to all migrants entering Italy, but we are not aware of the existence of such data at this time.

From a public policy perspective, the fact that a huge number of migrants leave the centre voluntarily is an interesting result. Our data provides better information than official statistics about this departure decision since official statistics are based only on

the number of untraceable individuals among the total number of asylum applications, meaning they underestimate the phenomenon because they do not consider those who leave before submitting an application.²⁷ Migrants may leave the centre in large numbers because they do not want to stay in Italy, the country being used mostly as an entry gate to Europe due to its geographical position. It is often suggested that the Dublin system is inefficient because it does not take into account illegal migrants' aspirations regarding the country where they really intend to live. As a consequence, the Dublin Regulation is expected to increase illegal migration to countries which are not migrants' intended destination and subsequently to other countries where they will transit or go to live.

At the same time, we cannot confirm this assertion because we have no information on the intended location of those migrants who decide to leave the centre. Results of qualitative studies on migrant trajectories suggest that migrants do not always have a clear opinion about where they want to go and sometimes their decision is shaped by networks of smugglers or available opportunities (Collyer 2007; Grillo 2007; Papadopoulou-Kourkoula 2008; Schapendonk 2012; Düvell 2014; Kuschminder, de Bresser, and Siegel 2015; Valenta, Zuparic-Iljic, and Vidovic 2015). Whether migrants stay in the reception centre after arriving in Italy may also depend on their financial resources. If migrants use all their savings to cover the cost of the risky journey to Europe they may be stuck in the reception centre, no matter what their previous plans were. Finally, the leaving decision may depend on the migrants' networks in destination countries.

Information on the intended location and on migrant networks would undoubtedly be useful in explaining the different trajectories of migrants from different countries of origin. Collecting data on the complete trajectory of migrants, from their departure to their stay in the migrants' centre to their final destination, is definitely the next challenge.

6. Acknowledgements

We are indebted to Jakub Bijak, the associate editor, three anonymous reviewers, Cris Beauchemin, and seminar participants at the INED Monday seminar held in Paris in March 2016 for their very helpful remarks and suggestions on a previous draft. We also thank Alberto Nilo Domanico, Giuseppe Facino, and Francesco Tipaldi for their help in collecting data, and Catriona Dutreuilh for the proofreading. Any remaining errors are ours.

²⁷ Our results also underestimate the phenomenon because many illegal migrants try to leave Italy even before their admission into a centre.

References

- Ambrosetti, E. and Cela, E. (2015). Demography of race and ethnicity in Italy. In: Saenz, R., Rodriguez, N., and Embrick, D. (eds.). *The international handbook of the demography of race and ethnicity*. London: Springer: 457–482. doi:[10.1007/978-90-481-8891-8_22](https://doi.org/10.1007/978-90-481-8891-8_22).
- Bloch, A., Sigona, N., and Zetter, R. (2011). Migration routes and strategies of young undocumented migrants in England: A qualitative perspective. *Ethnic and Racial Studies* 34(8): 1286–1302. doi:[10.1080/01419870.2011.560276](https://doi.org/10.1080/01419870.2011.560276).
- Bonifazi, C. (2013). *L'Italia delle migrazioni*. Bologna: Il Mulino.
- Bonifazi, C. (2017). *Migrazioni e integrazioni nell'Italia di oggi*. Rome: IRPPS.
- Bonifazi, C. and Strozza, S. (2017). Le migrazioni internazionali nei paesi meridionali dell'Unione Europea: Continuità e cambiamenti, prima e dopo la crisi. In: Ferragina, E. (ed.). *Rapporto sulle economie del Mediterraneo*. Bologna: Il Mulino.
- Caritas (2015). *Dossier statistico immigrazione 2015*. Rome: IDOS.
- Carling, J. (2007). Unauthorized migration from Africa to Spain. *International Migration* 45(4): 3–35. doi:[10.1111/j.1468-2435.2007.00418.x](https://doi.org/10.1111/j.1468-2435.2007.00418.x).
- Chiuri, M.C., De Arcangelis, G., D'Uggento, A.M., and Ferri, G. (2004). Illegal immigration into Italy: Evidence from a field survey. Fisciano: Centre for Studies in Economics and Finance, University of Salerno (Working Paper 121). <http://www.csef.it/WP/wp121.pdf>.
- Chiuri, M.C., De Arcangelis, G., D'Uggento, A.M., and Ferri, G. (2007). Features and expectations of illegal immigrants: Result of a field survey in Italy. Torino: Centre for Household, Income, Labour and Demographic Economics, University of Torino (Working Paper 1/2007). http://www.child.carloalberto.org/images/wp/child01_2007.pdf.
- Chiuri, M.C., De Arcangelis, G., D'Uggento, A.M., and Ferri, G. (2008). L'immigrazione irregolare in Italia: Alcune caratteristiche socio-economiche. *Studi Emigrazione* 169: 159–179.
- Collyer, M. (2007). In-between places: Trans-Saharan transit migrants in Morocco and the fragmented journey to Europe. *Antipode* 39(4): 668–690. doi:[10.1111/j.1467-8330.2007.00546.x](https://doi.org/10.1111/j.1467-8330.2007.00546.x).

