

## Migration and population change - drivers and impacts

### 1. The importance of migration as a driver of population change will increase in the next few decades

**The developed regions as a whole will experience a shrinking of population after 2040.** According to the medium-variant projection of the United Nations, the world's population is likely to increase from 7.6 billion in 2017 to 8.6 billion by 2030, the target year of the Sustainable Development Goals, and to 9.8 billion in 2050.<sup>1</sup> Most of this increase will take place in the developing regions, while the developed regions will, for the first time in recorded history, start to experience negative population growth by around 2040 or 2050. Under a scenario that assumes a net migration of zero, the projected population of the developed regions would be nine per cent smaller in 2050 than if current migration trends continued. With no migration, or with equivalent levels of immigration and emigration, the population of the developing regions would be about one per cent larger in 2050 than if current migration trends continued.

**With fertility falling, the contribution of migration to population change is likely to increase.** Total fertility, which stands at 2.5 births per woman at the world level today, is projected to fall to 2.2 in 2050. Fertility in the developed regions, which fell below the replacement level of 2.1 births per woman shortly before 1980, stands currently at 1.7 births per woman. Birth rates in many developing countries, while declining, remain relatively high. In the long run, the trend towards lower fertility rates could result in an eventual stabilization of the world's population at around 11 billion people.

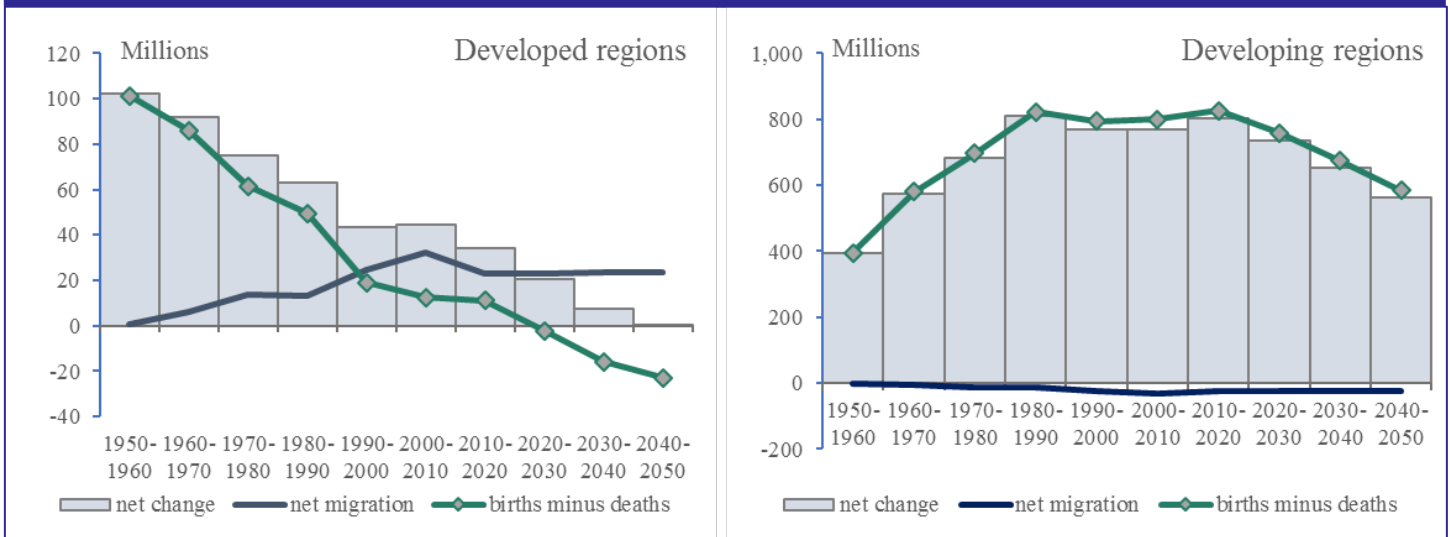
**Migration already makes an important contribution to population growth.** Since the 1950s, the developed regions continuously gained population due to positive

net migration. From 1950-1970 to 2000-2010, the level of net migration to the developed regions increased from 0.3 million to 3.1 million migrants per year. However, the net inflow of migrants fell to about 2.2 million persons annually between 2010 and 2015.

