



**United Nations**

Department of  
Economic and  
Social Affairs

# Leaving No One Behind In An Ageing World

World Social  
Report 2023



# DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS

WORLD SOCIAL REPORT 2023:  
LEAVING NO ONE BEHIND  
IN AN AGEING WORLD



**United  
Nations**

# CHAPTER 1

## AN AGEING WORLD

### KEY MESSAGES

- The number of people aged 65 years or older worldwide is projected to more than double, rising from 761 million in 2021 to 1.6 billion in 2050. The number of people aged 80 years or older is growing even faster.
- Population ageing is an irreversible global trend. It is the inevitable result of the demographic transition – the trend towards longer lives and smaller families – that is taking place even in countries with relatively youthful populations. In 2021, 1 in 10 people worldwide were aged 65 or above. In 2050, this age group is projected to account for 1 in 6 people globally.
- As fertility levels fall, the share of younger people declines, while the shares of working-age adults and, eventually, older people go up. Further population ageing is driven by more people living longer, healthier lives.
- Among regions, Northern Africa and Western Asia and sub-Saharan Africa are expected to experience the fastest growth in the number of older people over the next three decades. Today, Europe and Northern America combined have the highest share of older persons.
- Women tend to live longer than men and thus comprise the majority of older persons, especially at advanced ages. Since the average survival of males is projected to gradually move closer to that of females, small but noticeable reductions in the sex gap in life expectancy and in the female share of the population at older ages are likely in coming decades.
- Conventional measures of population ageing, such as the old-age dependency ratio, are often used as proxy indicators of economic dependency. Other measures can provide a more nuanced picture by taking account of increased life expectancy or the economic production and consumption of various age groups.

We live in an ageing world, marked by a shift in the distribution of populations towards older ages. This pattern began on a global scale around the middle of the twentieth century and is expected to intensify in the decades ahead. Between 2021 and 2050, the global share of the older population, defined as people aged 65 years or over, is projected to increase from less than 10 to around 17 per cent. The number of older people is expected to more than double from 761 million to 1.6 billion during the same period (United Nations, 2022a). Most of the more developed countries have experienced population ageing over several decades and are already in advanced stages of this process. By contrast, many developing countries face rapid transitions towards ageing societies.

This chapter presents an overview of levels and trends in population ageing around the world. It also discusses how common demographic measures of population ageing can be modified to integrate health and economic considerations and thus provide clearer guidance as countries seek to implement policies and services to meet changing needs.

## A.

### **OLDER POPULATIONS ARE RAPIDLY GROWING EVERYWHERE**

The number of older people is growing fast, having tripled from around 260 million in 1980 to 761 million in 2021 (figure 1.1). By 2030, the number is projected to top 1 billion and eventually to reach over 1.6 billion

in 2050. By the end of the twenty-first century, the world could have nearly 2.5 billion older people (United Nations, 2022a).

### **The number of older people increased rapidly in all regions of the world from 1980 to 2021, a trend that is likely to continue over the next three decades**

The number of older people increased rapidly in all regions of the world from 1980 to 2021, a trend that is likely to continue over the next three decades. From 2021 to 2050, the population aged 65 or over in Eastern and South-Eastern Asia and in Central and Southern Asia is projected to grow by more than 540 million, accounting for more than 60 per cent of the global increase. Over the next three decades, Northern Africa and Western Asia and sub-Saharan Africa are projected to have the fastest growth – or highest growth rate – of the population aged 65 or above.

Globally, the number of people aged 80 years or over is rising even faster than the number aged 65 or above. By 2050, the world will have an estimated 459 million persons aged 80 or more, almost triple the number in 2021 at around 155 million. Between 2021 and 2050, this age group is projected to increase by more than 200 per cent in all regions except Europe and Northern America and Australia and New Zealand, where it is expected to grow by 10 per cent and 60 per cent, respectively.

# FACTS AND FIGURES FROM CHAPTER 1

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## MORE THAN DOUBLE

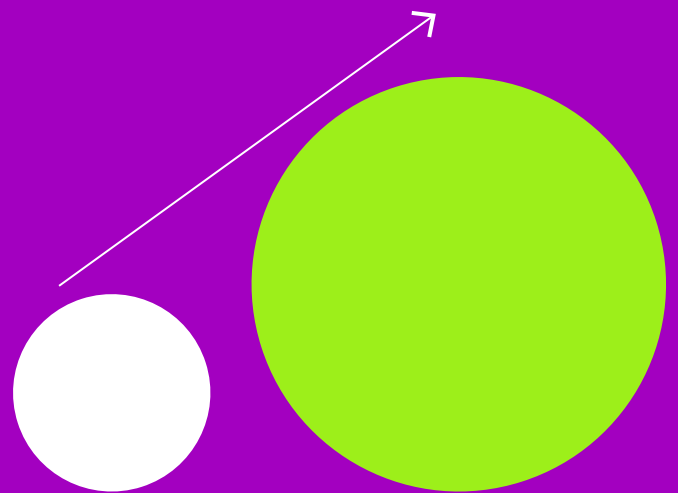
the number of people aged 65+ will  
MORE THAN DOUBLE from

**761**

MILLION in 2021 to

**1.6**

BILLION in 2050



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## THE 80+ POPULATION IS GROWING FAST

increase expected from

**155**

MILLION in 2021



to

**459**

MILLION in 2050

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# SOCIETIES WILL BE OLDER

from 1 in 10 people 65+



in 2021

to 1 in 6 people 65+



in 2050

## THE GEOGRAPHY OF THE WORLD'S OLDEST COUNTRIES AND TERRITORIES IS SHIFTING

from Europe towards Eastern and South-Eastern Asia by 2050

World's oldest country or territory (with the largest share of people 65+)

