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# MIND THE FERTILITY GAP

Why people stopped having babies and how economic freedom can help

Clara E. Piano October 2025



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### **Summary**

- In 2023, the global total fertility rate (TFR) fell to 2.2 children per woman, below the population replacement rate of 2.3. In England and Wales the same year, the TFR was 1.44 children per woman— the lowest value ever recorded in those countries. Fertility intentions remain higher, creating a fertility gap between desired and actual family size.
- Falling birth rates pose problems for all levels of society. Governments will struggle with increasing dependency ratios and stunted economic growth, civil organisations and businesses will face a shortage of labour and innovation, family members will have fewer children or siblings than they hope for, and individuals will struggle with loneliness.
- The imminent population bust has generated an appetite across a growing number of countries for ostensibly pronatal policies, such as baby bonuses or childcare subsidies, even as many governments face severe fiscal problems in meeting their current welfare obligations. While devoting more resources towards the production of children does result in more children (as with any other production process), financial incentives have limited success, do not address the root causes of birth rate declines, and are prohibitively costly for most governments.
- New research places other options on the table. In the context
  of the United States, lower regulatory burdens especially in
  labour and childcare markets are robustly associated with
  smaller fertility gaps, implying that women in these regions
  are more likely to achieve their fertility goals (Piano and

Stone 2024). Other research in Europe and Latin America suggests that religious leaders can play an important role.

• Giving children their due political representation by letting their parents vote for them is the most promising and sustainable route to closing the fertility gap. Researchers can only learn so much: it is (potential) parents themselves who know which barriers are truly binding as they pursue their family goals.

#### **Foreword**

Within living memory, we saw various Malthusian moral panics about 'overpopulation'. Global population growth, the argument went, was out of control. Humanity was multiplying like a virus, and in the process, it was depleting the world's resources and destroying its own habitat.

Needless to say, the dire predictions associated with population growth did not come true. While the world's population more than doubled over the past 50 years, and now stands at over 8 billion people, we also saw social and economic progress on an unprecedented scale, and even environmental improvements over the same period.

This seems like a good occasion for a reckoning. Why did the neo-Malthusians get it so wrong? What is wrong with their mental model of the world, and which model offers a better fit for what actually happened?

This reckoning is, however, unlikely to happen. Because the argument has already moved on. The (non-)issue of 'overpopulation' has been demoted to the readers' letters column of *The Guardian*. Today, we are far more likely to hear warnings about population *decline*, or at least, a decline in the working-age population, due to low birth rates.

The phenomenon is real. Demographic forecasts are much more reliable than, say, economic ones, because they depend on fewer variables, and the variables they depend on tend to be more predictable. At least in the developed world, birth rates have already been falling for quite some time, and we do not need sophisticated modelling to see that a person who is not being born in this year is not going to be around in the 2050s to have children of their own. For a population to stabilise on its own (i.e. without external influences), it usually needs a fertility rate of a little over two children per woman. High-income countries have not seen such rates since the mid-1970s, and in more recent decades, upper-middle income countries have also fallen one by one below that threshold.

The argument of people who worry about such trends is not that we are heading towards a cataclysmic population collapse. The argument is simply that there are already a number of countries where the population is simultaneously shrinking and ageing, and we can see from their experience that this causes economic problems. Welfare states, for example, have been built on the assumption of stable population levels and age pyramids, which can be changed, but only very slowly, and at a high political cost. Ageing populations also tend to be less dynamic and innovative than young and growing ones. In such populations, the political balance of power shifts, turning countries into 'gerontocracies'. And so on. None of the problems associated with shrinking populations are catastrophic on their own, but taken together, they certainly deserve to be taken seriously.

Do classical liberals have anything useful to contribute to this debate?

At first sight, it would seem that the answer is no. From a liberal perspective, if falling birth rates are the result of voluntary decisions, we just have to accept that, and if it causes problems, we just have to live with them. If people no longer want to have children, that is their choice.

Classical liberals tend to be suspicious of government attempts to manipulate birth rates. 'The birth rate' is a useful aggregate if we are interested in overall population trends, but it is just that: an aggregate. Beneath it are millions of individual decisions of a deeply personal and intimate character. Thus, if 'pro-natalism' refers to a form of social engineering where governments try to coax families into having more children than they would otherwise, or even attempt to centrally plan population numbers, there can be no such thing as a 'liberal pro-natalism'.

And yet, as Dr Clara Piano shows in this paper, there very much is such a thing. It just means something quite different.

For liberal pro-natalists, the opening question is not 'what can governments do to raise the birth rate?' It is something more like 'what does the government currently do that makes it harder for couples to have the children they already want to have?'

The key metric of interest here is the so-called 'fertility gap', the difference between the number of children people say they want to have, and the number of children they end up having.

