

## 8. How can the Nordic welfare state respond to demographic change?

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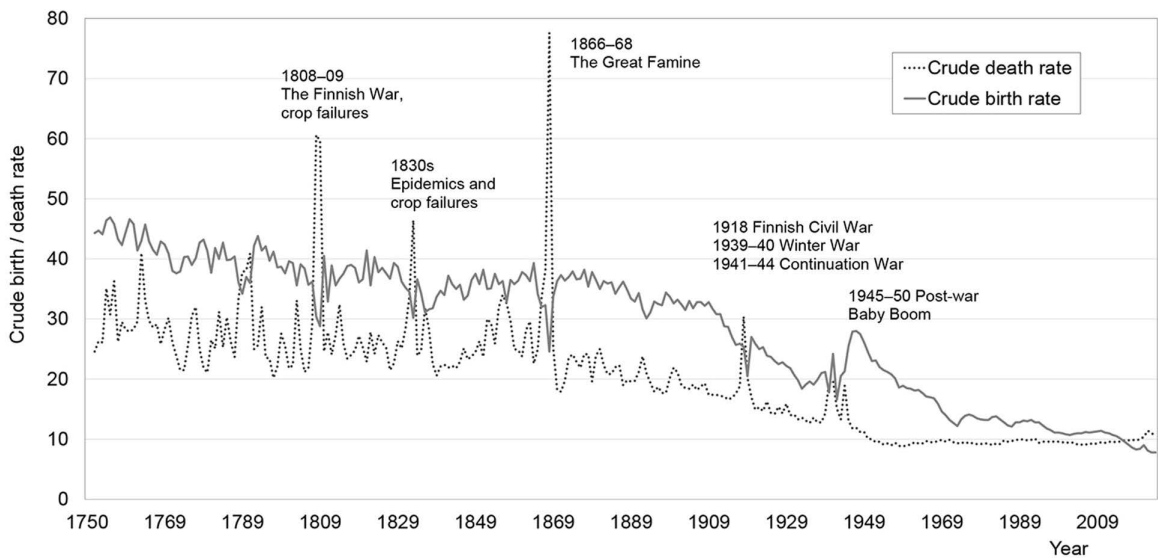
### INTRODUCTION

Finland is undergoing profound demographic changes, characterised by declining fertility, increasing longevity, and accelerated population ageing. While these shifts reflect broader patterns in highly developed societies, their pace and scale in Finland are striking. This chapter describes these developments and explores their economic and social implications, ranging from pressures on welfare sustainability to deepening social inequalities and gaps in well-being. We emphasise the need for a comprehensive policy response that adapts to demographic changes by investing in human capital and well-being, supporting individuals throughout their life course, and fostering a sustainable society into the future. While investments in human capital are essential, social and gender equality are conditions that enable the full realisation of everyone's potential in an ageing society.

### SHIFTS IN FERTILITY, MORTALITY, AND MIGRATION

#### **From the First to the Second Demographic Transition**

In nineteenth-century Finland, both mortality and fertility rates were generally high and stable, although they were occasionally disrupted by periods of exceptionally high mortality caused by wars, famines, and infectious diseases, during which fertility could also temporarily decline. By the late 1800s, Finland had entered the initial phase of what is known as the first, or classic, demographic transition (Notestein, 1945). This refers to the change from high to low mortality and fertility levels as societies industrialise and modernise. The shift in Finland is illustrated in Figure 8.1, which shows the crude rates of mortality and fertility. For fertility, a more refined measure is the **Total**



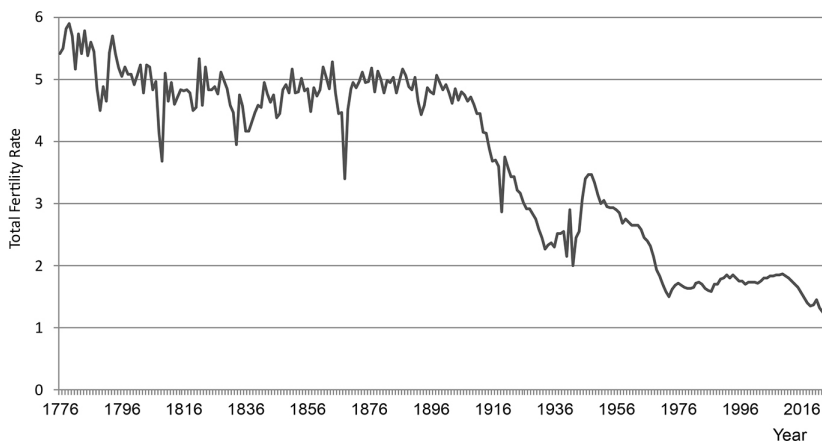
*Note:* The crude birth rate refers to the number of live births per 1,000 people in the mid-year population. The crude death rate refers to the number of deaths per 1,000 people in the mid-year population.

*Source:* Statistics Finland, 2025; the labels by the authors.

*Figure 8.1* Crude birth rate and crude death rate, Finland, 1751–2024

Fertility Rate (TFR), which controls for any changes in the age structure of the population (Figure 8.2). The TFR refers to the average number of children a woman is expected to have over her lifetime, assuming current age-specific fertility rates remain constant. Between 1900 and the early 1970s, Finland's TFR declined from around five children per woman to just below two. The most significant exception to the continuous fertility decline was the birth of Finland's baby boom generation, known as the 'large age cohorts', born right after World War II, between 1945 and 1950. In the latter half of the nineteenth century, life expectancy at birth in Finland ranged from 32 to 44 years. Since then, it has more than doubled, reaching 82 years in 2024 (Statistics Finland, 2025). Adult mortality declined significantly during the transition, but the more crucial development was the decline in infant mortality from very high to extremely low levels. The usual assumption in the model of the first demographic transition is that, afterwards, mortality and fertility would reach a new balance at a low level, with fertility near the population replacement level. The replacement level – typically slightly above two children per woman – refers to the average number of children each woman would need to have for a population to sustain its size from one generation to the next, in the absence of migration.

Over the past 60 years, Western societies have undergone profound changes in family dynamics, including declining marriage rates, delayed timing of first births, fertility rates falling below replacement level, rising rates of separation



Source: Statistics Finland, 2025.

