




To cite this article: Benassi, F., Carella, M., & Heins, F. (2022). Migration in the Mediterranean region: A response to crises and an emergency in its own right. *Investigaciones Geográficas*, (77), 15-36. <https://doi.org/10.14198/INGEO.19461>

# Migration in the Mediterranean region: A response to crises and an emergency in its own right

## *Migración en la región mediterránea: una respuesta a las crisis y una emergencia por derecho propio*

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### Abstract

Migration is an obvious response to political, economic, socio-demographic, and ecological crises. In recent decades, several crises have occurred in the Mediterranean region; consequently, migration has intensified, the geography of flows has been altered, and the roles of some countries within the Mediterranean migration system have rapidly changed.

This paper aims to delineate an overview of migration flows in this region over the last 20 years, focusing on the new migration flows related to humanitarian crises. In doing so, the present study also examines similarities and differences between past and current migration factors that shape the decisions of individuals. Migration flows are closely linked to the needs and fears of European societies. Following this logic, and by analysing challenges related to demographic and geopolitical dimensions in the future scenario, this study discusses the necessity of new policy responses.

**Keywords:** Migrations; Mediterranean region; humanitarian crises; demographic and geopolitical dimensions.

### Resumen

Las migraciones son una respuesta obvia a las crisis políticas, económicas, sociales y ecológicas. Durante las últimas décadas se han producido varias crisis en la región mediterránea; en consecuencia, las migraciones se han intensificado, la geografía de los flujos se ha alterado y los papeles de algunos países dentro del sistema migratorio mediterráneo han cambiado rápidamente.

Este artículo pretende ofrecer una visión general de los flujos migratorios en esta región durante los últimos veinte años, centrándose en los nuevos flujos relacionados con las crisis humanitarias. El presente estudio también examina similitudes y diferencias entre los factores migratorios pasados y actuales que influyen sobre las decisiones individuales. Los flujos migratorios están estrechamente vinculados a las necesidades y a los desasosiegos de las sociedades europeas. Siguiendo esta lógica, al analizar los desafíos relacionados con las dimensiones demográficas y geopolíticas en el escenario futuro, este estudio discute la necesidad de una nueva respuesta política.

**Palabras clave:** Migraciones; región mediterránea; crisis humanitarias; dimensiones demográficas y geopolíticas.

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## 1. Introduction

The Mediterranean region has always been a unique and important geostrategic region for economic and human interchanges involving the Near Eastern, North African and European states. It is an extremely heterogeneous area which includes countries that are closely connected by geographic proximity, and yet are very diverse historically, culturally and politically.

The varying levels of development, the geographical specificities, and the plurality of settlement configurations across these countries strengthen this diversity. Consequently, the demographic trends also vary significantly (Carella & Parant, 2014).

Two different demographic patterns can be observed in this region. The first concerns the countries of the northern littoral, which are facing demographic changes characterised by a slight increase of population related to international migration gains and a marked decline in fertility accompanied by a rapid population aging. The second involves the countries of the southern and eastern littorals, which are still undergoing the first demographic transition phase, characterised by a relatively young population with relatively high fertility and mortality levels and international migration losses (Parant & Léger, 2020).

Recent studies have documented that over time the entire Mediterranean region has been marked by a downturn in fertility rates and a raise in life expectancy which have both narrowed the range between the extremes (Carella & Parant, 2016). In particular, some of these studies have shown that the advancement of the transitional demographic process has engendered a gradual convergence of the demographic behaviours in the Arab and Near Eastern countries towards those of the European ones (Angeli & Salvini, 2018).

Another strand of literature suggests that a general notion of hypothetical homogeneity, or of demographic duality, in the Mediterranean has to be refuted when carefully analysing the indicators related to natural and migratory movement of populations. In other words, the variety of demographic regimes shaping the real heterogeneities in the Mediterranean region seems to be produced by trends and changes related to the political and cultural peculiarities of each country (Dumont, 2018).

Furthermore, the recent history of the Mediterranean region confirms the persistence of considerable socio-demographic disparities, due to the wide diversity of patterns in population growth and due to the consolidation of socio-economic differentials between the countries.

Over time, in order to compensate for these disparities individuals and families have always reacted by moving within the region, or by leaving it. Thus, as a historical crossroads, the Mediterranean has become an area of internal circulation involving diverse flows of population.

In this region the migratory patterns replicate those observed in other areas of the world in terms of the socio-demographic and socio-economic factors or drivers. The demand for cheap labour in the ageing societies of the European Economic Area is met by the countries of the African and Asian littorals (except Israel) and the Western Balkans. These countries have relatively young populations, as well as a general lack of economic opportunities that create jobs and provide economic stability in general. Obviously, people move not only because of economic disparities, but also for personal as well as political reasons.

Castles and Vezzoli (2009), referring to the financial crises unfolding in 2007, stated:

The current crisis is likely to have deep-reaching effects that we cannot foresee. It is mistaken to believe that migrants will serve as a safety valve for developed economies, by providing labour in times of expansion and going away in recession. When economic conditions get bad in rich countries they may be even worse in poorer origin countries. Moreover, migrants are social beings, who put down roots and form relationships in new countries. At times of recession, the motivation to migrate may be even higher than before, and remittances may prove a resilient form of international transfer. Finally, global economic inequality and the demographic imbalances between the ageing populations of the North and the large cohorts of working age persons in the South will remain important factors in generating future migration (p. 74).

During recent decades, several crises have occurred in the Mediterranean; consequently, migration has intensified, and the geography of flows has been altered. New migration routes have been added to the previous ones and new reasons—including economic ones—have led individuals and households to migrate. In this context, being that migration is extremely sensitive to shifts in the surrounding

environment, the spatial distribution and the roles of some countries within the Mediterranean migration system have rapidly changed.

The principal aim of this study is to investigate the trends and the nature of migration flows affecting the Mediterranean region between 2000 and 2020, a period marked by profound social, economic and political crises. We intend to examine the different effects of the various recent crises on the migration patterns and on the Mediterranean migration system in general. Aspects of emigration and immigration, but to a certain extent also the flows of transit migration along the various Mediterranean routes, are the subject of the analysis presented.

By focusing on contemporary migration patterns concerning the Mediterranean region, this paper complements and updates the literature on this topic showing the similarities and differences between past and current migration drivers. It investigates overall migration flows with a special focus on asylum seekers and refugees.

The article proceeds as follows: The next section provides some background and a short review of the literature on the determinants that have shaped the migratory system in the Mediterranean. A description of the data and methods is then presented. Next, a general analysis of the migration flows over the last twenty years is provided, with a focus on two specific issues: the new migration flows linked to humanitarian crises, and the loss of human lives due to the crossing of the Mediterranean Sea. The results of our analyses are discussed and put into future perspective in the final section.

### ***1.1. Conceptualising contemporary migration in the Mediterranean***

In Mediterranean context, the term ‘Southern European model of immigration’ was coined in the 1990s (King & Rybaczuk, 1993; King & Thomso, 2008) when southern Europe has mainly become an area of immigration rather than emigration. Since the 1990s most southern European countries have experienced consistent unregulated immigration flows involving immigrants from a wide range of European, Latin American, Asian and African countries (including Morocco, Tunisia and Egypt in the southern Mediterranean region). King & Rybaczuk (1993) identified diverse factors to explain the rise in immigration in the northern Mediterranean countries, including ease of entry, geographic and/or cultural nearness, economic growth causing greater disparities in income and unemployment levels, and the demographic disparities between an ageing population as compared to growing younger populations in the countries of origin. The migration flows into the northern Mediterranean countries seem to be closely linked to globalisation and the considerable segmentation of their labour markets, with specific sectors (for example, agriculture and the home care sector) relying on the cheap, informal labour provided by immigrants. Nevertheless, it is important to mention that emigration from Southern Europe never stopped, and it gained renewed importance after the great economic recession of 2007-2013.

The Mediterranean region is always experiencing persistent and substantial flows of population, and variations in these flows have often caused changes in net migration. Nevertheless, since in many Mediterranean countries migration statistics are not available or accurate our knowledge on migration flows is limited and the migratory phenomenon is often measured as the difference between natural and total population change. As a result it is often impossible to assess the levels of in- and out-migration that lead to this estimated migratory balance (Lafleur & Stanek, 2017).

To provide a complete picture of migratory movements in the Mediterranean region, it is necessary to combine the migration patterns at different geographic levels (from the local, to the regional, to the national) as well as their determinants and features which have always been very diverse.

Inter-Mediterranean flows have often been identified as a dual migratory system of opposing countries: the suppliers of migrants from the Southern and Eastern Mediterranean (except Israel), and the receiving nations of the Mediterranean European Union bordering the Northern Littoral. In this context the Western Balkans (especially Yugoslavia and its successor states) have been identified as a sub-region of emigration. It seems that until the 1980s most migration flows could be characterised as labour migration or economically active individuals moving to the north for economic reasons. Since then, the nature of migratory movements has changed: Socio-cultural and political as well as economic reasons have favoured further forms of migration, producing new flows alongside the axis of north-north and south-south (King, 2001).

On this last route, the Mediterranean is part of an inter-African regional mobility system that interplays with Euro-Mediterranean or inter-Arab migrations. Indeed, due to even more severe controls at the European frontiers, and to the Mobility Partnerships signed with the European Union<sup>4</sup>, Maghreb countries (especially Morocco, Tunisia, and Libya) have become transit countries through which increasing numbers of Sub-Saharan migrants (regular or irregular) move to enter Europe (Wihtol de Wenden, 2013).

To sum up, the effects of the European integration process, the new logics of spatial mobility related to globalization and the specific migratory patterns in the southeast of the Mediterranean lead us to question the concept of convergence towards a Mediterranean migratory duality based on simplistic push-pull models.

Additionally, during the two last decades financial, socio-economic and political crises have triggered important transformations which have also changed the roles of some countries within the contemporary Mediterranean migration system (Bellis, Carella, Léger, & Parant, 2021).

First, during the economic recession, young people and adults from the southern European countries most affected by the crisis (Greece, Italy, Portugal and Spain) reacted to adverse socio-economic conditions by moving to Northern Europe (Staniscia & Benassi, 2018). This renewed southern European flux of emigration to northern European countries remained attractive despite the crisis, having reconfigured the spatial distribution in some countries where the net migration rate has become negative.

