Mediterranean Demographic Overview: Growth, Stress Factors and Regional Divergences

Elena Ambrosetti
Professor of demography
Sapienza University of Rome

The population of the Mediterranean countries was about 571 million inhabitants in 2020. Since 1950 it has increased by two and a half. The annual rate of growth had been strong until the mid-1980s (more than 1.4% per year), then it started to decrease, reaching 0.9% at the beginning of the 21st century. The general growth rate decline masks regional differences. Most notably, North Africa and the Middle East still have annual population growth rates above 1.3%, despite a steady decline since the mid-1980s, while southern Europe and the Balkans have zero and negative growth respectively (-0.4%), partially compensated by positive net migration.

Despite the decrease in growth rates, the population of the Mediterranean countries has more than doubled, reaching around 570 million inhabitants in 2020, due to the so-called inertia of the demographic phenomena. The increase is mainly driven by the populations of the countries of the southern and eastern shores. The population of the Mediterranean area has increased by 110 million inhabitants between 2000 and 2020, with North Shore countries contributing only 11 million. Nowadays, two out of three Mediterranean inhabitants live in a country on the southern and eastern shores (compared to one out of three in 1950), with Egypt and Turkey being the most populated Mediterranean countries in 2020, while in 1950 it was Italy and France. With roughly 109 and 85 million inhabitants in 2020, respectively, Egypt and Turkey account for 34% of the Mediterranean population, occupying the same position as India and China with respect to the world population (Blöss-Widmer, 2022). The demographic order that prevailed in the 1950s has been reverted because of the demographic transition. While the majority of the Mediterranean population lived on the northern shore in 1950, the situation is exactly the opposite at present, where 60% of the Mediterranean population lives on the southern and eastern shores. Some countries on these shores have experienced a remarkable increase in their population since 1950. The population of Egypt and Turkey has multiplied by five and four, respectively. The most impressive growth has been recorded in Jordan. The country had less than 500,000 inhabitants in 1950, but more than 11 million in 2021 (a more than 25-fold increase in the population in 70 years). The countries of the southern and eastern shores have seen their populations increase by more than four times since 1950, compared to 1.5 for the countries of the northern shore.

The Various Demographic Transitions

This growth is largely a consequence of the various demographic transitions that occurred in Mediterranean countries since 1950. It is linked to the level of the natural balance (number of births minus number of deaths), a component of population change that is modified during the stages of the demographic transition. The rate of population change is also influenced by the size of the net migration (estimate of the difference between inflows and outflows from each country for each period). Taken together, these two components of population dynamics can either stimulate growth (positive natural balance and positive net migration), go in opposite directions (positive natural balance/negative net migration or vice versa) or contribute to a general decrease (negative natural balance and net migration).

Considering only the natural component of growth, the average annual rates of all countries of the Mediterranean region have decreased considerably since 1950. More generally, the effect of the demographic transition is to generate converging lower rates of natural change. However, behind the general decrease there are still important differences in the two shores with several demographic regimes coexisting in the Mediterranean. According to Doignon et al. (2023), analysing the evolution of the level of mortality, birth rate and natural change from 1950 till 2021, the demographic transitions in Mediterranean countries can be categorized into 10 different types, further grouped into six broad types. Natural growth has led to the increase of the population in the majority of Mediterranean countries. More specifically, natural growth has been responsible for population growth in North Africa (Morocco, Algeria, Tunisia, Egypt, Libya) and the Middle East (Palestine, Turkey, Syria). In these countries, the demographic transition began later, but much more rapidly, than the others. On the North Shore, France, Cyprus, Malta, Montenegro, Macedonia, Kosovo and Albania have managed to maintain positive natural growth because of higher fertility and age structures that are still favourable. However, their rate of natural growth (0.5%) is much lower than in the Middle East or North Africa.

Nine Mediterranean countries have experienced a weak and downward natural dynamic since the 1990s, all are located on the northern shore: Slovenia, Spain, Italy, Bulgaria, Bosnia-Herzegovina, Serbia, Portugal, Greece and Croatia. These countries are experiencing ageing populations and lower fertility leading to a slowdown of the natural dynamics.