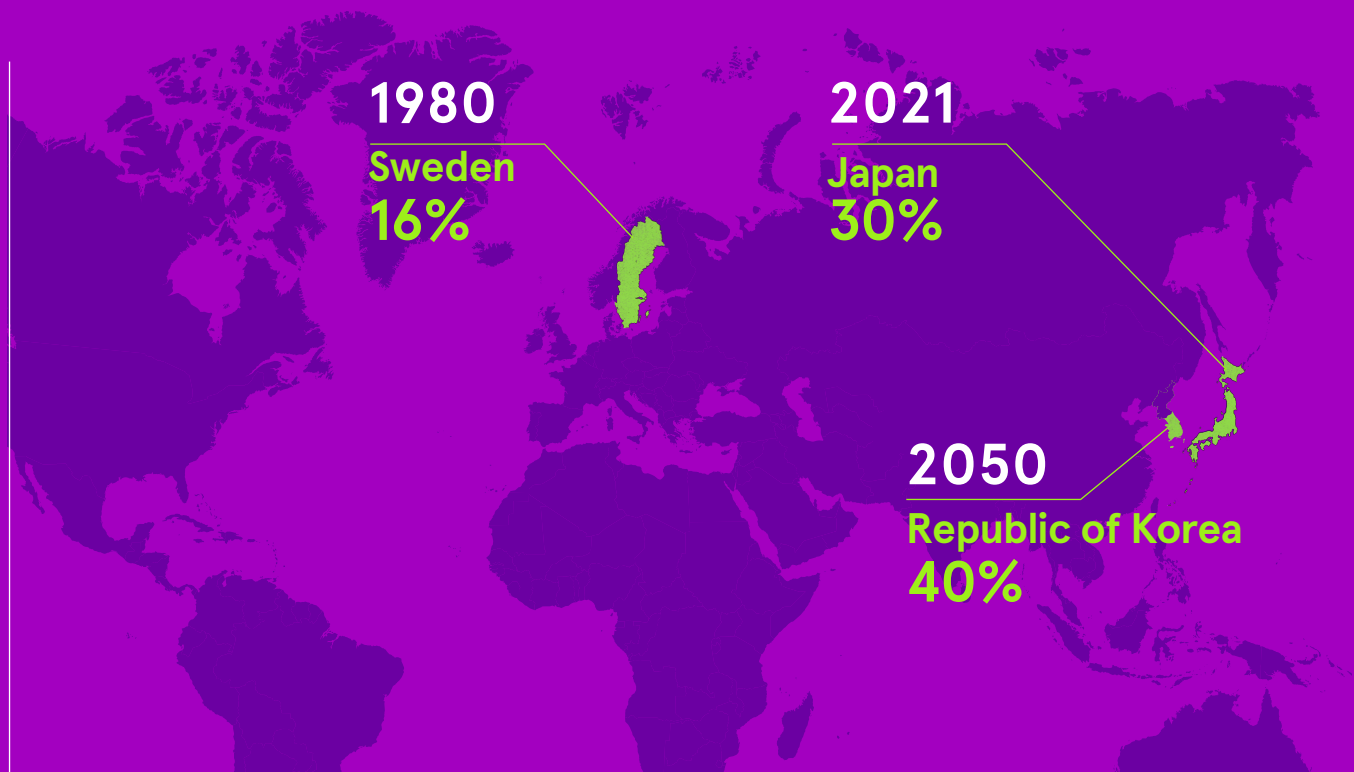
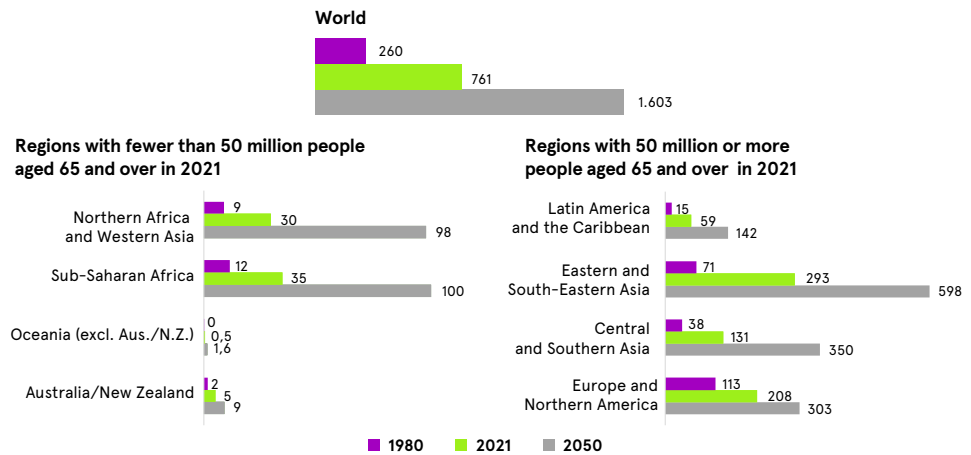


Figure 1.1

Number of people aged 65 years or above in millions, world and regions, 1980, 2021 and 2050



Source: United Nations (2022a).

Women live longer than men on average and thus comprise a majority of older persons, especially at the highest ages. In 2021, women outlived men by an average of 5.4 years and accounted for 56 per cent of the global population aged 65 or over. Among those aged 80 or over, the proportion of women reached 62 per cent. Since survival rates for men are projected to gradually move closer to those of women, the sex distribution at older ages is expected to become more balanced. Still, in 2050, women will likely comprise a majority of the population aged 65 or above and 80 or above (54 per cent and 59 per cent, respectively).

# B.

## THE POPULATION AGE DISTRIBUTION IS SHIFTING STEADILY UPWARD

The older population is growing globally both in absolute numbers and as a share

of the total population. Population ageing unfolds over many decades through a gradual upward shift in the age distribution. While the share of population at older ages goes up, the share at younger ages goes down. The median and average ages of the population both rise in the process.

In 2021, 1 in 10 people worldwide was aged 65 or over compared to 1 in 20 in 1950. In 2050, this age group may account for 1 in 6 people worldwide (figure 1.2). Over the next three decades, the proportion of older people is projected to double in five regions while increasing more slowly in the other three. In sub-Saharan Africa, high birth rates are expected to keep the share of children and youth relatively large and therefore the share of older persons relatively small. In Europe and Northern America and in Australia and New Zealand, where population ageing is already well advanced, further ageing will take place more slowly.