***Net migration** refers to the difference between numbers of immigrants and emigrants, who arrive in or depart from a particular country or area in a given time period, irrespective of country of birth or citizenship. The “medium variant” of the United Nations population projections assumes a continuation of recent levels of net migration in future years, whereas the “zero-net-migration scenario” assumes that numbers of immigrants and emigrants will be equal, starting in the period from 2015 to 2020. Comparing these two scenarios provides useful insights into the contribution of international migration to population change.*

**Since the 1990s, migration has been the primary source of population growth in the developed regions.** Migration is projected to be the only driver of population growth in the developed regions starting after 2020. By 2050, it is expected that the population of the developed regions will start to decline in size, as the net inflow of migrants will no longer be sufficient to compensate for the excess of deaths over births. The impact of outmigration on population growth in the developing regions is expected to remain minimal. Indeed, for the next several decades, it is expected that elevated levels of fertility in the developing regions will continue to dwarf the role of net migration, which is negative but relatively small (figure 1).

Figure 1. Population change in developed and developing regions, 1950 – 2050



2. The contribution of migration to population growth or decline varies greatly across regions and over time

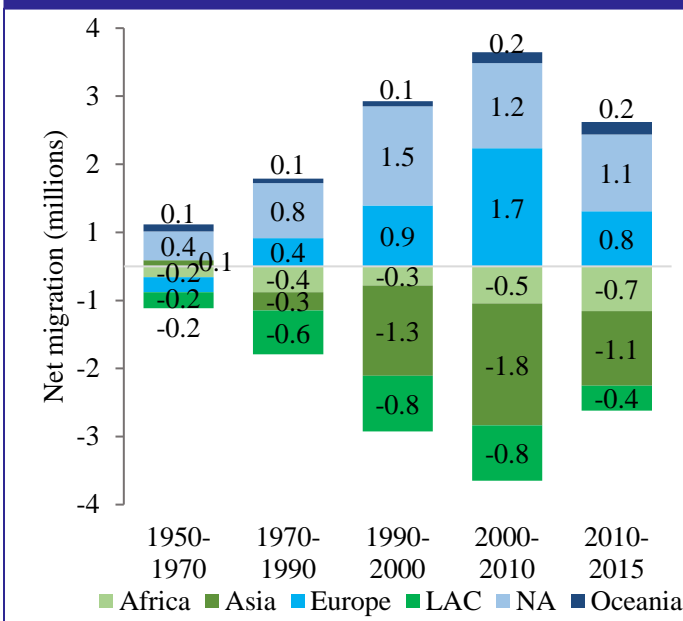
Since 2010, the net inflow of migrants to Europe and Northern America has diminished. The larger reduction in net migration took place in Europe, where net inflows were reduced by half, from 1.7 million per year between 2000 and 2010 to 0.8 million per year between 2010 and 2015. The net inflow to Northern America decreased by 0.1 million migrants per annum, while remaining stable for Oceania. At the same time, both Asia (-39 per cent) and Latin America and the

Caribbean (-50 per cent) registered a sharp decrease in net outflows. Africa was the only region in which net outmigration increased during the period from 2010 to 2015 (+40 per cent) (figure 2).

In Europe, migration will provide only a partial compensation for the expected excess of deaths over births between 2015 and 2050. In Europe, the excess of deaths over births is projected to total 57 million by 2050. However, with a net inflow of around 32 million migrants between 2015 and 2050, it is projected that the population decline will be limited to 25 million persons. In Northern America, net migration is projected to become the main driver of population growth starting between 2030 and 2040. In Oceania, net migration will become an increasingly important component of population growth over time. In Africa, Asia, and Latin America and the Caribbean, negative net migration will not significantly affect the size of the total population in the foreseeable future.