Second, the Arab Spring which started with some protests and uprisings at the end of 2010 has seemingly not led to the formation of additional migration flows, apart from a minor flow from Tunisia, but it has generated two major refugee crises, first in Libya and then in Syria (Fargues & Fandrich, 2012).

During recent socio-economic and political crises in the Mediterranean region the characteristics of immigrants have changed. The number of undocumented migrants, refugees and asylum seekers (persons in need of humanitarian protection), as well as transit migrants, has increased substantially in the past decade enhancing the complexity of the Mediterranean migratory system.

However, migration flows themselves also represent a crisis. The deaths of migrants crossing the Mediterranean Sea are unacceptable for European societies. The operations of the European border protection agency (FRONTEX) seem to not always consider saving lives to be the highest priority. Indeed, European societies are in the midst of a conflict between humanitarian values and populist desires to keep migrants out of Europe. Collyer & King (2016) argue:

On 19 April 2015 around 800 people were drowned in the Mediterranean Sea south of Lampedusa – the small Sicilian island – when the hopelessly overcrowded and unseaworthy boat in which they were trying to reach Europe capsized. This tragic accident, the most significant loss of life in a single such incident ever recorded, marks the beginning of a narrative of crisis associated with the movement of people to Europe. Unfortunately, none of this is new. Over the last few decades, undocumented migration, meaning travel organized specifically to avoid the institutionalized system of state regulation, has become increasingly common across the Mediterranean. These dangerous journeys have often resulted in tragedy (p.2).

Hence, the Mediterranean today is a region open to multiple contrasts that reflect the intensity and diversity of migratory movements within a context of crises. Socio-economic uncertainty, persistent economic difficulties, and political unrest in the Mediterranean countries of Africa, Asia and neighbouring countries have contributed to an increase in migration flows over the past two decades. Faced with these unprecedented migration flows, European countries, as well as the southern countries of this region, have become sending, transit, or receiving areas, and sometimes all three simultaneously (Schmoll, Thiolet, & Wihtol de Wenden, 2015).

Additionally, the financial crisis of 2008 has further promoted South-North-South circular migration for, such as between Spain and Algeria (Cabezón-Fernández & Sempere-Souvannavong, 2019), or return migration from France, Italy and Spain to Morocco and from Portugal to Guinea. In particular, outflows

<sup>4</sup> The EU has been in negotiations on readmission agreements (EURAs) with Morocco and Tunisia since the beginning of the 2000s, but until now the agreements are still not in sight. However, both Morocco and Tunisia have signed so-called Mobility Partnerships (MP) with the EU in June 2013 and in March 2014, respectively. These MPs provide a general framework for cooperating on border management and on the expulsion of undocumented Moroccan and Tunisian migrants (Abderrahim, 2019). The agreements mandate that the two governments in Rabat and Tunis 'readmit' Moroccan and Tunisian nationals residing irregularly in the EU.

of Moroccans from Spain have increased since 2008, reaching 40,000 individuals in 2013 (UNDESA, 2020). Moreover, in recent decades there has been an increase in flows of older migrants returning home at retirement age or adopting a transnational migration strategy anchored in different locations, often maintaining a residence in both their destination and their origin countries (De Haas, & Fokkema, 2010).

Interestingly, the need to map out a specific migration research agenda for the Mediterranean region was just recently expressed (Zapata-Barrero, 2020), generating an interesting special issue of the journal *Comparative Migration Studies*.

Finally, the themes of bordering and globalization were linked to international migration in the Mediterranean context also by Ribas-Mateos (2017, 2005) in a comprehensive study focusing on several 'gateway cities' of the European Mediterranean shore and on their forms of welfare and migration. Moreover in a recent contribution the concept of borders engaged in the relationship between wealth and poverty has been studied ethnographically comparing the situation in the Mediterranean region with the US-Mexico border one (Heyman and Ribas-Mateos, 2019) and extending the analysis beyond migration.

## 2. Methodology

The Mediterranean region is defined here<sup>5</sup> as all 21 countries bordering the Mediterranean, plus four - Portugal, Serbia (with Kosovo), the Republic of North Macedonia and Jordan - that are located nearby.

The choice to include in the region the latter countries that do not have a natural access to the Mediterranean Sea depends on two reasons. First, they are closely associated with the remaining Mediterranean states sharing history and geographical characteristics (Carella & Parant, 2016). Therefore, by joining them the Mediterranean region bring together European peninsulas (Iberian, Italian, Balkan) which advance towards the South of the Mediterranean and Anatolian highland that expands into the sea on an east-west axis between the Eastern Mediterranean and the Black Sea.

Second, the Mediterranean migratory system is characterized by a complexity which cannot be ignored: migrations in this region are not just unfolding in different directions but also interact with geopolitical factors affecting also the neighbourhood. Consequently, all countries of this region, including those without direct access to the Mediterranean Sea, should be considered when analysing current international migration flows in the Mediterranean region.

In the Mediterranean region, as identified in this paper, in 2020 about 550 million people lived across three continents: Africa, Asia, and Europe. Approximately 333 million people are concentrated in the countries of the south-eastern shores and more than half of the Mediterranean population (56%) resides in four countries: Egypt, France, Italy and Turkey (Table 1).

However, the population is not evenly distributed across the region; in some Mediterranean countries people live much more concentrated than in others. Malta, Palestine (especially the Gaza Strip), and Lebanon are the smallest and the most densely populated countries in the area, while Algeria and Libya have the lowest population densities.

Mediterranean countries are also characterized by many inequalities that can be assessed using demographic, social and economic indicators. The disparities between the north and south of the region become evident by analysing the degree of socio-economic development using the Human Development Index (HDI), which takes into account three basic dimensions: longevity, education and per capita income. According to the latest report (United Nations Development Programme, 2020), all the European Union Mediterranean countries, Montenegro in the Western Balkans, and Israel on the Asian littoral have achieved a very high level of human development. The rest of the countries fall in the 'High human development' group, except Morocco and the Syrian Arab Republic, which are in the medium and low HDI groups, respectively. The three countries with the highest HDI ranking in the Mediterranean region are Israel (0.919), Slovenia (0.917) and Spain (0.904), while Syria and Morocco

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5 This paper includes 25 countries divided into sub-regions as follows:

- European Littoral
  - European Union countries: Portugal, Spain, France, Italy, Slovenia, Croatia, Greece, Malta, Cyprus;
  - Western Balkans: Albania, Montenegro, Bosnia-Herzegovina, Serbia, Republic of North Macedonia;
- Asian Littoral: Turkey, Syria, Lebanon, Israel, Palestine, Jordan;
- African Littoral: Egypt, Libya, Tunisia, Algeria, Morocco

(0.567 and 0.686, respectively), have the lowest HDI values and rank at 151<sup>st</sup> and 121<sup>st</sup> position out of a total of 189 countries in 2019 (United Nations Development Programme, 2020).

Gaps in human development can depend on many factors related to unequal opportunities in access to education, healthcare and employment, or to persistent income inequalities. In the Mediterranean, the weakest value of the indicators that compose the HDI of Morocco concern the mean number of years of schooling for people aged 25 and older: in 2019 it was 5.6 years (estimated), lower than the one observed in Arab countries on average (7 years).

Table 1. Demographic and socio-economic characteristics of Mediterranean countries

Region/Country	Population 2020 (‘000)	Density 2020 (pop/ km <sup>2</sup> )	GNI per capita 2019 (2017 PPP \$)	Human Development Index 2019	
				Value	Ranking
<b>European Littoral</b>	<b>218,550</b>				
<i>EU countries</i>	<b>200,943</b>				
Portugal	10,197	111.3	33,967	0.864	38
Spain	46,755	93.7	40,975	0.904	25
France	65,274	119.2	47,173	0.901	26
Italy	60,462	205.6	42,776	0.892	29
Slovenia	2,079	103.2	38,080	0.917	22
Croatia	4,105	73.4	28,070	0.851	43
Greece	10,423	80.9	30,155	0.888	32
Malta	442	1379.8	39,555	0.895	28
Cyprus	1,207	130.7	38,207	0.887	33
<b>West Balkans</b>	<b>17,607</b>				
Bosnia and Herzegovina	3,281	64.3	14,872	0.780	73
Montenegro	628	46.7	21,399	0.829	48
Albania	2,878	105.0	13,998	0.795	69
Serbia	8,737	99.9	17,192	0.806	64
North Macedonia	2,083	82.6	15,865	0.774	82
<b>Asian Littoral</b>	<b>132,625</b>				
Turkey	84,339	109.6	27,701	0.820	54
Syria	17,501	95.3	3,613	0.567	151
Lebanon	6,825	667.2	14,655	0.744	92
Israel	8,656	400.0	40,187	0.919	19
Palestine	5,101	847.4	6,417	0.708	115
Jordan	10,203	114.9	9,858	0.729	102
<b>African Littoral</b>	<b>201,786</b>				
Egypt	102,334	102.8	11,466	0.707	116
Libya	6,871	3.9	15,688	0.724	105
Tunisia	11,819	76.1	10,414	0.740	95
Algeria	43,851	18.4	11,174	0.748	91
Morocco	36,911	82.7	7,368	0.686	121
<b>Mediterranean Region</b>	<b>552,962</b>				

Sources: World Population Prospects: The 2019 Revision; Human Development Report, 2020

