Danish Research Institute for
Economic Analysis and Modelling

Population Projection 2025

Forecasting assumptions and data update

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Background note
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1. Population Projections 2025: Denmark's population reaches 6 million during 2025

Denmark's population is projected to reach 6 million inhabitants during 2025. Due to an assumption of Ukrainians leaving the country during 2026, a slight population decline is projected, followed by a return to 6 million residents by the beginning of 2028 and by a continuous growth thereafter.

Last year's projection did not anticipate the population surpassing 6 million before 2028. The reason for this anticipated milestone is that this year's projection still include the individuals covered by the Act on Temporary Residence Permits for Persons Displaced from Ukraine[1] (hereinafter referred to as the Special Act). While last year's projections assumed the departure of this group in 2025, their residency permits have since been extended until March 2026[2]. As a result, their continued inclusion in the population for an additional year has played a decisive role in pushing the total population above the 6-million mark.

The emigration of individuals under the Special Act is now expected to occur in 2026, potentially resulting in a temporary population decline. This decline is expected to be temporary, with population growth projected to resume in 2027 and the total population stabilizing above 6 million from 2028 onward.

This year constitutes the first data update following the introduction of a new approach for fertility projections last year. Fertility is projected separately for each origin group, with persons of Danish origin serving as the reference population for the immigrant and descendant groups. The methodology relies on cohort fertility profiles and includes a reduction in the fertility rate to match the recent historical developments.

In line with expectations and previous sensitivity analyses, the approach has proven robust to the addition of extra years to the data. After updating historical data and shifting the start of the projection window to 2025, long-term fertility trends for people of Danish origin remained stable compared to last year. For immigrant and descendants groups this tendency is also prevailing.

[1] Act on temporary residence permits for persons displaced from Ukraine, https://www.retsinformation.dk/eli/lta/2022/324

[2] Act amending the Act on Active Social Policy, the Act on Active Employment Efforts and various other acts, https://www.retsinformation.dk/eli/lta/2024/1655

1.1 Migration

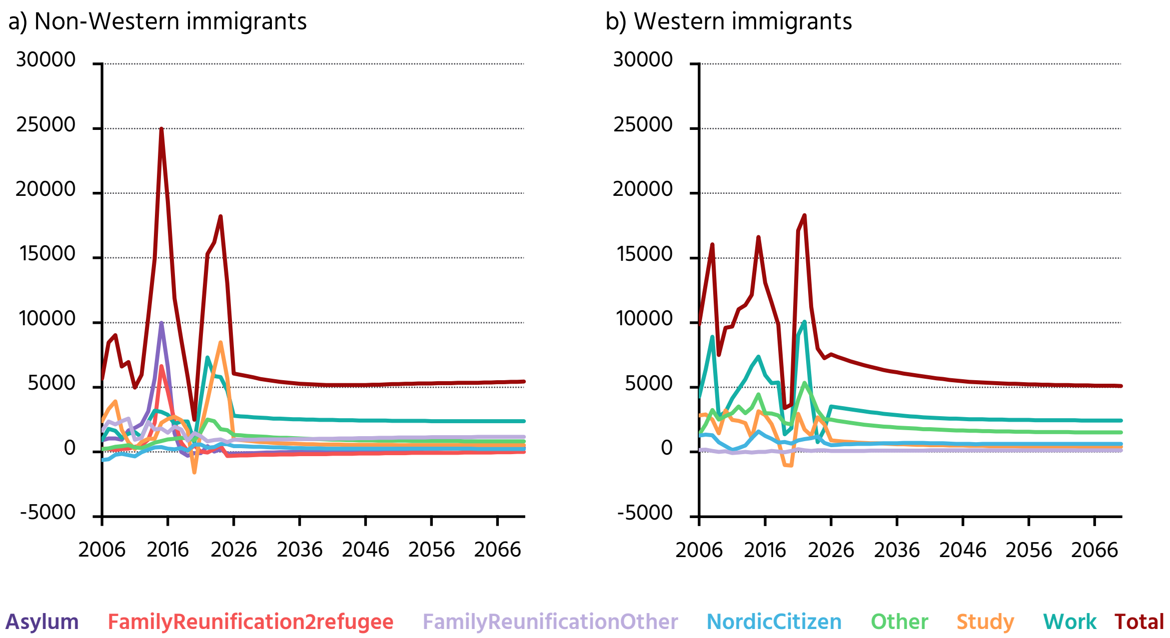
In 2025 the level of net migration to the population group covered by the Special Act is quantitatively assumed to match the increase in the resident population with this permit from the start of 2024 to 2025. Followingly, net migration under the Special Act is projected at 4,600 individuals in 2025, representing a 64% increase compared to the 2024 estimate of 2,800. The age and gender distribution is assumed to mirror the pattern of Ukrainian net migration observed in 2024. The demographic composition remains consistent to that of 2023, with a higher share of women compared to men, and a concentration of young men aged 15–20.