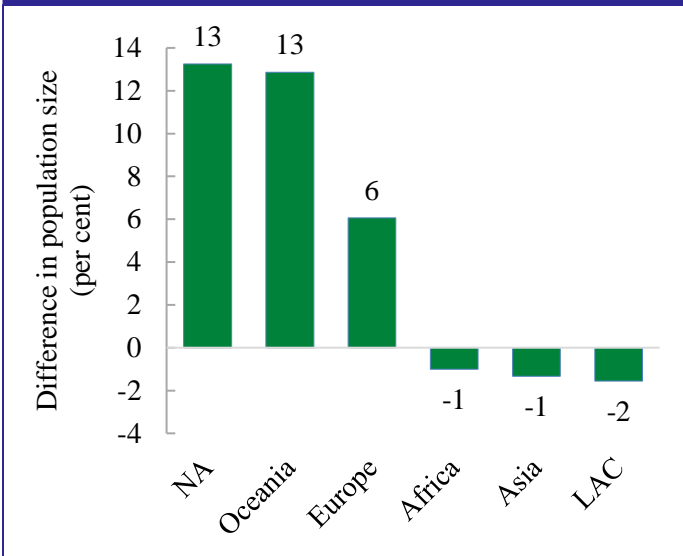
Without migration, the population of the developed regions would be smaller in 2050, while the population of the developing regions would be larger. Without migration, it is projected that Northern America and Oceania would record a 13 per cent smaller population in 2050 than if current migration trends continued. In Europe, this difference would amount to six per cent. On the other hand, without migration, it is projected that the populations of Africa and Asia would be one per cent larger, while the population of Latin America and the Caribbean would be two per cent larger (figure 3).

Figure 2. Average annual net migration by region, 1950 – 2015



Note: LAC = Latin America and the Caribbean; NA = Northern America

**Figure 3. Difference in projected population size between the medium variant and the zero-net-migration scenario, 2050**



Note: LAC = Latin America and the Caribbean; NA = Northern America

### 3. Armed conflict and economic crisis are important drivers of migration

**During the period from 2010 to 2015, 80 countries or areas experienced net inflows of migrants, while 120 countries or areas experienced net outflows.**

The top-five countries experiencing a net inflow of migrants between 2010 and 2015 were the United States of America, Germany, Turkey, Saudi Arabia and Lebanon, while the Syrian Arab Republic, India, Bangladesh, China and Pakistan were the five countries experiencing the highest net outflow of migrants. An estimated 4.2 million people left the Syrian Arab Republic between 2010 and 2015 as a result of armed conflict. Most Syrian refugees are hosted by neighbouring countries, contributing to high levels of net migration into Turkey (+1.6 million), Lebanon (+1.3 million) and Jordan (+975,000). The high level of net migration into Germany (+1.8 million) between 2010 and 2015 reflects in part the mass inflow of asylum seekers.

### Twenty countries saw a change in the direction of net migration around 2010.

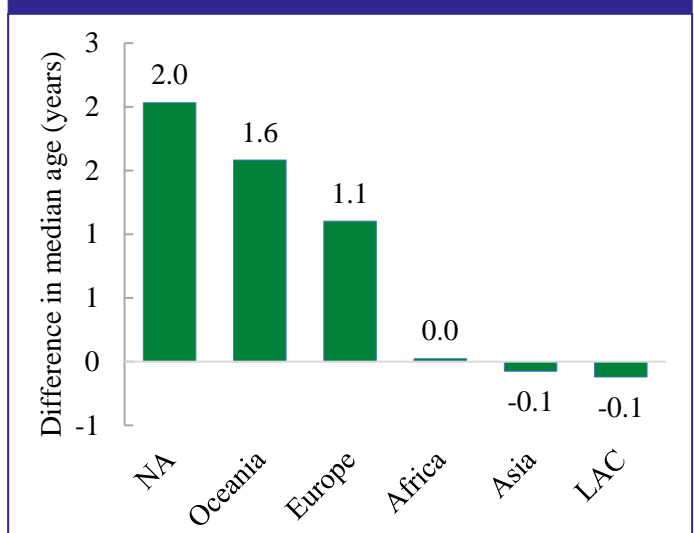
Between 2005 and 2015, eight countries changed from being predominantly “senders” to being primarily “receivers” of international migrants, including Afghanistan, Côte d’Ivoire, Iraq, Republic of Korea and Turkey. For Iraq and Turkey, the change was due in large part to the arrival of refugees from the Syrian Arab Republic, whereas for Afghanistan the return of refugees drove the changing migration pattern. Another twelve countries, including Greece, Ireland, Ukraine, Spain and the Syrian Arab Republic, saw net inflows change to net outflows of migrants. For the Syrian Arab Republic and Ukraine, the change was associated with an armed conflict, whereas for