Figure 8.2 Total Fertility Rate, Finland 1777–2024

and divorce, and an increase in non-marital cohabitation and childbearing among cohabiting couples. These developments are commonly understood as components of the second demographic transition (SDT). According to the SDT theory, these changes are primarily driven by a cultural shift towards attitudes, norms, and values stressing individuality and self-actualisation, and a growing rejection of institutional and familial authority in life decisions (see Zaidi & Morgan, 2017). This transition would increase diversity in individual life courses and family types. The Nordic countries are usually regarded as pioneers of the SDT, having exhibited high rates of non-marital cohabitation, non-marital childbearing, and postponement of first births earlier than many other countries. After the Nordic forerunners, most other European countries began to exhibit similar trends in partnership dynamics, but often with some delay, leading to a reasonably considerable variation in current behaviours such as non-marital childbearing.

### **Fertility Developments in the Nordic Countries Since the 1970s**

Despite leading the way in changes to partnership patterns linked to the SDT, the Nordic countries long resisted the steep fertility declines that affected many other European regions, particularly in the South and East. After the initial decline to around the population replacement level by the early 1970s, fertility in the Nordic countries remained high by European standards. The Nordic countries' ability to maintain fertility levels near the population replacement threshold, around two children per woman, was credited mainly to their strong welfare states, which support families in meeting their care responsibilities, and to greater gender equality, which makes it easier for mothers to balance paid work and family (e.g., Mills et al., 2011; Balbo et al., 2013).

However, since 2010, fertility has declined in all the Nordic countries. The decline has been most dramatic in Finland, where TFR has fallen by 33% in just 14 years (2010–2024), and is now at an ultra-low level, below 1.3 (1.25 in 2024). Between 2010 and 2022, the TFR declined notably in the other Nordic countries as well: 28% in Norway, 25% in Iceland, 23% in Sweden, and 17% in Denmark (Human Fertility Database et al., 2025). The fertility decline in Finland has been the largest among all European countries during this period and was below the European average of 1.38 in 2023 (Eurostat, 2025).

The Nordic fertility decline since 2010 is pervasive, affecting almost all age groups and large population segments. While continued childbearing has also declined, most of the reduction in total fertility rates (TFR) in the Nordic countries stems from a decline in first-birth rates (Hellstrand et al., 2021). Before 2010, fertility declined among women under 30 but increased among those aged 30 and above, reflecting a trend toward postponing childbearing to later ages. In the 2010s, the pattern shifted: fertility has also declined among

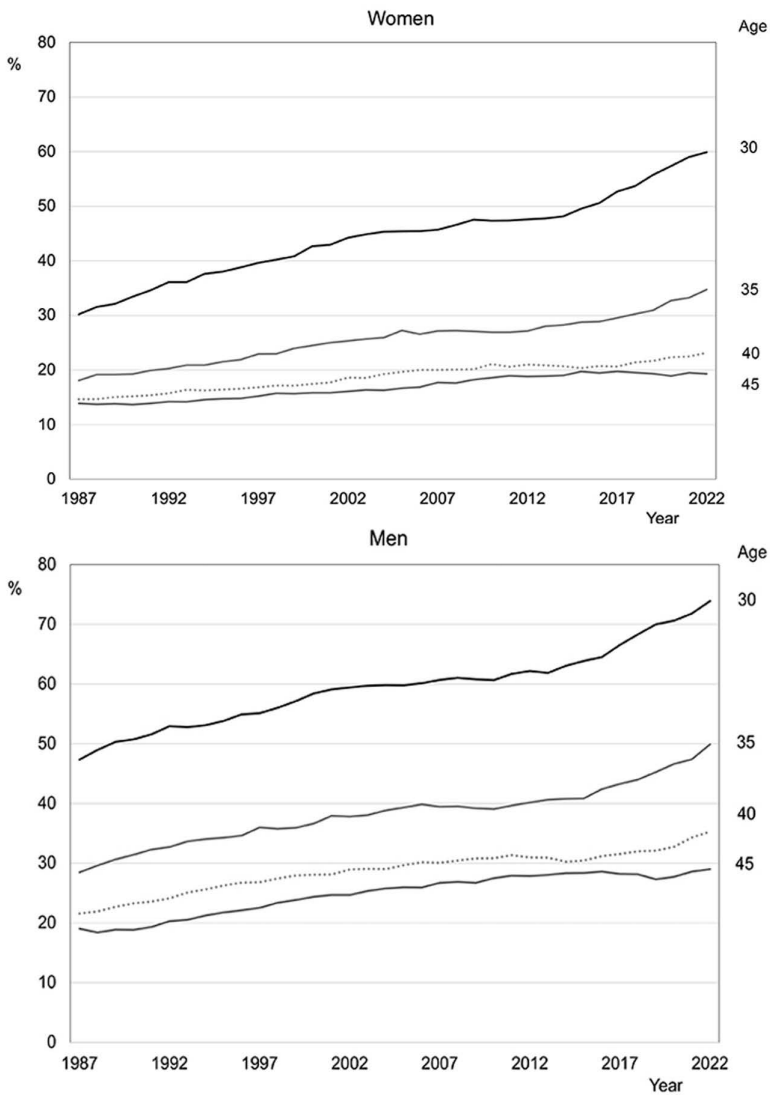
women in their 30s and approaching 40. This illustrates that the recent fertility decline is driven not only by delayed childbearing but is also expected to lower cohort fertility, meaning that the total number of children women ultimately have is likely to decrease. Cohort fertility has remained remarkably stable for decades in the Nordic countries: women born in the 1970s ultimately had on average 1.9 children, the same as those born in the 1940s. However, according to forecasts, cohort fertility is declining in most Nordic countries, and women born in the early 1990s in Finland will have, on average, fewer than 1.7 children (Hellstrand et al., 2021). That is, the level will not be as low as the period-based TFR would suggest, as is typical when childbearing is being postponed, but is still significantly lower than for previous female cohorts.<sup>1</sup> Furthermore, the fertility decline appears to extend across virtually all population groups, including those distinguished by urban-rural residence, partnership status, educational attainment, and economic activities inside and outside the labour force (Ohlsson-Wijk & Andersson, 2022). The broad and substantial nature of the decline suggests that a wide range of factors shape it.

In Finland, lifetime childlessness has long been unusually common compared to other Nordic countries and beyond. Women and men born in the late 1960s, for instance, remained childless at levels of 19% and 28%, respectively. Meanwhile, relatively high rates of continued childbearing have helped sustain fertility at relatively high levels, similar to those of the other Nordic countries (Jalovaara et al., 2021). Figure 8.3 shows the percentage proportions of childless individuals at ages 30, 35, 40, and 45 for women and men in Finland between 1987 and 2022. The developments at the age of 35 are particularly noteworthy. Despite many still entering parenthood after 35, the steep rise in childlessness at this age points to a continued upward trend in lifetime childlessness (Jalovaara & Miettinen, 2024).