To conclude, the contemporary deceleration of population growth in the Mediterranean region, now markedly lower than in previous decades, can be attributed to the widespread diffusion of the demographic transition across the entire area. All Mediterranean countries have experienced declines in both fertility and mortality rates, thereby contributing to a general moderation in population growth.

However, this aggregate trend conceals pronounced heterogeneity among countries. Rather than reflecting a single, uniform model, the demographic transition in the Mediterranean encompasses multiple trajectories that differ in timing, pace and post-transitional dynamics. In some countries, the transition has occurred relatively rapidly, whereas in others it has progressed more gradually.

Moreover, the post-transitional demographic regimes exhibit substantial variation. Certain countries (e.g., Bulgaria, Croatia, Italy) are characterized by negative or declining population growth, while others (such as France, Cyprus, Tunisia, Kosovo and Turkey) display low to moderate growth. A smaller group – including Egypt, Palestine, Jordan, Algeria and Israel – continues to experience comparatively high population growth rates. The post-transitional dynamics are characterized by two essential features: 1) a general convergence of births and deaths towards low rates; and 2) that convergence of mortality and birth rates towards low rates masks great diversity. On the northern shore the consequence is a low population growth due to low birth and death rates. On the southern and eastern shores there is a higher population growth due to higher birth rates and low mortality.

Rather than benefiting from the demographic dividend, the younger generations of the "demographic boom" were at the heart of the protests that led to the "Arab Spring"

Consequently, the overall slowdown in growth has led to divergent demographic outcomes within the region: some countries are undergoing population decline, while others continue to record population increases.

The Unequal Evolution of Fertility

During the demographic transition process, fertility levels have declined in all Mediterranean countries. However, as already mentioned in the previous section, this decline has occurred according to different time frames, leading to lower levels than in the past all over the region. Despite this convergence towards lower levels than those of the pre-transitional regimes, fertility differences persist in the Mediterranean. Most of the countries on the northern shore

and Cyprus, have reached a fertility level well below the population replacement level (2.1 children per woman). Other countries have a fertility level around the replacement level, such as France, Tunisia, Turkey and Lebanon. Egypt and Algeria, together with Palestine, Jordan and Israel have fertility rates of between three and four children per woman. What about the future? Past trends suggest that the fertility difference between the most and least fertile countries has fallen from 5.5 children per woman in 1950 to 2.6 children in 2020. Moreover, according to the median scenario of the World Population Prospects 2022, in 2060 the fertility difference between the most and least fertile Mediterranean countries will further decrease to 0.8 children per woman. According to this scenario there will be a significant narrowing of the fertility gap in Mediterranean countries.

Average estimated fertility rates in Mediterranean countries will drop from the current figure of two children per woman to 1.7. According to the median scenario, only three countries will remain above 2.1 children per woman (Israel, Palestine, Egypt), while Jordan, Syria and Algeria will attain fertility rates slightly below two children per woman.

In line with recent research (Doignon 2020; Doignon et al. 2023), instead of focusing on a general fertility convergence in the Mediterranean countries, we can suggest that there will be a convergence in fertility by groups of countries with similar demographic histories. Focusing on the groups of countries on the southern and eastern shores with fertility rates above two children per woman: Israel has a stable fertility rate (~three children per woman), it is an atypical case with no signs of decline in recent decades, making it difficult to foresee a decline in the coming decades. In the same region, Palestine, Jordan and Syria have declining fertility rates compared to the past, but with high future uncertainties. For instance, for Syria we can think about a possible "fertility recovery" after conflict, although its evolution is highly uncertain. For countries in North Africa, more specifically for Morocco, Algeria, Egypt and Libya, we can make the following hypotheses: in Morocco, a slowdown in gains in female education and geographic isolation could lead to a possible stabilization of fertility at 2.5 children per woman. In Algeria and Egypt there is a resistance to falling below replacement level, their fertility rates may converge toward 2.5-three children per woman. In Turkey and Lebanon fertility levels are stable at around two children per woman, however they are subject to further decline with delayed births for younger women. Future fertility trends in these countries are intertwined with several factors. Among the key factors, we should mention evolving female aspirations, cultural patterns, gender relations, geopolitics and the degree of openness of local communities to globalization. This analysis suggests that Mediterranean countries could stabilize at different fertility levels, potentially generating different demographic regimes in the future.

