SF1.4: Population by age of children and young adults, and youth dependency ratio

Definitions and methodology

This indicator presents information on child and young adult populations through three main measures:

- The *estimated population aged 0-24*, also further disaggregated into the estimated population aged 0-14, and the estimated population aged 15-24.

- The *distribution of children and young adults aged 0-24*, by five-year age groups.

- The *youth dependency ratio*, defined as the number of children and young people (aged 0-20) per one hundred people of working age (aged 20-64), and calculated as: *(number of people aged less than 20) / (number of people aged 20-64) * 100*. The youth dependency ratio is used here to capture the number of young persons that are likely to be "dependent" on the support of others for their daily living to the number of those who are capable of providing such support. It is presented both for past (1950-2015) and future years (2016-2050), with the data for future years based on the UN Population Division's 'medium fertility variant' population projections.

Data in all cases are taken from the United Nations Population Division World Population Prospects database (2017 revision).

Key findings

Child and young adult populations vary considerably across OECD countries (Chart SF1.4.A). In 2015, the countries with the fewest number of children and young adults were Estonia, Iceland, Latvia, Luxembourg and Slovenia, all of which had around or less than half a million people aged 0-24. The countries with the largest child and young adult populations were Japan, Mexico, Turkey and the United States, each with more than 25 million people aged 0-24.

Chart SF1.4.A. Child and young adult population, 2015
Estimated population aged 0-24, by age group, thousands
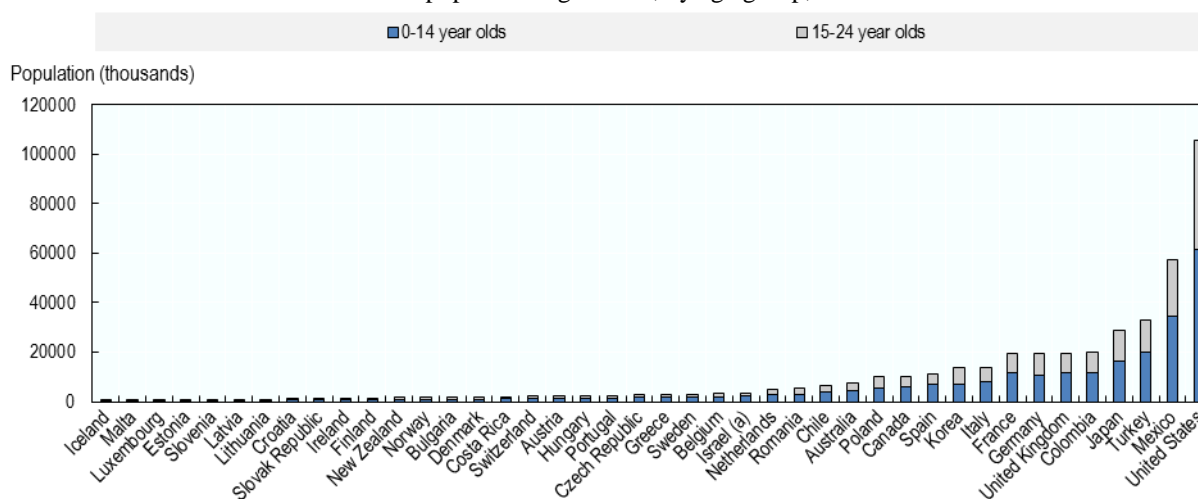
a) The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
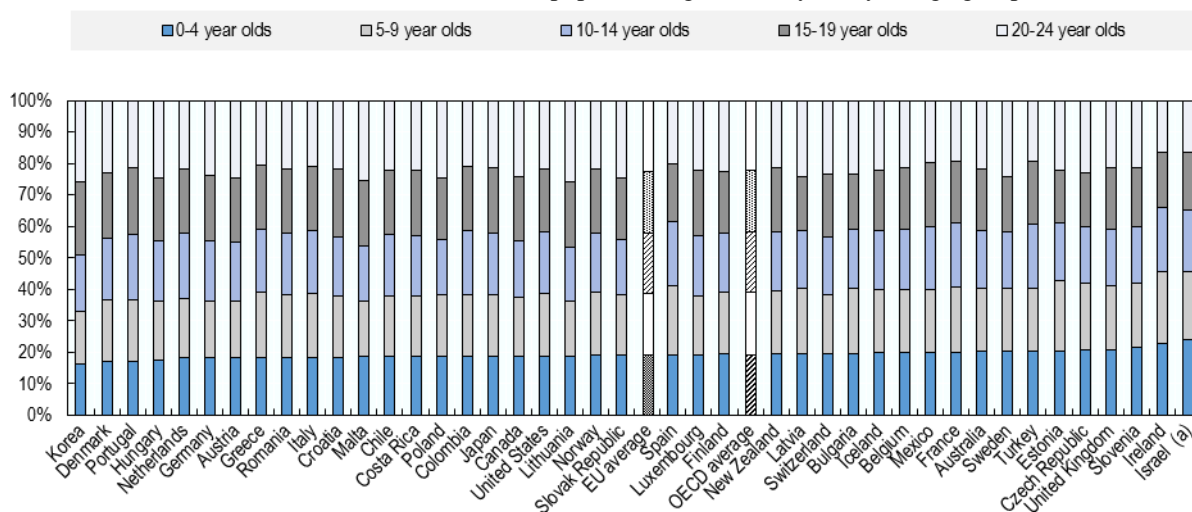*Sources*: United Nations Population Division World Population Prospects: The 2017 Revision, https://esa.un.org/unpd/wpp/