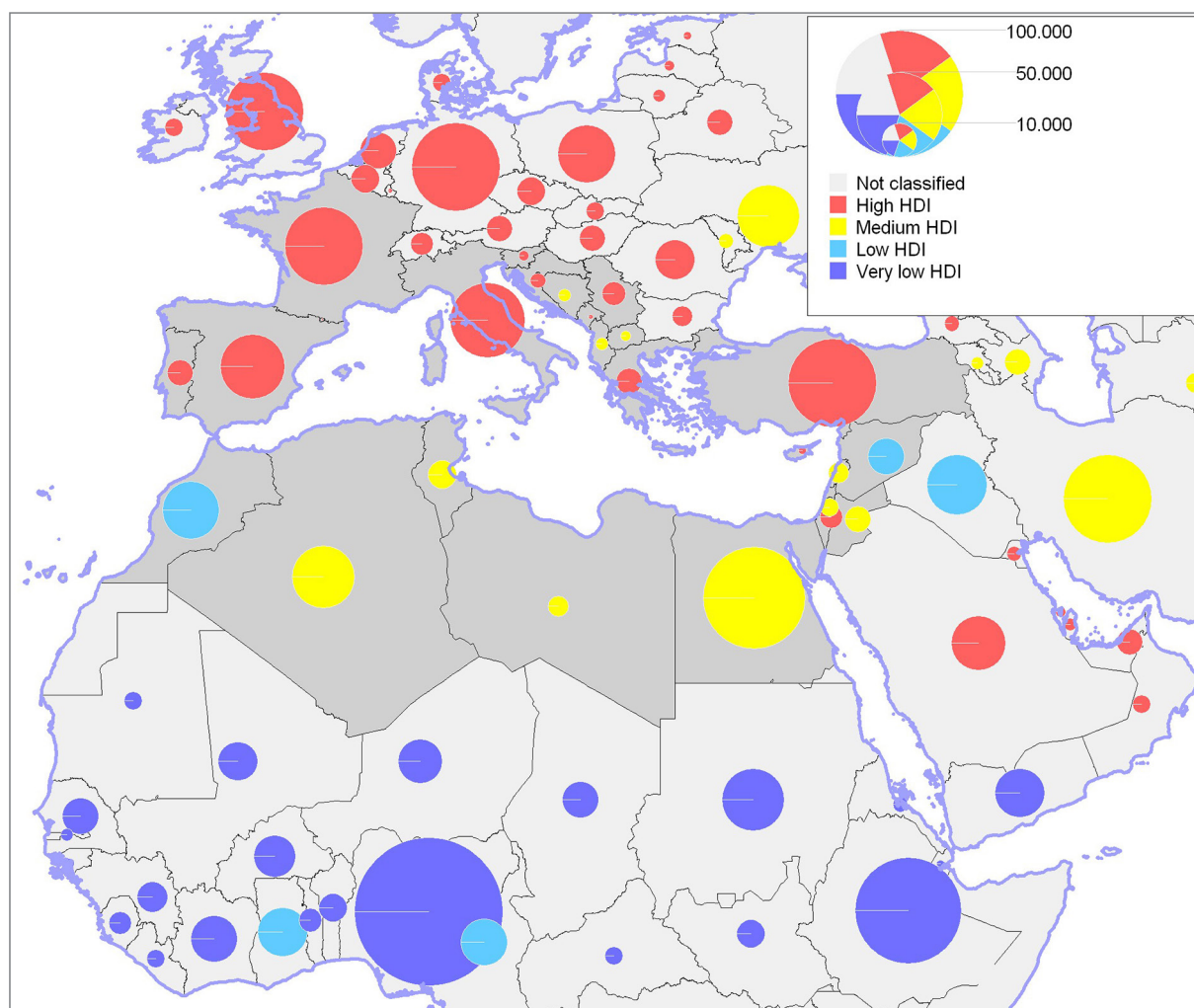
The very low HDI ranking of the Syrian Arab Republic reflects the serious socio-political conflicts that this country has suffered since 2011. The civil war, or proxy war, that began in 2011 has caused the HDI values to fall and the country is now at the bottom of the medium human development group (United Nations Development Programme, 2020). In fact, the Syrian Arab Republic’s HDI ranking fell in only 5 years from the 116<sup>th</sup> position in 2012 to the 155<sup>th</sup> in 2017.

Regarding the economic dimension of the HDI, the main disparities in the Mediterranean region consist in the significant inequality observed in terms of gross national income (GNI) per capita between the European littoral and the southern and eastern countries of the Mediterranean. Although the economic living standards of these countries are very heterogeneous, their income values are markedly lower than those of the northern ones.

In this context Israel is the only exception; indeed, the indicators that compose its HDI converge and even surpass those of the countries of the northern Mediterranean. The population of Israel has a life expectancy at birth among the highest in the world (83.0 years for both sexes combined in 2019, 84.5 for women and 81.3 for men) and a high level of education (an average of 13 years of schooling in 2019), as well as a high income per capita (40,187 in PPP\$ in 2019).

The population size and the level of human development is not only very heterogeneous in the Mediterranean countries but also among the neighbouring countries (Figure 1).

Figure 1. The geographical area of analysis. Population size and HDI values of countries of the Mediterranean region and neighbouring countries



Sources: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects: The 2019 Revision and United Nations Development Programme, Human Development Report, 2020

To conduct our analysis we use data from the UN Department of Economic and Social Affairs (United Nations, Department of Economic and Social Affairs, Population Division, various years) that allow us to investigate the population dynamics and net migration trends concerning Mediterranean countries from 2000 to 2020. Moreover, to analyse the phenomena of refugees and asylum seekers we explore data provided by the UNHCR (United Nations High Commissioner for Refugees, 2020). These same data are

used to examine irregular migrations and interceptions and deaths along the western, central and eastern Mediterranean routes for the more recent period.

An additional source of information is the Frontex data (Frontex, 2021) that refer to the detections of illegal border-crossing by the EU border protection agency. These attempts vary considerably over the years and were obviously the highest in 2015 and 2016. These data reflect certainly the existing migratory pressure at the EU borders, however, the attempted EU border crossings refer to events rather than persons.

In addition to this officially reported statistical information from various international organisations, detailed country-to-country migration flows estimates for the period of 1990 to 2015 (Abel & Cohen, 2019) are used to sketch the migration patterns affecting the Mediterranean and to outline the importance of the Mediterranean crossroads for international migration flows to Europe from Africa and Asia. Abel & Cohen (2019) provide estimates of bilateral migration flows between all countries for the 5-year periods between 1990 and 2015 based on data on stocks and flows of international migration published by the UN Population Division following different methods. The methods include those based on changes in migrant stocks, a method based on migration flow rates, and methods based on global demographic accounting using bilateral stocks of migrants, as well as births and deaths. The analysis in the following section will focus on a method developed by Abel (2018). The different estimation methods and the ensuing different results underline the approximate nature of the information regarding the quantitative scope of the international migration flows, not to mention the qualitative characteristics. These aspects should be kept in mind in the following analysis.

### 3. Results: Recent migration dynamics in the Mediterranean region

Since the beginning of the 2000s, the classic approach of reducing Mediterranean migratory exchanges to the South-North dimension has lost its value because most of the countries in this region experience simultaneously the three different processes of emigration, transit migration and immigration. Increasing social and economic disparities, as well as socio-political factors, have, over time, altered migration routes between origins and destinations in the Mediterranean, redefining the traditional trajectories of migration flows.

To discuss this assumption in greater detail, we examine in this section the migration dynamics in the region over the last two decades. Our analysis starts with the idea that the Mediterranean cannot be considered a homogeneous and closed space, and that migration flows can be heterogeneous regarding motives. Thus we attempt to delineate different migratory profiles, paying particular attention to the flows and stocks of refugees and asylum seekers. Moreover, we address the implications of recent irregular migration flows by analysing the interceptions and deaths recorded in this region.

#### 3.1. Population trends and net migration

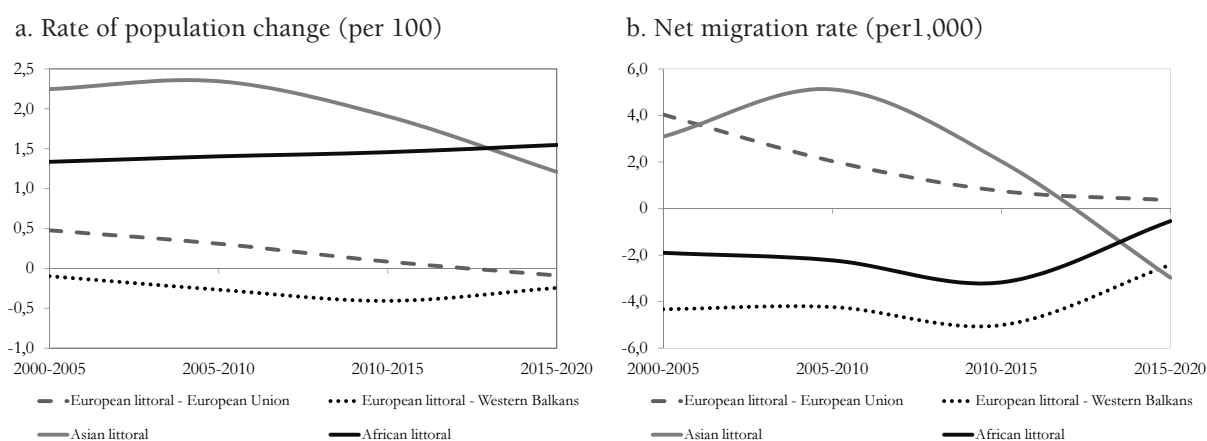
The demography of the Mediterranean region has always been characterized by a marked heterogeneity, which creates a sort of dual space: a northern shore characterized by developed economies and post-transitional populations (individualistic, with low fertility and mortality rates, delayed family formation, small families, and ageing populations) and a southern shore including less developed economies and still-growing younger populations (Livi Bacci & Veronesi, 1990; Di Comite & Moretti, 1999). The northern shore, as always, plays a role in attracting migration flows, while the southern is an area of origin. However, today these simple demographic and socio-economic juxtapositions are no longer the only determinants of migration flows and, as a result of several changes in the geopolitical scenario and the globalization process, the picture appears more nuanced than in the past.

The population of the European littoral decreased rather significantly in the period considered here even though, in the case of the Balkan countries, we see a weak recovery in the last five years. The Asian littoral recorded increasing values for the average annual rate of population change up to 2005-2010, after which, although still positive, they continued to decrease. In contrast, the African shore shows a constant population growth throughout the period analysed here (Figure 2a.). Taking into account the net migration rates, the differences within the European littoral are marked. The European littoral on the EU side also differs from the other two macro-geographical areas, being the only region that registers positive values for average net migration, even if those values have decreased over time. For this



indicator, the Asian littoral shows a trend similar to that which was commented on previously, though the contraction is more marked here, so much so as to assume negative values in the last 5-year period. In the detail of groups of countries, the geographical element emerges quite clearly by configuring the changing spatial patterns of the net migration rate (Figure 2b.). In the first period (2000-2005) the spatial pattern was pretty clear: The more economically developed parts of the Mediterranean region (i.e., the European littoral–EU countries) attract international migration flows, thus showing positive values for the net migration rate. In comparison, all other countries (i.e., European littoral—Balkan countries and African littoral) are characterized by negative net migration rates. In the case of the Asian littoral the atypical net migration trends are due to military conflicts in neighbouring countries.