Transformation of the Age Structure

Among the most important consequences of the process of demographic transition in Mediterranean countries is the rapid transformation in the composition of its population. The most significant trend observed is demographic ageing, characterized by a growing proportion of older individuals alongside a declining share of younger people in the population. At present, individuals aged 65 and over make up roughly 12% of the Mediterranean population, while those under 15 account for about 24%. Overall, countries along the northern shore tend to have older populations than those on the southern and eastern shores: in 2020, people aged 65 or above accounted for an average of 21% in the former, compared with just 6% in the latter. Nevertheless, this disparity has narrowed somewhat compared to 1950.

Controlling ageing through migration would require migration balances twice as high as those experienced by the most attractive countries in the world such as the United States

Demographic ageing is expected to accelerate significantly in the coming decades, ultimately becoming a shared challenge across all Mediterranean countries. According to the United Nations' median projections, by 2060 individuals aged 65 and over will constitute approximately 22% of the total Mediterranean population, with proportions reaching

around 34% on the northern shore and 17% on the southern and eastern shores.

This approach in a context marked by persistent structural inequalities and long-term political instability in the Global South contributes to driving forced migrants towards increasingly dangerous routes

In societies undergoing a transition from high fertility and mortality rates to low fertility and mortality rates, a temporary phase emerges in which both the elderly and the young constitute relatively small shares of the population. This shift creates a demographic window of opportunity for economic growth known as demographic dividend, as the working-age population exceeds the dependent population (children and the elderly).
The dependency ratio captures the balance between dependent and economically active populations by comparing those under 20 and over 65 with individuals aged 20 to 64. In the Mediterranean region, the dependency ratio declined markedly between 1950 and 2020, decreasing from 105 to below 75 (Doignon et al. 2023). As the proportion of young people declines, the dependency ratio correspondingly decreases. However, in recent years, an upward trend in this ratio has been observed in Balkan countries, southern Europe and Israel. This increase is primarily driven by population ageing, as improvements in survival rates lead to a larger share of elderly individuals. Meanwhile, countries on the southern and eastern shores continue to exhibit higher dependency ratios than those on the northern shore, particularly in the Middle East, where higher fertility rates result in a greater proportion of children within the population (Ambrosetti, 2020). For these countries to fully harness the demographic dividend, a key prerequisite is that young adults entering the labour market are able to secure employment. Meeting this condition depends largely on the institutional and economic environment in which the demographic transition unfolds. Crucial factors include the implementation of sound investment policies, improvements in infrastructure quality and initiatives aimed at enhancing workforce skills and specialization. In addition, social and political stability, effective governance, respect for human rights and the promotion of gender equality are all essential for enabling North African and eastern Mediterranean countries to capitalize on this opportunity (Ambrosetti, 2020).

International Migration

The Mediterranean constitutes a real migration system, and above all one of the largest migration areas in the world. Migration from the southern and eastern shore countries to European countries was intense in the 1960s. However, the various economic crises from the 1970s onwards led to increasingly restrictive entry policies in Europe. Southern European countries have been gradually becoming host countries. Since the 2000s, there has been a recomposition of the poles of attraction in the Mediterranean, with the emergence of Turkey for example. Finally, the number of refugees and asylum seekers has increased considerably since the "Arab Spring" and the various ensuing conflicts, to the extent that we are now talking about a "refugee crisis." The issue of international migration is, along with that of the urbanization/littoralization of the common sea and the ageing of populations, a challenge shared by the entire Mediterranean area.
At present, migration patterns in the Mediterranean region are largely influenced by the age structure of the resident population, as a consequence of the demographic transition. Indeed, the countries of the Mediterranean Basin are at different stages of this transition. Consequently, while the median age in most of the ageing countries of the northern Mediterranean is over 40 (with the exception of Albania and Montenegro), on the southern and eastern shores, the median age is under 30, resulting in a much younger age structure. This favourable demographic situation, known as the "youth bulge," holds great potential from an economic perspective: according to theorists of the demographic dividend, it could lead to rapid economic growth thanks to higher levels of education and increased labour force participation (Bloom et al. 2017). However, countries in the southern and eastern Mediterranean region have not yet reaped the benefits of this demographic dividend. The young population is far better educated