In 1980, the world's 10 oldest populations were in Europe, each with around 15 per cent of the population at ages 65 or above (table 1.1). By 2021, the share

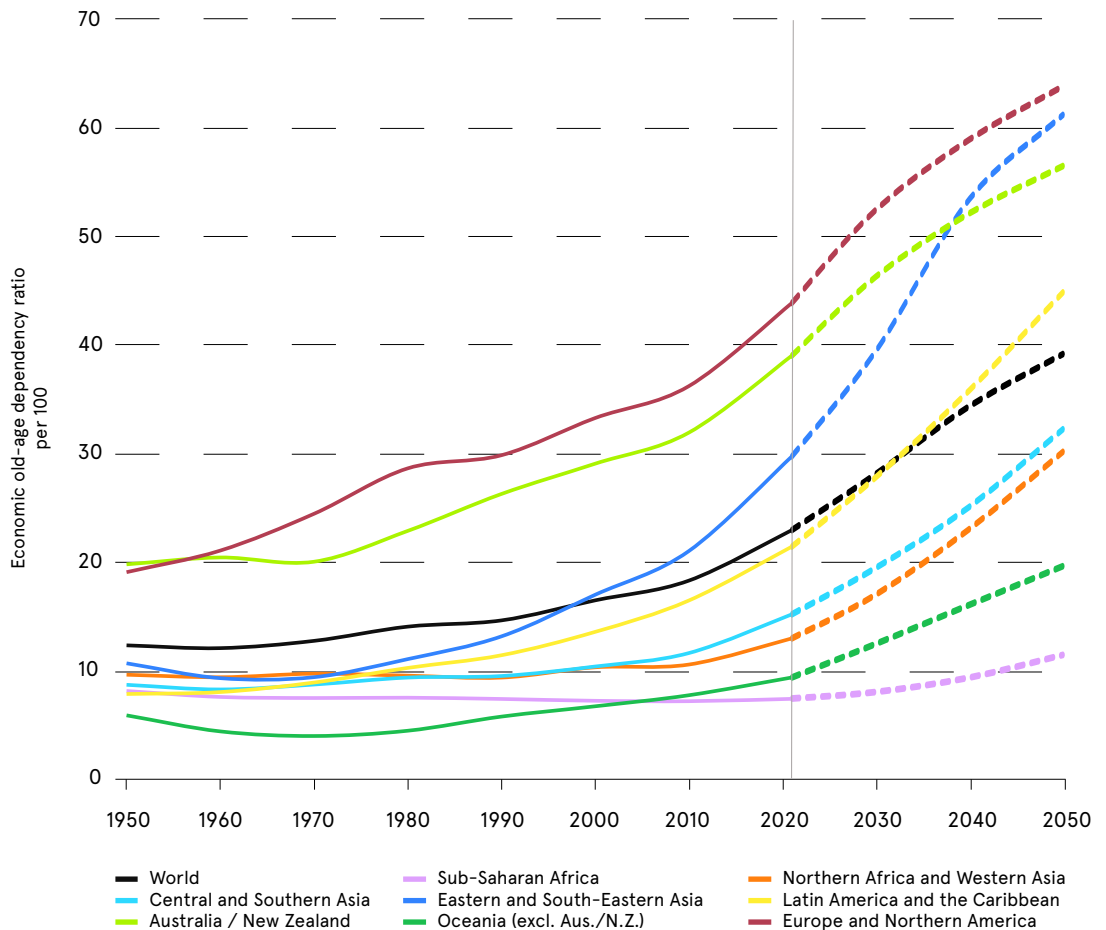
## The geography of the world's oldest countries will shift from Europe towards Eastern and South-Eastern Asia between now and 2050

expected 30 per cent by 2050. Although Japan had the world's oldest population in 2021, China, Hong Kong, Special Administrative Region (SAR) of China, and the Republic of Korea will likely surpass it before 2050. The geography of the world's oldest countries will shift from Europe towards Eastern and South-Eastern Asia between now and 2050, when the latter is expected to include 5 of the 10 oldest populations.

above age 65 had pushed past 20 per cent in all 10 countries, on its way to an

Figure 1.2

Percentage of people aged 65 years or over, world and regions, estimates for 1950–2021 and projections for 2022–2050



Source: United Nations (2022a).



Table 1.1

**Countries and areas with the largest shares of people aged 65 years or over, 1980, 2021 and 2050**

RANK	1980		2021		2050	
	COUNTRY OR AREA	PERCENTAGE AGED 65 YEARS OR OVER	COUNTRY OR AREA	PERCENTAGE AGED 65 YEARS OR OVER	COUNTRY OR AREA	PERCENTAGE AGED 65 YEARS OR OVER
1	Sweden	16.3	Japan	29.8	China, Hong Kong, SAR of China	40.6
2	Germany	15.7	Italy	23.7	Republic of Korea	39.4
3	Austria	15.4	Finland	22.9	Japan	37.5
4	United Kingdom	14.9	Portugal	22.6	Italy	37.1
5	Norway	14.8	Greece	22.5	Spain	36.6
6	Belgium	14.4	Bulgaria	22.4	China, Taiwan, Province of China	35.3
7	Denmark	14.4	Puerto Rico	22.4	Greece	34.8
8	France	14.0	Germany	22.2	Portugal	34.5
9	Switzerland	13.8	Martinique	22.1	Singapore	34.2
10	Luxembourg	13.6	Croatia	22.0	Kuwait	33.6

Source: United Nations (2022a).

Note: For countries and areas with a population of 90,000 or more by mid-2021.

## Population ageing is progressing more rapidly in developing countries than it did historically in more developed countries

Population ageing is progressing more rapidly in developing countries than it did historically in more developed countries. With few exceptions, such as Japan, in most countries of the more developed regions, the proportion of the population aged 65 or above rose from 7 to 14 per cent in anywhere from 40 to 120 years. It took (or will take) between 20 and 50 years to increase the share further from 14 to 21 per cent. By contrast, most developing countries will likely see a doubling in the share of older

persons from 7 to 14 per cent in 15 to 35 years and a further increase from 14 to 21 per cent in just 10 to 30 years.