Figure 2. 5-year average annual rate of population change (a.) and 5-year average net migration rate (b.) by groups of countries of the Mediterranean region, 2000-2020



Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, Online Edition. Rev. 1. Own elaboration

The permanent economic disparities, the repercussions of the global financial crisis (2008–2013) or Great Recession, the Arab Spring, and the conflict in Syria have all contributed to significantly change this dual, and quite classic, scheme in recent years. At the end of the time period analysed (2015-2020) the situation is more complex: Portugal and Greece exhibit slight negative net migration rates; Spain, France, Slovenia and Serbia are characterized by slight net migration gains between 0 and 1 per thousand; and Turkey, Lebanon and Jordan display positive net migration rates due to the arrival of Syrians who were forced to leave their country because of the conflict that began 10 years ago.

These migration losses and gains are driven by international migration flows. Table 2 shows the imbalances in the flows and their changes after the year 2000. The European littoral seems to have lost attractiveness especially after the great recession that brought also out-migration flows to the other European countries and the rest of the world. Most migration flows to Africa might be return migrants. We observe persistent emigration from the West Balkans to the European Littoral and the other European countries. The Asian littoral went through considerable changes in the immigration flows especially because of the wars in Western Asia and subsequent return migrations or, probably, onward migrations toward Europe, excluding the European countries bordering the Mediterranean. The European littoral seems to have lost attractiveness to the detriment of other European countries. Unfortunately no estimates are available for the last 5-year period that was marked by the Syrian civil war and the ensuing migratory movements.

Most international migration flows enter Europe by sea and air using regular means of travel. However, the public image is dominated by irregular immigration which has far greater visibility.

The main sea and land migration routes of irregular migration flows in the Mediterranean region are the western (towards Spain including the Canary Islands), the central (towards Italy and Malta), the western (towards Cyprus and Greece) and the Balkan routes. In most cases the first country of arrival is not the country of desired final destination. In the case of transit migrants before reaching the Mediterranean region the migration trajectory over land was usually long and perilous. Important to remember that

migration trajectories are flexible and complex and primarily serve the migrants to achieve their ultimate goal of the migration project. So, the sea and land routes mentioned above are subject to change, and most migrants, certainly not the poorest, are most likely travelling by air.

Table 2. Estimated migration flows related to the Mediterranean region for the periods 2000-2004, 2005-2009 and 2010-2014 (in thousands)

Estimated migration flows from origin to destination groups of countries (in thousands)								
Destination	Mediterranean littoral							
	Europe	European	West Balkans	Asian	African	Western Asia	Africa	Rest of the World
Origin	2000-2004							
Europe	-	1,376	5	49	1	2	88	264
European Littoral	359	-	7	36	1	3	34	66
West Balkans	208	204	-	7	0	0	1	66
Asian Littoral	274	172	0	-	113	377	5	172
African Littoral	96	884	0	74	-	74	100	60
Western Asia	366	66	0	305	42	-	85	260
Africa	597	649	0	29	16	9	-	522
Rest of the World	3,716	3,021	6	563	17	2,357	101	-
	2005-2009							
Europe	-	994	18	36	0	11	71	180
European Littoral	752	-	21	60	16	20	157	251
West Balkans	163	212	-	4	0	0	2	65
Asian Littoral	258	51	1	-	5	124	5	90
African Littoral	171	737	0	159	-	299	27	107
Western Asia	401	22	0	1,032	22	-	32	182
Africa	796	608	0	42	75	548	-	709
Rest of the World	4,279	2,239	2	312	15	5,871	160	-
	2010-2014							
Europe	-	332	3	30	1	38	47	367
European Littoral	940	-	24	21	11	11	118	756
West Balkans	194	180	-	0	0	0	1	40
Asian Littoral	761	62	4	-	73	1,220	5	444
African Littoral	178	425	1	288	-	216	33	238
Western Asia	228	18	0	469	15	-	13	312
Africa	906	722	0	30	30	239	-	1,456
Rest of the World	3,649	1,398	6	218	6	4,547	144	-

Source: Abel & Cohen (2019). Own elaboration

It is difficult to characterize migrants according to the predominant motive for their move, as personal, economic and political motivations are closely related. In the following two sections we would like to focus first on refugees and asylum seekers who should enjoy specific protections, and second on the phenomenon of irregular migration within the Mediterranean region.

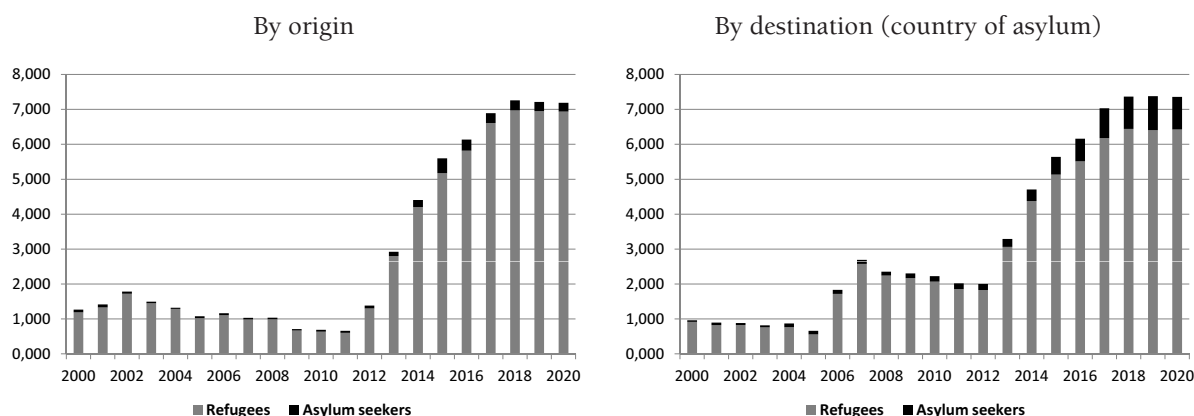
### 3.2. Refugees and asylum seekers

One of the consequences of humanitarian crises, wars, and political instability is an increase in the number of people obliged to flee their homes. They become internally displaced persons when they stay

within their countries, or refugees and asylum seekers when they are forced to flee their countries. Several major crises causing important displacements in the Mediterranean region have occurred: In the 1990s it was the Balkan War, and in the last two decades the Syrian conflict, the conflict in Afghanistan, conflicts and climate changes in the Sahel region, and other conflicts and crises in Asian and African (such as in Iraq, Libya, Somalia, the Central African Republic). Additionally, in recent years refugee crisis in some Latin American countries resulting from political instability, threats and persecution has generated an exodus of people seeking international protection. In general, the number of refugees and asylum seekers from Latin America has increased since 2019 and some European countries have become destinations for them, especially Spain, followed by Italy and Portugal (Eurostat, 2020).

In the recent past all crises, due to contingent and geographical issues, have found their maximum expression in the Mediterranean region, which connects different worlds. We refer here only to flows involving this area (25 by 25 origin destination square matrix). The data in Figure 3 are extremely revealing: From 2000 to 2020 the number of refugees and asylum seekers grew significantly. The most intense growth started after the second period (2005-2009), with a strong acceleration in the last few years.

Figure 3. Refugees and asylum seekers in the Mediterranean region by origin and destination (country of asylum), 2000-2020 (in thousands)

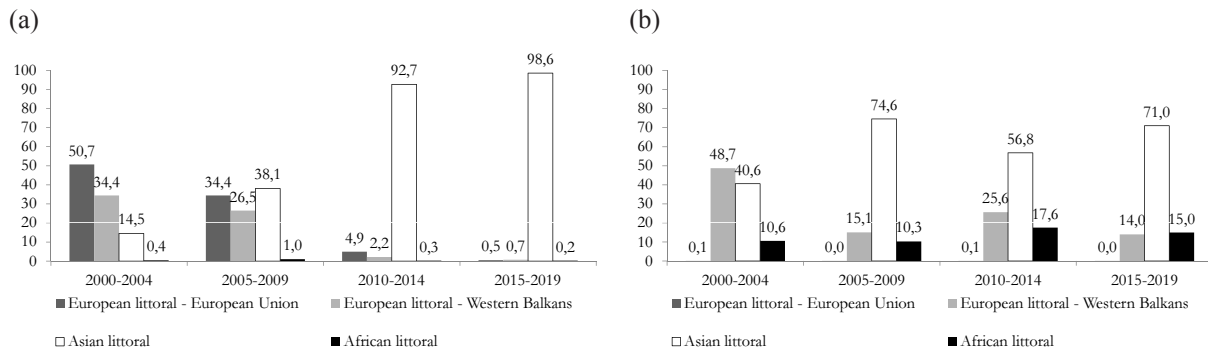


Source: United Nations High Commissioner for Refugees data. Own elaboration

The beginning of the millennium was characterised by the Yugoslav wars and conflicts linked to the breakup of the Yugoslav federation, as well as the emergence of ethnic conflicts in the 1990s that ended only in 2001. This third Balkan war led to high numbers of refugees and asylum seekers from Bosnia and Herzegovina, Croatia, Montenegro, Serbia and Kosovo. All these political crises and conflicts also produced internally displaced persons. Other conflicts are the war in Lebanon (in 2006, after a civil war from 1975 to 1990), and the civil wars after the revolt in 2011 in Libya and especially Syria. The latter two can be linked to the Arab Spring. In addition to the 6.7 million Syrian refugees and asylum seekers living in other countries in 2020, there are an estimated 6.7 million internally displaced persons. And the refugees and asylum seekers from Palestine are a constant presence over the last decades. Another long-lasting conflict is the one between the Kurdish minority and the Turkish government.

The numbers and origins of the refugees and asylum seekers changed during the observation period as a result of new geopolitical scenarios. At the beginning of the millennium (2000) more than 80% of refugees and asylum seekers originated from the European littoral, particularly from Bosnia and Herzegovina, Croatia, Serbia and Kosovo. After 2010 this changed dramatically: Today (2020) 97% of the total refugee and asylum seeker population in the Mediterranean region originate from the Asian littoral, and 93% are from Syria alone. For the stocks of asylum seekers we observe different patterns. In the first period (2000-2004) the highest shares recorded were from the European littoral–Western Balkans and the Asian littoral (48.7% and 40.6%, respectively). In the subsequent periods the number of asylum seekers from the Asian littoral grew significantly, reaching 71.0% in 2015-2019. The opposite is true for those originating from the European littoral-Western Balkans (14.0% in 2015-2019). The share of asylum seekers originating from the African littoral grew as well, rising from 10.6% in 2000-2004 to 15.0% in the last period (Figure 4).

