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CHILDLESS OR CHILD-FEWER? CHILDLESSNESS AND PARITY PROGRESSION WHERE FERTILITY IS BELOW REPLACEMENT

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ABSTRACT

Birth rates are falling worldwide, in every region. Falling birth rates can be decomposed into two components: (1) an increase in childlessness (i.e., lifetime nulliparity), and (2) fewer children ever born to women who have at least one child (completed cohort fertility among the parous). This paper quantifies the contributions of these two components for women in advanced economies in Europe, North and South America, and southeast Asia, and for recent cohorts in Indian districts. In both samples, we find that the birth rate among parous women is an important component in explaining low overall birth rates. Childlessness explains only 38% of the decline in cohort fertility in the advanced economies in our analysis. In the Indian context, childlessness accounts for only 6% of the difference between high-fertility and below-replacement districts. Moreover, in many country-cohorts and Indian districts, average completed cohort fertility would be below the replacement threshold *even when considering only women who do have children*—that is, omitting the zeros from the average. This is in tension with widespread recent narratives that attribute falling birth rates to increasing childlessness: To the contrary, in many populations average birth rates even among parents would be low enough eventually to cause depopulation.

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1 Introduction

Birth rates are falling worldwide, in every region. In a majority of countries, average birth rates are now below the replacement level—about two children per two adults—that would stabilize the size of the population.[1] In light of this change—which we investigate and explain in our book *After the Spike* (Spears and Geruso, 2025)—recent attention has focused on the role of childlessness in accounting for low fertility. Related patterns, such as a decline in marriage or family formation of any type, have also attracted attention.[2]

Such commentary often neglects an important quantity: the average lifetime number of births among women who are *not* childless—i.e., parous women in the language of formal demography. In principle, an increase in childlessness or a decrease in fertility among the parous could be individually sufficient to explain a fertility rate that falls below replacement. For example, even in a scenario in which there were no childless adults, if the average lifetime birth rate were below two births per two adults, then depopulation would result.

In this paper we evaluate whether childlessness is sufficient to statistically account for below-replacement fertility. Our formal analyses are Kitagawa (1955)-style decompositions of changes in cohort fertility. The decomposition is into the part accounted for by childlessness and the part accounted for by average lifetime fertility among parous women.

We decompose the contributions of these forces, focusing on countries and cohorts for which high quality parity data is available. Our data includes cohorts of women

[1]The exact replacement rate is above 2.0 and varies across both time and place. See Section 3 for a more detailed discussion.

[2]Demographers have long studied the transition to low birth rates (Visaria and Visaria, 2003; Lutz et al., 2006; Lesthaeghe, 2010). Recent broader attention includes Kearney et al. (2022) and Bloom et al. (2024) in economics; Berg and Wiseman (2024) in philosophy; and journalistic accounts such as Wolfe (2024) and Lewis-Kraus (2025).

from 34 advanced economies in eastern and western Europe, North and South America, and southeast Asia. Data on these country-cohorts come from the Human Fertility Database, which is constructed from high quality vital records. Additionally, to examine this question in the developing world, we also draw on parity data in India's most recent Demographic and Health Survey, which is representative of the largest national population on Earth, about 1.4 billion people. Although India's emerging status as a below-replacement population has attracted recent notice,[3] it remains uncommon to include India in comparative studies of low fertility.

In both samples, we find that the birth rate among parous women is an important component in explaining low overall birth rates. Comparing the latest cohorts from countries in the Human Fertility Database to the cohorts born twenty years earlier in these countries, we find that less than two-fifths of the fertility decline over those two decades is attributable to an increase in childlessness. More than three-fifths of the fertility decline is due to lower fertility among parous women. Moreover, in many country-cohorts and in many Indian districts, average completed cohort fertility would be below the replacement threshold *even only considering women who do have children*. In these populations, average birth rates even among parents would be low enough eventually to cause depopulation.