European countries, the change in the migration pattern was triggered by the 2008 economic crisis, with an increased outflow that consisted of both returning foreigners and emigrating citizens. This change was especially marked in Spain, where, between 2005 and 2010, the net inflow amounted to 2.3 million persons, while during the next 5-year period, the country registered a net outflow of 570,000 persons.

### 4. Although immigration often has a rejuvenating effect on the population age structure of receiving countries, it cannot halt or reverse the long-term process of population aging

**Migration is expected to slow the ageing of populations in the developed regions.** Under the projection scenario with zero net migration, the median age in the developed regions would be 1.7 years higher in 2050 than with migration continuing at current levels. Without net migration, the median age of the population of Northern America would be 2.0 years higher, while the equivalent difference in Oceania and Europe would be 1.6 years and 1.1 years, respectively. Outmigration has a negligible effect on the median age in developing regions, which would be only 0.1 years lower in 2050 than with migration continuing at current levels (figure 4).

**Figure 4. Difference in projected median age between the medium variant and the zero-net-migration scenario, 2050**

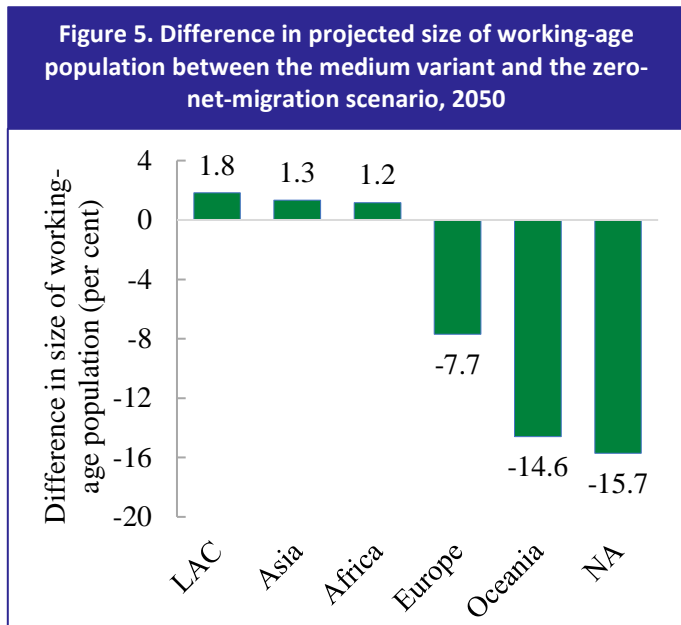


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### Migration is projected to mitigate the decline in the population of working age in the developed regions.

Comparing the projection scenario in which current migration trends continue to one without future net migration, the population aged 20 to 64 would fall considerably in Northern America (-16 per cent), Oceania (-15 per cent) and Europe (-8 per cent), but would be slightly larger in Latin America and the Caribbean (2 per cent), Africa and Asia (1 per cent each) (figure 5). In the United Arab Emirates, Qatar and