Following the extension of the residency permits until March 2026, emigration for individuals covered by the Special Act is not expected to occur until 2026, totalling approximately 38,700 individuals. As in the recent projections, the emigration assumptions are linked to the official policy guidelines on duration of stay.

During their temporary stay, this population is assumed not to contribute to births. Transitions to Danish citizenship or entry through family reunification are not considered. However, individuals under the Special Act are subject to the same average mortality rates as the general population.

Regarding the remaining population, migration patterns in the recent years are unchanged for several purposes of stay in 2024. Purposes of education and work are shaping the gross immigration to Denmark for both Western and non-Western foreigners by showing, despite large fluctuations, a general trend of increasing immigration.

Figure 1.1
Net migration – level of the Projection 2025



Note: Estimation of gross immigration flows is based on years 2018-19 and 2022-24 for immigrants without Danish citizenship. Immigration for asylum purposes is retrieved from the Danish Immigration Office (https://us.dk/nyheder/2024/maj/land-stallet-for-2025/) and amounts to 600 individuals. Immigration of the individuals under the Special Act is not included. Estimation of gross immigration for persons with Danish citizenship is based on years 2019 and 2023-24. Estimation is based on years 2019 and 2023-24 for emigration flows. Figures until 2024 refers to historical data and from 2025 onwards to projections.

Source: Own elaboration based on data from Statistics Denmark and Population Projections 2024 and 2025.

Migration assumptions for the Population Projection 2025 follow the same framework as used in the 2024 Population Projection (Hansen, 2024). The primary difference in this year's projection lies in higher expected gross immigration among non-Western foreigners for educational and working purposes. Particularly, the gross immigration for education purposes almost doubled from 2022 to 2024. Instead, gross immigration for Western immigrants is slightly revised downward, due to a decrease in working and studying permits in 2024.

Emigration propensities remain broadly stable compared to the previous projection. However, total emigration increases slightly for non-Western foreigners due to a larger base population in 2025, reflecting the overall increase in immigrant numbers.

As a result of the migration in- and out-flows, net migration is positive for both Western and non-Western populations, with the larger contribution resulting from migration for educational purposes (see Figure 1.1). Net migration in the 2025 Projection is slightly higher than in the 2024 Projection, due to the higher immigration among non-Western foreigners. The changes are largely driven by individuals migrating for work and study, who represent a substantial share of total immigration.

1.2 Stable fertility estimates

Last year's projection introduced a new approach for projecting fertility. The approach is based on cohort fertility profiles and incorporates a downward adjustment of the fertility level. The method uses observed age-specific fertility data for women aged 15-49. For cohorts with incomplete fertility histories, but sufficient data to infer the missing values, fertility profiles are completed by matching them with fully observed cohorts from the Human Fertility Database. For younger generations of Danish origin with insufficient fertility information, a constant completed fertility level of 1.75 children per woman is assumed.

The 2025 projection applies the same methodological framework as the 2024 projection, while updating the input data to the method. This year, the matching pool includes an additional completed generation of women of Danish origin: women born in 1975, who turned 49 in 2024, and have now completed their reproductive years. Further, obtaining fertility data for 2024 also results in additional complete cohorts from other countries being added to the pool. This expands the base for imputing fertility profiles of incomplete cohorts.

