



Why study fertility?

Both from the perspective of individuals as well as from the viewpoints of societies, fertility and reproduction matter. For individuals, the questions of whether to reproduce and when, how many children to have, with whom, in what family configuration, are among the most important questions people ponder over in their lives. Our research helps identifying the obstacles people face when planning to have children and studying the factors, circumstances and living arrangements that influence whether they succeed or not in realising these plans. At the level of populations, towns, regions, and countries, fertility is a major force that alters their population size and age structure, and which influences, among other things, future size of the labour force, social security needs, or the demand for health care. Our research particularly focuses on education, which plays a key role in the ongoing fertility and family changes. Education empowers men and especially women to plan their lives and to take a better control over their reproduction. But education also shifts priorities in life, leading to delayed partnerships and family formation.

Fertility in Europe

Do Austrians have more or fewer children than people in other European countries? Is there a trend to late parenthood? In a European comparison, Austria's period Total Fertility Rate of 1.44 children per woman (2020) is moderately low and close to the EU average of 1.5. In Austria and other highly developed countries the family formation has been shifting to ever later ages (Fig. 1) and women's mean age at first birth is now close to 30, up from age 24 in the early 1980s. In

Historical foothold of out-of-wedlock births in Austria. In 2020, 50% of first children were born outside of marriage – with a surprising regional distribution: The highest number was observed in Carinthia (61%) and the lowest number in Vienna (42%). This pattern is reflective of historical developments: In the 19th century, the share of non-marital births in Austria was among the highest in Europe. It was particularly high in the mountainous areas of Carinthia and Styria. The relatively low non-marital fertility in Vienna is linked to the high share of foreign-born mothers, for whom child-bearing outside wedlock is less common.

comparison, lower fertility rates are concentrated in the South of Europe – especially in Spain, Italy, Greece, Malta, and Cyprus – where women have their first child at a higher age (around 31 years) than in other parts of Europe. With many people postponing childbearing past age 35, women and men alike experience a decrease in the realisation of their intention to have a child with age, despite advancing use of assisted reproductive technologies.

Is fertility stable over the long term in Austria? Fertility rates in Austria are best characterised by their stability in the past three decades: the period Total Fertility Rate (TFR) in 2020, at 1.44 children per woman, is almost identical to its level in the mid-1980s. This stability is quite remarkable given changes in family policies, women's growing education and labour force participation, changing partnership and marriage behaviours and also the fact that Austria has become a more diverse and multicultural society due to immigration. Women born in the late 1970s, who are now approaching the end of their reproductive lives, have 1.65 children on average—the same value as the mean family size among women in the whole EU.

Family trends

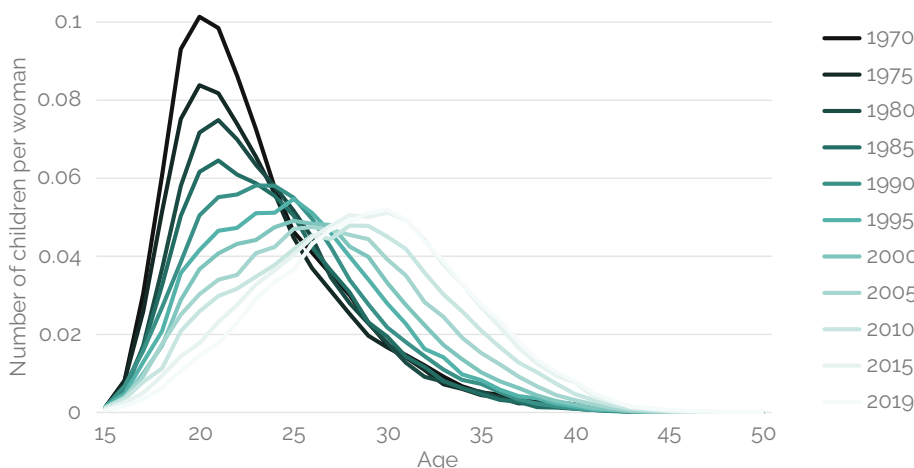
Which couples have many children? Who remains childless? As in the other European countries, the share of large families declined in Austria over the past decades. Families with three or more children are common among couples who have a lower level of education, in rural areas, among people with a high level of religiosity, and among migrants from particular countries. Only around 15% of women that were born around 1980 had three or more children – while around 20% remained childless – and childlessness is still on the rise. Only few EU countries report higher levels of childlessness, mostly in Southern Europe, but also in Germany and Switzerland. Childlessness is most prevalent among highly educated women – around 30% – reflecting their difficulties in combining a career with childrearing.