Another unique feature of the Nordic fertility trends is the educational differences in childlessness and fertility more broadly. Research on cohort fertility shows persistent (for men) and changing (for women) educational differences in childbearing in the Nordic countries. Developments in educational differentials in fertility for women and men have led to a new pattern of gender similarity. For example, whereas in the older cohorts, lifetime childlessness was highest among men with low educational attainment and women with high educational attainment, in the most recent cohorts, lifetime childlessness is highest among those with low educational attainment regardless of gender. Educational differences in the average number of children eventually born to

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<sup>1</sup> Overall, trends in men's fertility at the population level typically closely mirror women's trends in low-fertility countries yet at a slightly lower level (Dudel & Klüsener, 2021).



Source: Jalovaara & Miettinen, 2024.

Figure 8.3 Proportions (%) childless at age 30, 35, 40, and 45 in 1987–2022; women and men, Finland

men and women are less pronounced than in lifetime childlessness (Jalovaara et al., 2019). This is partly influenced by the fact that low-educated parents are more likely to have three or more children, which is increasingly associated with childbearing with more than one partner, reflecting partnership instability (Jalovaara et al., 2022). The gender-neutral socio-economic differentials in family formation are consistent with the institutional support for social and gender equality and the dual-earner family model. Yet, welfare state support for combining work and childbearing may be most beneficial to individuals with strong labour market positions. Consequently, the countries now face a new challenge – obstacles to both family formation and partnership stability accumulate among lower-educated individuals, regardless of gender.

### **Migration and Regional Differences**

The population of Finland is relatively small, with 5.6 million inhabitants in 2024 (Statistics Finland, 2025). Since 2016, the natural population change has been negative; that is, there have been more deaths than births annually. However, the population is still growing due to positive net migration, meaning that more people are moving to the country than leaving it.

Until quite recently, Finland was mainly a country of emigration. Many Finns moved abroad, especially to North America in the early twentieth century and to Sweden in the 1960s and 1970s. Compared to other Nordic and Western countries, Finland has a relatively recent history of immigration (Busk & Jauhiainen, 2022). Net migration only turned positive in the late 1980s and 1990s, as growing numbers of refugees, labour migrants, and international students began to arrive. Russian and Estonian migrants are Finland's two largest immigrant groups, especially among women. Net migration averaged approximately 9,000 per year in the 2000s and increased to 15,000 in the 2010s (Statistics Finland, 2025). These figures are notable, being of a similar order of magnitude as the decline in recent birth cohorts, which fell from 61,000 children born in 2010 to 45,000 in 2022 (Statistics Finland, 2025). In 2022, the flow of permanent immigrants relative to Finland's population size remained below the OECD average and that of other Nordic countries, despite a recent upward trend. However, the increase in the permanent-type immigration flow in 2022, as compared to 2019 or 2021, was larger than the respective increase in Denmark, Norway, and Sweden (OECD, 2023). In 2015, 29,000 people immigrated to Finland, a number that increased to 33,000 in 2020 and has remained at a similar or higher level since then (Statistics Finland, 2025). There was also a modest upward trend in emigration from Finland to other countries in the first decades of the 2000s, from an average of 13,000 in the first decade to almost 16,000 in the second decade (Statistics Finland, 2025).

Given its small population and large land area, Finland is sparsely populated and shows significant regional variation in population density and demographic developments. Urbanisation has been a long-standing trend, with the population increasingly concentrated in urban areas and larger cities. Rural areas generally face population ageing at a faster rate than urban areas. This is due to a combination of factors, including out-migration of young people to urban regions, and few children born due to an older population structure in many rural areas (despite higher TFR levels) (Campisi et al., 2023). In contrast, urban areas – especially larger cities like Helsinki, Tampere, and Turku – tend to have younger populations, driven by both immigration and internal migration from rural regions. Larger cities also tend to have higher shares of highly educated individuals.

### **Global Trends in Fertility and Population Growth**

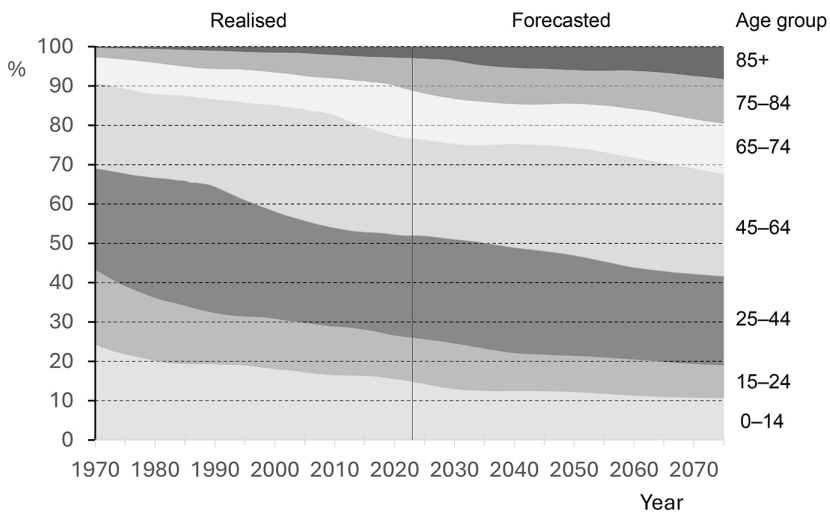
Since the 1960s, most of the world has undergone a significant fertility transition, with birth rates declining not only in high-income countries but also in less developed countries. As a result, many regions – particularly Europe, East Asia, and the Americas – are facing stagnating or negative population growth and rapidly ageing populations. In contrast, sub-Saharan Africa continues to exhibit rapid population growth, driven by relatively high fertility and, more importantly, by a youthful age structure that sustains strong population momentum despite declining fertility. Globally, the population growth rate, having peaked at over 2% per year in the 1960s, has declined to below 1% in the 2020s and continues to fall. The world population surpassed 8 billion in 2022, but growth is expected to slow, with UN projections indicating a peak of around 10.4 billion in the 2080s, followed by stabilisation or decline. Looking ahead, the demographic trajectories of ageing societies will increasingly depend on migration. The sources of population growth will shift significantly across income groups. In low-income countries, growth remains driven by high birth rates and declining mortality. In high-income countries, where births no longer outpace deaths, immigration is, or becomes, the primary driver of population growth (United Nations, 2024).

