

EXPLORING ASYLUM PATTERNS IN EUROPE: A FOCUS ON ITALY¹

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Abstract. In recent years, asylum applications have become a central issue in the European migration context, with varying dynamics across countries. In 2024, Italy ranks third in Europe for number of first-time asylum applicants. Excluding temporary protection requests granted due to the Russia-Ukraine conflict, asylum applications in 2023 and 2024 have returned to the peak levels recorded during the Mediterranean crisis in 2016. This study aims to enhance understanding of the phenomenon through a multi-level approach. At the European level, we implement a descriptive analysis of asylum applications using Eurostat data. The goal is to analyse the distribution of socio-demographic indicators, such as the share of women or young people among applicants, within the European countries. Through multivariate analysis, we look for common patterns in asylum applications and groups of countries with similar profiles. The focus then shifts to Italy, where we investigate the evolution of asylum-seeker inflows, with particular attention to the cohort that entered in 2016, following the Mediterranean crisis. We trace these individuals up to 2024, to assess their presence and the reason for the residence permits they hold. A multinomial regression model is used to analyse the factors associated with permit transitions. The analysis seeks to highlight patterns and potential determinants that shape the asylum experience in Italy, contributing to a broader understanding of long-term migration dynamics and supporting evidence-based policy.

1. Trends in Asylum Applications Across Europe

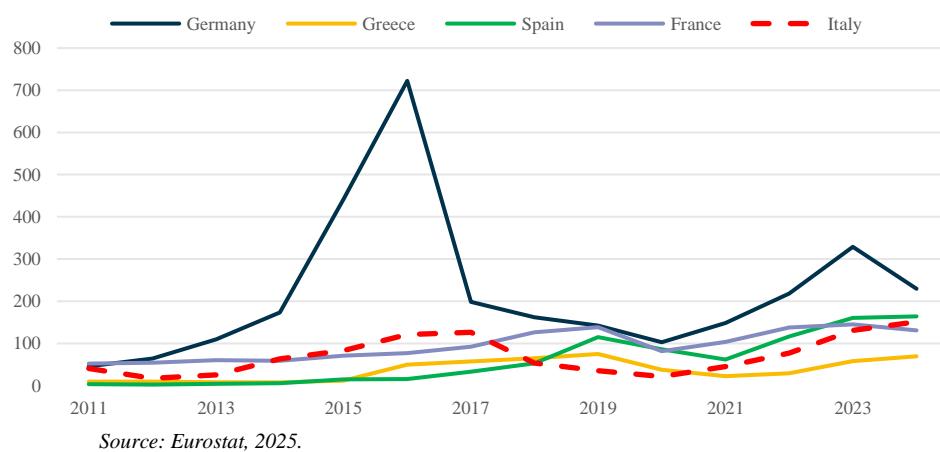
An *asylum seeker* is an individual who has left their country of origin, has applied for asylum in another country, and is awaiting a decision from the host country's authorities regarding the recognition of refugee status (UNHCR). The term *refugee* applies to anyone who, owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of their nationality and is unable or unwilling to avail themselves of the protection of that country (United Nations, 1951).

¹ Although this paper is the outcome of the authors' joint reflections, paragraph 1-3 was drafted by Fabio Massimo Rottino, paragraphs 4-7 by Marco Rizzo. Conclusions were written jointly by the authors.

Over the past decade, the demand for international protection has increased both in Italy and across all European Union countries (Figure 1). The phenomenon has particularly affected the main Mediterranean countries, and especially Germany, which remains the country with the highest number of asylum applications (approximately 230,000 applications in 2024). The time series reflects the major events that have influenced asylum flows.

The most prominent is the so-called Mediterranean refugee crisis, which affected European countries with varying intensity and timing during the 2015–2017 period. Germany registered the highest number of arrivals, particularly from Syria. Since 2021, following the COVID-19 pandemic, asylum applications in Europe have once again increased. In 2024, Italy recorded the highest number of applications (approximately 150,000) since the first available data in 2011. This renewed growth over the past four years is mainly attributable to the conflict in Ukraine and to ongoing tensions in the Middle East. However, Figure 1 underestimates the impact of the Russia-Ukraine war, managed through exceptional protection mechanisms outside standard asylum procedures. (Council of the European Union, 2001).

