THE INTERNATIONAL OUTLOOK: MIGRATION, AGEING, AND FERTILITY

The global fertility decline

Alícia Adserà



Swings in a playground. Photography by Adobe Stock

Over the past few decades, fertility rates have declined dramatically across most regions of the world. In many high-income societies, and even some middle-income countries, the number of children per woman now hovers well below the replacement threshold of 2.1, a level at which population would decrease in the absence of migration. Rates in Southern Europe and East Asia, for instance, lie below 1.5 (with Spain's lingering between 1.2 and 1.1 in recent years); in South Korea, fertility has plunged to around 0.7, the lowest in the world. Even the United States, once considered an outlier because its fertility remained relatively high among wealthy nations, has seen rates decline to around 1.64. Yet, there is one remarkably persistent exception: Sub-Saharan Africa, where fertility rates remain around 4.6 children per woman, stands out in a global landscape otherwise marked by historically low levels of childbearing.

This radical restructuring of fertility regimes poses serious questions for the future of societies worldwide. Low fertility accelerates population aging, strains welfare states, challenges pension systems, affects migration dynamics and can lead to labour shortages and economic slowdowns. The consequences of sustained low fertility reach beyond demographics: they affect intergenerational relations, reshape cultural expectations and demand new policy approaches. Furthermore, the existence of a persistent gap between what people state is their "ideal" number of children and their "realised" fertility underscores the complexity of the phenomenon. Indeed, surveys consistently show that when asked directly, individuals around the world tend to express a desire for about two children on average. Yet these stated preferences are not translating into actual births.

Although demographers, sociologists and economists have generated a rich array of explanations for long-term fertility declines —from the rise in female education to the entrance of women into the labour force, from the growth of secularism to the expansion of individual autonomy— these frameworks struggle to account for the extraordinarily low fertility observed today.

Below, I examine the global fertility decline from a comparative perspective and outline some unique regional differences. I refer to the key explanatory frameworks —the New Home Economics, the gender equity hypothesis and the second demographic transition— and to the failure of pro-natalist policy attempts. Finally, I explain why moving beyond cost-based explanations alone and looking also into evolving preferences is essential for understanding and potentially addressing one of the central demographic challenges of our time.

A global decline with one notable exception

In most of the world, fertility rates have been falling for decades. In the mid-20th century, many regions had average fertility rates well above five children per woman. Today, these figures have declined dramatically, reaching levels that would have been unimaginable just a few generations ago. The global fertility decline unfolds differently in different regional and cultural contexts. European countries, once concerned about overcrowding, now worry about population decline. East Asian societies, celebrated for their postwar economic "miracles," now grapple with some of the lowest fertility rates on record, which impact on their growth rates. Even the United States, which for decades maintained near-replacement fertility, has dropped to historically low levels. Only Sub-Saharan Africa stands apart as a region where fertility remains high.

The question now is not merely how fertility fell, but why it has declined so far below replacement in many settings —and what that implies for the future. Let me highlight some important regional differences.

Japan, South Korea, Singapore and other East Asian countries display some of the lowest fertility rates in the world. The reasons for these exceptionally low levels are complex and interwoven. First, childbearing in these societies remains closely linked to marriage and out-of-wedlock births are rare and socially discouraged. Second, hyper-competition and hyper-investment in children's education and upbringing make having more than one child economically prohibitive. Third, conservative gender norms mean women are often expected to shoulder disproportionate household and caregiving responsibilities, even as they attain higher levels of education and aspire to rewarding careers. [1] Many highly educated women delay or forego marriage entirely to avoid entering marital arrangements that limit their career prospects and personal autonomy. Government attempts to encourage marriage or reduce the financial burden of childrearing have not substantially raised fertility. Without a deeper reconsideration of gender roles and the intense pressures around parenting, closing the gap between low realised fertility and the lingering ideal of having around two children remains challenging.

Southern European countries like Italy, Spain and Greece have also had persistently low fertility rates since the 1990s. Labour market conditions and housing affordability are key culprits here. Repeated periods of high unemployment and a segmented labour market characterised by precarious contracts for younger cohorts discourage early family formation. [2] [3] Women who take time off for childbearing risk substantial career penalties, both in terms of lower wages and lower employment – often termed the "motherhood penalty." In these dual labour markets, where stable careers are hard to secure, the perceived long-term cost of having children is substantial. Although many Southern European governments have enacted family policies, these are generally less generous than in Northern Europe. Smaller firms struggle to provide family-friendly arrangements and tight public budgets limit the scope of interventions. Cultural changes, including reduced religiosity and evolving perceptions of children's value, have also contributed in a very different manner in these countries. Over time, these factors reinforce very low fertility patterns that are proving resistant to policies aimed primarily at reducing direct costs.