This is a somewhat unusual approach for economists. Economists are usually reluctant to take people's stated preferences at face value. Where there is a gap between what people say they want to do, and what they actually do, economists assume that the latter reveals people's true preferences, while the former is just idle talk. Actions speak louder than words.

While generally the right approach, we need to remember the *reason* economists do this. It is because stated preferences are often skewed by what is known as 'social desirability bias', our tendency to say what we think we are socially expected to say, rather than what we truly think or feel. But the two are, of course,

not always in conflict with one another, and where they are not, we can take stated preferences more seriously.

In traditionalist societies with a social stigma attached to childlessness, couples who do not want to have children may be reluctant to say so. In such a context, we need to be careful with stated fertility preferences. But one of the main reasons for the long-term downwards trend in fertility rates in developed countries is precisely the disappearance of that social stigma. Nowadays, social desirability bias may even work in the opposite direction. In recent years, there has been a tendency for young people to tell pollsters that they refrain from having children because of their fears of climate change. In this way, it is the desire *not* to have children which becomes the socially desirable response, because it signals high-status opinions (environmental awareness and concern). In such a context, people many underreport rather than exaggerate the number of children they want to have.

So we should take fertility gaps seriously, and those gaps show us that across the developed world people are, in the aggregate, having fewer children than they say they want to have. Even in a world without fertility gaps, there would, of course, be no return to the birthrates of the 1960s. But desired fertility rates are still at, or not far below, replacement levels.

Dr Piano finds that fertility gaps are not just – or even especially – affected by family policies in the conventional sense (e.g. child benefits, maternal leave entitlements), but also by certain types of labour market and product market regulations which never had that intention. This is a remarkable finding, because it points to the existence of low-cost, low-risk, no-regrets policy options in this area. The regulatory barriers Dr Piano points to are of questionable merit anyway, and relaxing them would be

justifiable in its own right, even if it had no impact whatsoever on fertility gaps. But if it also enables some people to achieve their desired family goals – even better.

What this means differs from country to country, but it is not hard to guess what it could mean specifically for the UK. The UK has exceptionally high housing and childcare costs, which are mostly caused by supply-side restrictions in those sectors. Easing those restrictions would make life easier for lots of parents, which could lead to more people becoming parents in the first place (or parents of a larger family). Or it might not – but if not, no harm would have been done. It would then 'only' have made life easier for parents.

Whatever the precise policy agenda we may want to derive from this, though, the point is that liberals need to come up with a version of pro-natalism that is compatible with personal and economic freedom, rather than leave this important policy area to central planners and social engineers.

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KRISTIAN NIEMIETZ

Editorial Director, Institute of Economic Affairs

London, October 2025

# The problems of declining birth rates

In 2023, the total fertility rate in England and Wales was 1.44 children per woman, the lowest ever recorded.¹ Surveys have also asked questions about the fertility desires or intentions of individuals for many years. In 1979, women aged 21-23 reported an average intended fertility rate of 2.23 children (General Household Survey). Their average intended fertility rate changed very little over the next few decades, while the TFR has declined significantly since 2012. Figure 1 graphs the evolution of the TFR alongside average intended fertility over time. While estimates of fertility intentions end in 2011, which was the last year of the General Household Survey, recent research suggests that fertility intentions in the UK changed very little during the COVID-19 pandemic (Raybould, Mynarska, and Sear 2023).

<sup>1</sup> The total fertility rate measures the number of live births a woman is expected to have if her fertility matches those age-specific fertility rates of that calendar year.

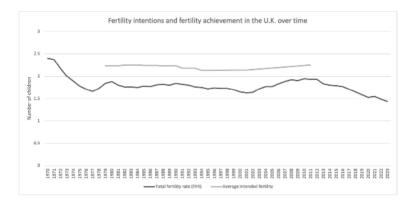


Figure 1

Sources: TFR data from ONS  $(2024)^2$ . Fertility intentions data from Smallwood and Jeffries (2003) and OECD  $(2016)^3$ . Data for intentions is missing for some years between 1980-2011, so values are extrapolated.

The fertility gap – a statistic that measures the difference between the number of children an individual *desires or intends* to have and the number of children they are projected *actually* to have – can be calculated for the available years of data (1978-2011), yielding a gap of 0.3-0.4 children. This means that for every three children wanted, only two will be born.<sup>4</sup> To put this number into perspective, achievement of the additional 0.3 children on average would push the total fertility rate of England and Wales up to 1.74 children per woman, well above that of the United States (currently 1.62) and that of nearly every other

<sup>2</sup> Office for National Statistics (2024) *Births in England and Wales: 2023.* Accessed: 22 October 2025 (https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/bulletins/birthsummarytablesenglandandwales/2023).

<sup>3</sup> OECD Family Database (2016) *Ideal and actual number of children*. Accessed: 22 October 2025 (http://www.oecd.org/els/family/database.htm).