Figure 1 – Asylum applications in Germany, Greece, Spain, France, and Italy; 2011–2024.
Values in thousands.



The main entry routes into Europe are diverse. In the Mediterranean area, the Western, Central, and Eastern Mediterranean routes are particularly significant, involving countries of North Africa. Another major influx originates from Asia and the Middle East and from the Atlantic route from West Africa, which is considered the most dangerous due to the length of the journey (Ministry of the Interior, 2024; McAuliffe and Ocho, 2024). This diversity in entry routes is reflected in the diverse range of citizenships that most influence host countries. The top four countries in

terms of asylum applications in 2024 have markedly different profiles in terms of applicants' nationalities (Table 1). In Germany, one third of all applications come from Syria, as happened during the Mediterranean crisis, the country continues to be the primary destination for this population. Spain, by contrast, registers a predominance of asylum seekers from South America, due in part to linguistic affinities, with 64% of all 2024 applications coming from Venezuela and Colombia alone. France displays a more heterogeneous distribution of citizenships, with no clear prevalence of any single nationality; however, among the top five citizenships represented, three are African countries where French is the official language. In this context, Italy records a mix of flows primarily from North Africa countries, such as Egypt and Morocco, and South Asia, including Bangladesh and Pakistan (Istat, 2023).

Table 1 – Asylum applications in Germany, Spain, France, and Italy by main countries of citizenship; 2024. Absolute and percentages values.

Germany			Spain		
	a.v.	%		a.v.	%
Syria	76.765	33	Venezuela	65.460	40
Afghanistan	34.150	15	Colombia	39.765	24
Türkiye	29.175	13	Mali	10.585	6
Iraq	7.840	3	Peru	10.360	6
Somalia	6.955	3	Senegal	7.655	5
<i>Other</i>	5.230	33	<i>Other</i>	4.010	18
Italy			France		
	a.v.	%		a.v.	%
Bangladesh	32.865	22	Ukraine	13.355	10
Peru	15.595	10	Afghanistan	10.375	8
Pakistan	11.740	8	DPR Congo	9.295	7
Egypt	11.595	8	Guinea	7.990	6
Morocco	9.985	7	Côte d'Ivoire	6.975	5
<i>Other</i>	9.435	46	<i>Other</i>	5.870	63

Source: Eurostat, 2025

2. Literature Review

The classification of European countries based on asylum seeker flows, aimed at identifying patterns common to multiple states, has been addressed in the literature with different perspectives and levels of detail. Among the various approaches, one strategy is to classify countries according to their capacity to grant protection, combining indicators of application pressure, administrative efficiency, and recognition outcomes (Forte et al., 2025). Another perspective is to group countries according to their structural and socio-economic context, taking into account factors

such as economic performance, inequality, or governance, which influence their attractiveness to asylum seekers (Manafi and Roman, 2022). A simpler strategy distinguishes countries by the volume of applications received over a given period, thereby identifying high-, medium-, and low-pressure destinations (Nicolescu and Drăgan, 2020). Despite relying on different sets of variables, these approaches consistently show that European states tend to cluster into relatively stable groups, whether defined by policy effectiveness, structural conditions, or application volumes.

The study of migrants' retention in the host country is a well-established area of research, particularly within the work of official statistical offices and in response to the growing interest of policy makers in this issue. By relying on longitudinal databases that monitor individuals' presence or absence over time, it is possible to estimate retention rates several years after admission (Statistics Canada, 2024). With specific regard to asylum seekers, territorial presence can be examined in relation to socio-demographic factors such as age, migratory cohort of entry, and citizenship—the latter being one of the main determinants of the phenomenon (Casacchia et al., 2023). Another crucial dimension for assessing integration into the host society is labour market participation, which can be analysed in terms of its evolution throughout the period of residence (Bakker et al., 2017).

Overall, the literature highlights the importance of combining structural, policy, and individual-level factors to fully understand the dynamics of asylum applications and subsequent integration paths across European countries.