Between 2021 and 2050, all regions are expected to experience a rise in the median age, which divides the younger and older halves of the population. Globally, the median age is expected to climb from 30 years in 2021 to 36 years in 2050. The region of Latin America and the Caribbean is projected to experience a rapid rise in the median age from 30 years in 2021 to 40 years in 2050. Over the same period, the median age in Europe and Northern America is projected to increase from 40 to 46 years. Between now and 2050, 16 countries are expected to reach a median age of 50 years or higher.

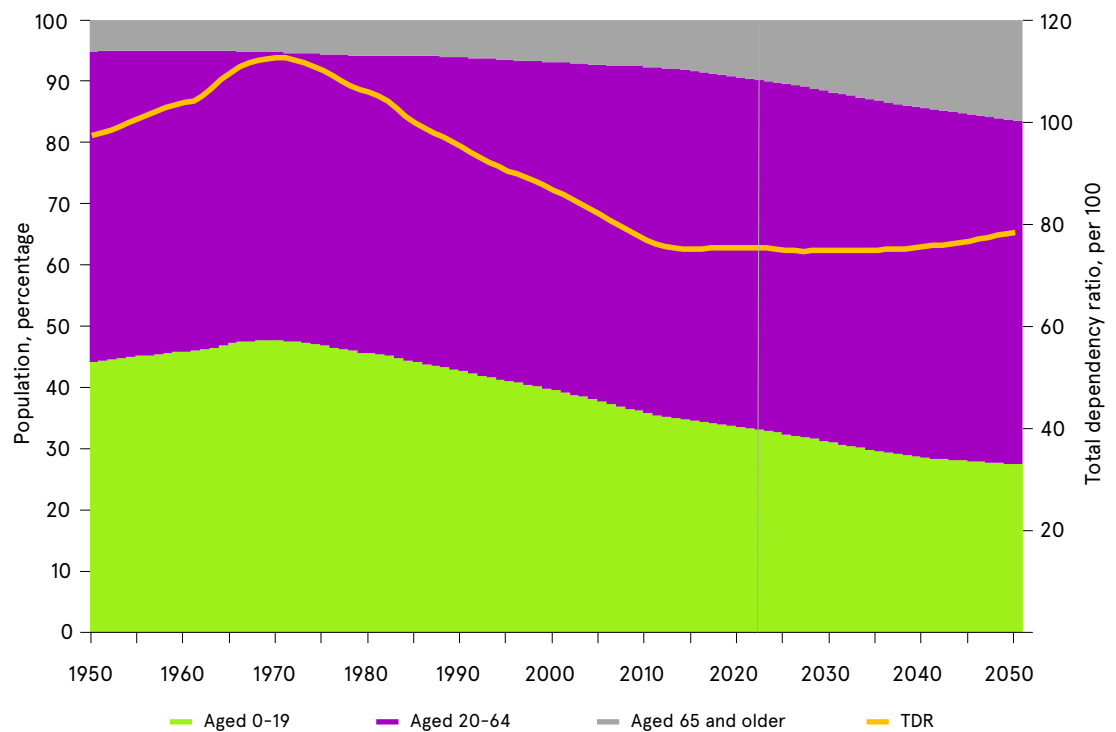
Historically, older persons made up a much smaller share of the population compared to younger age groups. As fertility rates drop during demographic transition, the shift in the age structure manifests initially as a swelling share of adults in the working and reproductive ages and falling proportions of children and youth. If fertility remains at lower levels, the population begins to age and eventually the share of older people starts to rise. Successive cohorts tend to live longer, increasing the demands on younger generations as potential sources of assistance in old age.

Children and older people tend to rely on economically active adults for financial support and care. A total dependency ra-

tio provides an approximate indication of how many dependents are likely to need support from each person of working age, on average. The ratio reflects the number of children and young people under age 20 plus the number of older persons compared to the number of working-age people, often defined as those between ages 20 and 64. The actual ages of dependency, however, vary considerably from country to country and from person to person. Factors such as the pursuit of higher education or youth unemployment often prolong the dependent period beyond age 20. Health and financial considerations as well as personal preferences influence the age at which people retire from the workforce and eventually become dependent.

Figure 1.3

Distribution of the global population in broad age groups and total dependency ratios, estimates for 1950–2021 and projections for 2022–2050



Source: United Nations (2022a). TDR indicates total dependency ratio.

In 2002, at the time of the Second World Assembly on Ageing, more than half of the global population was between 20 and 64 years old (54 per cent), meaning 8 or 9 individuals potentially depended on every 10 workers (figure 1.3). Most “dependents” were children and youth below age 20; only 15 per cent were older people. By 2021, with the progression of population ageing, older people made up a larger share of the dependent group, although still less than that of children and youth, and the proportion of working-age persons in the total population had increased to 57 per cent. This share will remain relatively stable through 2050, keeping the dependency ratio below 1. Part of the increased portion of people at ages 65 or over stems from the greater share over age 80. The latter is expected to increase from 2 to around 5 per cent of the global population between 2021 and 2050.

A regional review of the evolution of the working-age population shows that it peaked in Europe and Northern America in 2013. It is projected to peak in 2027 in Eastern and South-Eastern Asia, followed by Latin America and the Caribbean in 2043 and Central and Southern Asia in 2058. All other regions are expected to experience continued growth in the working-age population through the end of the century.

Although population ageing is progressing everywhere, younger populations will continue to constitute the largest share of dependents globally even while declining from 33 per cent of the global population in 2021 to around 28 per cent in 2050. Three regions will complete the transition from a high share of youth dependents to a high share of older dependents before 2050: Australia and New Zealand, Europe and Northern America, and Eastern and South-Eastern Asia. Latin Ameri-

ca and the Caribbean will complete this transition by 2060 and Central and Southern Asia by 2080. Populations in sub-Saharan Africa, Oceania (excluding Australia and New Zealand), and Northern Africa and Western Asia will continue to have dominant shares of young dependents through the end of this century.