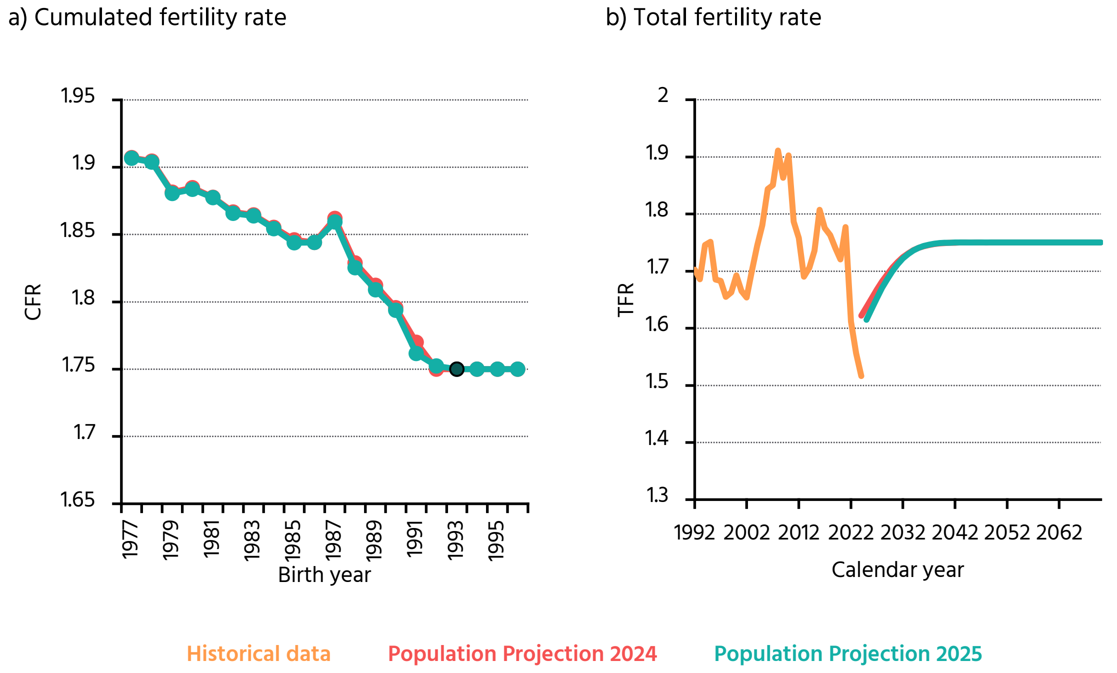
Women whose fertile profile is incomplete are those born from 1976 onwards. However, because citizenship data is available only from 1977 onward, only cohorts from 1977 and later are included in the completion process. These cohorts entered the childbearing age range (15–49 years) from 1992 onward. When fertility data are missing before the age where the bulk of births occurs, the age profile is not completed due to the high uncertainty in their fertility behaviours. The threshold age to stop completing the fertility profile of a generation is set at 32 years old.

Compared to last year's projection, an additional cohort is completed by matching. In the 2024 projection, matching ended with the 1991 cohort. In the 2025 Projection, the matching strategy is carried on until the cohort of 1992. The generations being completed are those born between 1977 and 1992, entering their fertile range between 1992 and 2007. For cohorts born in 1993 and onward, a constant completed fertility of 1.75 is assumed.

The update of the matching pool for people of Danish origin results in minor changes in cohort fertility until generation 1992 (see Figure 1.2). Period fertility for people of Danish origin in the 2025 Projections is slightly lower in the short run but converges to fertility of the 2024 Projections in the long run. The initial difference is due to the inclusion of an extra complete generation in the matching pool and an extra generation to be completed.

Figure 1.2

Fertility - population of Danish origin



Note: The cumulated fertility rate is obtained completing the cohorts by matching strategy, and assuming a constant completed fertility rate of 1.75 children per woman for cohorts with missing information before age 32. The matching pool in the Population Projection 2025 includes additional cohorts compared to the Population Projection 2024.

Source: Own elaboration based on data from Human Mortality Database, Statistics Denmark and Population Projections 2024 and 2025.