3. Objectives

The aim of this study is to investigate the issue of asylum seekers, starting from a European-level perspective and subsequently narrowing the focus to the Italian context.

At the European level, the research question guiding our analysis is whether it's possible to identify common patterns in asylum flows across countries. Specifically, by examining key socio-demographic characteristics of asylum seekers, we aim to determine whether certain types of flows are concentrated in specific groups of European countries, or whether the phenomenon is overall heterogeneous and lacks a systematic distribution.

Once the European framework has been explored, the focus shifts to Italy. Here, first we try to identify the typical and most prevalent profile of asylum seekers. The analysis then focuses on the integration process resulting in the granting of an asylum residence permit, its subsequent conversion into another type of permit, or the individual's disappearance from the national territory. The aim is to identify and

describe the profiles of asylum seekers in Italy and the factors shaping their condition eight years after arrival.

4. Data

The data used for the European-level analysis come from Eurostat. We considered the cumulative number of asylum applications submitted in 2022 and 2023 across 32 European countries for which Eurostat collects information. Liechtenstein, Montenegro, and Hungary were excluded from the analysis, as they reported very low numbers of applications - fewer than 325 over two years - and were therefore treated as outliers. For each country, the total number of applications was broken down by key variables relevant to the analysis: age, sex, citizenship (grouped by macro-regions), the presence of unaccompanied minors, and the share of rejected applications.

For the Italian case study, we used administrative data on residence permits granted to non-EU citizens in Italy. These data, provided by the Ministry of the Interior, are validated and processed by Istat. The analysis focused on individuals who were granted their first residence permit for seeking asylum in 2016 and whose status was traced in the stock of valid permits in the latest available archive, referring to 2024. As with the European-level data, the main socio-demographic characteristics of these individuals were also considered.

5. Results of PCA

To study the phenomenon at the European level, a Principal Component Analysis (PCA) was carried out using 29 countries from the European region as units of analysis. To avoid the influence of absolute volumes of asylum applications, standardized indicators were constructed. These indicators represent the share of asylum seekers with specific characteristics over the total number of applications in each country. To summarize the geographical origin of asylum seekers, countries of origin were grouped into macro-regions, considering the share of applications from “North and West Africa”, “Centre-South Asia”, and “West Asia”. Additional variables included the share of female applicants, age groups (18-34 and 35-64 years), the proportion of unaccompanied minors, and the share of rejected applications. Table 2 presents the rotated (Varimax) loadings of the first two principal components, which together explain 69% of the total variance. The first component contrasts two distinct profiles of asylum seekers. On one side are countries with a high proportion of applications from women aged 35 to 64; on the

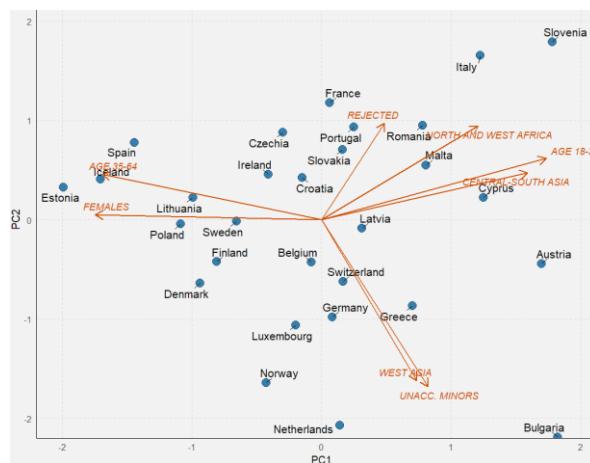
other are countries with younger applicants (aged 18–34), mostly originating from North and West Africa and Centre-South Asia. These countries also tend to have a higher rate of rejected applications. The second principal component is mainly driven by flows characterized by a high share of unaccompanied minors, particularly from West Asia. These two features are closely linked: the main countries of origin for unaccompanied minors in Europe are in that region, such as Syria, Afghanistan, and Palestine (EUAA, 2024).

Table 2 – First two principal components with variable loadings and explained variance.