The share of women wishing a child at age 40-42 has increased from around 1% in 1986 to 12% in 2016 in Austria. Among childless women, the share rose from around 4% to 30%.

Is reproduction becoming disconnected from marriage? Marriage and childbearing have become increasingly disconnected around Europe: in Austria 41% of all children were born outside of marriage in 2019, which is close to the EU average. Higher values were observed in the Nordic countries and some Central and Eastern European countries, e.g., Bulgaria and Slovenia. France has the highest value in the EU with 61% of children born to cohabiting couples and single mothers.

Fertility during COVID-19
Was there a baby boom or a baby bust during the COVID-19 pandemic in Austria? Surprisingly, the coronavirus pandemic has had rather small impact on fertility intentions and birth trends. This is arguably in part due to relatively generous welfare and family policies, including job protection and continuing financial support to families. At the start of the pandemic, the uncertainty and the initial lockdowns in mid-March 2020 contributed to a decline in the number of births 8-9 months later (-5% births in December 2020). The end of lockdowns and restrictions led to a mini-baby boom some 9 months later (births jumped by 8% in February 2021). Births did not change compared with 2020 between April and August 2021, but then they jumped by around 6% in September - November 2021, nine months after the third lockdown, suggesting that the experience of the pandemic was no longer discouraging couples from realising their reproductive plans.

Fig. 1: Age specific first birth rates of women in Austria, 1970-2019



Migration and fertility

Do migrant women differ in their fertility behaviour from "native-born" women? Although women born abroad have on average higher fertility rates than women born in Austria, wide differences prevail in fertility rates of migrant women coming from different countries. For instance, women born in Germany and Hungary have almost identical fertility rates as Austrian-born women. Women born in South-eastern Europe and Turkey have higher fertility rates than Austrian women, with their total fertility rate reaching around 2 births per woman. Yet higher fertility rates are found among women born in Syria and Afghanistan. Migration and childbearing are often interconnected: many migrant women have a child soon after their arrival to Austria as they had postponed childbearing until they could settle.

The future of fertility

How low will fertility fall in the future? A combination of declining family size and fertility postponement has squeezed period fertility rates in many countries to extreme low levels, with East Asia and Southern Europe becoming global hotspots of "ultra-low" fertility and high childlessness. It is likely that more countries will follow and experience protracted periods of period total fertility rates at around or below 1 in the future.

How do economic factors, policies and gender inequality affect fertility decisions?

Across many highly developed countries women and men broadly adhere to a two-child family ideal (Fig. 2). Many societies show continuing stark gender inequalities in labour force participation and the division of childcare and housework within couples. Especially highly educated women have to make difficult choices between their career and family lives. In addition, because of the instability of the labour market and of demanding parenting norms, medium educated increasingly struggle to realise their reproductive goals. Societies that do not adapt their policies, norms and institutions to the new reality are likely to experience very low fertility in the decades to come.

Will fertility ideals and intentions fall well below two kids on average? The widespread idea that declining fertility rates are likely to eventually reverse and recover some "lost ground" critically hinges on expecting that women and men retain reproductive intentions at around or above two births on average. But this is far from being guaranteed. Current uncertainties and anxieties among young adults, including worries about climate change and political polarisation, but also less positive attitudes towards kids, may translate into falling fertility desires and a rise of voluntarily childfree lifestyle in the future.

Will age cease being a barrier to reproduction? Advances in assisted reproduction help eroding the initially solid limits to late reproduction that were "dictated" by the onset of infertility and menopause among women. If the use of assisted reproduction, including egg harvesting and freezing, become much more widespread in the future, reproduction among women in their 40s, and even 50s and 60s may become common, vastly expanding the reproductive span people have for realising their reproductive plans.

Will male-factor infertility reach alarming levels? Some research during the past three decades suggests that male reproduction is threatened by the ubiquitous spread of endocrine disruptors—chemicals that cause declining sperm counts, concentrations and sperm quality. Despite many compelling arguments and analyses, the evidence that men face a global trend of increasing difficulties to reproduce still seems to be speculative.

Policy recommendations

Policies need to respect the diversity of people as well as their family preferences and reproductive rights. There is no single "one-size-fits-all" policy that can address low fertility. Rather, what's needed is a comprehensive package of policies that address different needs and preferences of individuals, give them enough flexibility, and also help them improve their work-life balance.