This finding, that changes in childlessness is an important—but not the primary—driver of falling fertility in many country contexts, is in tension with recent U.S.-centered narratives that attribute below-replacement birth rates primarily to increasing childlessness.[4] We investigate the extent to which the U.S. is an outlier relative to other advanced economies.

Our paper is distinguished from the prior literature by our emphasis on the

[3]For example Gietel-Basten and Scherbov (2019); Gietel-Basten et al. (2022); Visaria (2022); Park et al. (2023) as well as discussion in Spears and Geruso (2025).

[4]See, e.g., Stone, 2020 which is concerned with U.S. fertility in particular: "the main cause of declining fertility in America is increasing childlessness at all ages."

average number of births among mothers (i.e., cohort fertility among parous women), which is a conceptually important indicator, but is not a standard, named measure in the existing population science literature. To our knowledge, no prior study has emphasized this conditional average and quantified it for our broad set of global populations.

We also expand the literature in our attention to India as an emerging low fertility population. More broadly, our global analysis includes a larger set of low fertility countries than in prior research, and so can uncover different patterns. For example, our findings on the smaller role of childlessness in accounting for fertility decline outside of the United States contrast somewhat with Kearney et al. (2022), who show that in the context of post-Great Recession United States, first births have been declining faster than higher-parity births. The prior literature closest to our paper is Beaujouan et al. (2023), which also includes a decomposition of changes in cohort fertility in Europe and the United States. Zeman et al. (2018) also decompose cohort fertility by parity, with a special focus on cohorts below 1.75 children per woman. Gietel-Basten (2019) includes a thorough discussion of changes in parity progression in Pacific Asia. We encourage readers to consult these complementary studies.[5]

[5]Other papers study childlessness or decompose fertility changes by parity with a smaller geographic focus on one or a few countries. These include Hellstrand et al. (2021) and Hellstrand et al. (2022), which study Nordic Europe; Hwang (2023), a study of South Korea; and Sobotka (2021) on East Asia; and Aaronson et al. (2014) on Black women in the U.S. South.

2 Data and Methods

2.1 The Human Fertility Database and India's Demographic and Health Survey

Our primary data source is The Human Fertility Database (HFD), which aggregates historical information on period and cohort fertility rates for a set of countries for which high quality vital statistics data have been collected (Human Fertility Database, 2023).[6] We focus in this study on country-cohort data—for example, lifetime births to the cohort of women born in France in 1935—rather than period total fertility rates. Period total fertility rates aren't useful for our purposes, as these combine age-specific fertility rates of many country-cohorts at a point in time. For example, the total fertility rate in France in 1970 would combine information on age-35 fertility among women born in 1935 with information on age-36 fertility among women born in 1934, and so on.

We include all available HFD country-cohorts in our sample.[7] Our sample consists of country-cohorts from 34 countries: Austria, Belarus, Belgium, Bulgaria, Canada, Chile, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Japan, Lithuania, Netherlands, Norway, Poland, Portugal, Republic of Korea, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Taiwan, United Kingdom, Ukraine, and the United States.

Cohorts in the HFD span the birth years 1935 to 1979. In some analyses we restrict to low fertility countries, or to cohorts with cohort fertility less than 2.0. In other analyses, we examine the lowest fertility cohort within each country.

[6]The Human Fertility Database (HFD, 2023) describes itself as "the leading scientific data resource on fertility in the developed countries." It explains: "The HFD is entirely based on official vital statistics and places a great emphasis on rigorous data checking and documentation."

[7]We drop subunits that are tallied separately within the database—East and West Germany, and England, Wales, Scotland and Northern Ireland—while keeping Germany and the United Kingdom.

The HFD tends to include only high-income countries, as these are more likely to have high-quality vital registration systems in operation for the longest period. To study fertility patterns in India, we rely on survey data from India's 2019-2021 Demographic and Health Survey (DHS), known as the NFHS-5 in India. The Indian DHS is a large, nationally representative survey that collects data from interviews of women aged 15 to 49. Data on children ever born are collected in a retrospective birth history. We compute cohort fertility among the parous as a simple sample mean, conditional on ever having given birth at time of survey.