## C.

### BETTER MEASUREMENT IMPROVES UNDERSTANDING OF AGEING SOCIETIES

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The total dependency ratio allows an overall understanding of the demand for public services and the necessary financial resources. Yet to better comprehend the socioeconomic implications of population ageing, several additional measures help account for the diversity of capacities and dependencies across ages.

The old-age dependency ratio, based on chronological age, compares the size of the older population to that of the working-age population. It assumes implicitly that all older persons are net recipients of economic transfers, including for health care, and that these transfers are financed by the labour income of younger age groups. Defining age groups in a purely chronological and static manner, however, may limit understanding of possible changes over time in the health status and activity levels of older persons (see chapter 2). Other concepts and measures that shift the focus from the number of years lived since birth to the expected

time until death, or remaining life expectancy, offer an alternative perspective on how population ageing impacts social and economic development.

Given the diversity among older persons in terms of economic activity, health and well-being, and levels of non-market activity, and considering that not all working-age people are economically active, researchers have proposed alternative measures of population ageing that incorporate information about age patterns of production and consumption. Such measures have been developed in the context of the National Transfer Accounts (United Nations, 2013, 2019a; Lee and Mason, 2011; Mason and others, 2017).<sup>5</sup>

### 1. COMPARING CHRONOLOGICAL AND PROSPECTIVE MEASURES OF OLD-AGE DEPENDENCY

The old-age dependency ratio is based on chronological age and is defined as the number of persons aged 65 years or over divided by the number of working-age people (20 to 64 years). This indicator allows an examination of national trends in population ageing and a comparison across countries at a given point in time. Age 65 is generally the threshold for defining older persons, who are often net recipients of economic transfers through publicly funded pensions and health care.

In all regions of the world, the old-age dependency ratio has increased continuously since 1990, albeit at varying speeds. Globally, in 2021, there were 17 persons aged 65 years or over per 100 persons aged 20

to 64. By 2050, this ratio is projected to increase to 29 per 100. In fact, the old-age dependency ratio is expected to rise in all regions between 2021 and 2050 (figure 1.4).

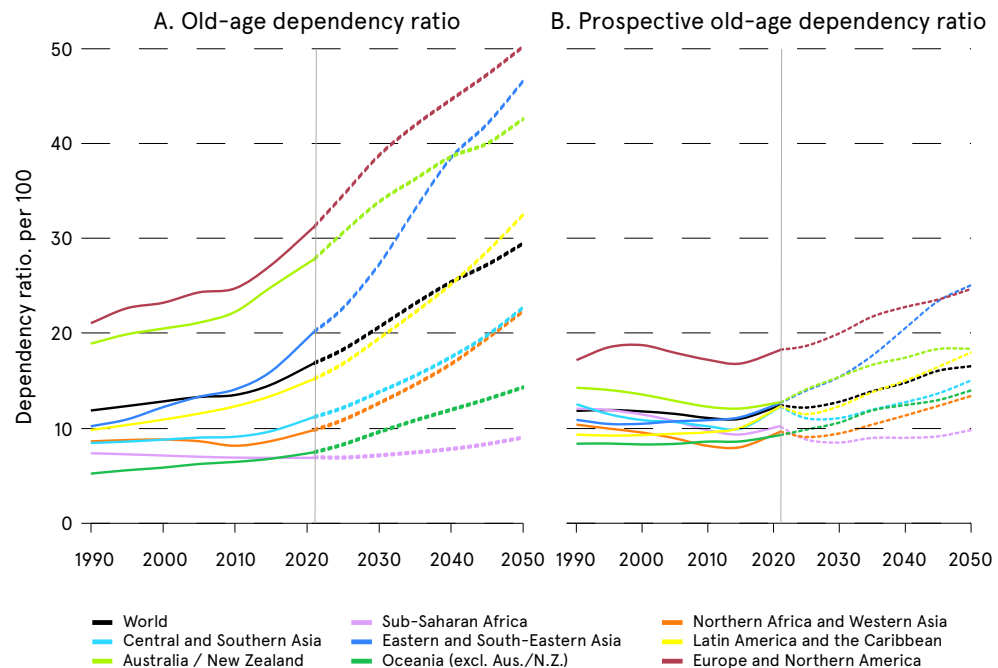
A complementary way to assess population ageing involves shifting the focus from the time since birth (chronological age) to the expected time until death (thanatological age). At an aggregate level, the expected time until death is determined by a set of age-specific mortality rates covering the remaining years of life. Since a person's health, welfare and social care demands at older ages are often more closely linked to thanatological than to chronological age, forecasts of the social and economic costs of ageing that are based only on chronological age are prone to bias (Riffe and others, 2016). During periods of declining mortality and increasing longevity, predictions of health and social care costs based on chronological age tend to overestimate total financial expenditure, as most acute medical care costs occur in the final months of life with little additional impact from a person's age at that time (Miller, 2001; Riffe and others, 2016; Sanderson and Scherbov, 2010; Stearns and Norton, 2004).

The prospective old-age dependency ratio (Sanderson and Scherbov, 2005, 2007) considers as "old" those ages at which people are expected to live, on average, a certain number of years (for this analysis, 15 years). Accordingly, this ratio is calculated as the number of persons above the age for which the remaining life expectancy is closest to 15 years, relative to the number of persons between age 20 and that age. In this way, the number of people with a remaining life

<sup>5</sup> Ageing measures featured in this chapter focus on those with comprehensive data available at the global level or for large numbers of countries. Chapter 2 refers to other measures that are available only for a select number of countries for certain periods of time, including measures that incorporate information about health status or functional ability (WHO, 2015).

Figure 1.4

### Traditional and prospective old-age dependency ratios, world and regions, estimates for 1990–2021 and projections for 2022–2050



Sources: United Nations (2022a), own calculations, based on Sanderson and Scherbov (2005, 2010, 2019). Note: The bump in the trajectories of prospective ratios around 2020–2022, as shown in panel B, are due to the impact of the COVID-19 pandemic, which interrupted trends in life expectancy for most regions.

expectancy of less than 15 years serves as a proxy for the number who are economically dependent on others due to advanced age.