Variable	PC1	PC2
North and West Africa	0.72	-0.23
Centre-South Asia	0.82	0.05
West Asia	0.06	0.88
Females	-0.80	-0.32
Age: 18-34	0.91	0.01
Age: 35-64	-0.71	-0.50
Unaccompanied minors	0.09	0.92
Rejected	0.39	-0.37
Proportion Variance explained	0.42	0.27
Cumulative variance explained	0.42	0.69

The biplot of the first two principal components (Figure 2) confirms that the selected variables strongly characterize the components themselves. In contrast, the European Union countries do not show a clear distribution along the axes. Most of them are spread evenly, forming a cloud of points, with the overall structure being pulled in the direction of the principal components by a few individual countries.

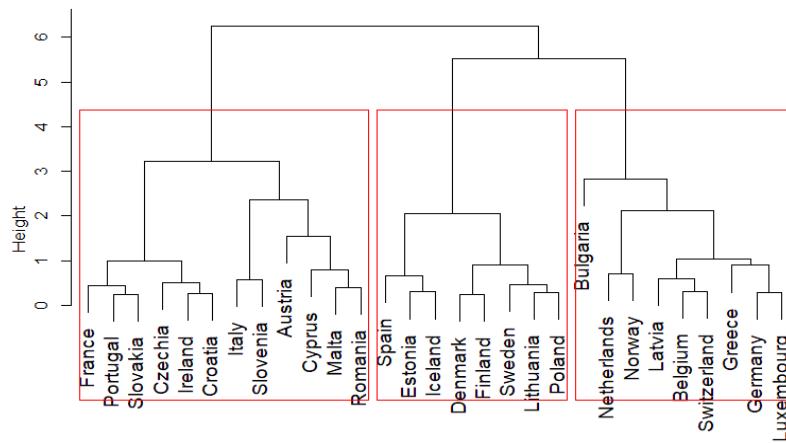
Figure 2 – Biplot of the first two principal components with European countries and variables.



6. Three clusters of European countries

To explain the distribution of countries within the framework defined by the Principal Component Analysis, a Cluster Analysis was performed on the first two principal components. As an exploratory step to determine the optimal number of clusters, a hierarchical cluster analysis was first conducted. The result, shown in the dendrogram (Figure 3), suggests that three clusters provide a good solution.

Figure 3 – Dendrogram of the hierarchical cluster analysis.



Subsequently, a non-hierarchical k-means Clustering Analysis was carried out, aiming to partition countries into three groups that maximize the explained variance. The resulting model accounts for 64.3% of the total variance. This outcome is consistent with the interpretation of the biplot (Figure 1), showing that countries are not clearly separated into sharply distinct groups.

The three identified clusters (Figure 4) align with the profiles defined by the variables loading on the principal components.

The first cluster (Figure 4, in green) includes countries where asylum applications are predominantly submitted by women aged 35–64. This group includes many of the Baltic and Scandinavian countries, which have received significant per capita inflows from the Russia–Ukraine conflict (Eurostat, 2025). Spain is also part of this group, mainly due to the large number of applications from South America. These flows tend to have a higher proportion of female applicants compared to those from North Africa or the Middle East (Schiele M., 2024).

The second cluster (Figure 4, in red) consists of countries receiving asylum applications primarily from North and West Africa and from Central-South Asia, with a predominance of applicants aged 18–34. Italy and Slovenia are the most

representative countries in this group. These characteristics reflect the Italian situation, where the main origin countries in 2024 included Bangladesh, Pakistan, Egypt, and Morocco (see Table 1). Italy also stands out for the high share of rejected asylum claims; a feature that further defines this cluster. According to Eurostat data, in 2023 Italy granted protection in 47.5% of processed cases, compared to 62.2% in Germany and an EU average of 53%.

The third cluster (Figure 4, in blue) exhibits higher within-cluster variance than the other groups. It includes countries with a high share of asylum seekers from West Asia and a significant proportion of unaccompanied minors. Among the countries in this group are Germany, the Netherlands, Austria, Bulgaria, and Greece—the top five countries in terms of unaccompanied minor asylum applications in 2023 (EUAA, 2024).

Figure 4 – Biplot of European countries on the first two principal components, grouped by cluster.