For the Indian analysis, we restrict attention to women born from 1980 to 1984, who would have been observed at ages 35 to 41 in the DHS data. This restriction balances a desire to focus attention the most recent cohorts against the limitation that some survey respondents will not have completed their lifetime childbearing at the time of survey. That limitation is less quantitatively important in the modern Indian context than, for example, in the United States, because most marriages and births in India happen relatively young.

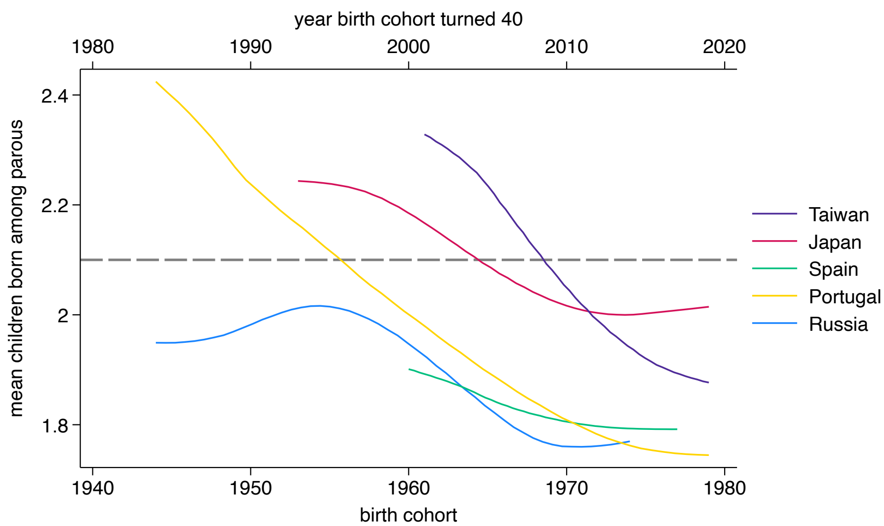
Most of our analysis of DHS data is at the district level. Districts are administrative subdivisions of states. The average Indian district population size in 2021 was about 2 million people, which would be comparable to the country population of Slovenia, or the size of a small US state, such as Idaho or Nebraska. In 2021, there were 736 Indian districts, with a population totaling 1.4 billion.

Figure 1 uses a selected set of countries (Japan, Portugal, Russia, Spain, and Taiwan) and four Indian states to illustrate our statistics of interest, explored in more systematic detail below. In the figure, we plot average lifetime fertility among the parous.[8]

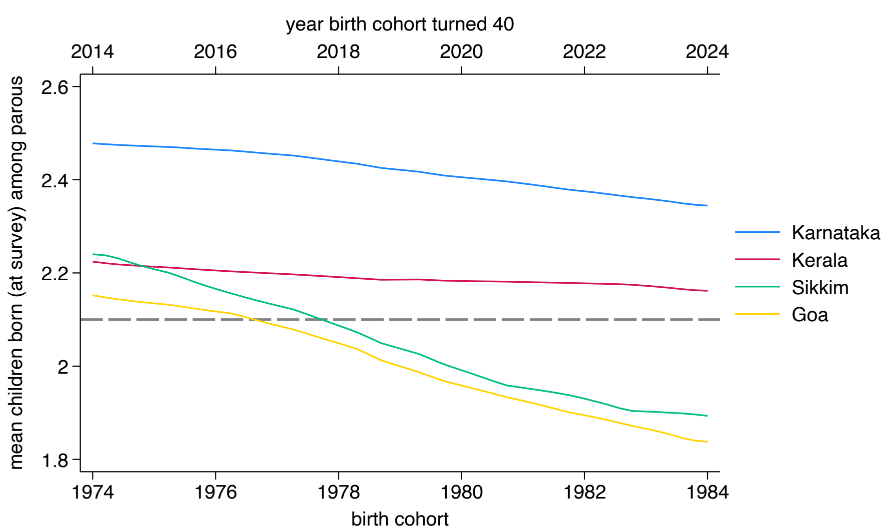
[8] Average lifetime fertility among the parous in the HFD country cohorts is calculated as $\frac{\text{completed cohort fertility}}{1-(\text{fraction childless})}$. In the Indian DHS microdata, it is calculated as the simple mean of children ever born, among women with one or more births.