Comparing the traditional and prospective old-age dependency ratios, the latter is lower in all regions except sub-Saharan Africa and Oceania (excluding Australia and New Zealand). This result suggests that the impact of population ageing may be less than what is implied by the traditional old-age dependency ratio in populations with high levels of life expectancy (figure 1.4).

## 2. MEASURING AGEING FROM AN ECONOMIC PERSPECTIVE

The old-age dependency ratio has economic analogues based on levels of consumption

and production and other components of economic behaviour over the life course, as described in the literature on National Transfer Accounts (United Nations, 2013, 2019a; Lee and Mason, 2011; Mason and others, 2017). The analysis of such accounts focuses on the age distributions of consumption, labour earnings and other economic aggregates in a national economy. National Transfer Accounts can be used to measure and analyse the age and generational dimensions of an economy, providing evidence of the consequences of population ageing for economic policymaking.

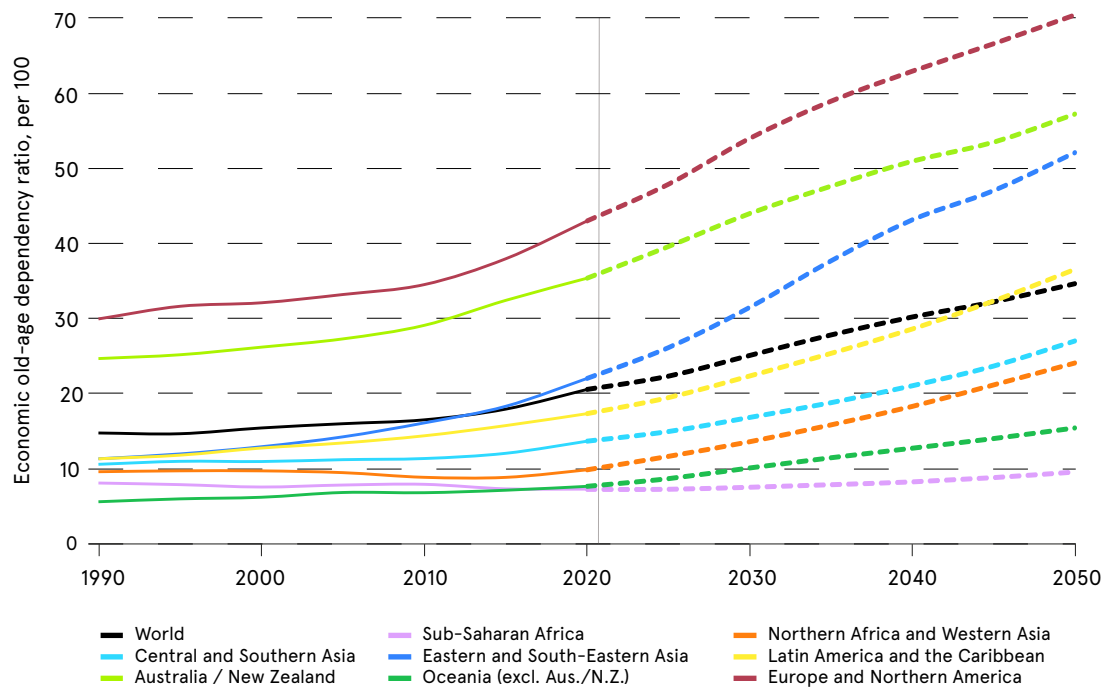
In contrast to the measures discussed above, the economic old-age dependency ratio explicitly considers age-related patterns of economic activity to assess levels of dependency (net consumers) associ-

ated with old age. The ratio is defined as the effective number of consumers aged 65 years or over divided by the effective number of workers at all ages.<sup>6</sup> The key advantage of this measure is that it explicitly incorporates age-specific variations in labour income and consumption. In doing so, it gives a more direct, focused and realistic measure of economic dependency over the life cycle than either the old-age dependency ratio or the prospective old-age dependency ratio.

The economic old-age dependency ratio indicates that globally in 2020, there were 21 effective consumers aged 65 years or over per 100 effective producers. By 2050, this ratio is projected to rise to 35 per 100, with increases in all regions (figure 1.5). The economic old-age dependency ratio is slightly higher than the old-age dependency ratio in all regions, with a greater difference in Europe and Northern America and in Australia and New Zealand compared to other regions due to their relatively higher consumption at older ages (United Nations, 2019a).

Figure 1.5

### Economic old-age dependency ratios, world and regions, estimates for 1990–2021 and projections for 2022–2050



Source: Based on the method outlined in Mason and others (2017).

<sup>6</sup> The effective number of workers or consumers at a given age is calculated as the population at that age weighted by the labour income or consumption profile. People aged 30–49 are counted, on average, as one effective worker and one effective consumer. People at other ages are counted as more or less than one effective worker or consumer depending on how much they produce through their labour or consume relative to the average for those aged 30 to 49 (Mason and others, 2017).

Considering total demand for public support by younger and older populations worldwide, the share of dependents is expected to remain rather stable. The composition is changing, however. Most regions are already experiencing or will experience a shift in dependency from younger to older ages. Because populations are ageing at different speeds, national ratios vary significantly. In half of all countries or areas, the total dependency ratio is expected to change either upwards or downwards by 25 per cent or more from today until 2050. In 40 per cent of countries or areas, it will change by 30 per cent or more.

Most countries in the early stages of population ageing will continue to benefit from stable and in some instances even growing workforces while striving to meet the demands of large shares of young people and mounting numbers of older persons. Regions at more advanced stages of population ageing may see declining demands from shrinking younger populations and shift their focus to promoting the health and well-being of working-age and older populations. In doing so, they may benefit from people working longer in better health, with reduced needs for health care.

Conventional measures of population ageing, such as the old-age dependency ratio, are often used as a proxy indicator of economic dependency. From this perspective, growing numbers and rising shares of older persons are frequently considered a looming threat to public services, particularly health care and pensions. Other measures

that account for increased life expectancy and actual economic production and consumption in various age groups, however, provide a more nuanced picture.