## **CONSEQUENCES OF DEMOGRAPHIC CHANGES**

### **Population Ageing**

Despite the fertility decline in the long run, Finland's population has grown almost continuously, for instance, from 2.7 million in 1900 to 5.6 million in 2024 (Statistics Finland, 2025). During the shift to lower mortality and fertility levels, Finland's population began to age, meaning that the proportion of

the population in older age groups increased. The primary drivers of population ageing are rising life expectancy and a long-term decline in fertility rates. In addition, Finland's large baby boomer generation continues to influence the age structure, now contributing to the current population's large shares of older age groups. As a result, Finland ranks among the countries with the highest proportion of people aged 65 and older globally. As of 2023, 24% of Finland's population falls into this age group (World Bank, 2024). The recent (2010 onwards) fertility decline accelerates ageing in a country that already has a relatively old population structure. Figure 8.4 illustrates the relative population shares of age groups for Finland, actual for 1970–2023 and projected for 2024–2075. The projected figures are based on Statistics Finland's 2024 population forecast. Notably, the increases are most substantial in the oldest age groups. For instance, the change between 1970 and (projected) 2075 means that the proportion of those aged 75 or older grows seven-fold, and that of those aged 85 or older grows 24-fold.



Source: Statistics Finland, 2025 (data) and the authors (graph).

Figure 8.4 Relative (%) population shares of age groups, actual 1970–2023 and projected 2024–2075, Finland

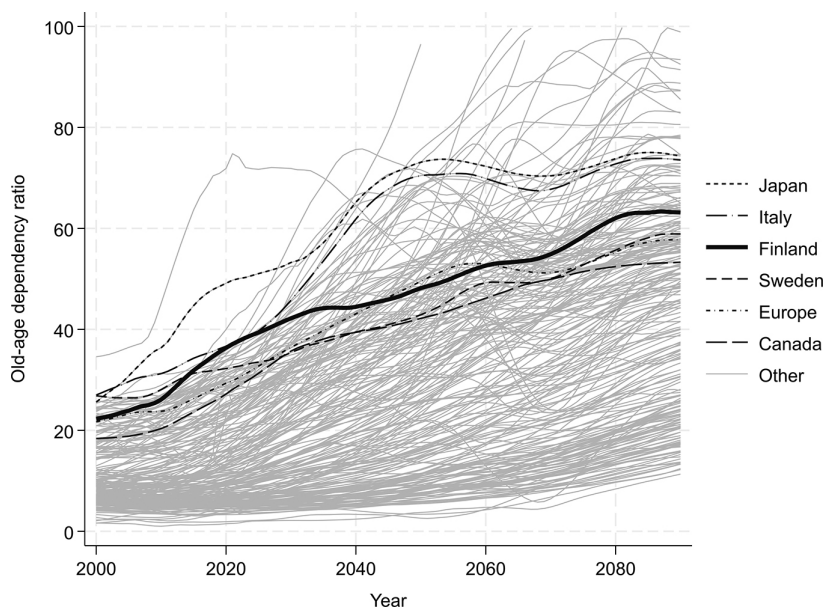
## Challenges to Economic and Social Sustainability

The new demographic landscape in the Nordic countries, particularly in Finland, poses significant challenges to the economic and social sustainability of their welfare societies. Declining fertility rates are accelerating population ageing, with far-reaching implications at national, community, and individual levels. This demographic shift strains welfare systems that rely on a balance between a growing number of older adults requiring pensions and care and a shrinking working-age population responsible for financing these supports and providing essential public services. The resulting imbalance threatens economic sustainability by reducing the proportion of the working-age population and increasing pressure on social security systems, including pensions, healthcare, and long-term care. Rural communities, in particular, experience accelerated population ageing, intensifying these challenges at the local level.

As mentioned, Finland, already among the countries with the highest proportion of people aged 65 and older, is facing further acceleration of ageing due to recent declines in fertility rates. Its old-age dependency ratio has risen more rapidly than in other Nordic countries (Figure 8.5). As the population of the oldest age groups – especially those aged 85 and over – increases sharply, the prevalence of age-related health conditions such as dementia, mobility limitations, and multiple chronic illnesses also grows. This makes it increasingly urgent to ensure the availability of accessible, high-quality long-term care, healthcare services, and support for informal caregivers to meet the rising demand for assistance among individuals with reduced functionality.

Small families and individuals living alone will become increasingly common, presenting new challenges in social relationships and well-being. This also needs to be considered when planning social security and public services. For example, the risks of poverty, loneliness, and mental health problems are greater for those living alone. Mental health problems have become more common, and they predict a lower likelihood of having a partner or children, regardless of gender, among young adults in Finland (Kailaheimo-Lönnqvist et al., 2025). With fewer children, daycare and school systems may become more centralised, and schools in particular may shift towards greater digitalisation, leading to longer travel distances or fewer in-person social interactions. Fewer adults are participating in the care of elderly parents, while care services struggle with a lack of personnel.

Aspects of social sustainability include individual well-being and quality of life. In the long run, low fertility is partly the outcome of several positive societal developments, including the widespread availability of effective contraception and safe abortion, which support women's reproductive autonomy. The available evidence suggests, however, that low fertility and childlessness in Finland nowadays are not only a societal problem but also a problem for



*Note:* Old-age dependency ratio refers to the number of individuals aged 65 or older per 100 people of working age, defined as those aged 15 to 64 years.

*Source:* United Nations, 2024 (data) and the authors (graph).

*Figure 8.5* The old-age support ratio (observed and forecasted) for all countries and regions in 2000–2090

many individuals. As expressed in surveys, **the desired number of children has declined only modestly, and the gap between the desired and actual number of children may have widened** (Sorsa et al., 2023). However, the evidence remains limited, and there are also indications that childfree life ideals are becoming more common in Finland among more recent birth cohorts (Golovina et al., 2024).

Various polarisations are more pronounced **in Finland** than in the other Nordic countries. For example, **lifetime childlessness is more common, and while it is associated with social and economic disadvantages in all Nordic countries, many disparities are more profound in Finland. Also of great concern are the large and growing socio-economic inequalities in family formation and stability, which signal and may further contribute to unequal prospects for well-being, quality of life, and participation.** Research consistently shows that stable family life enhances the well-being, health, and quality of life for family

members. The family remains a fundamental unit of society and an arena for children's socialisation, and family relationships are an essential source of meaning and happiness. These relationships also provide social protection and support throughout the life course and across generations, even in less family-centred welfare systems, such as the Nordic countries. Those with the fewest resources to begin with are most likely to experience the lack of stable family relationships; at the same time, they tend to have the fewest resources to deal with any adverse consequences of a lack of family support. Therefore, family dynamics are also a part of the processes leading to deeper social exclusion.