- Commissione Nazionale per il diritto di asilo (2016). Quaderno statistico per gli anni 1990–2016: Richieste di asilo [electronic resource]. Rome: Dipartimento per le libertà civili e l’immigrazione. http://www.libertaciviliimmigrazione.dlci.interno.gov.it/sites/default/files/allegati/quaderno_statistico_per_gli_anni_1990-2016_.pdf.
- Conflict Barometer (2013–2014). *Annual reports*. Heidelberg: Heidelberg Institute for International Conflict Research (HIK).
- Crawley, H., Düvell, F., Sigona, N., McMahon, S., and Jones, K. (2016). Unpacking a rapidly changing scenario: Migration flows, routes and trajectories across the Mediterranean. Coventry: MEDMIG (Research Brief 01). <http://www.medmig.info/research-brief-01-unpacking-a-rapidly-changing-scenario/>.
- Düvell, F. (2014). Transit migration in the European migration spaces: Politics, determinants and dynamics. In: Düvell, F.C. (ed.). *Transit migration in Europe*. Amsterdam: Amsterdam University Press: 209–236.
- Fine, J.P. and Gray, R.J. (1999). A proportional hazards model for the subdistribution of a competing risk. *Journal of the American Statistical Association* 94(446): 496–509. doi:10.1080/01621459.1999.10474144.
- Grillo, R. (2007). Betwixt and between: Trajectories and projects of transmigration. *Ethnic Migration Studies* 33(2): 199–217. doi:10.1080/13691830601154138.
- Guiraudon, V. (2018). The 2015 refugee crisis was not a turning point: Explaining policy inertia in EU border control. *European Political Science* 17(1): 151–160. doi:10.1057/s41304-017-0123-x.
- Hinchliffe, S.R. and Lambert, P.C. (2013a). Flexible parametric modeling of cause-specific hazards to estimate cumulative incidence functions. *BMC Medical Research Methodology* 13(13): 1–14.
- Hinchliffe, S.R. and Lambert, P.C. (2013b). Extending the flexible parametric survival model for competing risks. *Stata Journal* 13(2): 344–355.
- ISMU (2018). Protezione internazionale: Dati [electronic resource]. Milano: Fondazione Iniziative e Studi Sulla Multietnicità. <http://www.ismu.org/richiedenti-asilo-e-rifugiati-dati/>.
- Istat (2017). Noi Italia: 100 statistiche per capire il Paese in cui viviamo [electronic resource]. Rome: Istat. <http://noi-italia.istat.it/>.

- Italian Ministry of Interior (2015). Presenze dei migranti nelle strutture di accoglienza in Italia, Scheda d'approfondimento [electronic resource]. Rome: Ministero dell'Interno. <http://www.interno.gov.it/it>.
- Kasperek, B. (2016). Complementing Schengen: The Dublin system and the European border and migration regime. In: Bauder, H. and Matheis, C. (eds.). *Migration, diasporas and citizenship: Interventions and solutions*. Hampshire: Palgrave Macmillan: 59–78.
- Kuschminder, K., de Bresser, J., and Siegel, M. (2015). Irregular migration routes to Europe and factors influencing migrants' destination choices. Maastricht: Maastricht Graduate School of Governance (Report 2015).
- Leo, L. (2014). Aspetti critici del Sistema di Protezione Internazionale in Italia. Bologna: ASGI (Report February 2014). <http://www.asgi.it/wp-content/uploads/2015/03/report-febbraio-2014.pdf>.
- Papadopoulou-Kourkoulou, A. (2008). *Transit migration: The missing link between emigration and settlement*. Hampshire: Palgrave Macmillan. doi:10.1057/9780230583801.
- Royston, P. and Parmar, M.K.B. (2002). Flexible parametric proportional-hazards and proportional-odds model for censored survival data, with application to prognostic modeling and estimation of treatment effects. *Statistics in Medicine* 21(15): 2175–2197. doi:10.1002/sim.1203.
- Schapendonk, J. (2012). Turbulent trajectories: African migrants on their way to the European Union. *Societies* 2(2): 27–41. doi:10.3390/soc2020027.
- Schapendonk, J. and Steel, G. (2014). Following migrant trajectories: The im/mobility of sub-Saharan Africans en route to the European Union. *Annals of the Association of American Geographers* 104(2): 262–270. doi:10.1080/00045608.2013.862135.
- Schuster, L. (2005). The continuing mobility of migrants in Italy: Shifting between places and statuses. *Journal of Ethnic and Migration Studies* 31(4): 757–774. doi:10.1080/13691830500109993.
- Toshkov, D.D. (2014). The dynamic relationship between asylum applications and asylum recognition rates. *European Union Politics* 15(2): 192–214. doi:10.1177/1465116513511710.

- UNHCR (2015). Refugees/migrants emergency response: Mediterranean [electronic resource]. Geneva: UNHCR. http://data.unhcr.org/mediterranean/regional.php#_ga=1.38078819.1326910167.1451554920.
- UNHCR (2017). *Global trends: Forced displacement in 2016*. Geneva: UNHCR. <http://www.unhcr.org/5943e8a34.pdf>.
- UNHCR (2018). Mediterranean situation: Operational portal, refugees' situation [electronic resource]. Geneva: UNHCR. <http://data2.unhcr.org/en/situations/mediterranean>.
- Valenta, M., Zuparic-Iljic, D., and Vidovic, T. (2015). The reluctant asylum-seekers: Migrants at the southeastern frontiers of the European migration system. *Refugee Survey Quarterly* 34(3): 95–113. doi:10.1093/rsq/hdv009.
- Wijers, G.D.M. (2011). The reception of Cambodian refugees in France. *Journal of Refugee Studies* 24(2): 239–255. doi:10.1093/jrs/fer008.
- Wissink, M., Düvell, F., and van Eerdewijk, A. (2013). Dynamic migration intentions and the impact of socio-institutional environments: A transit migration hub in Turkey. *Journal of Ethnic and Migration Studies* 39(7): 1087–1105. doi:10.1080/1369183X.2013.778026.