<sup>4</sup> Beaujouan and Berghammer (2019) arrive at a similar estimate for the UK fertility gap, 0.3, using a cohort approach for an earlier generation of women.

high-income country.<sup>5</sup> Immigration issues would be a lot less pressing, and the fiscal outlook of public programmes would be much brighter. Most importantly, women would be achieving their family goals. But are declining birth rates really a problem? Aren't they the result of people having to make difficult tradeoffs, and ultimately not valuing children as much as they say?

The best way to think about declining birth rates is to see them as an unemployment problem. Estimates of unemployment typically come from surveys that compare the number of people seeking employment to the total number of people in the workforce. Even though 'talk is cheap', economists and policymakers take people's stated preferences for whether they want a job seriously because, well, jobs involve hard work. Moreover, there are many legitimate reasons that someone might be currently unemployed and not seeking employment. In an analogous way, the fertility gap represents the degree of 'parental unemployment' in a society, that is, the share of people desiring or planning to have a child compared to how many children we expect to be born at current fertility rates. 6 Just like holding down a job, raising children requires hard work and there are many legitimate reasons that someone might not be seeking to have (more) children. In both cases, the plain statistics of employment or fertility rates are not enough to determine how the market is performing from the perspective of the people involved - survey data is useful to show economists and policymakers where people might be falling short of their goals.

<sup>5 &#</sup>x27;The demographic future of humanity: facts and consequences', Fernández-Villaverde, J., 31 May 2025 (https://www.sas.upenn.edu/~jesusfy/Slides London.pdf).

<sup>6</sup> Stone (2019) estimates that the global fertility gap is positive, meaning that in the vast majority of countries, women can expect to have fewer children than they say is ideal. See 'The global fertility gap', *The Institute for Family Studies*, 25 February 2019 (https://ifstudies.org/blog/the-global-fertility-gap).

#### Problems for the economy

The total fertility rate needed to replace a population is about 2.1-2.3 children per woman (depending on the context), and falling below this threshold means that a population is on the path to decline. This fact poses several concrete economic problems. Firstly and most importantly, ideas are the key to economic growth and higher standards of living (Simon 1996 and Romer 1994). Because these ideas for doing more with less can be shared with others without reducing their value, ideas are the ultimate renewable resource (Spears and Geruso 2025).

A below-replacement TFR means that fewer people will be around to produce ideas. Under the projections of many macroeconomic models, this could be the end of economic growth, hence the end of dramatic improvements to our standards of living (Jones 2022). Fewer people around also means that there would fewer reasons to produce certain ideas, since the number of potential consumers would be shrinking. A recent study found that the GDP per hour worked in Japan is one of the highest amongst the G7, but that its GDP growth is dramatically crippled by its shrinking share of working-age adults in the population (Fernández-Villaverde et al. 2025). Studies also consistently show that an ageing population produces fewer start-ups and patents, providing yet another avenue through which economic productivity is negatively impacted (Irmen and Litina 2022).

#### **Problems for governments**

Birth rates below replacement levels and the average fertility intentions of citizens also portend numerous problems for

governments, especially those with welfare programmes. Although there might be a temporary increase in economic productivity as people spend less time caring for children and potentially more time working (thus generating tax revenue), this benefit will quickly expire as the population begins to age.<sup>7</sup> The population pyramid will become more rectangular or even inverted in shape as the age structure of the population changes, yielding more dependents (those under age 15 or 65 and over) per working-age adult. As can be seen in Figure 2, the population pyramid of 2038 (shaded) is much thinner for ages under 50 than it was in 1998 (banded), while the share of the population above the age of 50 will be larger. This is a problem for many welfare programmes, especially pay-as-you-go pension systems, as they are premised on the fact that the current working-age population can generate enough tax revenue to provide benefits to those in need. For example, the Old-Age and Survivors Insurance (OASI) Trust Fund in the United States is projected only to pay out full benefits until 2033. After that point, the 'fund's reserves will become depleted and continuing program income will be sufficient to pay 77 percent of total scheduled benefits'.8 Issues with retirement are compounded by the fact that private investment returns will decline as economic growth and innovation decrease, implying that individuals will have to save more and sooner to build the same nest-egg for retirement.

<sup>7</sup> This is why throughout history, autocratic regimes have experimented with drastic forms of anti-natal policy, seeking the short-run benefits, followed by attempts at pro-natal policy once the economic damage became obvious (Piano, 2022).

<sup>8</sup> Office of the Chief Actuary (2025) A Summary of the 2025 Annual Reports. Accessed: 22 October 2025 (https://www.ssa.gov/oact/trsum/).