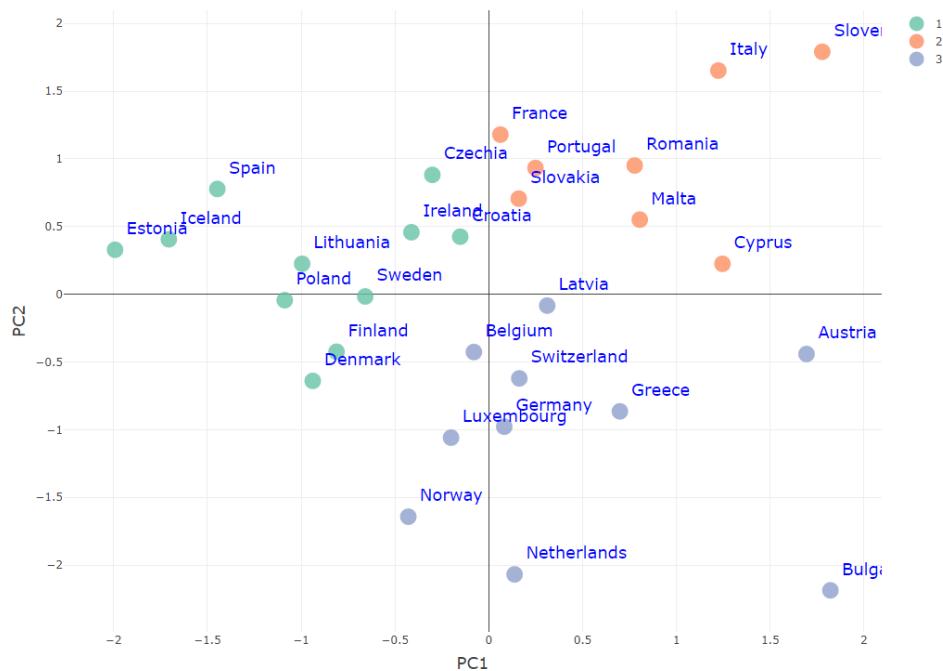
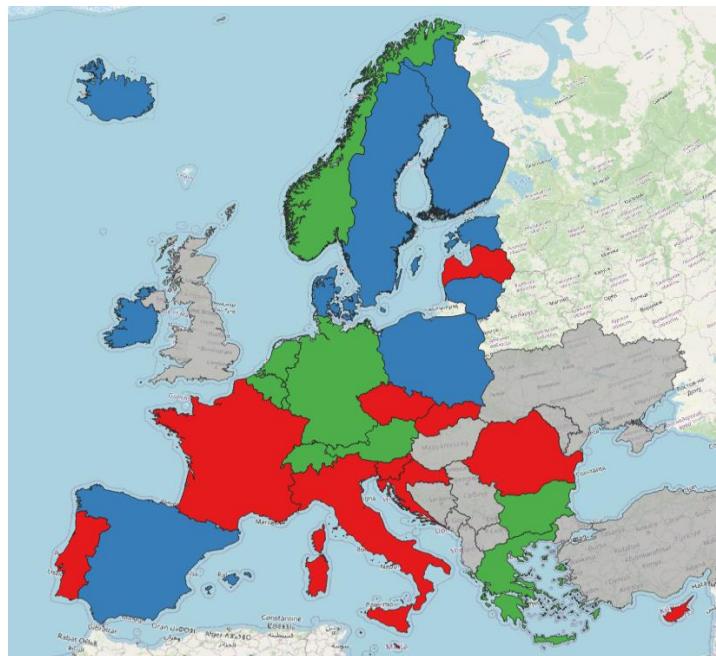


Figure 5 displays these three clusters using the same colours adopted in the biplot. The map highlights that the clusters do not follow a clear geographical pattern. This supports the idea that, while certain specificities exist in asylum flows, the phenomenon remains largely heterogeneous and not systematically structured across countries.