Figure 4. 5-year proportion of (a) refugees and (b) asylum seekers compared to the total number of refugees and asylum seekers, respectively, by macro area of origin. Mediterranean regions, 2000-2019



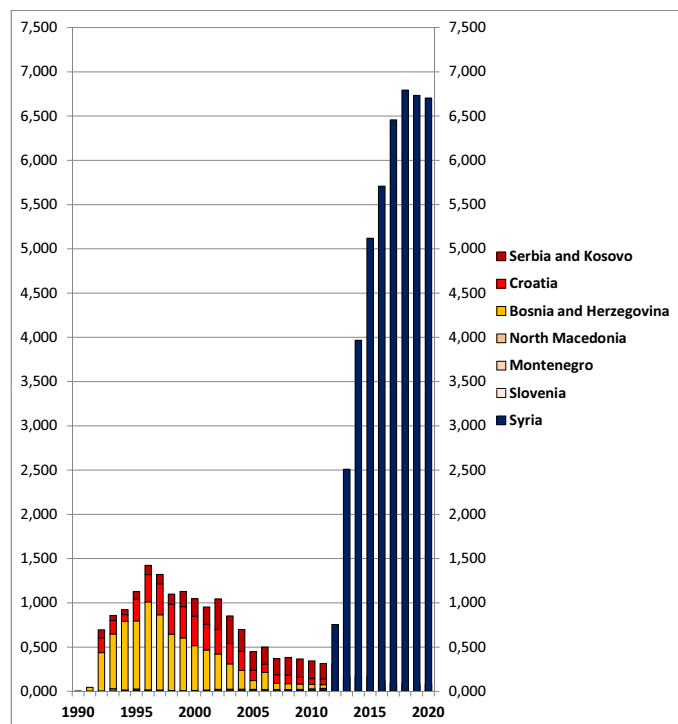
Source: United Nations High Commissioner for Refugees data. Own elaboration

Observing refugees and asylum seekers by country allows us to detect the changing geographies of origin and destination. This analysis concentrates on the two most prominent cases: 1) the breakup of Yugoslavia and the ensuing wars in the Western Balkans in the 1990s, which involved the present countries of Bosnia and Herzegovina, Croatia, Montenegro, North Macedonia, Serbia and Kosovo and Slovenia; and 2) the still ongoing civil war in Syria. The countries of origin of refugees and asylum seekers reflect past and present political and military conflicts. In addition to these two crises we focus on several conflicts that are creating refugees and asylum seekers. The continuously precarious situation of many Palestinians living outside of their home territory is well known and has been a persistent crisis in recent decades. At the beginning of the observation period, a high number of nationals of Turkey, Lebanon, Syria, Albania and Algeria were living as refugees and asylum seekers in other countries. In the case of Turkey, many reached Iraq and several European countries, particularly Germany. And in the case of Syria, many reached European countries such as Germany, the Netherlands and Sweden. However, the majority is today living in neighbouring countries. In recent years the most prominent countries of origin of refugees and asylum seekers (after Syria) are Turkey and Egypt, two countries characterised by internal political conflicts. Libya is another, having experienced two civil wars, the first in 2011 and the second since 2014. Most of the refugees and asylum seekers from these countries have been hosted by western and northern European countries and the USA. And in the case of Turkey, Iraq also plays an important role.

The first of the two crises caused by armed conflicts (Figure 5) focuses on the break-up of multi-ethnic Yugoslavia after the death of Josip Broz Tito (1980) and the fall of the Iron Curtain. Ethnic conflicts, outright wars of independence, insurgencies in the individual states that had formed Yugoslavia, and ethnic cleansing led to several waves of refugees and asylum seekers, as well as internally displaced persons beginning in the early 1990s and continuing until the early 2000s. Still today UNHCR is assisting persons that were forced to leave their homes then. The consequences of the second crisis were observable immediately after the start of the Syrian civil war in 2011. The civil war grew out of the Arab Spring protests and opposed the government and single forces of factions along political, ethnic and religious lines. Foreign forces also intervened.

In Table 3, data are reported regarding refugees and asylum seekers originating from three countries involved in the breakup of Yugoslavia and Syria, grouped by the most important countries of destination. The year chosen is the one with the highest numbers observed (see Figure 5). In the case of the Balkan countries, the neighbouring countries play an important role: Refugees and asylum seekers moved from Bosnia and Herzegovina to Serbia (25%), and from Croatia to Serbia (84%) and Bosnia and Herzegovina (11%). But western and northern European countries, as well as the USA and Canada, also played a role. In fact, NATO played a political and military role in the conflicts in these countries, and bonds between certain areas were already created in the 1960s and 1970s through the migration of 'Gastarbeiter' to Germany and other European countries. In the case of the refugees and asylum seekers from Syria, the neighbouring countries (Turkey, Lebanon and Jordan) are absorbing the brunt of the exodus. To a lesser degree, European and other Arabic countries are also offering support.

Figure 5. Refugees and asylum seekers in the context of two crises: the breakup of Yugoslavia in the 1990s and the Syrian civil war in the 2010s, 1990-2020 (absolute values in 1,000)



Source: United Nations High Commissioner for Refugees data. Own elaboration

Table 3. Destination countries of refugees and asylum seekers in the context of two crises: the breakup of Yugoslavia in the 1990s and the Syrian civil war in the 2010s

		Destinations of refugees and asylum seekers from selected countries of origin and years (in %)				
		The breakup of the Yugoslav Federation			The civil war in Syria	
Country	Year	Bosnia and Herzegovina 1996	Croatia 1999	Serbia and Kosovo 2002	Syria 2018	
Refugees and asylum seekers (in 1,000)		994	354	346	6,794	
	Germany	33.2	Serbia&Kos.	84.4	Germany	54.6
	Serbia&K	25.2	Bosnia&Herz.	11.2	Sweden	9.9
	Croatia	16.0	Canada	1.2	UK	5.8
	Austria	7.5	Australia	1.0	USA	5.0
	Sweden	5.0	Sweden	0.8	Switzerland	3.9
	USA	3.2	USA	0.6	Netherlands	3.1
	Denmark	2.6	Others	0.8	Australia	2.9
	Netherlands	2.2			Norway	2.3
	Canada	1.7			Canada	2.2
	Slovenia	0.8			Bosnia&Herz.	1.8
	Italy	0.8			France	1.6
	Switzerland	0.5			Denmark	1.4
	North Maced.	0.5			Austria	1.2
	Others	0.8			Finland	0.8
					North Maced.	0.8
					Italy	0.6
					Hungary	0.6
					Others	1.4
					Turkey	53.3
					Lebanon	13.9
					Jordan	10.0
					Germany	8.6
					Iraq	3.7
					Egypt	2.0
					Sweden	1.6
					Sudan	1.4
					Austria	0.7
					Greece	0.6
					Netherlands	0.5
					Libya	0.3
					Denmark	0.3
					France	0.3
					Switzerland	0.3
					Bulgaria	0.3
					Others	2.3

Source: United Nations High Commissioner for Refugees data. Own elaboration

When focusing on the Mediterranean region as a destination for refugees and asylum seekers, the destination country that stands out today is Turkey, with about 3,575,000 from Syria, but also 174,000 from Iraq, 117,000 from Afghanistan, and 28,000 from Iran (all data refer to 2020; UNHCR, 2020). This role is internationally recognized, for example, by the controversial agreement with the EU concluded in 2016 that limited the movement of Syrians in particular to the EU in exchange for a financial contribution to cover the expenses of hosting the refugee and asylum seekers. Lebanon (747,000) and Jordan (901,000) admit refugees and asylum seekers from Syria and also Iraq. Egypt, with a total of 329,000, admits Syrians and Palestinians, but also Sudanese, South-Sudanese, Eritreans and Ethiopians. About 90% of the refugee population in Algeria (99,000) are Western Saharans. Also for the EU Mediterranean countries, Syrians constitute a significant share of refugees (especially in Greece); however, the refugee and asylum seeker populations of these countries do not only belong to the Mediterranean region but come from all over the world and often have traditional ties with specific countries or language affinities.

This is a significant change from the beginning of the millennium (2000) when the numbers of refugees and asylum seekers were considerably lower and were influenced by the breakup of Yugoslavia, the conflict in Western Sahara, and the situation of the Palestinians. In France, with a total of about 133,000 asylum seekers and refugees, it was then already possible to observe a multitude of origins for the populations in need of humanitarian protection, which are, in part, still determined by the conflict in Indochina.

So the Mediterranean region is not only the centre of an exchange of migrants, or a migration hub, but it plays a similar role for refugees and asylum seekers from African and Asian countries as well. Migratory flows cross the Mediterranean to reach its northern shore and the economic centres of the European Economic Area or the countries that offer a more open policy of humanitarian protection.

### 3.3. Irregular arrivals, interceptions and deaths in the Mediterranean regions

Due to the restriction of legal methods of reaching the European countries to secure their economic livelihoods or humanitarian protection, international migrants are obliged to use alternative means to reach the European shore. This includes relying on illegal smugglers and human traffickers that often offer risky land passages to the shores of the Mediterranean and subsequent sea passages that are frequently highly dangerous. The (often estimated) data provided by the UNHCR in “*Data on attempted crossings of the Mediterranean Sea 2016-2019*” shed some light on a crucial topic that has also become a central issue in national and supra-national political debates. The number of irregular arrivals in Mediterranean EU (Spain, Italy, Malta, Greece and Cyprus) exceeded 1 million in 2015, was almost 370,000 in 2016 and 124,000 in 2019, and reached a relative low of 95,000 in 2020 due to the COVID-19 pandemic and the continuous activities of the coast guards of the countries along the southern European shores and FRONTEX (Table 4).