Even Nordic countries have not been immune to the recent decline in fertility. [4] For decades, many observers pointed to the Nordic countries as a model of "best practices" in encouraging higher fertility through generous welfare states, extensive childcare provision and progressive gender norms. Yet even here, fertility has declined in recent years. Scholars note that although Nordic policies reduce many financial and logistical hurdles, they cannot fully counteract broader shifts in values and lifestyles that deprioritise childbearing. This pattern emphasises the need for a more nuanced understanding of how couples weigh their preferences for children within an increasingly complex landscape of career aspirations, personal development and shifting societal norms.

While most of the world grapples with ultra-low fertility, Sub-Saharan Africa still stands out for its fertility rates often above four children per woman. Higher desired fertility in these contexts reflects deeply ingrained cultural and religious norms that value large families. In many African contexts, children are seen as an asset, a source of old-age security, family labour and lineage continuation. The region also has lower levels of female education and greater economic uncertainty. Where educational attainment for women increases, fertility tends to decline, but many girls in Sub-Saharan Africa still leave school early due to economic constraints, early marriage or conflict-related disruptions.

Weak political institutions, instability and conflict reduce the effectiveness of family planning programmes and health services. In these environments, there is often little political will to promote family planning aggressively, as public opinion surveys reveal frequently stated preferences for large families. In some areas, conflicts hamper access to reproductive health services and displaced populations remain underserviced. These conditions create a context in which fertility rates have fallen more slowly and remains relatively high. [5] [6] Political stability and improved governance could foster better education and health infrastructure, ultimately reducing fertility and shifting these countries closer to global trends.

What are the main theoretical frameworks for explaining declines in fertility?

Scholars have advanced multiple frameworks to explain fertility changes over time. Three prominent theories help structure the discussion: the New Home Economics, the gender equity hypothesis and the second demographic transition. Each provides valuable insights, but none fully accounts for the ultra-low fertility patterns observed today.

One of the first major frameworks to consider the decline in fertility was Gary Becker's influential New Home Economics approach, which focused on the economic and structural factors that influence family size. [7] As increasingly better educated women join the labour force, they face trade-offs between career prospects and childrearing. This is what the theory refers to as the opportunity cost of having children. This theory also refers to the existence of a quality-vs-quantity trade-off. It implies that as income rises, parents invest more (what Becker refers to as more quality) in fewer children. In many advanced economies, however, reducing the direct and indirect costs of having children through policies such as subsidised childcare or parental leave has not substantially raised fertility. While these interventions may encourage earlier births or marginally increase second births, their overall impact on the final number of children women have remains modest.

A second set of theories emphasises the importance of gender equity both in the public sphere (education, the labour market) and the private sphere (household tasks, caregiving). As societies progress, women's educational attainment and career opportunities increase, raising their expectations for gender-equal partnerships. When household responsibilities fall disproportionately on women, the burden of balancing work and family life becomes daunting. Countries that have achieved greater gender balance in domestic tasks and caregiving tend to have slightly higher fertility rates. [8] Yet even in places like the Nordic countries, with generous parental leaves and robust childcare systems, fertility has declined in recent years, suggesting that while equality matters, it does not fully solve the problem.

The second demographic transition (SDT) framework attributes declining fertility to cultural and ideological shifts. Rising secularism, individualism and the pursuit of self-realisation have led to lower marriage rates, delayed unions and postponed childbearing. The SDT highlights the crucial role of changing values, including more egalitarian gender norms and acceptance of diverse family forms. [9] However, while this theory points to changing values as a central driver, it has done less to elucidate the specific value individuals attach to children themselves. The assumption that people still hold a latent preference for around two children remains, but empirical evidence suggests that, when considering the full range of trade-offs – career, leisure, relationship quality – people's preferences are revealed as possibly leaning toward fewer children than they state when considered in isolation.