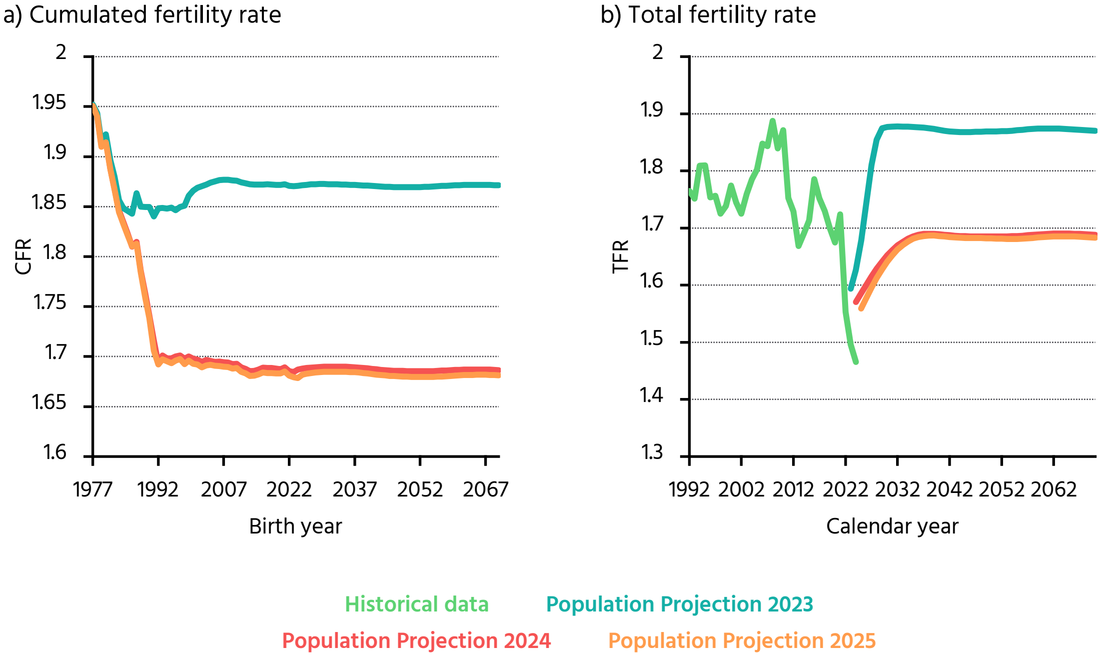
The other origin groups include immigrants and descendants, further divided into Western and non-Western countries of origin, and differentiated by Danish or foreign citizenship. Fertility projections for those population groups remain largely unchanged from last year's, with only minor deviations for the smallest groups.

The 2025 Projection for the total population shows only a minimal downward adjustment in the long run compared to the 2024 Projection, both in the cohort and period fertility (see Figure 1.3). These changes can be attributed to a diverse demographic composition of the population, particularly the increasing number of women of childbearing age among non-Western immigrants and descendants.

The 2025 Projection anticipates a marginal long-term increase in the total number of births compared to the estimates in 2024. For the period 2030–2050, the average annual increase is about 62,500 new-borns according to this year's projections, compared to about 62,100 last year. Of the difference between the two projections (approximately 400 births per year), 40% is attributable to children of Danish origin, 44% to descendants of non-Western origin, and 16% to descendants of Western origin.

In 2024, 84% of the new-borns was of Danish origin, 10% non-Western descendant, and 6% Western descendant. Therefore, despite representing only 16% of the total newborns, the descendants largely contribute to the changes in numbers compared to last year. These shifts reflect ongoing changes in the population's composition. As fertility is stable in the long run, the increase in the number of live births is mainly due to an increase in the number of immigrants, particularly of non-Western origin.

Figure 1.3
Fertility – total population



Note: The Population Projections 2024 and 2025 differ from The Population Projection 2023 (Hansen, 2023) in the implementation of the methodological revision for projecting fertility.
Source: Own elaboration based on data from Human Mortality Database, Statistics Denmark and Population Projections 2024 and 2025

1.3 Mortality and life expectancy

After a decline in life expectancy in 2021 and 2022 due to the COVID-19 pandemic, increases resumed in 2023 and 2024 for both men and women. In the Population Projection 2025, the gap with pre-pandemic expectations has narrowed significantly.

Figure 1.4 illustrates the development of life expectancy for men and women, as well as the projection in the Population Projection 2024 and 2025. Population Projection 2021 is also included as a reference to represent the pre-pandemic expectations.

In all three population projections, the mortality projections were calculated based on the historical developments from 1990 to 2020. However, since the Population Projection 2022 (Hansen, 2022), the projections have been adjusted by the difference between actual and expected mortality in the final year of the estimation period, with this adjustment gradually phased out over the projection window. As a result of the adjustment during COVID-19, the projections begin at the actual level—reflecting either the pandemic-induced decline or the subsequent recovery—and gradually converge toward the pre-pandemic expectations outlined in the Population Projection 2021.

The recovery in mortality over recent years has brought the starting point of the projection closer to pre-pandemic levels, thereby narrowing the gap created by COVID-19. In 2024, life expectancy for women (84.4 years) was only slightly lower than anticipated in the Population Projections 2021 (84.7 years) and 2024 (84.5 years). For men, life expectancy in 2024 (80.7 years) was slightly lower than that of the Population Projection 2021 (81 years) and slightly higher compared to the Population Projection 2024 (80.6 years).