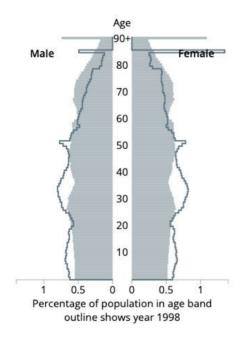


Figure 2
Source: Office for National Statistics, 'UK population pyramid interactive'

Shrinking populations also threaten national security. An ageing population is less able to defend itself than a population with a traditional age pyramid. Below-replacement TFRs may foster geopolitical instability as countries consider a future in which their military force is shrinking, and decide that now is the time to act.<sup>9</sup>

<sup>9 &#</sup>x27;The battle for Ukraine is a war of demography', *Foreign Policy*, 6 December 2024 (https://foreignpolicy.com/2024/12/06/russia-ukraine-war-demography/).

#### **Problems for human happiness**

Finally, the modern phenomenon of declining birth rates represents a growing failure to achieve family goals (as stated by individuals themselves) rather than a sharp decline in the desire for children. It is important to note that the fertility decline in most countries is not caused by families becoming smaller. The majority of the decline in the average number of children per woman is caused by a shrinking share of the population who are parents (having about the same number of children as in the recent past) and a growing share of the population having no children at all. For instance, Beaujouan and Berghammer (2019) estimate excess childlessness in the United Kingdom to be nearly 15% for the cohort born in the early 1970s. This means that although 5% of women in this cohort had reported that they desired zero children, nearly 20% of women in the cohort ended their reproductive lives without children. This discrepancy has significant implications for human happiness.

At the most basic level, many people may not have a family at all. Some will have partners but no children or grandchildren. The Harvard Study of Adult Development, the longest scientific study of happiness, found that the answer to the question 'What makes a good life?' was straightforward: good relationships (Waldinger and Schulz 2023). In a world with fewer siblings, aunts, uncles, cousins, and babies around, good relationships will become harder to find. In a recent study of college-educated women with five or more children, Pakaluk (2024) finds that a significant number of mothers describe their children as bringing healing

<sup>10</sup> Several studies have documented a direct increase in depression and anxiety following the realisation that participants will undershoot their fertility goals, by looking at couples whose assisted reproductive technologies have failed (Milazzo et al. 2016).

into their lives, even acting as a 'sunlamp' for their other children. We do not know the health effects associated with a lack of affection from children in one's adult life; we do know that infants who lack the loving touch of an adult experience a 'failure to thrive' (Roback Morse 2001).

# Why are birth rates declining?

Although economists generally loathe to explain changes in behaviour by changes in preferences - because 'changes in preferences' really does not explain much - some have begun to take that approach to fertility choices. For instance, leading family economists recently cited the 'shifting priorities' of young adults away from parenthood as the likeliest explanation for why fertility has fallen to historic lows in most high-income countries (Kearney and Levine 2025). But even these scholars recognise that 'people across countries and age groups consistently report a higher planned level of fertility than what they experience. It raises the distinct possibility that the widespread decline in fertility does not entirely reflect a change in preferences or deliberate choices, but perhaps also a meaningful wedge between plans and realizations' (p. 31). What sort of things could drive such a wedge? Since children are 'jointly-produced' by a man and a woman, declining marriage rates can explain much of the decline in births in particular countries and regions. Also, because children require both time and income from parents, declining work-family compatibility - often due to misgoverned labour markets - is another culprit. In countries where there is more disagreement between partners over whether to have a(nother) child and it is especially hard to combine careers with family life, fertility has reached the 'lowest-lows'. Examples of these countries are Italy (1.24 TFR in 2022), Spain (1.16 TFR in 2022), and South Korea (0.78 TFR in 2022).

#### Dysfunctional marriage markets

A basic fact about babies is that it takes both a woman and a man to make one' (Doepke and Kindermann 2019: 3264). Much of the decline in fertility in many countries of the world can be attributed to unintended childlessness, either because individuals were not able to find a partner or the partners disagreed over whether to have a child. Doepke and Kindermann (2019) show using detailed survey data from 19 countries that parents generally reach agreement before there is a birth, but that a large share of couples disagree over whether to have a(nother) child. Women in particular are significantly less likely to agree to having a(nother) child than their male counterparts. They further show that the share of men doing some childcare work is inversely related to female disagreement, meaning that countries with stronger norms for paternal involvement tend to have more women agreeing to have a(nother) child.

Mechanically, we can also look at whether the fertility of married couples has remained stable over time. Stone (2025) estimates<sup>11</sup> that declining marriage rates in the United States explain about 75% of the decline in fertility since 2007.<sup>12</sup> This is relevant to the experience of the UK, as the recent decline in birth rates is largely attributable to a decline in first births (Ermisch 2021).

<sup>11~</sup> 'Yes, marriage still matters for fertility: new evidence', *The Institute for Family Studies*, 30 January 2025 (https://ifstudies.org/blog/yes-marriage-still-matters-for-fertility-new-evidence).