The gap between desired and realised fertility

One enduring puzzle is the persistent gap between what people say they want and what they end up doing. Surveys consistently show that on average, individuals in low-fertility societies still report an “ideal” family size as around two children. Yet the actual number of children born falls well below these ideals. [10] [11] Why this discrepancy?

Accurately capturing how individuals feel about childbearing is more complicated than traditional surveys suggest. When asked in the abstract, many people say they want two children, possibly reflecting a lingering cultural norm. But these are hypothetical ideals that do not force respondents to consider the trade-offs they face in real life: economic stability, leisure, career advancement, relationship quality and personal autonomy. However, when the decision is placed in a multidimensional context, accounting for trade-offs, they may choose differently.

Recent innovative methodologies, such as conjoint experiments and factorial survey designs, have started to reveal a more complex picture. In recent work, jointly with colleagues of different universities, we employed these experiments to investigate how individuals perceive family ideals in various low-fertility societies, including Spain. [12] Respondents evaluated hypothetical family profiles that varied across multiple dimensions, including the number of children, marital status, income, domestic work-sharing and communication quality. The results showed that, while participants viewed childlessness negatively, having more than one child does not substantially increase the perceived value of a family. This challenges the widely held notion that the two-child family remains the unwavering ideal. Rather, when preferences are elicited in a context that forces trade-offs, individuals demonstrate a weaker attachment to having more than one child. In other words, even though individuals claim two children as the normative ideal, when confronted with realistic trade-offs, they appear indifferent regarding one or two children or find it not worth the extra cost, effort or lost opportunity.

By understanding fertility choices as embedded in a larger web of competing preferences, we can better explain why fertility remains low despite widespread claims of wanting around two children. Economic costs alone cannot fully explain why fertility has dipped so dramatically. Instead, individuals appear to weigh the intangible costs and benefits of a second or third child against other valued life dimensions. In the context of late marriages, precarious youth labour markets, housing constraints, long working hours and shifting personal values, having fewer children often feels like the better choice.



A nurse’s hand supports a newborn resting on its mother’s chest just minutes after birth. Photography by Adobe Stock

Persistent low fertility despite policy interventions

If addressing the financial burdens of childbearing were enough, we would have seen a reversal of the fertility decline by now. Many countries have introduced pro-natalist policies, ranging from direct cash transfers and baby bonuses to subsidised childcare and generous parental leave, to encourage families to have more children. Yet the success of these interventions has been limited. [13] Policy has often influenced at what time in their lives people have children rather than the overall number. Fertility may briefly increase after, say, the introduction of a parental leave benefit or a baby bonus, but the effect usually tapers off and does not push fertility back to replacement levels.

In the Nordic countries, often cited as best-case scenarios with supportive policies and high female labour force participation, fertility rates are once again declining. This suggests that even when the direct and indirect costs of raising children are reduced, couples still choose fewer children than they once said they desired. Similarly, in East Asia, where governments have recently turned to marriage-promotion campaigns or housing incentives for young couples, the fertility rate remains among the lowest in the world. The limited effectiveness of policy interventions that focus narrowly on cost suggests we must look beyond economics to understand today’s fertility slump.

Rethinking policy approaches

Given that current pro-natalist policies have had limited success in raising fertility, what should policymakers consider next? The evidence suggests that simply reducing the monetary cost of childbearing, while necessary, may not be sufficient. People appear to be making decisions in a more holistic context. Policy interventions that focus solely on parental leave, housing subsidies or childcare costs have a role, but they fail to address the deeper shifts in how individuals value children relative to other life paths.

In East Asia, policy discussions increasingly recognise that supporting families requires more than childcare subsidies: it may mean reevaluating long working hours, encouraging more egalitarian gender roles and making it socially acceptable to have children outside marriage. In Southern Europe, measures such as improving labour market stability for younger workers, ensuring that taking time off to have children does not incur severe career penalties and broadening family support could help. Meanwhile, even in Nordic countries with generous benefits, understanding that low fertility may reflect evolving preferences suggests that no single policy “fix” is guaranteed to restore higher fertility levels.

Ultimately, policy must grapple with a population for whom the value of having additional children is often outweighed by other priorities. If children are increasingly seen as one dimension in a multidimensional choice set, rather than as a default life milestone, then policymakers need to think more broadly. Interventions might aim not only to relieve cost pressures but to create supportive environments that reduce the emotional and opportunity costs of childrearing. This might mean promoting workplace cultures that genuinely respect work-life balance, encouraging men to assume a more equitable share of domestic tasks or changing narratives regarding what constitutes a fulfilling adult life.