## D.

### DEMOGRAPHIC TRANSITION STEMS FROM LONGER LIVES AND SMALLER FAMILIES

The demographic transition, a gradual shift towards longer lives and smaller families, began first in Europe and Northern America, where levels of fertility and mortality began to fall as early as 1800, leading to a larger population and, eventually, a much older one as well. The transition took off on a global scale around the middle of the twentieth century (Caldwell, 2006; Lee and Reher, 2011).<sup>7</sup> The process typically unfolds in stages (figure 1.6). Population growth first accelerates and then slows down, while the age distribution first becomes younger before shifting towards older ages.<sup>8</sup>

Three main mechanisms drive population ageing during the demographic transition. First, the share of older people increases as fertility levels decline and reduce the proportion of younger people (ageing “from the bottom”). Second, the continuing extension of the human lifespan raises the number of older people (ageing “from the top”).

7 Today, no country or area is in the pre-transition stage. Among the 236 countries or areas that comprise the global population, one sixth, located almost exclusively in sub-Saharan Africa, are in an early stage; one third are in an intermediate stage; and the other half are in a late or post-transition stage (United Nations, 2022a).

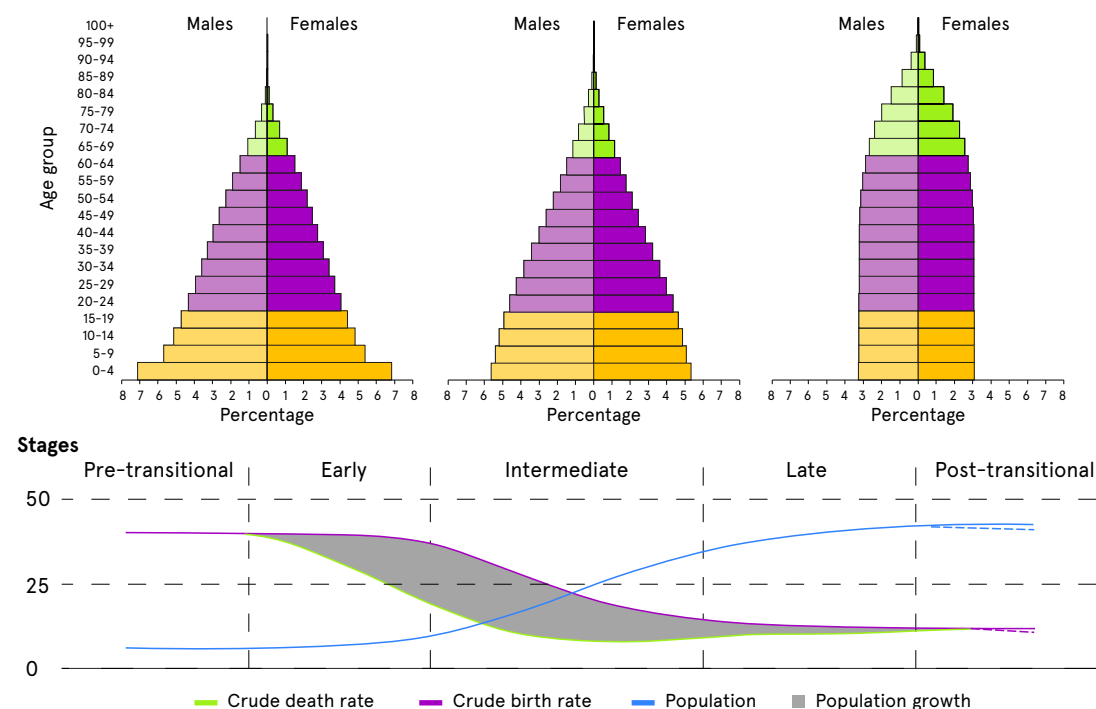
8 This stylized description of the demographic transition refers to a population that is closed to migration, in which population trends are determined entirely by changes in levels of fertility and mortality. Box 1.2 examines the role of international migration in population ageing.

Third, when the cohort of people who are about to enter old age is large compared to its predecessors, their progression into older ages will enlarge the older population (a “cohort effect”). A large number of people ageing into their 60s and beyond stems from earlier declines in mortality at younger ages but can also result from high or fluctuating levels of fertility in the past, historical inflows of migrants or a combination of factors (Bloom, 2019; Sudharsanan and Bloom, 2018).<sup>9</sup> Because such a cohort effect is driven by past demographic changes, it can influence the age distribution of a population even if levels of fertility and mortality are not changing.

Before the demographic transition, the population distribution by age and sex resembles a pyramid, with a wide base and relatively few older people (figure 1.6, left population pyramid). At the onset of the transition, the opposite of population ageing – population rejuvenation – often occurs. Mortality levels typically fall first among infants and children due to improved nutrition and effective control of infectious diseases, including pneumonia, diarrhoea and malaria (Caselli, Meslé and Vallin, 2002), while fertility levels remain high. As the population grows due to declining mortality at younger ages, the share of children and youth expands, widening the base of the pyramid.

Figure 1.6

Population distribution by age and sex, crude birth and death rates, and total population size at different stages of the demographic transition



Source: United Nations calculations.

Note: The crude birth (or death) rate is the annual number of live births (or deaths) divided by the population size at the midpoint of the observation period. Both rates are expressed as the number of births or deaths per 1,000 people per year.

9 Change in the age distribution associated with large cohorts born from the late 1940s until the early 1960s in some countries, known as the “baby boom” generation (Van Bavel and Reher, 2013), is an example of population ageing led by a temporary rise in fertility. Today’s ageing “boomers” comprise a significant part of the older population in some countries.



In an intermediate stage, fertility starts to fall while mortality continues to decline, including at adult ages. The base of the population pyramid shrinks as the share of children falls, while the share of people at working and childbearing ages expands, signalling the onset of population ageing (figure 1.6, middle population pyramid). Eventually, the share of older persons starts to increase as well. As the transition progresses, fertility may reach and level off at the so-called “replacement” level, at which successive generations become roughly equal in size (box 1.1). In this scenario, there will be less of a difference in population size across the age range, as the population “pyramid” becomes more

like a bell tower or a rocket (figure 1.6, right population pyramid).