<sup>12</sup> An important related question is whether nonmarital fertility occurs within a relatively stable partnership, or whether the mother is truly single. In general, nonmarital births in countries like France occur within a relatively stable cohabitating relationship, with the child spending most of their childhood living with both parents, while the United States is an outlier with a high proportion of children born to single mothers and a higher probability of children who experience the disruption of the union of their biological parents (Andersson, 2002).

This decline is linked to a rising age at marriage – now 32.7 years for men and 31.2 years for women, the highest median ages on record. This isn't the case in every country, however, as a recent paper shows that marriage rates remain high in India while fertility has fallen below replacement (Park et al. 2023). This underscores an important point: while virtually every country faces declining birth rates, there is not one single cause present in all cases.

Why is marriage declining across many countries? Economists have posited that certain legal changes – such as the enforcement of child support regardless of marital status in the United States – made marital and nonmarital fertility more similar, and thus reduced the value of marriage (Lafortune and Low 2023). For couples without access to 'collateral' (such as a house), which makes the marital agreement more binding, long-term cooperation can be difficult to sustain.<sup>14</sup>

It may be, however, that couples are postponing marriage until they feel ready to have children. A recent paper, focused on the UK, asks why people are delaying having children by assessing their willingness to 'pay' in reproductive months (i.e. the length of time they are willing to wait) for certain life features to be in place before welcoming a child (Sheppard 2025). Figure 3 reports the desired features for four demographic groups: university-educated women, university-educated men, non-university-

<sup>13</sup> Office for National Statistics (2024) Marriages in England and Wales: 2021 and 2022. Accessed: 22 October 2025. (https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/marriagecohabitationandcivil-partnerships/bulletins/marriagesinenglandandwalesprovisional/2021and2022)

<sup>14</sup> However, as Kearney (2023) points out, the evidence is still undeniably in favour of marriage when it comes to promoting better outcomes for children. Thus, the decline in marriage both suppresses birth rates and reduces the likelihood that a child grows up enjoying the 'two-parent privilege'.

educated women, and non-university-educated men. For both groups of women, regardless of educational attainment, and for university-educated men, the presence of a partner or their partner's support was the biggest factor that kept individuals waiting to have children. This was the second most important factor for non-university-educated men, while the leading factor worth waiting for (in their view) was living in a neighbourhood that was safe and spacious enough for children to play. These findings strongly suggest that a lack of coordination between men and women is the largest contributor to fertility delays in the United Kingdom.

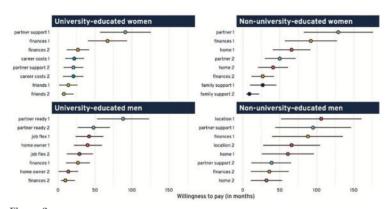


Figure 3
Source: Sheppard (2025)

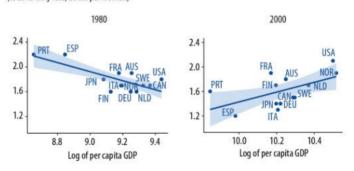
#### **Dysfunctional labour markets**

Economic studies consistently show that children are 'normal' goods, which means that couples tend to have more children when their incomes rise, holding other things constant (Black et al., 2013). In the UK, women with educational attainment

below degree level experienced a larger decline in fertility than those with degrees (Ermisch 2021). Contrary to popular misconceptions, modern fertility declines are not directly attributable to rising real wages - or increased female workforce participation rates. Doepke et al. (2023) documents new fertility facts, which reveal that for high-income countries, income and female workforce participation rates are positively correlated with fertility rates. Figure 4 shows the changed correlation between the TFR and GDP per capita in selected OECD countries in 1980 vs. 2000. The late 20th century experience of income, workforce participation, and fertility was a historical anomaly in the sense that inflexible jobs truly increased the opportunity cost of children for women. Today, the picture that emerges from the data is that some places are better than others at providing the conditions for young people to achieve their career and family goals, leading to relatively high birth and employment rates in those regions.

#### **Total fertility rate and GDP per capita in selected OECD countries** In just 20 years, the relationship between per capita income and fertility rates

changed dramatically. (total fertility rate, births per woman)



Source: Doepke and others (2022).

**Note**: OECD = Organisation for Economic Co-operation and Development. Data labels use International Organization for Standardization (ISO) country codes.

Figure 4

Financial readiness and more flexible work schedules are the second and third most important factors for men and women, regardless of educational attainment, in terms of their willingness to wait for these to be present before starting their family (Sheppard 2025). Countries with dysfunctional labour markets - often because of strict regulation that makes it very hard for young people to find stable, productive employment are rewarding the older generation at the expense of the next. Examples of strict regulation include high barriers to entry (e.g., occupational licensing), policies which make it difficult to fire workers (which disproportionately punish younger, unproven workers), and any compensation or benefit requirements that make entry-level positions less accessible. Young people are naturally very good at finding jobs that will fit their family goals — they are the ones who benefit from such an arrangement — but excessive government involvement in labour markets often reduces their options and tilts the scales towards the older generation.