Conclusion: toward a more comprehensive understanding

The unprecedented fertility declines recorded worldwide, except in places like Sub-Saharan Africa, pose pressing demographic, economic and cultural challenges. Existing theories have provided essential clues: the New Home Economics shows how rising opportunity costs curb fertility; the gender equity hypothesis explains why more balanced household roles support higher fertility; and the second demographic transition highlights how secularisation, individualism and the pursuit of self-fulfilment alter family formation patterns.

Yet these frameworks cannot fully explain today’s extraordinary lows. Even with generous policies reducing direct costs, fertility remains stubbornly low. This suggests that the sharp decrease in fertility stems not only from financial or structural constraints, but also from fundamental shifts in how people prioritise their time, relationships, careers and personal freedom. Policies aimed solely at reducing costs have limited effectiveness. Ultimately, recognising that the low fertility plateau may reflect a recalibration of what people want, and not just what they can afford, is crucial.

REFERENCES

1 — Brinton, M. C.; Oh, E. (2019). “Babies, Work, or Both? Highly Educated Women’s Employment and Fertility in East Asia”. *American Journal of Sociology*, no. 125, pp. 105-140.
2 — Adserà, A. (2005). “Vanishing Children: From High Unemployment to Low Fertility in Developed Countries”. *American Economic Review*, no. 95, pp. 189-193.
3 — Adserà, A. (2011). “Where Are the Babies? Labor Market Conditions and Fertility in Europe”. *European Journal of Population*, no. 27, pp. 1-32.
4 — Kulu, H.; Andersson, G. (2023). *Fertility Decline and Family Policies in the Nordic Countries,* Mimeo.
5 — Adserà, A. (2020). “International Political Economy and Future Fertility Trends”. *Vienna Yearbook of Population Research*, no. 18, pp. 27-32.
6 — Bongaarts, J. (2017). “Africa’s Unique Fertility Transition”. *Population and Development Review*, no. 43, pp. 39-58.
7 — Becker, G. S. (1993). *A Treatise on the Family*. Expanded edition. Harvard University Press.
8 — Esping-Andersen, G. (2009). *The Incomplete Revolution: Adapting to Women’s New Roles*. Polity Press.
9 — Lesthaeghe, R. (2010). “The Unfolding Story of the Second Demographic Transition”. *Population and Development Review*, no. 36, pp. 211-251.
10 — Adserà, A. (2006). “An Economic Analysis of the Gap Between Desired and Actual Fertility: The Case of Spain”. *Review of Economics of the Household*, no. 4, pp. 75-95.
11 — Sobotka, T.; Beaujouan, É. (2021). “Two is best? The Persistence of a Two-Child Family Ideal in Europe”. *Institut für Demographie – VID*, no. 1, pp. 1-81.
12 — Sobotka, T.; Beaujouan, É. (2021). “Two is best? The Persistence of a Two-Child Family Ideal in Europe”. *Institut für Demographie – VID*, no. 1, pp. 1-81.
13 — Gauthier, A. H. (2007). “The Impact of Family policies on Fertility in Industrialized Countries: a Review of the Literature”. *Population Research and Policy Review*, no. 26, pp. 323-346.

Alícia Adserà

Alícia Adserà is a Senior Research Scholar and Lecturer at the School of Public and International Affairs at Princeton University, where she also directs the Population Studies Program within the Office of Population Research. She holds a PhD in Economics from Boston University and is a research fellow at the Institute of Labor Economics (IZA) and at CreAM (Centre for Research and Analysis of Migration). Previously, she was an Associate Professor at the University of Illinois at Chicago and an affiliated researcher at the Population Research Center at the University of Chicago. Her research focuses on economic demography—particularly fertility decisions—as well as development and migration. She has held fellowships from institutions such as the University of Chicago, the Alfred P. Sloan Foundation, the Government of Catalonia, and the Bank of Spain. Her work has been published in journals including *American Economic Review, Economic Journal, PNAS, Population Studies, Economic Policy, Journal of Population Economics, European Journal of Population, Journal of Law, Economics and Organization,* and *Labour Economics*, among others.