## **While population ageing is an inevitable consequence of demographic transition, population decline is not**

Once the demographic transition is complete, populations may stop growing and reach a stable size or begin to decline (figure 1.6, the post-transitional stage). However, while population ageing is an

### **BOX 1.1**

## **DEFINING REPLACEMENT-LEVEL FERTILITY**

Replacement-level fertility refers to a level of childbearing where each generation exactly replaces the previous one in terms of size. In other words, children of the current generation of parents grow up to become an equivalent number of potential parents in the next generation. To “replace” themselves, women need to have, on average, one daughter who survives through the reproductive age and so on for succeeding generations.

An average of 2 births per woman will exactly replace mothers and fathers, but only if two conditions hold true: first, the same numbers of boys and girls are born, and second, all female children survive to the

end of the reproductive age range. In reality, replacement-level fertility is slightly higher than 2 births per woman to account for the unbalanced natural sex ratio at birth (slightly more boys than girls) and for the loss of reproductive potential due to premature mortality. In populations with relatively low levels of mortality, replacement-level fertility requires approximately 2.1 live births per woman over a lifetime. In countries with higher levels of mortality, a slightly higher level of fertility is required to compensate for the greater loss of reproductive potential and to ensure the replacement of generations (Espenshade, Guzman and Westoff, 2003).

inevitable consequence of demographic transition, population decline is not. The fall in fertility that typically occurs during the transition is a necessary but not sufficient condition to produce a deficit of births. Population decline occurs only if below-replacement levels of fertility continue for several decades without a counteracting effect due to internation-

al migration (box 1.2). Today, about half the countries or areas of the world have completed or are in a late state of the transition, with life expectancies at birth of 75 years or more and fertility below the replacement level (box 1.3).

## BOX 1.2

### INTERNATIONAL MIGRATION CAN BOTH SLOW AND ADD TO POPULATION AGEING

Beyond the interplay of mortality and fertility, international migration can influence the age distribution in countries with large inflows of migrants. Because immigrants typically include a disproportionate number of young adults, immigration often results in a younger population and workforce in destination countries, postponing the process of population ageing by a few years without fundamentally altering the trend towards an older population. The children of immigrants also contribute to a younger population, especially when migrants have more children than the resident population.

International migrants comprise a sizeable share of working-age people in some countries today. By lowering the old-age dependency ratio, they contribute to a more affordable balance between workers and

retirees. If migrants remain and grow old in destination countries, they will eventually add to older cohorts, increasing the share of older people and gradually diluting the impact of immigration on the population age distribution. On the other hand, if migrants return to their countries of origin and do not become permanent residents of the host country, and if they are followed by younger cohorts of migrants, immigration can have an enduring impact through keeping the population somewhat younger than it would have been in the absence of migration.

In 2020, international migrants accounted for nearly 19 per cent of the working-age population of high-income countries and over 1 in 10 of those aged 65 or above (United Nations, 2020a).

## BOX 1.3

## FROM TAX CREDITS TO BABY BONUSES, COUNTRIES CONCERNED ABOUT LOW FERTILITY OFFER SUPPORT FOR BEARING AND REARING CHILDREN

In 2021, fertility hovered below the replacement level in 124 of 236 countries or areas. Among these, 47 had fertility below 1.5 births per woman (United Nations, 2022a). Government policies and institutional settings, as well as associated cultural, economic and sociopolitical structures and histories, can cause fertility to decline to low levels.

Influential factors include the incompatibility between professional careers and family life, which has been identified as a major driver of low fertility (Wilkins, 2019; Sobotka, Matysiak and Brzozowska, 2019; McDonald, 2006). Other factors encompass the flexibility of the labour market, the educational system, gender equity, the links between marriage and childbearing, governmental subsidies for the costs of childrearing, the housing market and international migration (United Nations, 2015a). Over the past three decades, amid concerns about population ageing and potential population decline, a growing number of governments have adopted policies to raise the fertility level. Based on survey data from 2019, Governments in half of the 82 low-fertility countries with available data had adopted policies to raise the fertility level (United Nations, 2021b).

A wide range of family policies can help parents balance their work and family life. Examples include employment-related support, such as parental leave for one or both parents and flexible working hours; mone-

tary support, such as tax credits, child and family allowances, baby bonuses and childcare subsidies; and service provision, such as childcare and after school programmes. Some high-income countries (e.g., France, Hungary, Japan, the Republic of Korea, the Russian Federation and Singapore) have adopted explicit policies to influence the fertility level through economic or social incentives and tax credits. Others do not have such specific policies in place (Demeny, 2011; May, 2012).

In developed countries, family-oriented policies have evolved mostly through social welfare systems. For example, the “maternity capital” programme in the Russian Federation and the “speed premium” in Sweden provide cash benefits for having children. Norway makes high-quality childcare facilities available, and Estonia grants universal and generous parental leave (Sobotka, Matysiak and Brzozowska, 2019). Some developing countries, despite their less extensive welfare systems, have adopted measures that include maternity leave, family or child allowances and publicly subsidized childcare. Notably, all low-fertility countries except the United States of America provide national paid maternal leave. Fewer countries also provide paternal or parental leave (United Nations, 2021a).

A recent review of policy responses to concerns about low fertility indicates that di-

**BOX 1.3**

rect monetary support may have temporary effects, mainly on the timing and spacing of births, but little long-term impact (Sobotka, Matysiak and Brzozowska, 2019). Policies that lower the costs of childbearing in a predictable way over several years, not just around the time of birth, are more likely to be effective. Clashes between work and family life underline the need to advance gender equality, achieve work-family balance, subsidize costs for childbearing and housing, and ensure that the private sector allows flexible working ar-

rangements and access to parental leave for both parents (Wilkins, 2019).

Improving work-family balance and guaranteeing income security could have positive impacts on dependency ratios and fiscal sustainability. Such policies can assist men and women in realizing their desired family size while contributing to financial independence at older ages, especially for women. They may also support the voluntary extension of people's working lives.