Challenges related to family relationships also arise from issues of gender equality and gender diversity. The uneven distribution of household chores and childcare in everyday life often leads to conflicts between partners, particularly among parents of young children (Sorsa et al., 2023). Disparities in the division of paid and unpaid work are reinforced during parental leave, as women take considerably longer leave periods than men. This leads to economic inequality between parents, affecting power dynamics in partnerships. Further, individuals who belong to gender or sexual minorities may have feelings of exclusion within family relationships. Childbearing has increased among female same-sex couples in Finland, but only among the highly educated (Ponkilainen et al., 2024)

### **Facing the Challenges**

Some public and policy discussions about fertility decline centre on whether to encourage increased birth rates or to focus on adapting to its impacts. Given the recent sharp decline in fertility in a country already facing rapid population ageing, proactive adjustment and preparation are imperative. The demographic reality of sustained low fertility demands timely and far-reaching societal responses. Substantial short-term increases in fertility are unlikely, and even if fertility were to rise, the rapid pace and advanced stage of population ageing remain pressing challenges. Fertility is in decline globally, and an increasing number of countries are facing the outlook of possibly sustained below replacement-level fertility (Skirbekk, 2022). Further, the Nordic welfare states already provide robust support for family welfare, leaving limited room for additional measures to impact fertility rates significantly, and the fertility decline since 2010 was not preceded by substantial cuts or reductions in family policies. Nevertheless, family policies remain vital for the well-being of family members and can play a role in encouraging childbearing (Rotkirch, 2024). Two key points emerge: first, if the goal is to support family formation, starting with the entry into parenthood, a narrow focus on further supporting existing families with children is essential but insufficient. Broader approaches are needed. Second, the fundamental measures required to adapt to demographic

change and support family formation are aligned, suggesting that there is no strong contrast between these objectives.

In this context, combining broad policy measures with targeted interventions may offer new opportunities to address challenges underlying low fertility levels. For example, reproductive health education that increases awareness of factors influencing fecundity and fertility – such as age and health behaviours – alongside broader support for young people in planning life choices, and wide access to infertility treatments, can serve as timely complements to longer-term social investment strategies. These goal-oriented interventions help individuals make informed decisions about their reproductive lives and overcome barriers to fulfilling their fertility goals, potentially reducing involuntary childlessness and promoting family formation. However, while such interventions may benefit many individuals, their overall effect on population-level fertility is likely to remain modest.

## INFLUENCING AND ADJUSTING TO DEMOGRAPHIC CHANGE

### Role of Human Capital for Economic Sustainability

In the face of the undeniable need for Finnish society to adapt to low fertility and rapid population ageing, key measures include investments in well-being and human capital, which facilitate employment and productivity in the long run. If anything, high levels of human capital and employment can also support family formation in today's Nordic societies, lessening the need to choose between policies aimed at adaptation and those aimed at supporting family formation. Wolfgang Lutz (2008) emphasises that as populations age, i.e., the old-age dependency ratio increases, investing in the 'quality component', human capital, is crucial. Here, the quality component refers to the population's characteristics and capabilities, such as education, health, and skills, that determine how effectively it can contribute to economic development, social well-being, and sustainability. Such an investment-oriented approach can help mitigate the economic and social challenges faced by an ageing population.

Recent studies have examined the potential of human capital investments to mitigate the economic burden of Finland's ageing society. Marois, Rotkirch, and Lutz (2022) forecasted the productivity-weighted labour force dependency ratio under various assumptions regarding education and fertility, extending until 2060. They concluded that a fertility rate of around 1.6 would not pose a major economic problem if labour productivity increased as a result of Finnish men reaching the educational level of Finnish women. Mäki-Franti et al. (2023) modelled the economic growth in Finland under varying human capital investment scenarios until 2070 using the Bank of Finland's long-run forecast

model (Kokkinen et al., 2021). They reached similar conclusions, stressing that investments in human capital are key to economic growth. Their optimistic scenario, leading to economic growth, also assumed some increase in immigration. Myrskylä et al. (2025) analysed to what extent an increase in human capital can counterbalance the predicted long-term decline in economic growth resulting from a sustained low fertility level (decline from 1.45 to 1.3). In their view, maintaining the investment in education at a constant rate despite the decline in cohort size has the potential to offset the impact of the fertility decline. Increased levels of education, particularly among women, may lead to further delays in childbearing (e.g., Monstad et al., 2008). However, impacts on eventual numbers of children in the Nordic context are likely to be small, but if anything, positive for men (e.g., Nisén et al., (2018).

In ageing societies, it is increasingly important to enable and encourage longer working lives. This helps retain the human capital that societies have already invested in, rather than allowing it to depreciate prematurely. To boost employment among older individuals, pension systems should be reformed to support flexible retirement and provide incentives for extended careers, while removing disincentives to continue working. At the same time, workplaces must become more age-inclusive by offering flexible work arrangements, combating age discrimination, and promoting lifelong learning (e.g., Lindström, 2025).

### **Role of Immigration for Economic Sustainability**

Another key set of measures we emphasise in adaptation to population ageing is immigration, which leads to employment and integration into the host society. Marois, Bélanger, and Lutz (2020) highlight the high stakes involved in mitigating the weakening old-age support ratios in advanced ageing economies through immigration. According to their projections, long-term support ratios are more strongly influenced by changes in educational attainment, labour force participation, and migrant integration than by the sheer number of migrants or overall fertility levels. Nopola's study (2019) examined the long-term implications of migration for the sustainability of Finland's pension system. She demonstrates that migrant groups not only differ in their levels of skills and employment rates, but also in their fertility: the latter may compensate for the former, given that migrant groups with lower skills (i.e., from lower-income countries) tend to have higher fertility. However, as fertility declines globally, the initial skill levels and the integration of migrants become even more crucial for economic sustainability. Moreover, the fertility behaviour of the descendants of migrants also typically resembles that of natives, and their fertility can even reach lower levels than that of natives (Höhn et al., 2024).