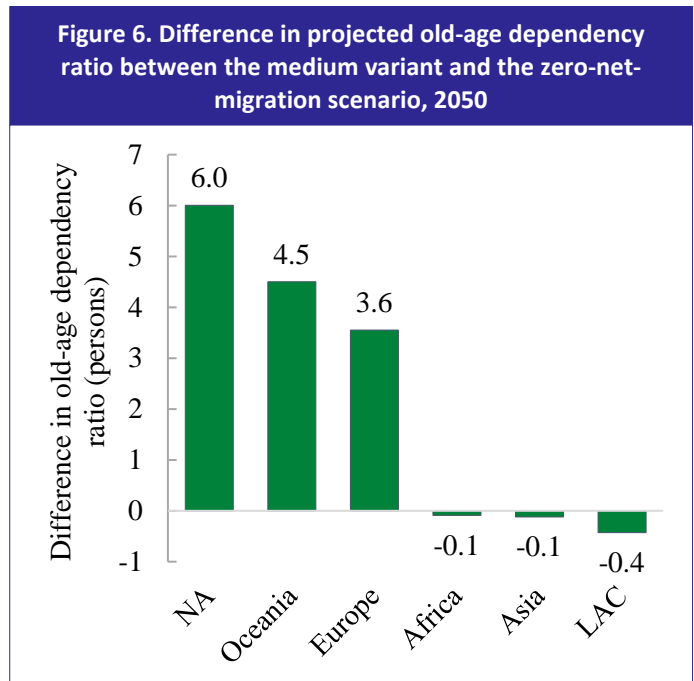
Bahrain the impact of no future migration would be the greatest, with the population of working age shrinking by 53 per cent, 48 per cent and 45 per cent, respectively. Conversely, Samoa (63 per cent), Tonga (45 per cent) and Lebanon (42 per cent) would experience the most significant gains in the size of their working-age populations in the absence of net migration.



Note: LAC = Latin America and the Caribbean; NA = Northern America

**Migration is projected to reduce old-age dependency ratios in the developed regions.** Most world regions are expected to experience a significant increase in the old-age dependency ratio during the next 35 years.<sup>2</sup> Latin America and the Caribbean is projected to experience the largest increase in the old-age dependency ratio, from 13 to 34 persons aged 65 or over per 100 persons of working age (138 per cent), followed by Asia (138 per cent), Europe (83 per cent), Northern America (64 per cent) and Oceania (57 per cent). Africa's projected increase in the old-age dependency ratio is relatively modest, rising from 8 older persons per 100 persons of working age in 2015 to 11 in 2050 (38 per cent). The difference in the projected old-age dependency ratio between the medium variant and the zero-net-migration scenario would range from an average increase of 6 persons aged 65 or over per 100 persons of working age in Europe to an average decrease of less than one person

aged 65 or over per 100 persons of working age in Latin America and the Caribbean (figure 6).



Note: LAC = Latin America and the Caribbean; NA = Northern America

### 5. Harnessing the demographic dividend in Africa will foster development and may reduce the need to migrate

**Africa's total dependency ratio<sup>3</sup> will decrease well into the second half of the 21<sup>st</sup> century.** In Africa, children under the age of 15 accounted for 41 per cent of the population in 2015, while young persons aged 15 to 24 accounted for an additional 19 per cent. As these cohorts of children and youth grow older and reach the working ages, a continuing reduction of the birth rate in their countries will help to create a favourable age distribution, presenting Africa with a demographic window of opportunity. Providing current generations of children and youth with quality health care and education and ensuring that they have access to gainful employment will be critical both for their own prosperity and for the successful implementation of the 2030 Agenda for Sustainable Development. In Africa and throughout the world, sustainable development will, in the long run, help to make the option to remain in one's country viable for all people.

#### NOTES

<sup>1</sup> The data used are from the latest set of population estimates and projections produced by the United Nations (United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 revision, DVD Edition). Estimates refer to the period from 1950 to 2015 and projections to the period from 2015 to 2100. Different variants and scenarios are used to explore possible future trends. Unless specified otherwise, the projections cited here correspond to the "medium variant", in which the assumed future level of international migration for each country or area is held constant until 2050 around the average level observed in recent years.

<sup>2</sup> The old-age dependency ratio is calculated by dividing the population aged 65 years or older by the working-age population aged 20 to 64 years old. A higher value indicates that each potential worker needs to support a larger number of potentially dependent persons aged 65 years or older.

<sup>3</sup> The total dependency ratio is calculated by dividing the population aged 0-19 and 65 years or older by the population aged 20-64 years old.