Other relevant indicators: SF1.1: *Family size and composition*; SF1.2: *Children in families* and SF2.1: *Fertility rates*.

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In most OECD countries, younger age groups tend to make up a slightly smaller proportion of the overall child and youth population than older age groups (Chart SF1.4.B). On average across OECD countries the smallest five-year age group is the 10-14 year old age group (19.1% of the population aged 0-24), followed by the 0-4 year old age group (19.4%). The largest age group, on average, is the 20-24 year old age group (21.9%). Young children (those age 0-4 and 5-9) make up a very small proportion of the overall 0-24 year old population in Austria, Denmark, Germany, Hungary, the Netherlands, Portugal and particularly Korea, where the share of 0-24 year olds aged 0-4 is 16.2% and 5-9 only 16.6%. By contrast, in Ireland and Israel older children and young adults (those aged 15-19 and 20-24) make up only a relatively small proportion of the 0-24 year old population – in Ireland, the share of 0-24 years olds that are aged 15-19 comes to only 17.5% and the share aged 20-24 only 16.4%.

Chart SF1.4.B. Age distribution of children and young adults, 2015
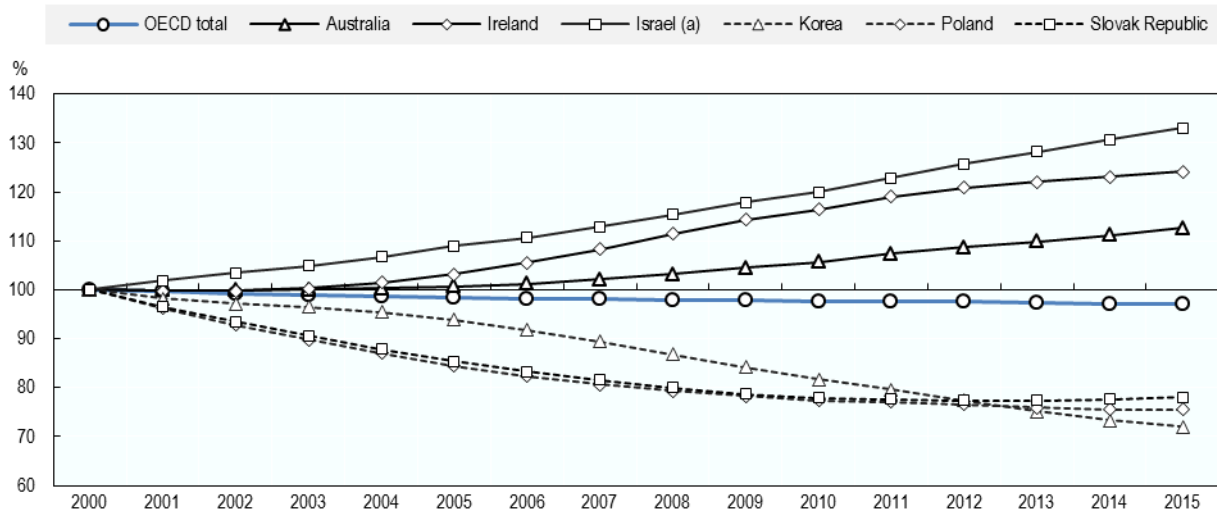Distribution (%) of the estimated population aged 0-24 by five year age group