As a consequence of the projections starting closer to pre-pandemic levels, the influence of the COVID-19 pandemic on mortality has diminished with each annual up-date, and the gap with to pre-pandemic trends has been closing faster. While earlier projections assumed a 10-year recovery period, according to current figures, life expectancy is expected to realign with pre-pandemic levels shortly after 2025. In the 2024 Population Projections, life expectancy aligned with the trajectory of the Population Projection 2021 around 2030. In contrast, in the Population Projections 2025 life expectancy already begin at levels nearly identical to the expectations of the Population Projection 2021, indicating an earlier and faster convergence to pre-pandemic mortality patterns.

Figure 1.4
Life expectancy

Note: The estimation period for the three projections is from 1990 to 2020. The latest data year is marked with a round mark in each series.
Source: Own elaboration based on data from Statistics Denmark and Population Projections 2024 and 2025

1.4 Changes in the population relative to Population Projection 2024

The expected development of the population size in the Population Projection 2025 is relatively close to that of the Population Projection 2024, due to same methodological assumptions. Figure 1.5 shows the difference in the population stock between the two projections, by the main five origin groups. A slightly higher population size is expected compared to last year, with an initial peak followed by a gradual increase over time.

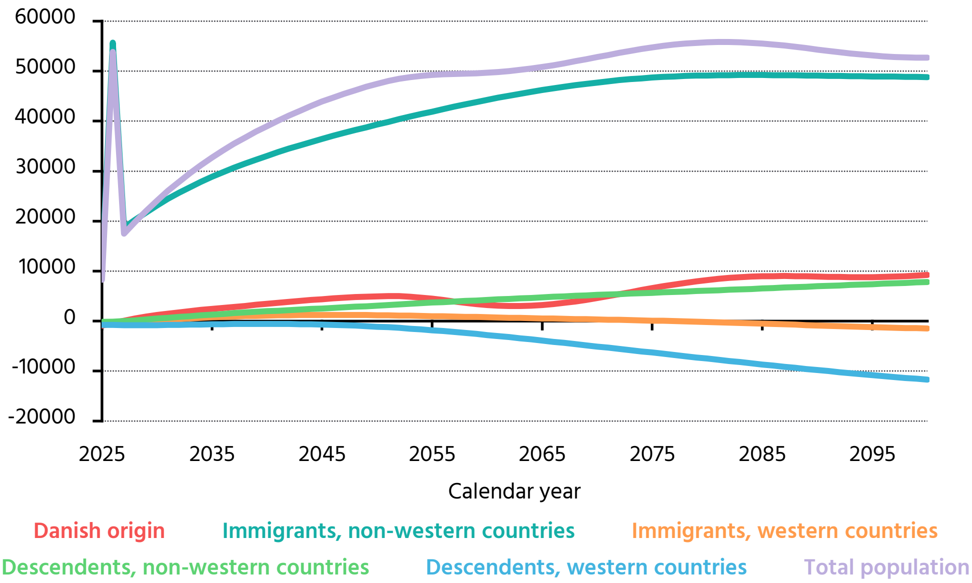
The initial peak in the stocks can be attributed to the continued permanency of the individuals covered by the Special Law in 2025 and their emigration in 2026, which affects the number of non-Western immigrants. A similar pattern was observed for last year and is now shifted by one projection year.

The long-term population projection has been revised upward compared to last year's projection. The upward adjustment is primarily driven by the group of non-Western immigrants, and to a smaller extent by non-Western descendants and Danes. The increase in the number of non-Western immigrants over time is supported by a higher expected net migration relative to last year. The larger immigration also has the secondary effect of increasing the number of potential mothers in the same group, and explains the larger number of descendants in the long-run. People of Danish origin contribute to increasing the difference in the population size. This is partly explained by slightly higher number of births and a lower mortality in the medium term.

For Western migrants and descendants, the opposite pattern is seen. Although a minimal increase in the number of Western migrants is projected in the short term, both groups are projected to decline in the long term compared to last year.

Figure 1.5

Difference between the resident population by origin groups in the Population Projection 2025 and Population Projection 2024



Source: Population Projection 2025 and Population Projection 2024.

2. References

Hansen, M. F. (2022). *Befolkningsfremskrivning 2022. Indregning af merindvan-dring fra Ukraine, COVID-19 og andre fremskrivningsforudsætninger.* DREAM: København.

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