RESEARCH PROJECTS

- Arbeitsteilung in Paaren in der Corona-Krise (CoWork), <https://cowork.univie.ac.at/>
- Auswirkungen der COVID-19 Pandemie auf die Kinderwünsche in Wien (COVKIWU), <https://www.oeaw.ac.at/en/vid/research/research-projects/covkiwu>
- Fertility and family change – Late fertility in Europe, <https://fertilitychange.wordpress.com/>

OPEN-ACCESS DATABASES

- European Demographic Data Sheet: <https://www.populationeurope.org/en>
- Birth Barometer Austria: <https://www.birthbarometer.at/en>
- Human Fertility Database: <https://www.humanfertility.org>
- Short-term fertility fluctuations data series: <https://www.humanfertility.org/cgi-bin/stff.php>
- Human Fertility Collection: <https://www.fertilitydata.org>
- Cohort Fertility and Education database: <https://www.cfe-database.org/database/>

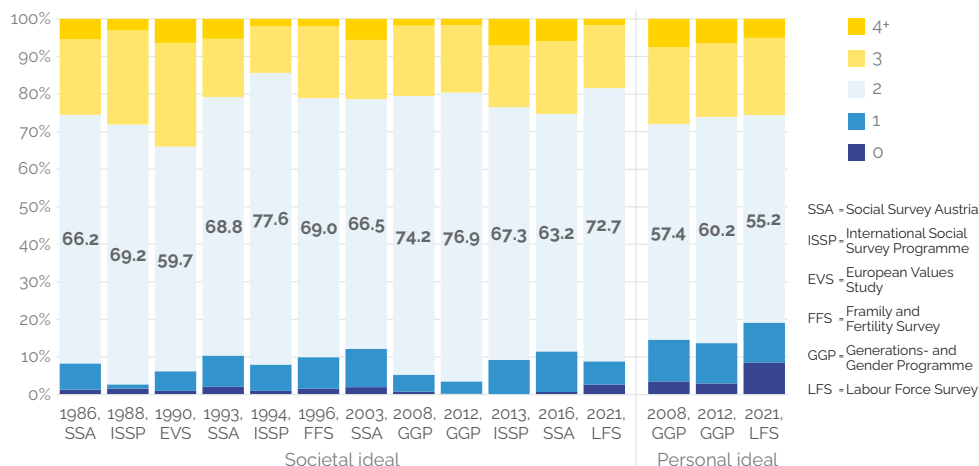
SHORT REVIEWS & SUMMARIES

- Beaujouan E (2010) *How is fertility affected by separation and repartnering?* Population & Societies, No. 464.
- Beaujouan E, Sobotka T, Brzozowska Z, Zeman K (2017) *Has childlessness peaked in Europe?* Population & Societies, No. 540.
- Beaujouan E, Sobotka T (2019) *Late childbearing continues to increase in developed countries.* Population & Societies, No. 562.
- Sobotka T (2021) *World's highest childlessness levels in East Asia.* Population & Societies, No. 595.

PUBLICATIONS

- Sobotka T, Matysiak A, Brzozowska Z (2020) *Policy responses to low fertility: How effective are they?* Working Paper No. 1 (May 2019), UNFPA.
- Sobotka T, Berghammer C (2021) *Demography of family change in Europe.* In: Research Handbook on the Sociology of the Family, Hrsg. Schneider NF, Kreyenfeld M, 162-186. Cheltenham, UK, Northampton, USA: Edward Elgar Publishing.
- Beaujouan E, Berghammer C (2019) *The gap between lifetime fertility intentions and completed fertility in Europe and the United States: A cohort approach.* Popul Res Policy Rev 38: 507-535.
- Sobotka T, et al. (2021) *Booms, busts and trend reversals? Shifts in births and fertility rates across the highly developed countries during the COVID-19 pandemic.* Presented at the MPIDR conference "Pandemic Babies? The Covid-19 Pandemic and Its Impact on Fertility and Family Dynamics", 13-14 Dec 2021.

Fig. 2: Ideal number of children of women aged between 20-45 years in Austria



Source and single data sources: Buber-Ennsner I., Riederer B. und Setz, I. (2021) [Changes of fertility plans in Austria due to the COVID-19 pandemic](#). COVKIWU Projekt.

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