a) See note a) to chart SF1.4.A
Sources: United Nations Population Division World Population Prospects: The 2017 Revision, https://esa.un.org/unpd/wpp/

The broad pattern of older cohorts being larger than younger cohorts among OECD countries is more apparent when comparing the number of children and young people by single years of age (see the associated .xls file). In most OECD countries trend and fluctuations in the population size by age can be explained by changes in the fertility rates over the past few decades (see indicator SF1.2 *Fertility rates*).

The child population has been falling in recent years in many OECD countries. In the OECD as a whole, the total child (0-14) population was about 2.9% smaller in 2015 than it was in 2000 (Chart SF1.4.C). Within individual countries, however, trends are fairly diverse. In some OECD countries the 0-14 year old population has increased since 2000, with Ireland and Israel seeing the number of people aged 0-14 increase by around 24% and 33%, respectively. In many others the number of people aged 0-14 has declined. In the Slovak Republic and Poland the child population has declined by about 22% and 24% respectively since 2000, while in Korea it has fallen by 28%.

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Chart SF1.4.C. Trends in the child population, selected OECD countries
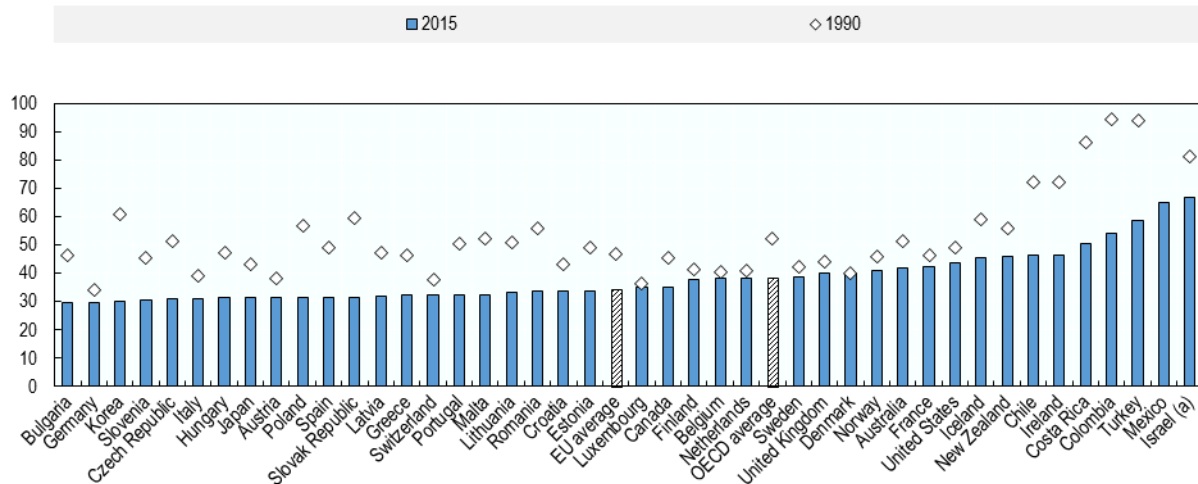Population index (base 2000 = 100) for the population aged 0-14, 2000-2015

a) See note a) to chart SF1.4.A
Sources: United Nations Population Division World Population Prospects: The 2017 Revision, https://esa.un.org/unpd/wpp/

In 2015, the OECD average youth dependency ratio was 38.6, meaning that on average across OECD countries there were just under 39 people aged 0-20 for every 100 aged 20-64 (Chart SF1.4.D). Among OECD countries, Germany, Korea and Slovenia had the lowest youth dependency ratios at less than 31, while Israel and Mexico had the highest at around or above 65.