Table 4. Irregular arrivals (number of people) in Mediterranean Europe\*, 2016-2019

Irregular arrivals in Europe*	2016	2017	2018	2019
Total arrivals in Europe	369,977/373,652	180,005/185,139	126,370/141,472	114,951/123,663
Total arrivals by sea in Europe	363,581	173,712	119,570	108,606
Total arrivals by land in Europe	6,396	6,293	6,800	6,345
Spain (Western Mediterranean)	14,558	28,452	64,018	29,809
Sea	8,162	22,159	57,218	23,464
Land	6,396	6,293	6,800	6,345
Italy (Central Mediterranean)	181,436	119,370	23,370	11,471
Sea	181,436	119,370	23,370	11,471
Land	-	-	-	-
Malta (Central Mediterranean)	24	20	1,445	3,405
Sea	24	20	1,445	3,405
Land	-	-	-	-
Greece (Eastern Mediterranean)	173,614	29,501	32,742	62,445
Sea	173,614	29,501	32,742	62,445
Land	-	-	-	-
Cyprus (Eastern Mediterranean)	345	2,662	4,795	7,821
Sea	345	2,662	4,795	7,821
Land	-	-	-	-

Source: United Nations High Commissioner for Refugees “Data on attempted crossings of the Mediterranean Sea 2016-2019”: \*Spain (Western Med.); Italy and Malta (Central Med.); Greece and Cyprus (Eastern Med.). Own elaboration

Whereas in 2015 Syrian nationals dominated (48%, followed by Afghans 29%, Iraqis 9%, and Eritreans, Nigerians, Pakistanis and Somali), in 2020 the most frequent countries of origin were Tunisia (19%) and Algeria (13%), followed by Morocco, Bangladesh, Afghanistan, Syria, Côte d'Ivoire, Mali and Guinea.

The trend in irregular arrivals is partially explained by the rise in the number of interceptions in the Central and Eastern Mediterranean regions, which grew from 52,000 to 71,000 in the period of 2016 to 2019 (these data refer only to interceptions made by the Libyan, Tunisian and Turkish coast guards) (Table 5).

It should be noted that the increase in the number of interceptions is entirely attributable to the Turkish coast guard. If we look at the data on arrival broken down by pathway (sea or land) we can clearly see that, in reality, the decrease in the volume of irregular arrivals is due to arrivals by sea decreasing from 363,581 in 2016 to 114,951 in 2019 (- 68.3%). The fact is that arrival by land is more difficult to detect and, in fact, data are only available for Spain, where the volume of the flows remained quite stable during the period observed. It is reasonable to suppose that irregular migrants and traffickers are searching for loopholes to reach European countries, be it by land or sea. In fact, migration seems to be a process that is difficult to stop when individuals are really motivated and determined. What emerges from Table 4 is the fact that the real decrease in the number of irregular arrivals occurred in Italy (from 181,436 to 11,471, or -93.6%) and in Greece (from 173,614 to 62,445, or -28.1%). In contrast, in Spain, Malta and Cyprus irregular arrivals increased significantly from 2016 to 2019.

Table 5. Interceptions in Central and Western Mediterranean, 2016-2019

Interceptions in Central and Western Med.	2016	2017	2018	2019
<i>Interceptions by Libyan Coast Guard</i>	14,332	18,900	15,428	9,225
<i>Interceptions by Tunisian Coast Guard</i>	1,105	3,178	4,091	1,028
<i>Interceptions by Turkish Coast Guard</i>	37,130	19,084	25,398	60,543
Total interceptions	52,567	41,162	44,917	70,796

Source: United Nations High Commissioner for Refugees "Data on attempted crossings of the Mediterranean Sea 2016-2019".  
Own elaboration

Concerning the number of deaths and disappearances recorded in the Mediterranean region a decrease from extremely high values can be observed in the Eastern and, especially, in the Central Mediterranean (Table 6). But keeping in mind that the Central Mediterranean is composed of Italy and Malta and the Eastern Mediterranean of Greece and Cyprus, we can argue that this decrease is essentially the effect of the reduction of irregular arrivals in Italy and Greece. This argument is partially confirmed by the data regarding deaths and disappearances in the Western Mediterranean (i.e. Spain, including attempts to reach the Canary Islands) that increased from 128 in 2016 to 552 in 2019. Spain was one of the countries in which the number of irregular arrivals grew between 2016 and 2019. Even if the number of deaths and disappearances has recently decreased the loss of human life in the Mediterranean cannot be accepted and European countries have to do everything possible to improve the situation.

Table 6. Deaths and disappearances recorded in Mediterranean regions by area, 2015-2020

Deaths /disappearances	2015	2016	2017	2018	2019	2020
<i>Deaths recorded in Western Mediterranean</i>	102	128	224	811	552	330
<i>Deaths recorded in Central Mediterranean</i>	3,149	4,581	2,853	1,314	1,262	983
<i>Deaths recorded in Eastern Mediterranean</i>	803	434	62	174	71	104
Total deaths and missing	4,054	5,143	3,139	2,299	1,885	1,417

Source: Data from <https://missingmigrants.iom.int/region/mediterranean>. Own elaboration

It seems useful to draw attention to the seasonality of the flows and their relative magnitudes for each Mediterranean area. The total number of attempts is decreasing over time and is characterized by a high seasonality; in the summer and spring periods the number of attempts increases, most likely due to better weather conditions. In the first period (from the beginning of 2016 to mid-2017), the Central Mediterranean (Italy and Malta) show a comparatively high number of attempts. The Eastern Mediterranean

(Greece and Cyprus) recorded very high numbers of attempts in the first three months of 2016, and thereafter, the numbers decreased significantly. In the last part of 2019, the number of attempts in that area rose again. Western Mediterranean (Spain) presents a quite stable profile, with an intensification during the second part of 2018 and the first part of 2019. In relative terms, the central Mediterranean corridor appears to have the highest rates of death and disappearance. No wonder, then, that migration rescue efforts by NGOs are concentrated in this area. In Italy in particular, political positions on protecting the lives of migrants on the one hand and limiting the number of arrivals on the other hand clash most severely. The Mediterranean countries of Europe, and the European Community as a whole, must face this conflict and find a solution that will protect the lives of those coming in search of a better and safer life.

#### 4. Discussion: What's next? Some scenarios

During recent decades, several crises have occurred in the Mediterranean region, producing a sharp increase in the numbers of internal displacements and international migration. These crises are causing terrible suffering to the human beings directly involved. And they lead to social and economic difficulties in all the countries affected by the crisis. Today, in the Mediterranean area, a fairly good knowledge of the determinants and implications related to contemporary spatial mobility is available (de Haas, Castles & Miller, 2020). To formulate hypothetical future scenarios, mechanical and causal arguments such as the push-pull model alone are neither adequate nor sufficient. In fact, the variables influencing the decision to migrate are multiple and are rather difficult to model. A first step to formulate possible future scenarios is to focus on the obvious drivers that underlie the migration flows described above at the macro level, hypothesizing that they will continue to maintain validity in the future. In doing so, it must be emphasized again that the Mediterranean region is not a closed, self-contained space: its particular geographical location touching three continents means that migrants, even from very distant countries, transit through the region, often as the last stage of a long and winding migratory path. It is therefore natural that the following evaluations refer to data and indicators mainly connected to three continents: Africa, Asia and Europe. The main drivers that we have identified are substantially related to demography, environment, economic growth and the political dimension.

Differential population growth leads to significant imbalances in the overall amount and age structure of the population. These aspects are in themselves elements that favour geographical mobility of the population. This mechanism cannot be addressed in a deterministic way, as was often done in the past by demographers and economists, because today's reality is very complex and rapidly changing (Hugo, 2011). However, considering potential future demographic scenarios can help us to focus on some dominant dynamics. According to the demographic projections of the United Nations (United Nations, 2019), significant demographic growth in most African countries will continue into the near future, while we will see a decreasing and ageing population in European countries and a substantial stationarity of the Asian one, leading to changes in the population weights of the countries and increasing disparities in the population age structures in the countries involved. In particular, in the next 30 years the population of Africa will see a rise of almost 86%, the Asian population will increase by about 14%, and the European continent's population will decrease by 5%. As already stated, these differences in numbers are correlated to other structural differences: the percentage of young people (0-14 years) will decrease on all three continents, even though the starting levels are significantly different (if we consider that in 2020 young people represented 40% of the African population and only 16% of the European one). The most significant contraction will be, in relative terms, that in the African countries (-8.3%). On the other hand, future changes in the percentage of the population of working age (i.e., the population potentially economically active, 15 to 64 years old) differ between continents. In this case, the only increase is the one expected in Africa (+6.1%) while there are significant decreases in this population group for Asia and for Europe with an outstanding value of -7.6%. Finally, on all three continents, though with varying degrees of intensity, the percentage of elderly (65 years and over) will increase, although, as with young people, they start from significantly different initial situations, with Europe in the lead (19.1%) (United Nations, 2019). These changes in age structure are accompanied by equally significant changes in the geographical distribution of the population, summarized here by the percentage change in the urban population. This is an important element in understanding international migration phenomena (IOM, 2015). Very often, in fact, international migration is nothing more than the final stage of a wider migration process along the rural-urban axis (Pumain, 2006). On the other hand, urbanization has a very high environmental



cost which, in turn, affects international migration processes, acting as a push factor (Meyerson, Merino & Durand, 2007). The gradient between the different continents is impressive: the percentage increase, again according to the United Nations (2018), of the urban population in the African continent in the next 30 years will be 153%, while it will be 47% in Asia and just 8% in Europe. It therefore seems legitimate to state that, at least from a theoretical point of view, the demographic disparities underlying or furthering international migration do not seem likely to diminish in the near future.