Immigrants, on average, have a weaker position in the labour market than native Finns, and this is particularly evident in the relatively low employment rates among female immigrants (Sutela, 2016). However, the employment rate of female immigrants (aged 20–64) increased from 53% in 2016 to 68% in 2022 in Finland, indicating a strengthening labour market attachment of this group. In 2022, the overall employment rate among immigrants was 73.4%, comparable to that in Sweden (72.4%) (Sutela, 2023). There is a significant variation in labour market attachment and educational level among immigrants depending on their country of origin. For instance, in 2022, the employment rate of male immigrants from other EU countries was higher than that of native Finnish men, while the employment rate of male immigrants from other countries was lower. Female immigrants from outside the European Union are less likely to be employed than native Finnish women. In contrast, the employment of female migrants from other EU countries resembles that of native Finnish women (Sutela, 2023).

### **Role of Family Policy and Gender Equality for Social and Economic Sustainability**

Prior to the unexpected decline in fertility rates in the 2010s, there was widespread support for the idea that strong family policies and high levels of gender equality in the Nordic countries were responsible for their relatively high fertility rates compared to other high-income countries. However, developments over the past 15 years have called this assumption into question. Particularly, isolated family policy measures may prove ineffective in achieving a sustainable reversal of the trend (Neyer & Andersson, 2008), especially when fertility has fallen to very low levels and an increasing proportion of young adults are childless. This is because fertility behaviour is related to many, often complex, societal developments. Moreover, low fertility may have self-reinforcing effects on continued low birth rates through social, economic, and demographic mechanisms that may hinder an increase back to higher levels (Lutz et al., 2006). The demographic mechanism means that as the pool of women of reproductive age shrinks, it becomes increasingly unlikely to foresee an increase in the number of births, even if the number of children born per woman increases. Despite these challenges, it remains crucial to continue enhancing the well-being of families with children and to support young adults in achieving their desired family planning goals.

Much literature studies the role of various family policy measures in influencing fertility, typically related to the reconciliation of paid employment and childcare, or to compensating the costs of children and supporting the family economy. The primary policy indicators encompass parental leave policies, childcare services, and child-related benefits. Recent systematic reviews

(Bergsvik et al., 2021; Thomas et al., 2022) conclude that family policies promoting work-family reconciliation and gender equality can be more effective strategies for increasing fertility than cash transfers, which often have only temporary effects on the timing of childbirth. However, the support for work-family reconciliation may have more substantial consequences for continued childbearing than for first births, given that first births are strongly impacted by educational enrolment, partnership dynamics, and lifestyle-related reasons at young ages. Important to note is that the needs of (prospective) families vary. Covering the direct costs of childbearing is likely more acute for couples with lower levels of education and income. Couples with higher levels of education may benefit more from reducing the indirect costs of children, which may ease the work-family reconciliation. In addition to economic security, support for parenting skills and co-parenting practices is also relevant for the progression to a second birth (Moilanen et al., 2024).

It can be argued that family policies in the Nordic countries are already well developed to support gender equality (Daly & Ferragina, 2018). Mothers' participation in paid employment has been high for several decades, and attitudes towards the gendered division of labour in parenting are more egalitarian than in many other countries. However, the 'stalled revolution' remains apparent even in these countries, as men have yet to take on a more equal share of unpaid care responsibilities. As a result, women in paid employment are often burdened with a disproportionate 'second shift' at home. Additionally, economic gender inequality remains in these countries, for instance, in terms of labour earnings accumulated over time (Nisén et al., 2025). To strengthen gender equality as a building block of social sustainability, a cultural shift is needed that challenges norms and expectations around gender, promoting not only equal participation in the labour market but also more equally shared care responsibilities (see, for instance, Evertsson et al., 2023).

Early evidence suggests that the most recent parental leave reform in Finland, implemented in 2022, which granted fathers a longer non-transferable leave, has to some extent increased fathers' uptake of leave (Helske et al., 2025). While legal regulation and statutory rights are crucial for achieving gender equality, workplace practices that support the reconciliation of paid employment and family life are also needed. Such practices include autonomy and flexibility of working hours and place of work, as well as making leave use and care responsibilities possible for both mothers and fathers.

A more equal sharing of parental leave between mothers and fathers supports the well-being of both parents and children. It also supports society's social and economic sustainability by reducing inequalities and promoting women's careers and economic growth. Daly (2020) notes that gender equality is often not a central priority in social policy models focused on social investment. However, addressing persistent gender inequalities is crucial not only

for promoting economic sustainability but also as a matter of social justice and equity.

A more equal sharing of paid and unpaid work within families may create more favourable conditions for childbearing (Helske et al., 2025). Accordingly, it is important to recognise that reductions in family policies – particularly those supporting gender-equal division of care and work – could further depress fertility by weakening the prospects of potential parents, whether for first or subsequent children.

## CONCLUSION: NAVIGATING THE DEMOGRAPHIC FUTURE OF AN AGEING SOCIETY

Finland's demographic shifts, including declining fertility, increasing longevity, and population ageing, present significant social and economic challenges. While these trends reflect broader developments in industrialised and modernised societies, Finland's sharp decline in fertility since 2010, along with its advanced stage of ageing, sets it apart from other Nordic countries and much of Europe.

Population ageing, accelerated by low fertility, poses risks to the sustainability of welfare systems, intergenerational support structures, and labour market dynamics (i.e., patterns and changes in employment, workforce participation, and labour supply and demand). Simultaneously, rising levels of childlessness, persistent and growing socio-economic differentials in family formation, and challenges in work-family reconciliation and gender equality demand multifaceted policy approaches. Addressing these challenges requires adapting to the new low-fertility landscape and population ageing while fostering conditions conducive to family formation.

While increasing fertility levels through policy measures remains complex and uncertain, any efforts to raise fertility should adopt a bottom-up approach and aim to mitigate the gap between desired and achieved fertility of individuals (Gietel-Basten et al., 2022). We emphasise a broader perspective, prioritising sustained investments in human capital, gender and social equality, and well-being. Enhancing educational attainment, reducing disparities in labour market opportunities, and improving the compatibility of work and family life are crucial for adapting to population ageing. Still, they may also address some of the factors underlying today's low fertility.

Immigration plays a crucial role in sustaining population growth and supporting economic productivity. At the same time, ensuring the well-being, inclusion, and equal opportunities of immigrants is essential, so that they can fully participate in Finnish society and the labour market. Notably, investments in human capital should encompass immigrants and their children,

promoting both their individual development and long-term societal and economic sustainability.

Ultimately, Finland's ability to navigate these demographic changes lies in a holistic approach that balances social sustainability with economic imperatives. By fostering a society that values inclusivity, supports individuals throughout their life course, and invests in its people, Finland can address its demographic challenges while preserving the core principles of its welfare state.