Chart SF1.4.D. Youth dependency ratio, 1990 and 2015
Estimated number of children and young people (aged 0-20) per one hundred people of working age (aged 20-64)
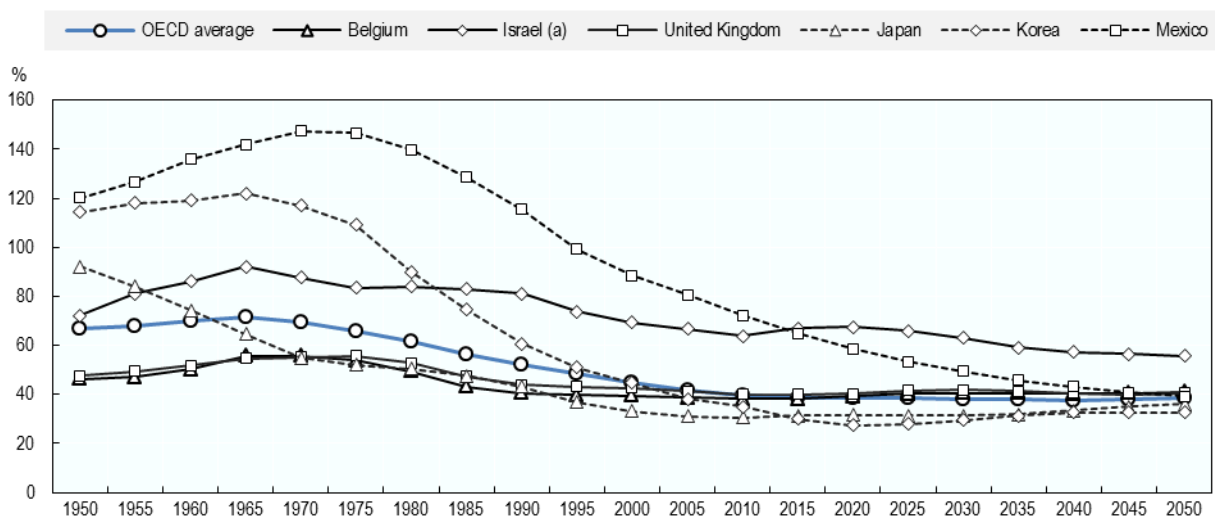

a) See note a) to chart SF1.4.A
Sources: United Nations Population Division World Population Prospects: The 2017 Revision, https://esa.un.org/unpd/wpp/

Youth dependency ratios have declined in all OECD countries over the past few decades, and in most are projected to remain fairly stable over the next 40 years (Chart SF1.4.E). Countries with historically high ratios have seen larger declines than countries with historically low ratios. This has led to a convergence in the youth dependency ratios across the OECD.

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Among OECD countries, the largest declines have been in Japan, Korea and Mexico, where youth dependency ratios have fallen by more than 50 points since 1950. Belgium, France, Israel, Sweden, and the United Kingdom have seen the smallest declines, with youth dependency ratios having fallen by less than 10 points in each since 1950.

Chart SF1.4.E. Estimated (1950-2015) and projected (2016-2050) youth dependency ratios, selected OECD countries
Estimated and projected number of children and young people (aged 0-20) per one hundred people of working age (aged 20-64)

a) See note a) to chart SF1.4.A

b) Data for the years 2016-2050 are based on the UN Population Division's 'medium fertility variant' population projections. See the United Nations Population Division World Population Prospects webpage (https://esa.un.org/unpd/wpp/) for more information on the methods and assumptions used to produced these projections.

Sources: United Nations Population Division World Population Prospects: The 2017 Revision, https://esa.un.org/unpd/wpp/

Comparability and data issues

All data presented in this indicator are taken from the United Nations Population Division World Population Prospects database (2017 revision). To ensure comparability, the United Nations Population Division employs (as far as is possible) a single, consistent, and internationally accepted method for its estimates for all countries. Detailed information on the methods and assumptions used by the United Nations Population Division when producing both its estimates of past populations and its projections of future populations can be found on the United Nations Population Division World Population Prospects webpage (https://esa.un.org/unpd/wpp/) and in United Nations (2015) *World Population Prospects: The 2015 Revision, Methodology of the United Nations Population Estimates and Projections*.

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