Another important dimension is related to the environmental aspects. These, including climatic aspects, play a fundamental role in determining migratory pressures, especially for countries where the agricultural sector represents a significant share of employment and/or a source of self-sufficiency (Adamo & Izazola, 2010; Black, Adger, Arnell, Dercon, Geddes, & Thomas, 2011). From this perspective, the main drivers related to climate change and its environmental effects are numerous. These and other relevant aspects are well highlighted in the recent contribution of Livi Bacci (2018), emphasizing that, in addition to the explosion of the already mentioned urbanization processes, two particular aspects must be taken into account with regard to the complex relationship between man and the environment: human intrusion into large forest areas and the growth of populations in the most precarious habitats. In this regard, the author reports very striking data that highlight how deforestation in Africa, Asia and Latin America has assumed alarming levels, as has spreading human settlement, especially in coastal areas, which are perceived as being more attractive but are also much more environmentally fragile. In short, it is a process of consuming landscape, indeed of what little is left, which does not bode well in relation to the pressures leading to future migration flows. A sort of mechanism of attraction and repulsion, the inertial force of which, admitted to defuse the causes, seems to be able to continue to produce harmful effects. In addition to these aspects which are general in nature, there are others of a more local nature. Particularly in some areas of Africa, the process of desertification is an increasing phenomenon. Fuelled by global warming, which is a direct effect of human activities, (especially of the More Developed Countries), desertification is taking land and life away from local populations. Consequently, by 2030, some authors expect that there will be 135 million climate refugees due to desertification of land on a global scale. Of these, 60 million are destined to move from Sub-Saharan Africa to North Africa and Europe (Confortin, 2017). This confirms, as we previously discussed, that climate change is an important contributing factor for internal and international migration. A recent report released by the Italian Agency for Development Cooperation states that, according to the United Nations (FAO-IFAD-OIMWHP 2018), in Sub-Saharan Africa, during the period 1960-2000 changes in temperature and rainfall can be linked to a 50% increase in net migration. Some 5 million people have been pushed to migrate from rural areas to urban areas due to agricultural production losses and falling incomes and wages (Dessi, 2019). A sort of self-feeding or self-reinforcing process is thus outlined: the consumption levels of big cities and their CO<sub>2</sub> emissions promote climate change, such as global warming, which speeds up the desertification processes which, in turn, pushes more and more people to urbanize (Livi Bacci, 2018). It is a sort of Malthusian environmental trap that seems to still gain vigour.

The manifest and persistent economic disparities existing in the Mediterranean region and beyond are a further element in driving international migration towards the north of the northern Mediterranean shore, and towards Europe in general. This is especially true when considering economic prosperity, or the lack of it, as an indicator of the possibility of securing the livelihoods of individuals, families and the entire population. However, the decision to migrate depends not only on economic opportunities, or the lack of them, but also on the availability of resources, be it in the form of economic capital or in the form of family and social networks. In the context of the discussion on the Human Development Index above, the importance of the economic dimension was already stressed and the existing disparities in the Mediterranean region (Table 1) were shown. The gradient of economic wellbeing or development becomes yet steeper when considering other African and Asian countries (Figure 1).

The general absence of economic opportunities might be one of the important drivers of emigration. But also specific aspects could lead to the decision to emigrate: the phenomenon of land grabbing. This is now recognized as a cause of mobility of people, especially in continents such as Africa that are rich in land but are otherwise very poor (Pugliese, 2019). In general, external influences can play crucial role on mobility of populations. A recent contribution in "La Voce" by Pasquale, Stucchini & Tronchin (2019) states that since the early 2000s, the main player in Africa has become China, with a very concrete approach: natural resources in exchange for infrastructure projects such as roads, dams, stadiums,

railways and ports. On the other hand, as demonstrated in some recent contributions (Clemens & Postel, 2017), in the short and medium term, economic development of developing countries, typically areas of origin for large migratory flows, would not favour a contraction of the migratory push but, on the contrary, its expansion (Mendola, 2018).

Besides these macro aspects, individual decision making is an important element in understanding migration flows. The disparities in demographic, environmental and economic situations and trends by themselves do not lead to migration. Aspirations and capabilities play a decisive role. De Haas (2021) discusses this concept, which was formulated by Carling earlier (2002) and was further developed by others, putting it in relation to other theoretical approaches and pointing out the limitations of functionalist and historical-structural theories. De Haas (2021) discusses various categories of migrations that highlight the multi-faceted aspects of international migration, referring to the concepts of aspirations to migrate or to stay, as well as to the liberty to either migrate or stay. De Haas (2021) also underlines the role played by migratory agency and its tendency for self-enforcing:

The entire set of structural conditions at home and in imagined migration destinations creates complex opportunity structures, endowing different individuals and social groups with various sets of negative and positive liberties, which, depending on how these structural conditions affect people's capabilities and aspirations and how people perceive these conditions through their social, cultural and personal lenses, may, or may not, make them decide to migrate (De Haas, 2021, p. 27).

Existing migration networks show the tendency to reinforce this process. Moreover the aspirations-capabilities framework can account for increasing propensities to migrate linked to social and economic change (de Haas, 2011). With this framework the individual and the family is put at the centre of the decision to stay or to migrate. Thus, more information and more liberty might increase the number of migrants.

The discussion surrounding the various potential future drivers of international migratory flows affecting the Mediterranean region suggests that migration flows will likely continue be directed to the European shores or to transit to the other European countries. The demographic component regarding potential migrants alone hints at a future increase of migration flows. The COVID-19 pandemic seems to have underlined the importance of foreign labour, especially in essential sectors of the European labour markets, such as agriculture or personal care. And as long as European countries will retain relatively high social and economic living standards, they will remain attractive for migration flows from the Asian and African shores of the Mediterranean and beyond.

## 5. Conclusions

The scenarios delineated here lead us to revisit Mediterranean migration flows in terms of concepts and aspects of categorization, and they also invite us to rethink policies that could be adapted to the multiple changes and challenges in the region. In other words, two interconnected dimensions become crucial in the analysis of the Mediterranean migratory system: the geopolitical component and the need to reflect on more interventionist policies. Concerning the first dimension, the issue of spatial mobility provides the opportunity to reveal the complex interrelationships among populations, places, and politics; in turn the analysis cannot ignore the geopolitical circumstances under which this mobility occurs. With regard to the second dimension, the inadequacy of the policies adopted in recent decades to gradually manage demographic and socio-economic processes in the origin countries of the migration flows interesting the European Mediterranean countries and other European countries invites discussions regarding measures and political actions to improve the future situation. The failure of the Barcelona Process and the Union for the Mediterranean, the impasse in the Lisbon strategy, and the ineffectiveness of decentralized cooperation in the context of co-development impose strategies to facilitate socio-economic development in less developed countries. In other words, the political management of international migration flows should go beyond the bilateral or multilateral agreements to govern these flows. Even if the issue is controversial, there seems to be no alternative to a proactive government or management of international migration flows in the interest of origin and destination countries. This could be realized within the framework of The Global Compact for Safe, Orderly and Regular Migration and The Global Compact on Refugees. Obviously these policies have to go along with measures to support social and economic development in countries with a low Human Development Index. The policies can only be

virtuous and effective if democratic principles and human rights are respected. In addition to the measures that should apply in ordinary times of permanent crises with regard to demographic, environmental and socio-economic differences, we would like to point out the need to react quickly in times of actual humanitarian, political or socio-economic crises.

## Funding

Part of this work was carried out within the financial support provided by the Italian Ministry of University and Research, 2017 MIUR-PRIN Grant N. 2017W5B55Y (“The Great Demographic Recession”) and within the Horizon2020 FUME project (Future Migration Scenarios for Europe), Grant ID. 870649. Project website: <https://futuremigration.eu> & <https://greatdemographicrecession.home.blog>

The opinions of the authors expressed herein do not state or reflect those of the institutions of affiliation.

## Acknowledgment

The authors would like to express gratitude to the reviewers for their very valuable comments.

## Appendix

Table A1. Net Migration Rates (per 1,000 population) – Countries of the Mediterranean region

	Net migration rate (per 1,000 of population)			
	2000-2005	2005-2010	2010-2015	2015-2020
Portugal	3.4	1.7	-2.7	-0.6
Spain	13.7	10.0	-2.2	0.9
France	3.1	1.4	1.3	0.6
Italy	5.8	3.6	5.5	2.5
Slovenia	1.5	3.9	1.6	1.0
Croatia	-0.1	-0.5	-1.8	-1.9
Greece	2.0	-6.7	-3.0	-1.5
Malta	2.8	2.8	7.3	2.1
Bosnia-Herzegovina	-0.3	-3.2	-14.5	-6.4
Montenegro	-2.6	-0.2	-1.0	-0.8
Serbia	-5.9	-2.6	0.7	0.5
Albania	-11.4	-14.4	-9.4	-4.9
North Macedonia	-1.4	-0.7	-0.9	-0.5
Turkey	-0.1	-0.1	4.7	3.5
Syrian Arab Rep.	-4.4	3.7	-54.7	-24.1
Lebanon	25.8	-1.1	41.5	-4.5
Israel	3.3	7.9	0.5	1.2
State of Palestine	-11.2	-5.4	-7.3	-2.2
Jordan	-3.5	20.0	25.6	1.1
Cyprus	11.7	11.0	4.0	4.2
Egypt	-0.2	-0.7	-0.6	-0.4
Libya	-0.7	-4.0	-9.5	-0.3
Tunisia	-2.9	-0.8	-2.8	-0.3
Algeria	-1.3	-2.1	-0.8	-0.2
Morocco	-4.4	-3.6	-2.2	-1.4

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019).  
World Population Prospects: The 2019 Revision

## References

Abderrahim T. (2019). A Tale of Two Agreements: EU Migration Cooperation with Morocco and Tunisia. *41 Papers IEMed*. European Institute of the Mediterranean. Retrieved from [https://www.euromesco.net/wp-content/uploads/2019/04/EuroMeSCo-Paper\\_A-tale-of-two-agreements.pdf](https://www.euromesco.net/wp-content/uploads/2019/04/EuroMeSCo-Paper_A-tale-of-two-agreements.pdf)