and more skilled than their parents' generations, but economic opportunities for these generations are still lacking. Indeed, the supply of labour exceeds demand, resulting in high unemployment rates. High inflation rates and growing income inequality characterize the economies of most of these countries. Consequently, rather than benefiting from the demographic dividend, the younger generations of the "demographic boom" were at the heart of the protests that led to the "Arab Spring" in the early 2010s (Martin and Bardak 2011). The political and economic problems affecting the Arab countries of the Mediterranean are a major factor driving migration to countries in Europe and the Middle East (Etling et al. 2020).

Considering that southern European populations are ageing, for these countries migration could be a solution for mitigating the effect of ageing on the age structure. However, regardless of the size of net immigration to these countries over the next 40 years (the evolution of which is the most unpredictable of all the components), this solution would not, a priori, make it possible to halt the expected phenomena of decline, because the ageing of the population leads to the observation of too rapid an increase in the number of deaths. As early as the 2000s, a United Nations report (Population Division et al., 2000) modelled an adjustment of imbalances by migration flows. The main conclusions were that controlling ageing through migration would require migration balances twice as high as those experienced by the most attractive countries in the world such as the United States; and some simulations of migration balances needed to maintain dependency ratios in ageing developed countries are even described as "totally unrealistic."

One in two people in the region will live in just three countries: Egypt, Turkey or Algeria

Moreover, the new measures outlined in the European Pact on Migration and Asylum, which will take effect in June 2026, are primarily aimed at strengthening control over migration flows and addressing political demands for security, notably through the acceleration of deportations, cooperation among Member States, and the outsourcing of migration policies to third countries. Three main areas emerge: the tightening of return procedures for undocumented migrants, the establishment of flexible solidarity among states and the broadening of the "safe country" concept, thereby facilitating the rejection of many asylum claims (Bonifazi, 2026).

These agreements are part of a broader European strategy that, for the past two decades, has been based on the externalization of migration control to countries of transit and origin. This approach in a context marked by persistent structural inequalities and long-term political instability in the Global South, contributes to driving forced migrants towards increasingly dangerous routes and into the hands of smuggling networks, thereby increasing the risks of exploitation and death.

Recent experience thus shows that policies of closure and deterrence quickly reach their limits in the face of protracted crises. Despite the diversity of shocks – economic, political or health-related – migration flows persist. The Mediterranean region thus emerges as a genuine migration system, capable of absorbing and redistributing human mobility beyond short-term disruptions (Panebianco, 2022; Wihtol de Wenden, 2019).

Conclusions

By 2060, the population of the Mediterranean region is expected to reach about 685 million people, according to United Nations projections. However, this growth will not be shared equally. Less than half of the countries will see their populations increase, while the others will continue to shrink due to low birth rates and ageing populations. In southern Europe and the Balkans, even if more people move in than leave, this will not be enough to make up for the long-term decline caused by having fewer births than deaths.

As a result, the countries on the southern and eastern shores of the Mediterranean will make up a larger share of the population. They are expected to account for 72% of the total by 2060, compared with 61% today. By then, one in two people in the region will live in just three countries: Egypt, Turkey or Algeria. In contrast, countries such as Italy, Spain, Portugal and Greece will lose population, with Portugal and Greece dropping below 10 million inhabitants. Overall, southern Europe's share of the Mediterra-

nean population will fall to less than 30%, and the Balkans to less than 5%. Many countries – especially in the north, but also Lebanon – will have fewer people in 2060 than they do today.

In summary, population growth has been slowing across all Mediterranean countries since the 1950s. Although the differences between countries are smaller than before, growth remains much stronger in North Africa and the Middle East than in southern Europe and the Balkans. In most countries, population change is mainly driven by the balance between births and deaths. Migration can help slow population decline or support growth, but in countries with very low birth rates and high life expectancy, it will not be enough to prevent a decrease in population in the coming decades.

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