# What can be done about declining birth rates?

Attempts at pro-natal policy go back at least to ancient Rome, when the Lex Papia et Poppaea penalised celibacy and awarded special privileges to citizens with three or more children. While similar policies are being considered by an increasing number of governments around the world today, much has since been learned about couples' responsiveness to fertility incentives. 15 The first important lesson is that there is a clear asymmetry between the effectiveness of anti-natal and pro-natal policy: people are very responsive to anti-natal policy incentives, but they are only slightly responsive to pro-natal policy incentives (Engle et al. 2024). Many things have to go right for there to be a baby, but only one thing has to go wrong for there not to be a baby. 16 This is why the 'aid' approach to pro-natal policy generally produces lacklustre effects. The second important lesson is that all policy decisions are, at some level, anti-natal or pro-natal. Some of the most effective 'pro-natal' policies were designed with completely different goals in mind, as will be discussed below. Finally, some pro-natal interventions may cost very little but are creatively designed. I will discuss two cases, one involving a religious authority and the other involving changes to the franchise.

<sup>15</sup> As of 2019, 55 countries have policies aimed at raising their birth rates – including China. See United Nations (2019) *World Population Policies*. Accessed: 22 October 2025 (https://www.un.org/development/desa/pd/data/world-population-policies).

<sup>16</sup> Aitken (2022) points out how it is wrong, at every level, to think about fertility like a tap that can be turned on and off.

#### What aid can do

The vast majority of ostensibly pro-natal policies are simply a transfer of resources towards people with children and away from those without them. This includes direct payments to families, subsidies supporting childcare, and mandatory parental leave. There are reasons that a country might strongly consider this route, especially if they are undertaken to correct existing welfare programmes which shift resources away from young families and towards the elderly or those without children. France, a high-income country with one of the highest TFRs in Europe (1.64 children per woman), is an example of what aid can do.

For nearly 80 years, France has employed a suite of explicitly pro-natal policies, which include tax breaks for young families, generous child allowances, flexible childcare support, and retirement benefits for parents taking time off work to raise children. The French were the first to experiment with pronatal policy in the modern era because they were the first to need it; French fertility declined to its low modern levels before 1830. To Stone (2025) estimates that these policies 'boosted French fertility by about 0.1-0.2 extra children per woman', amounting to five million more French people today than would otherwise have been the case. This constellation of policies has an underlying logic: making public programmes effectively less anti-natal by giving more aid to families.

<sup>17</sup> Moreover, the subsequent decline in fertility across Europe is partially explained by the growing influence of French culture (Spolare and Wacziarg 2022), which likely brought a mix of secular norms and industrialisation (Moorthy, 2025).

 $<sup>^{18}</sup>$  'Does pronatal policy work? It did in France', The Institute for Family Studies, 6 February 2025 (https://ifstudies.org/blog/does-pronatal-policy-work-it-did-in-france).

Tax-and-redistribute programmes tend to be anti-natal because parents with co-residing children pay more into these programmes in the form of taxes than they receive. 19 One of the most expensive welfare programmes in Europe, the oldage pension, is especially punishing to parents. Before such programmes, children and extended family members were the likeliest sources of old-age support for parents. When old-age support was centralised, it simultaneously reduced the private benefit of having children, and increased the public benefit of living in a society with lots of children (who will grow up to pay for everyone's pensions). Empirical evidence suggests that public pension programmes can account for 55-65% of the observed Europe-US fertility differences across countries and time (Boldrin et al. 2015). The economist Nancy Folbre observed years ago that 'as children become increasingly public goods, parenting becomes an increasingly public service' (1994: 86). Reforming public programmes to account for the 'in-kind' contributions to the public welfare that parents make by spending private time and resources to raise their children is a necessary step to keep any welfare programme sustainable in the longer run.

Still, aid has limits.<sup>20</sup> While devoting more resources to the 'production' of children will result in more children (as with any production process), it does not address the underlying causes of declining birth rates. It also costs an enormous amount: public

<sup>19</sup> Vanhuysse et al. (2023) make this point: 'The logic of transfer conversion implies that parents are likely to largely pay themselves for these welfare-enhancing policies through higher net tax and social security contributions. A parent taking up paid work and using public child care reduces his or her time transfers and pays more net taxes. On balance, extra revenues for governments may well exceed the cost of providing public child care.'

<sup>20</sup> Skarbek and Leeson (2009) make similar points when discussing foreign aid.

spending on family benefits is nearly 3.5% of GDP in France.<sup>21</sup> Increased transfers to families can help to balance out the distortions caused by welfare programmes for family choices, but ultimately, closing the fertility gap (allowing women to achieve their desired fertility) will require more.