- Abel, G. J. (2018). Estimates of Global Bilateral Migration Flows by Gender between 1960 and 2015. *International Migration Review*, 52(3), 809-852. <https://doi.org/10.1111/imre.12327>
- Abel, G.J., & Cohen, J.E. (2019). Bilateral international migration flow estimates for 200 countries. *Scientific Data*, 6, 82. <https://doi.org/10.1038/s41597-019-0089-3>
- Angeli, A. & Salvini, S. (2018). *Popolazione mondiale e sviluppo sostenibile*. Bologna: Il Mulino.
- Adamo, S. B., & Izazola, H. (2010). Human migration and environment. *Population & Environment*, 32(2-3), 105-108. <https://doi.org/10.1007/s11111-010-0130-0>
- Angeli, A., & Salvini, S. (2008). *Popolazione e sviluppo nelle regioni del mondo*. Bologna: Il Mulino.
- Bellis, G., Carella, M., Léger, J.-F., & Parant, A. (Eds.) (2021). *Populations et crises en Méditerranée*. Milano: Edizioni Franco Angeli.
- Cabezón-Fernández, M.-J., & Sempere-Souvannavong J.-D.(2019). The global South as a solution to cope with the crisis: Following the transnational itineraries of the precarised Spaniards towards Algeria. *Migration Studies*, mnz035. <https://doi.org/10.1093/migration/mnz035>
- Carella, M., & Parant, A. (2014). Demographic trends and challenges in the Mediterranean. *South-East European Journal of Political Science*, II(3), 10-22.
- Carella, M., & Parant, A. (2016). Age-Structural Transition and Demographic Windows around the Mediterranean. In R. Pace, & R. Ham Chande (Eds.), *Demographic Dividends: Emerging Challenges and Policy Implications* (pp. 83-113). Switzerland: Springer International Publishing. <https://doi.org/10.1007/978-3-319-32709-9>
- Castles, S. (2011). Migration, Crisis, and the Global Labour Market. *Globalizations*, 8(3), 311-324. <https://doi.org/10.1080/14747731.2011.576847>
- Castles, S., & Vezzoli, S. (2009). The global economic crisis and migration: temporary interruption or structural change? *Paradigmes: economia productiva i coneixement*, 2, 69-75. Retrieved from <https://www.raco.cat/index.php/Paradigmes/article/view/223806/304668>
- Clemens, M.A., & Postel, H. M. (2018). Detering Emigration with Foreign Aid: An Overview of Evidence from Low-Income Countries. *Population and Development Review*, 44(4), 667-693. <https://doi.org/10.1111/padr.12184>
- Collyer, M., & King, R. (2016). Narrating Europe's migration and refugee 'crisis'. *Human Geography: a new radical journal*, 9(2), 1-12. <https://doi.org/10.1177/194277861600900201>
- Confortin, E. (2017). *Desertificazione in Africa, 135 milioni di profughi entro il 2030*. Inika. Retrieved from <http://www.indika.it/news/desertificazione-in-africa>
- Black, R., Adger, N., Arnell, N. W., Dercon, S., Geddes, A., & Thomas, D. S. G. (2011). The effect of environmental change on human migration. *Global Environmental Change*, 21(1), 3-11. <https://doi.org/10.1016/j.gloenvcha.2011.10.001>
- De Haas, H., & Fokkema, T. (2010). Intra-Household Conflicts in Migration Decision making: Return and Pendulum Migration in Morocco. *Population and Development Review*, 36(3), 541-561. <https://doi.org/10.1111/j.1728-4457.2010.00345.x>
- De Haas, H. (2011). Mediterranean migration futures: patterns, drivers and scenarios. *Global Environmental Change*, 21(1), 59-69. <https://doi.org/j.gloenvcha.2011.09.003>
- De Haas, H. (2021). A theory of migration: the aspirations-capabilities framework. *Comparative Migration Studies*, 9(8). <https://doi.org/10.1186/s40878-020-00210-4>
- De Haas, H., Castles, S., & Miller, M. J. (2020). *The age of migration. International Population Movements in the Modern World* (6<sup>th</sup> edition). London: Macmillan Education (Red Globe Press).
- Dessi, A. (2019). *Le migrazioni ambientali: le sfide attuali rispetto ai cambiamenti climatici*. In Quaderni Migranti. Alle Radici della Migrazione dall'Africa. Roma: Agenzia Italiana per la Cooperazione allo Sviluppo.
- Di Comite, L., & Moretti, E. (1999). *Geopolitica del Mediterraneo*. Roma: Carocci.
- Dumont, G.-F. (2018). *Géographie des populations. Concepts, dynamiques, prospectives*. Paris: Armand Colin. <https://doi.org/10.3917/arco.dumon.2018.02>
- Eurostat (2020). *Main trends in the number of asylum applicants*. European Commission. Brussels

- Fargues, P., & Fandrich, C. (2012). *Migration after the Arab Spring*. Migration Policy Centre Research Report, 9. Retrieved from <http://hdl.handle.net/1814/23504>
- Frontex (2021). Migratory map web site. Detections of illegal border-crossings statistics download (updated monthly). Retrieved from <https://frontex.europa.eu/we-know/migratory-map/>, [https://frontex.europa.eu/assets/Migratory\\_routes/2021/Monthly\\_detections\\_of\\_IBC\\_2021\\_06\\_04.xlsx](https://frontex.europa.eu/assets/Migratory_routes/2021/Monthly_detections_of_IBC_2021_06_04.xlsx)
- Gills, B. K. (2010). The return of crisis in the era of globalization: one crisis, or many?. *Globalizations*, 7(1), 3-8. <https://doi.org/10.1080/14747731003592978>
- Heyman, J., & Ribas-Mateos, N. (2019). Borders of Wealth and Poverty: Ideas Stimulated by Comparing the Mediterranean and U.S.-Mexico Borders. *Archivio antropologico mediterraneo*, XXII, 21(2). <https://doi.org/10.4000/aam.2019>
- Hugo, G. (2011). Future demographic change and its interactions with migration and climate change. *Global Environmental Change*, 21(1), 21-33. <https://doi.org/10.1016/j.gloenvcha.2011.09.008>
- International Organization for Migration (2015). *World Migration Report 2015. Migrants and cities: new partnerships to manage mobility*. <https://doi.org/10.18356/be2a2be6-en>
- King, R. (2001). *The Mediterranean passage: Migration and new cultural encounters in Southern Europe*. Liverpool: University Press.
- King, R., & Rybaczuk, K. (1993). *Southern Europe and the international division of labour: from mass emigration to mass immigration*. In R. King (Ed.), *The New Geography of European Migrations* (pp. 175-206). London: Belhaven.
- King, R. & Thomson, M. (2008). The Southern European model of immigration: do the cases of Malta, Cyprus and Slovenia fit?. *Journal of Southern Europe and the Balkans*, 10(3), 265-291. <https://doi.org/10.1080/14613190802493550>
- Lafleur, J.-M., & Stanek, M. (Eds.) (2017). *South-North Migration of EU Citizens in Times of Crisis*. IMISCOE Research Series. <https://doi.org/10.1007/978-3-319-39763-4>
- Livi Bacci, M. (2018). Guardando al futuro. La questione dei 4 miliardi. *Papeles de Población*, 24(96), 15-28. <https://doi.org/10.22185/24487147.2018.96.13>
- Livi Bacci, M., & Veronesi Martuzzi, F. (1990). *Le risorse umane del mediterraneo*. Bologna: Il Mulino.
- Mendola, M. (2018). "Aiutarli a casa loro" non ferma i flussi migratori. *La voce.info*. Retrieved from <https://www.lavoce.info/archives/53871/aiutarli-a-casa-loro-non-ferma-i-flussi-migratori>
- Meyerson, F. A. B., Merino, L., & Durand, J. (2007). Migration and environment in the context of globalization. *Frontiers in Ecology and Evolution*, 5(4), 182-190. [https://doi.org/10.1890/1540-9295\(2007\)5\[182:MAEITC\]2.0.CO;2](https://doi.org/10.1890/1540-9295(2007)5[182:MAEITC]2.0.CO;2)
- Parant, A., Léger, J.-F. (2020). Tendances & perspectives démographiques en Méditerranée. *Les notes du plan bleu*, 38. Retrieved from <https://planbleu.org/en/publications/note-38-demographic-trends-and-outlook-in-the-mediterranean>.
- Pasquale, E., Stuppini, A., & Tronchin, C. (2019). Ma perché gli africani emigrano?. *La voce.info*. Retrieved from <https://www.lavoce.info/archives/57374/ma-perche-gli-africani-emigrano>
- Pugliese, R. (2019). *Land Grabbing: una lotta tutta da combattere*. In Quaderni Migranti. Alle Radici della Migrazione dall'Africa. Roma: Agenzia Italiana per la Cooperazione allo Sviluppo.
- Pumain, D. (2006). The urbanization process. In G., Caselli, J., Vallin, G., Wunsch (Eds.), *Demography. Analysis and Synthesis*, 2, (pp. 319-328). London: Elsevier.
- Ribas-Mateos, N. (2017, 2005). *The Mediterranean in the Age of Globalization. Migration, Welfare, and Borders*. London: Routledge. <https://doi.org/10.4324/9781315133096>
- Schmoll, C., Thiollet, H., & Wihtol de Wenden, C. (2015). *Migrations en Méditerranée. Permanences et mutations à l'heure des revolutions et des crises*. Paris: CNRS Editions.
- Staniscia, B., & Benassi, F. (2018). Does regional development explain international youth mobility?. *Belgian Journal of Geography*, (3), 1-24. <https://doi.org/10.4000/belgeo.30305>
- Sobczak-Szelc, K., & Fekih, N. (2020). Migration as one of several adaptation strategies for environmental limitations in Tunisia: evidence from El Faouar. *Comparative Migration Studies*, 8(8). <https://doi.org/10.1186/s40878-019-0163-1>

- United Nations Development Programme (2019). *Human Development Report 2019. Beyond income, beyond averages, beyond today. Inequalities in human development in the 21<sup>st</sup> century*. New York: United Nations Development Programme. Retrieved from <http://hdr.undp.org/sites/default/files/hdr2019.pdf>
- United Nations Development Programme (2020). *Human Development Report. 2020. The next frontier. Human development and the Anthropocene*. New York: United Nations Development Programme. Retrieved from <http://hdr.undp.org/sites/default/files/hdr2020.pdf>
- United Nations, Department of Economic and Social Affairs, Population Division (2018). *World Urbanization Prospects: The 2018 Revision*. Retrieved from <https://population.un.org/wup/>
- United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019*. Retrieved from <https://population.un.org/wpp/Download/Standard/Population>
- United Nations, Department of Economic and Social Affairs, Population Division (2020). *International Migrant Stock 2020*. Retrieved from [https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undes\\_a\\_pd\\_2020\\_international\\_migration\\_highlights.pdf](https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undes_a_pd_2020_international_migration_highlights.pdf)
- United Nations High Commissioner for Refugees (UNHCR) (2020). *Global Trends. Forced displacement in 2019*. Copenhagen, UNHCR Global Data Service. Retrieved from <https://www.unhcr.org/5ee200e37.pdf>
- Wihtol de Wenden C. (2013). Migrations en Méditerranée, une nouvelle donne. *Confluences Méditerranée*, 4(87), 19-30. <https://doi.org/10.3917/come.087.0019>
- Zapata-Barrero, R. (2020). Editorial: “Mediterranean thinking” for mapping a Mediterranean migration research agenda. *Comparative Migration Studies*, 8(6). <https://doi.org/10.1186/s40878-019-0170-2>