Figure 5 – Map of European countries grouped by cluster.²

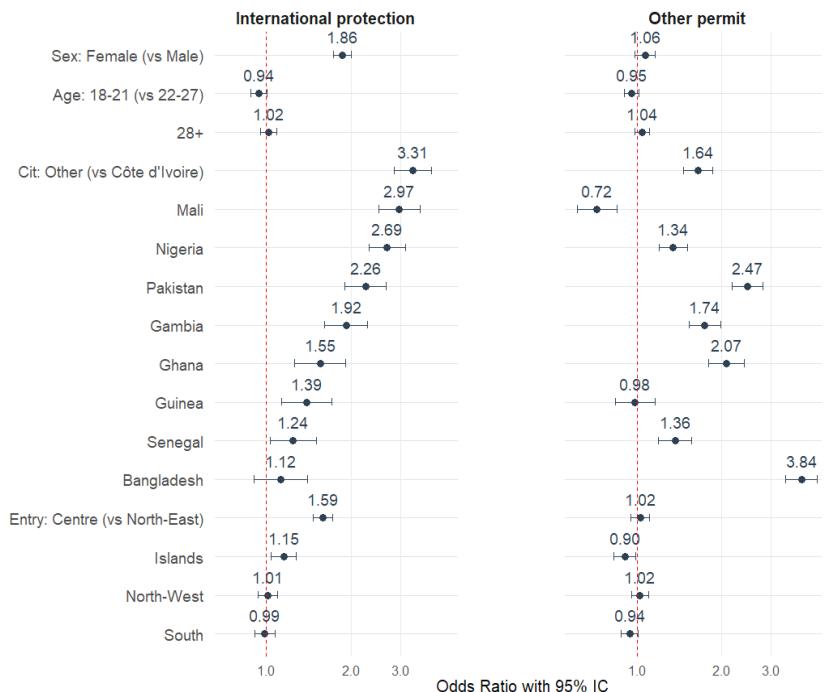
7. From Asylum Application to International Protection

After identifying the socio-demographic characteristics that define the typical profile of asylum seekers in Italy compared to other European countries, the analysis moved to a more detailed level. We asked how these characteristics, which shape the seeking of asylum in Italy, affect long-term residence outcomes. We focused on individuals who applied for asylum in Italy in 2016, a year marked by high inflows due to the Mediterranean crisis. We linked their records to the stock of valid residence permits as of 2024.

The analysis was carried out using a multinomial regression model, where the dependent variable is categorized into three outcomes with respect of the status at 2024: (1) present in Italy with an international protection permit; (2) present with a different type of residence permit (e.g., for work, family, etc.); and (3) no longer present in the country (reference category). The results of the model are shown in Figure 6, reporting the odds ratios and 95% confidence intervals in relation to the selected covariates: sex, age, citizenship, and the territorial area of entry into Italy.

² Thanks to Alessandro Cimbelli for the elaboration.

Figure 6 – Odds ratios (with 95% IC) from multinomial regression model on asylum seekers' status in 2024.



Gender shows a statistically significant effect on the likelihood of remaining in Italy with an international protection permit: women are 86% more likely than men to still be present with such a permit. Age does not appear to significantly influence the probability of remaining in the country-neither for protection-related permits nor for other types. Similarly, territorial area of entry is generally not significant, except for individuals who entered through Central Italy, who are 60% more likely to still be present in 2024 as refugees compared to those who entered through the North-East (reference category). By contrast, citizenship emerges as a strong predictor. The model includes the ten most common citizenships among asylum applicants in 2016. Applicants from Mali, Nigeria, and Pakistan show significantly higher odds (between 2.3 and 3) of obtaining a protection-related permit compared to those from Côte d'Ivoire, which serves as the reference category due to its lower probabilities. As for other types of residence permits, higher odds are observed for individuals from Bangladesh (3.84), Pakistan, and Ghana, suggesting alternative pathways to residence, likely connected to labour market integration or family networks. Notably, Malian citizens have significantly lower odds of obtaining a non-protection permit (OR < 1), indicating a higher likelihood of either exiting the country or being

granted international protection. Their lower tendency to remain with another type of permit may reflect weaker or less established support networks in Italy.