#### What freedom can do

Restricting the term *pro-natal* to explicit transfer policies obscures the broader policy landscape that shapes family decisions. Policies affecting economic and religious freedom, in particular, have profound effects on fertility through their impact on work-family compatibility and personal beliefs. The United States, a high-income country with fertility rates above most European countries (1.62 children per woman), provides a useful example in both regards. While its fertility rate is nearly identical to that of France, the US achieved this not by aid, but by protecting the economic and religious freedoms of parents.

Recent empirical evidence confirms the relationship – at the individual US state level – between economic freedom and smaller fertility gaps, which implies that more women are achieving their fertility goals (Piano and Stone, 2024). One of the biggest ways that economic freedom affects the fertility choices of couples is through labour market regulation. When a labour market is strictly regulated, individuals find it difficult to match with work that is compatible with their family goals, and young people often face more hurdles to job entry. It can

<sup>21</sup> OECD 2023 *Public spending on family benefits*. Accessed: 22 October 2025 (https://www.oecd.org/content/dam/oecd/en/data/datasets/family-database/pf1\_1\_public\_spending\_on\_family\_benefits.pdf).

also be more difficult for families to supplement their income. Striking examples of this are the 'two-tiered' labour markets of Italy and Japan. Rules that make it difficult to fire workers result in internship-like positions with very low wages often worked by people under 45, while jobs with tenure-like protection and higher wages are reserved for once an employee has 'proved' themselves after decades. By age 45, it is virtually impossible for an individual to start their family, even if they wanted to.

In contrast, Piano and Stone (2025) show with individual-level United States data that policies supporting greater economic freedom in the areas of government spending (i.e. fewer transfers) and labour markets (i.e. right-to-work laws) are associated with significantly smaller fertility gaps. Figure 5 shows the magnitude of the association between different types of economic freedom and the fertility gap in a US state, controlling for a battery of demographic and state-level characteristics. A recent working paper suggests that more flexible labour market regulation, particularly in the area of childcare, is associated with smaller fertility gaps as well (Flowers, Geloso, Piano, and Stone, 2025). The influence is clear: more women are able to attain their family size goals when labour markets offer more choice and flexibility.

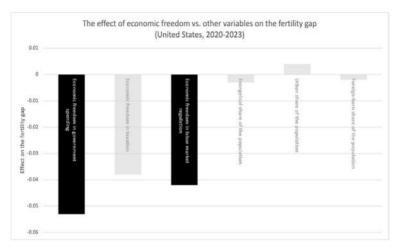


Figure 5

Sources: Demographic Intelligence Survey (2020-2023), Economic Freedom of the World Report (2020), and the ACS (2020). Black bars are statistically significant effects. A smaller fertility gap (negative coefficient) implies that more women are achieving their fertility goals.

Final important aspects of economic freedom related to fertility choices are land use and housing regulation. Spacious and safe housing - especially with many bedrooms - is a childcomplement, meaning that couples tend to have higher fertility when they can achieve these conditions (Stone and Fijan 2025). A recent study of land use regulations in the United States found 'a significant negative relationship between land use restrictions and fertility rates across all measures and geographies'; effects that were especially concentrated for women in their twenties (Shoag and Russell 2017: 139). There is also some evidence that home ownership itself is conducive to marriage, because a large, shared asset such as a home can act as collateral for the marriage contract, making the marriage more binding and valuable to each of the members (Lafortune and Low, 2023). This matters for children because much of fertility decline is attributable to the decline in marriage, while conditional on being married, individuals are still achieving or coming close to their fertility goals (Stone 2025). Under normal market conditions, high housing prices encourage more construction since there are profits to be made, which brings the price down as supply expands. Extensive land use and housing regulation, however, can dampen the supply response and keep prices high, causing the costs of raising children to be higher than would otherwise be the case.

Religious freedom is another important influence on fertility. Economists understand that while constraints are objective (resources that don't exist cannot be used), costs and benefits are subjective (one person's garbage is another person's treasure). This applies to children as well: different individuals value children differently.<sup>22</sup> A few recent papers have highlighted the pro-natal effects of persuasive messages from religious authorities that children are valuable and to be held in high esteem. In countries with more religious freedom, economists typically find that more competition between religious providers yields higher rates of religious participation and human flourishing (Makridis 2020). In Latin America, Iyer et al. (2024) studied visits by Pope John Paul II, where his speeches promoted traditional Catholic messages about the beauty of marriage, the dignified work of raising children, and sinfulness of using abortion or contraception. They find a significant and large increase in fertility in the 2-5 years after the Papal visit for nearly all the countries, amounting to roughly 220,000-

<sup>22</sup> There is a famous story about Elizabeth Anscombe, an Oxford don who had seven children. Someone had once meanly scribbled 'ANSCOMBE BREEDS' on her classroom blackboard before she arrived. When Anscombe noticed it, she simply added two words: 'ANSCOMBE BREEDS IMMORTAL BEINGS'. Subjective beliefs about children's value obviously influence fertility behaviour. See 'Breeding immortal beings', *Law & Liberty*, 27 March 2024 (https://lawliberty.org/book-review/breeding-immortal-beings/).