The Nordic welfare states are particularly well-positioned to respond to fertility decline through a dual strategy that combines long-term investments in education, gender equality, and social capital with targeted interventions aimed at supporting informed reproductive and life choices (see Chapter 2). While broader social investments lay the groundwork for individuals' well-being and human capital, as well as family-friendly environments and reproductive autonomy, carefully designed interventions (e.g., reproductive health education) can directly influence the timing and feasibility of family formation. This integrated investment-intervention approach not only aligns with the values and institutional strengths of the Nordic model but also offers a realistic means to mitigate the demographic consequences of sustained fertility decline and population ageing in the coming decades.

## REFERENCES

- Balbo, N., Billari, F. C., & Mills, M. (2013). Fertility in advanced societies: A review of research. *European Journal of Population*, 29(1), 1–38. <https://doi.org/10.1007/s10680-012-9277-y>
- Bergsvik, J., Fauske, A., & Hart, R. K. (2021). Can policies stall the fertility fall? A systematic review of the (quasi-) experimental literature. *Population and Development Review*, 47(4), 913–964. <https://doi.org/10.1111/padr.12431>
- Busk, H., & Jauhiainen, S. (2022). The careers of immigrants in Finland: Empirical evidence for genders and year of immigration. *Journal of International Migration and Integration*, 23(2022), 2009–2030. <https://doi.org/10.1007/s12134-021-00924-z>
- Campisi, N., Kulu, H., Mikolaj, J., et al. (2023). A spatial perspective on the unexpected Nordic fertility decline: The relevance of economic and social contexts. *Applied Spatial Analysis*, 16(2023), 1–31. <https://doi.org/10.1007/s12061-022-09467-x>
- Daly, M. (2020). *Gender inequality and welfare states in Europe*. Edward Elgar Publishing.
- Daly, M., & Ferragina, E. (2018). Family policy in high-income countries: Five decades of development. *Journal of European Social Policy*, 28(3), 255–270. <https://doi.org/10.1177/0958928717735060>
- Dudel, C., & Klüsener, S. (2021). Male–female fertility differentials across 17 high-income countries: Insights from a new data resource. *European Journal of Population*, 37(2021), 417–441. <https://doi.org/10.1007/s10680-020-09575-9>
- Eurostat (2025). Fertility statistics. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility\\_statistics#Data\\_sources](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility_statistics#Data_sources)

- Evertsson, M., Magnusson, C., & van der Vleuten, M. (2023). Social stratification by gender and parenthood: The importance of family formation, gender roles, and ideals. In M. Gangl, L. Platt, J. G. Polavieja, and H. G. van de Werfhorst (Eds.) *The Oxford handbook of social stratification*. Oxford University Press.
- Gietel-Basten, S., Rotkirch, A., & Sobotka, T. (2022). Changing the perspective on low birth rates: Why simplistic solutions won't work. *BMJ*, 379(2022), e072670. <https://doi.org/10.1136/bmj-2022-072670> <https://doi.org/10.1136/bmj-2022-072670>
- Golovina, K., Nitsche, N., Berg, V., Miettinen, A., Rotkirch, A., & Jokela, M. (2024). Birth cohort changes in fertility ideals: Evidence from repeated cross-sectional surveys in Finland. *European Sociological Review*, 40(2), 326–341. <https://doi.org/10.1093/esr/jcad048>
- Hellstrand, J., Nisén, J., Miranda, V., Fallesen, P., Dommermuth, L., & Myrskylä, M. (2021). Not just later, but fewer: Novel trends in cohort fertility in the Nordic countries. *Demography*, 58(4), 1373–1399. <https://doi.org/10.1215/00703370-9373618>
- Helske, S., Jalovaara, M., Lammi-Taskula, J., Miettinen, A., Nisén, J., & Österbacka, E. (2025). A well-functioning parental leave system supports well-being as well as the social and economic sustainability of the society. *FLUX Policy Brief 3/2025*. <https://fluxconsortium.fi/a-well-functioning-parental-leave-system-supports-well-being-as-well-as-the-social-and-economic-sustainability-of-the-society/>
- Höhn, A., Andersson, G., Kulu, H., & Campbell, B. (2024). Childbearing across immigrants and their descendants in Sweden: The role of generation and gender. *International Migration Review*, 58(1). 01979183241245072.
- Human Fertility Database, Max Planck Institute for Demographic Research (Germany), & Vienna Institute of Demography (Austria) (2025). [www.humanfertility.org](http://www.humanfertility.org)
- Jalovaara, M., Andersson, L., & Miettinen, A. (2022). Parity disparity: Educational differences in Nordic fertility across parities and number of reproductive partners. *Population Studies*, 76(1), 119–136. <https://doi.org/10.1080/00324728.2021.1887506>
- Jalovaara, M., & Miettinen, A. (2024). Childlessness trends at different ages by educational attainment for men and women in Finland. *INVEST Working Papers 90/2024, FLUX 18/2024*.
- Jalovaara, M., Neyer, G., Andersson, G., Dahlberg, J., Dommermuth, L., Fallesen, P., & Lappegård, T. (2019). Education, gender and cohort fertility in the Nordic countries. *European Journal of Population*, 35(2019), 563–586. <https://doi.org/10.1007/s10680-018-9492-2>
- Kailaheimo-Lönnqvist, S., Nisén, J., Metsä-Simola, N., Martikainen, P., & Myrskylä, M. (2025). Different mental health disorders and childlessness: The importance of partnership status (No. WP-2025-010). Max Planck Institute for Demographic Research. 10.4054/MPIDR-WP-2025-010 <https://doi.org/10.4054/MPIDR-WP-2025-010> DOI:10.4054/MPIDR-WP-2025-010 DOI:10.4054/MPIDR-WP-2025-010 DOI:10.4054/MPIDR-WP-2025-010
- Kokkinen, A., Obstbaum, M., & Mäki-Fränti, P. (2021). Bank of Finland's long-run forecast framework with human capital. *BoF Economics Review* 2021:10. <https://urn.fi/URN:NBN:fi:bof-202112162154>
- Lindström, J. (2025). Konkarit töihin–Suomen malli ja sen kokeilu: 55+–hankkeen loppuraportti. *Valtioneuvoston julkaisuja* 2024:123. <http://urn.fi/URN:ISBN:978-952-327-861-5>
- Lutz, W. (2008). Europe's changing population in a global context. *European View*, 7(2), 237–245. <https://doi.org/10.1007/s12290-008-0061-7>