8. Conclusion

The analysis confirms the heterogeneous nature of asylum applications across Europe, while also highlighting the existence of some recurring patterns among countries. Citizenship emerges as the most decisive variable in shaping asylum seeker profiles, more so than age or gender. In fact, such characteristics are typical of the migrant populations from specific countries of origin, rather than being traits that make individuals more likely to be accepted by host countries regardless of their nationality. Established migration routes play a key role in determining the geographical distribution of asylum seekers: for instance, the prevalence of Syrians in Germany, Latin Americans in Spain, or certain African communities in France. These flows are largely influenced by historical, linguistic, and political ties, as well as pre-existing migration networks, which appear to guide migrants' choices more than individual socio-demographic characteristics.

In the Italian context, there is a clear prevalence of flows from North Africa and South Asia-regions often associated with higher rejection rates for asylum claims. The longitudinal analysis of those who entered Italy in 2016 shows that citizenship also strongly affects the type of residence permit held in the long term. Certain groups-such as those from Mali, Nigeria, and Pakistan-are more likely to receive international protection, while for others, such as Bangladeshi nationals, alternative pathways to residence emerge, often linked to employment or family reasons. Gender plays a role in the likelihood of obtaining protection status, whereas age and the region of entry into Italy do not appear to be significant predictors.

Overall, the findings underscore the complexity of the asylum process and the importance of considering the specific characteristics of each citizenship group, as well as the presence and strength of social networks on the territory. Considering this, further research is recommended to better understand the diverse integration trajectories among those who received protection, those who remained through other channels, and those no longer present in the country-particularly in relation to the presence and cohesion of their national communities within the host society.

References

BAKKER L., DAGEVOS J., ENGBERSEN G., 2017. Explaining the refugee gap: a longitudinal study on labour market participation of refugees in the Netherlands. *Journal of Ethnic and Migration Studies*, Vol. 43, No. 11, pp. 1775-1791.

CASACCHIA O., CONTI C., PANGALLO C., ROTTINO F.M., 2024. Beyond the emergency: characteristics and behaviour of refugees and asylum seekers in Italy. *Rivista Italiana Di Economia, Demografia E Statistica* - ISSN 0035-6832. – Vol. LXXVII: No.3, pp. 115-126.

COUNCIL OF THE EUROPEAN UNION 2001. Council Directive 2001/55/EC of 20 July 2001 on minimum standards for giving temporary protection in the event of a mass influx of displaced persons and on measures promoting a balance of efforts between Member States in receiving such persons and bearing the consequences thereof. *Official Journal of the European Communities*, L 212.

EUAA 2024, Asylum Report 2024, Annual Report on the Situation of Asylum in the European Union June 2024.

EUROSTAT 2025. 4.3 million under temporary protection in January 2025, 10 March 2025.

FORTE M.V., GATTI R., GABRIELLI G., BENASSI F., STROZZA S. 2025. Europe and the recent influx of asylum seekers: the EU Member States capability to grant international protection. *Genus*, Vol. 81, No.9.

ISTAT 2023. Report cittadini non comunitari in Italia, 3 ottobre 2024, pp. 2.

MANAFI I., RÖMAN M. 2022. A Way to Europe: New Refugees' Migration Patterns Revealed. *Sustainability* 2022, Vol.14, No.748.

MCAULIFFE M., OUCHO L.A. 2024. World Migration Report 2024. International Organization for Migration (IOM), Geneve.

MINISTRY OF THE INTERIOR 2024. Principali flussi migratori nell'Unione Europea, Ufficio della Sede Didattico Residenziale Carlo Mosca, pp. 4-5.

NICOLESCU A., DRĂGAN G. 2020. The EU Migration Crisis in Terms of Asylum Applications Received. A Cluster Analysis over the Period 2015–2018. *Studia Europejskie – Studies in European Affairs*, Vol. 4/2020, pp. 109-124.

SCHIELE M. 2024. The Role of Gender in Asylum Migration to Europe: Analyzing Country-Level Factors of Gendered Selection of Asylum Seekers to Europe, *Journal of Immigrant & Refugee Studies*, pp. 10.

STATISTICS CANADA 2024, Immigrants admitted in Ontario, British Columbia, Alberta and Quebec most likely to stay in their provinces of destination, *The Daily*, December 19, 2024.

UNITED NATIONS 1951. Convention Relating to the Status of Refugees, Art. 1. Geneva: United Nations.