251,000 additional births (0.3-0.4% increase) in those years (Iyer et al. 2024). The effects are driven mainly by first births and a rise in marriage rates, and increase with the number of times a specific issue (e.g. marriage) is mentioned in the speech. In the context of the US, Pakaluk (2024) presents interviews with fifty women who have a college degree and at least five children to understand how they approach the choice to have a(nother) child. These women represent a variety of income levels, have worked or are still working in many different types of careers, and come from a variety of family backgrounds. The only common element that Pakaluk (2024) identifies as driving their high fertility behaviour is a significant religious belief (often but not always shared between partners) that children are a blessing. Pakaluk's takeaway is that public policy should allow religious organisations (including religious schools) to spread their pro-natal messages.

#### What creative thinking can do

The forces working against future children vary across countries and across specific groups within countries. Creative thinking is necessary, because some of the most effective pro-natal policies have been very specific, low-cost interventions that are tailored to a particular context. While these approaches would not work well in the United Kingdom, other creative policy proposals hold significant promise.

The country of Georgia recently experienced a 'religiously inspired baby boom' at virtually no cost to the government (Chung et al. 2025). After Patriarch Ilia II agreed personally to baptise all third-and-higher parity children, Chung et al. estimate a 100% increase in the third-and-higher birth rate

within marriage as well as a 17% increase (0.3 children per woman) in the national fertility rate. This is one of the largest fertility effects ever documented. Perhaps the best part, from the government's perspective, is that this type of intervention costs virtually nothing. While this case emphasises the importance of religious leaders in fertility, it is difficult to envision its application outside the Georgian Orthodox context.

A recent franchise reform proposal made by law professors in the United States, however, is useful for the United Kingdom to consider. The idea is simple: 'Voting parents should be able to cast proxy ballots on behalf of their minor children' (Kleinfeld and Sachs 2024).<sup>23</sup> While this is not explicitly a pro-natal policy. it is not hard to see how children's interests would be better represented at the polling booth, and thus unsuspecting antinatal policies might be curtailed. The real virtue of this proposal, however, is that no one but young people themselves knows the true barriers to fertility. A law to extend the franchise to children (via their parents) would allow this local knowledge to be transmitted through the elections, opening the door to practical and likely surprising pro-natal policies. Franchise reform is obviously possible in the UK, given the recent lowering of the voting age to sixteen. But a better proposal would be giving that vote to the parents of sixteen-year-olds, who are entrusted with their child's welfare in nearly every other area of life.

### The future of fertility

The bad news is that birth rates are falling in nearly every country on earth. The good news is that nearly every country on earth will be confronting the same problem which, hopefully, can foster learning. The fact that the total fertility rate is higher in countries that have mitigated the anti-natal effects of their public programmes, fostered economic and religious freedom, and opened the door to creative thinking is encouraging. Any of those areas would be a good place for the UK to begin.

There is a lot of well-intentioned pro-natal policy that has been tried and found wanting. Stone (2020) compares scholarly estimates of the effectiveness of various pro-natal policies – such as baby bonuses, child tax credits, maternity pay, and childcare subsidies - in present value terms to parents. While emphasising that some pro-natal policies have shown positive fertility effects in the short-run (which become much smaller or zero in the longrun), Stone concludes: "Truth be told, trying to boost birth rates to replacement rate *purely through cash incentives* is prohibitively costly'.24 Other constraints - like obstacles to marriage or education, and career inflexibility that eats into reproductive years - are simply more binding than resource constraints. However, it is ultimately a fool's errand to study the constraints on fertility faced by young people today without letting them speak for themselves. That is why my strongest recommendation is to give parents the vote (Kleinfeld and Sachs 2024). If parents

<sup>24 &#</sup>x27;Pro-natal policies work, but they come with a hefty price tag', *The Institute for Family Studies*, 5 March 2020 (https://ifstudies.org/blog/pro-natal-policies-work-but-they-come-with-a-hefty-price-tag).

could cast votes on behalf of their minor children, government officials would learn exactly what parents need to help them in their work of rearing the next generation.

But what will happen if nothing is done? If birth rates do not rise soon (and there is no reason to think they might), countries like the UK will face two options in addition to trying to raise fertility: welcome more immigrants, and/or continually increase life expectancy. Many countries are struggling to do the first, although there is some evidence that increased immigration can even increase births by native women through the channel of more household help (Furtado 2016). The second option is increasingly difficult, although perhaps some miraculous technological breakthroughs will make it possible. The problem of the fertility gap, however, would remain. We should never forget that fertility desires still cling stubbornly to above-replacement levels, with most individuals hoping for two or more children. Governments must mind that gap.

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