- Lutz, W., Skirbekk, V., & Testa, M. R. (2006). The low-fertility trap hypothesis: Forces that may lead to further postponement and fewer births in Europe. *Vienna Yearbook of Population Research*, 4(2006), 167–192. doi:10.1553/populationyearbook2006s167
- Mäki-Fräänti, P., Kokkinen, A., Obstbaum, M., & Jalasjoki, P. (2023). Suomen talouskasvu uhkaa hyyytä ilman panostuksia inhimilliseen ja kiinteään pääomaan: Suomen Pankin pitkän aikavälin ennuste. *Kansantaloudellinen aikakauskirja*, 119(3). <https://journal.fi/kak/article/view/131486/85710>
- Marois, G., Bélanger, A., & Lutz, W. (2020). Population aging, migration, and productivity in Europe. *Proceedings of the National Academy of Sciences*, 117(14), 7690–7695. <https://doi.org/10.1073/pnas.1918988117>
- Marois, G., Rotkirch, A., & Lutz, W. (2022). Future population ageing and productivity in Finland under different education and fertility scenarios. *Finnish Yearbook of Population Research*, 56(2022), 13–760. <https://doi.org/10.23979/fypr.119666>
- Mills, M., Rindfuss, R. R., McDonald, P., & Te Velde, E. (2011). Why do people postpone parenthood? Reasons and social policy incentives. *Human Reproduction Update*, 17(6), 848–860. doi: 10.1093/humupd/dmr026
- Moilanen, S., Räikkönen, E., Lammi-Taskula, J., Duvander, A.-Z., & Alasuutari, M. (2024). Do parenthood worries impede the birth of a second child? Differences according to the parent's gender and spousal support in Finland. *Journal of Family Research*, 36(2024), 103–125. <https://doi.org/10.20377/jfr-968>
- Monstad, K., Propper, C., & Salvanes, K. G. (2008). Education and fertility: Evidence from a natural experiment. *Scandinavian Journal of Economics*, 110(4), 827–852. <https://doi.org/10.1111/j.1467-9442.2008.00563.x>
- Myrskylä, M., Hellstrand, J., Lappo, S., Lorenti, A., Nisén, J., Rao, Z., & Tikanmäki, H. (2025). *Declining fertility, human capital investment, and economic sustainability*. *Demography*, 62(2), 489–514. <https://doi.org/10.1215/00703370-11858484>
- Neyer, G., & Andersson, G. (2008). Consequences of family policies on childbearing behavior: Effects or artifacts? *Population and Development Review*, 34(4), 699–724. <https://doi.org/10.1111/j.1728-4457.2008.00246.x>
- Nisén, J., Erlandsson, A., & Jalovaara, M. (2025). Gendered relationship of childbearing with earnings accumulated by midlife in two Nordic welfare states. *Journal of Family and Economic Issues*, 46(2025), 685–707. <https://doi.org/10.1007/s10834-024-09986-w>
- Nisén, J., Martikainen, P., Myrskylä, M., & Silventoinen, K. (2018). Education, other socioeconomic characteristics across the life course, and fertility among Finnish men. *European Journal of Population*, 34(2018), 337–366. <https://doi.org/10.1007/s10680-017-9430-8>
- Nopola, T. (2019). *Skenaariolaskelmia muuttoliikkeen vaikutuksista eläkejärjestelmän kestävyYTEEN*. Eläketurvakeskuksen raportteja 9/2019. Eläketurvakeskus. <https://urn.fi/URN:ISBN:978-951-691-010-2>
- Notestein, F. W. (1945). Population – The long view. In T. W. Schultz (Ed.), *Food for the world* (pp. 36–57). University of Chicago Press.
- OECD. (2023). *International migration outlook 2023*. OECD Publishing. <https://doi.org/10.1787/b0f40584-en>
- Ohlsson-Wijk, S., & Andersson, G. (2022). Disentangling the Swedish fertility decline of the 2010s. *Demographic Research*, 47(12), 345–358. <https://www.jstor.org/stable/48708282>
- Ponkiläinen, M., Einiö, E., Pietiläinen, M., & Myrskylä, M. (2024). Educational differences in fertility among female same-sex couples in Finland. *Demography*, 61(6), 2053–2079. <https://doi.org/10.1215/00703370-11687583>

- Rotkirch, A. (2024). *20 ehdotusta lapsitoiveiden tukemiseksi: Selvitys syntyvyyden laskusta Suomessa*. Valtioneuvoston julkaisujal, 22(2025). <https://urn.fi/URN:ISBN:978-952-383-655-6>
- Skirbekk, V. (2022). *Decline and prosper!: Changing global birth rates and the advantages of fewer children*. Palgrave Macmillan.
- Sorsa, T., Lehtonen, N., & Rotkirch, A. (2023). *Kuka haluaa lapsia 2020-luvulla? Perhebarometri 2022*. Väestöliitto. <https://www.vaestoliitto.fi/verkkojulkaisut/kuka-haluaa-lapsia-2020-luvulla/>
- Statistics Finland. (2025). *StatFin database*. [https://stat.fi/tup/statfin/index\\_en.html](https://stat.fi/tup/statfin/index_en.html)
- Sutela, H. (2016). Lähi-idästä ja Afrikasta kotoisin olevien naisten kotoutumiseen kiinnitettävä huomiota. *Tieto & Trendit 2016*. Tilastokeskus. <https://stat.fi/tietotrendit/artikkelit/2016/lahi-idasta-ja-afrikasta-kotoisin-olevien-naisten-kotoutumiseen-kiinnitettava-huomiota>
- Sutela, H. (2023). Maahanmuuttajien työllisyys Suomessa yli EU-keskitason – työmarkkina-asema heikompi kuin suomalaistaustaisilla. *Tieto & Trendit 2023*. Tilastokeskus. <https://stat.fi/tietotrendit/artikkelit/2023/maahanmuuttajien-tyollisyys-suomessa-yli-eu-keskitason-tyomarkkina-asema-heikompi-kuin-suomalaistausta-isilla>
- Thomas, J., Rowe, F., Williamson, P., & Lin, E. S. (2022). The effect of leave policies on increasing fertility: A systematic review. *Humanities and Social Sciences Communications*, 9(2022), 262. <https://doi.org/10.1057/s41599-022-01270-w>
- United Nations. (2024). World population prospects 2024. <https://population.un.org/wpp>
- World Bank (2024). World development indicators. <https://datatopics.worldbank.org/world-development-indicators/>
- Zaidi, B., & Morgan, S. P. (2017). The second demographic transition theory: A review and appraisal. *Annual Review of Sociology*, 43(1), 473–492. <https://doi.org/10.1146/annurev-soc-060116-053442>