Families and ageing in Europe

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Abstract

This paper summarises the demographic development since the mid of the 20th century with a focus on European countries. The paper explains the concepts of the first and second demographic transition, illustrates the development of key indicators like life expectancy of birth and total fertility rate. It shows the influence of population dynamics on the age structure and on the evolution of dependency ratios. Moreover, the paper gives insights into changes in the composition and living conditions of families.

Introduction

The world is currently experiencing the largest demographic upheaval in human history, with a doubling of the world population between 1960 and 2000. The projected increase for the current halfcentury is estimated to be 2.8 to 4.4 billion, primarily concentrated in the least developed countries. Despite concerns about the economic consequences of population growth, historical increases in population did not result in economic disaster and changes in population age structure even led to increased prosperity. China and India currently have the largest populations, but India is assumed to be the most populous country as of the end of April 2023 (United Nations, 2022).

Population growth rates have been higher in less developed regions, and a significant portion of the projected population increase will occur in the least developed countries. Africa is a region with high population growth and a substantial contribution to global population growth. The urban share of the global population has been increasing from 30% in 1950 and is projected to reach 68% by 2050 (United Nations, 2018). Urbanization can contribute to economic growth through economies of scale, but it also poses challenges such as pressure on resources and slum conditions.

Many scholars suggest that population growth and economic growth influence each other mutually. According to Thomas Malthus population growth leads to poverty and misery (Malthus, 1798), but there are also opposing views that emphasize technological advancement and innovation as solutions to resource shortages and economic growth. Additionally, the concept of population neutralism suggests no significant connection between population growth and economic growth.

Ageing and the Demographic Transition

The demographic transition framework explains the process of a transition from a population with slow population growth to a transient phase characterised by a rapidly growing population and back to a population that grows only slowly or even shrinks. It illustrates a stylised development, explaining the transition from high fertility and mortality rates to low fertility and mortality rates, resulting in slow population growth.

The starting point of the first demographic transition is a population with high birth rates (fertility) and high mortality, resulting in a stagnating or only slowly growing population. The transition begins with a decline in mortality rates, driven by medical advances, improvements in nutrition, and improved hygienic conditions and public health measures. As mortality decreases, life expectancy increases. This leads to a transition phase characterised by still high fertility but low mortality. During this phase, the population grows at a relatively high pace. The proportion of young people increases and the society as a whole becomes younger.

Figure 1 depicts the development of life expectancy at birth in Europe, France, Germany, Poland and Spain from 1950 to 2022. It shows a monotonous increase in life expectancy from 1950 to 2019 with a sudden drop in 2020 and a return to the ascending path thereafter. This temporary setback is obviously due to the Covid-19 pandemic. The Covid-19 pandemic mostly affected people with pre-existing diseases who would have had a higher probability to die in the following years in the absence of Covid-19. Therefore, it is possible that life expectancy – which is a period measure based on the cases of death within one calendar year – will increase even more in subsequent years because the deaths of those with the highest exposure were brought forward.



Figure 1: Life expectancy at birth in Europe, France, Germany, Poland and Spain from 1950 to 2020. Source: United Nations (2022).

As development progresses, income growth, educational expansion (particularly among women) result in a declining fertility (see Figure 2). The decline in fertility is typically initiated by parents recognising that fewer children are enough to achieve the desired family size. Fertility declines further due to lower infant mortality, longer birth intervals and better access to modern contraception. However, there are still millions of women in developing countries with an unmet need for family planning.

After this transition, the population returns to a phase of low growth or moderate shrinkage. Births and deaths are in balance and the number of persons in the population is relatively stable. Since there is usually little in-migration at this stage, there is typically no significant increase in the population (Bloom 2011). The main message of the first demographic transition is that during the 19th century European countries experienced a gradual transition from a state of equilibrium with high mortality and fertility to a new equilibrium with low mortality and low fertility.



Figure 2: Total fertility rate in Europe, France, Germany, Poland and Spain from 1950 to 2020. Source: United Nations (2022).

Lower fertility rates lead to improvements in child survival and well-being, as parents can allocate more resources to each child in smaller families. The process of fertility decline is reinforced by the positive impact of child survival on low fertility. Apart from population growth, the demographic transition also brings about changes in population age structure. The initial decline in mortality rates primarily benefits infants and children, resulting in a "baby boom" generation that lasts until fertility rates decrease.

The demographic transition has a major impact on the age structure of the population, which is significant for analysing the effect of population change on economic growth, as well as for understanding the concept of the demographic dividend. Figure 3 depicts the development of the youth dependency ratio, the ratio of the young age group from zero to 24 years divided by the working age group from 25 to 64 years, and the old age dependency ratio, the ratio of the youth dependency ratio divided by the working age group. The horizontal axis represents the youth dependency ratio. Therefore, all points along a diagonal line with the same sum of youth and old age dependency ratio

represent a set of states with equal total dependency. Thus, the area in the lower left corner of the figure indicates a low total dependency while the area in the upper right corner indicates a high total dependency. The curves illustrate the development in Europe, France, Germany, Poland and Spain from 1950 to 2021. Departing from a state with high fertility and low life expectancy in the 1950s, the trajectories start in the lower right corner. At the beginning the youth dependency declines due to the decline in fertility, while the old age dependency ratio increases only slowly. The curves move mostly to the left, indicating a decrease in total dependency. Later on, the youth dependency remains low, but due to increases in life expectancy and due to the ageing of the baby boom cohorts, the old age dependency increases.



Figure 3: Youth dependency [0-24 / 25-64] (horizontal axis) and old age dependency [65+ / 25-64] (vertical axis) in Europe, France, Germany, Poland and Spain from 1950 to 2020. Source: United Nations (2022).

At this stage an increase in fertility, possibly due to effective reforms in family policies, would not affect the evolution of the old age dependency for the next 25 years, because only then will the additional newborns enter the working age population between 25 to 64 years. Nevertheless, at the same time, the youth dependency will increase for the next 25 years due to the increase in fertility. Consequently, the total dependency ratio will increase and it will take more than 25 years for the effects of the family policy reforms to have a positive impact on the total dependency. Thus, investments in family policies are based on very long-term decisions that go far beyond the usual planning periods. Still, the positive effects of increasing fertility pay off in the long run. The challenge is to get today's policymakers and taxpayers to accept temporary increase in dependency ratios for the benefit of future generations. Besides that, one should keep in mind that the burden of the youth dependency is mostly individualised, i.e. despite publicly funded family benefits the burden is mostly carried by the families, while the burden of the old age dependency is mostly institutionalised.

In the short and medium term, controlled and managed migration is the only way to reduce the dependency ratio. A successful migration strategy has to take into consideration the characteristics and needs of the migrants and of the resident population. The professional qualifications of the migrants and their compatibility with the culture of the host society are key requirements for their successful integration into the society and into the labour market. Finally, improvements and targeted integration policies can further support the integrations process.

Families and their living conditions

A decline in fertility accompanied by a striking change in marriage behaviour as well as in family structures and lifestyles could be observed in all Western countries from the mid-1960s onwards. First, the post-war baby boom came to an end and the birth rate declined. Secondly, the trend towards earlier first marriages ended and the age of marriage rose again. Thirdly, new ways of living spread, especially among the younger generations (premarital and non-marital cohabitation). Fourthly, the frequency of divorce increased. These shifts and changes since the mid-1960s led to the concept of a second demographic transition (Lesthaeghe 1995, 2010; van de Kaa 1987). In contrast to the first demographic transition, the second demographic transition is based not only on changes in fertility and mortality but above all on a change in values. Society is turning towards post-materialistic and individualistic values. The influence of secular and ecclesiastical authorities is declining. In the family, the focus is no longer on the children alone, but also on the couple. Individualisation manifests itself in an increasing diversity of family forms and life courses. Educational expansion and a higher importance of individual self-fulfilment lead to a higher age at marriage, a higher age at the birth of the first child and, as a consequence, to an overall lower fertility.

An alternative explanatory approach is based exclusively on microeconomic considerations. According to these considerations, individuals optimise their utility through specialisation and trade, which increases the opportunity costs of having children (Esping-Andersen and Billari, 2015). This purely microeconomic approach can explain the demographic developments since the mid of the 20th century just as well as the concept of the second demographic transition, although the assumed causes are completely contrary.

On average, OECD countries allocate 2.3% of their GDP to family benefits, although there are significant differences among nations (OECD, 2023). France and Sweden lead in public spending on family benefits, devoting approximately 3.5% of their GDP to this area. However, several countries such as Costa Rica, Mexico, Spain, Turkey, and the United States allocate less than 1.5% of their GDP to family benefits. The distribution of spending across cash benefits, services, and tax measures also varies across countries. While most OECD countries spend more on cash benefits than services or tax breaks for families with children, some countries, including Chile, Colombia, Denmark, Finland, Iceland, Japan, Korea, Mexico, Norway, Sweden, Turkey, and the United States, allocate over half of their family benefits expenditure to services. On the other hand, France, Germany, and Hungary invest more than 0.5% of their GDP in tax breaks for families.

Figure 4 illustrates the distribution of families with children younger than 18 years in Austria in 2022. The columns on the left-hand side show the number of families with zero, one, two and three or more children. While the two-child family was considered the archetypical family type in the past, this figure shows that among families with children, the one-child family has become the most common family type. This may prompt policy makers responsible for family issues and companies and organisations offering goods and services for families to customise their offers to the needs of one-child families. However, the picture changes completely if we take the children's perspective. The three bars on the right-hand side of Figure 4 represent the number of children living in families with one, two or three or more children. This children's perspective shows immediately that despite of the erosion of the twochild family norm there are still more children living in two child families than in one child families, and the number of children in large families with three or more children is approximately equal to the number of children living in one-child families. Since the aim of family policies should be to support families, and in particular the development and well-being of their children, tailoring family benefits to the needs of one-child families would fail to achieve this goal.



Figure 4: Families with children younger than 18 years in Austria in 2022. Source: Statistik Austria (2023).

On a societal level, the ageing of the population is seen as a challenge. Above all, the entry of the baby boomers (people born in the 1960s) into retirement age is a major societal challenge for the coming decades. A decreasing proportion of working-age people will have to finance or support an increasing proportion of non-working-age people. Raising the retirement age, the future financial viability of pensions and the health care system and the increasing need for care in connection with diseases such as dementia or Alzheimer's disease are widely discussed. Other important issues related to population ageing are infrastructural planning (fewer schools and kindergartens, more facilities for older people in need of care and stairways for the disabled) or the age composition of voters and their voting behaviour are associated with demographic change (Konzelmann et al., 2014).

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