Figure 1: Examples of fertility decline among women with any children (excluding childless cohort members)

Panel A: Selected low-fertility countries in the Human Fertility Database



Panel B: Selected low-fertility Indian states in the 2019-2021 DHS



Notes: Figure displays fertility among the parous—i.e., excluding childless cohort members from the calculations. Curves are local polynomial regressions with bandwidth wide enough to include two cohort years. Sample includes selected countries and Indian states.

Figure 1 shows that the average number of children among women who have any children has been falling in the sample cohorts. For many of the cohorts in the figure, fertility among the parous has itself fallen below the (approximate) replacement threshold of 2.1. Even excluding childless cohort members, all of the available birth cohorts in Russia and Spain, and many in Japan, Portugal, and Taiwan have below-replacement fertility. In panel B, fertility among the parous is declining in each of the four Indian states shown, and in Goa and Sikkim it has dropped below replacement. Motivated by these facts, we decompose declining cohort fertility into two components: an increase in childlessness (lifetime nulliparity) and fewer children being born among women who do have children (completed cohort fertility among the parous subcohort).

2.2 Kitagawa (1955)-style decomposition

Our analysis begins with two familiar cohort-level variables: average completed cohort fertility (which is a count of births) and the fraction of the cohort that is non-parous (i.e., childless). From this, we compute our measure of interest, average lifetime fertility among parous women. Where we use published aggregate statistics, we compute this as completed cohort fertility divided by the fraction of the cohort with any children. Where we use survey data on individual women, we compute this as a sample mean, restricting the sample to parous women.

To understand the role of lower fertility among the parous versus childlessness in accounting for below-replacement fertility, we conduct a decomposition in the spirit of Kitagawa's (1955) exact decomposition of a weighted average of subgroup means into the component due to weights and the component due to within-subgroup means. In our application the two subgroups are parous and nonparous. The within-subgroup means are average cohort fertility among the parous and average cohort fertility among the nonparous (which is zero by construction). The Kitagawa weights are the fraction of the cohort that are childless and that are not childless. So, letting p represent the fraction of a cohort that is parous, cohort fertility can be rewritten as a weighted mean:

$$\text{cohort fertility} = p \times (\text{average lifetime fertility among parous}) + (1 - p) \times 0.$$

The aim of the decomposition is to compare two cohorts, such as an earlier and later cohort of the same country, and evaluate the relative importance of increasing childlessness (a change in p) versus a change in the fertility rate among the parous in accounting for overall cohort fertility decline across the cohorts. Comparing cohorts A and B, with parous fractions p^A and p^B respectively, the share of the difference in cohort fertility due to the difference in childlessness would be:

$$(p^A - p^B) \times \left(\frac{(\text{average lifetime fertility among parous})^A + (\text{average lifetime fertility among parous})^B}{2} \right),$$

where the superscripts A and B indicate cohort quantities, and the $(1 - p)$ term is suppressed because it is multiplied by zero.

In our applications, the groups A and B differ for the HFD and Indian samples. In the HFD, we study change over time, comparing later and earlier cohorts. We compare the most recent cohort in the data for each country with the cohort born twenty years earlier. This approach excludes countries that do not have a twenty-year span of cohorts. In the Indian DHS, we study only one cohort (born 1980-84), and instead make cross-sectional comparisons: We compare low-fertility districts with high-fertility districts. There are 48 districts where cohort fertility was below 2 the 1980-84 cohort. We compare these against the 48 districts with the highest cohort fertility.

3 Results

3.1 Childlessness and Completed Cohort Fertility

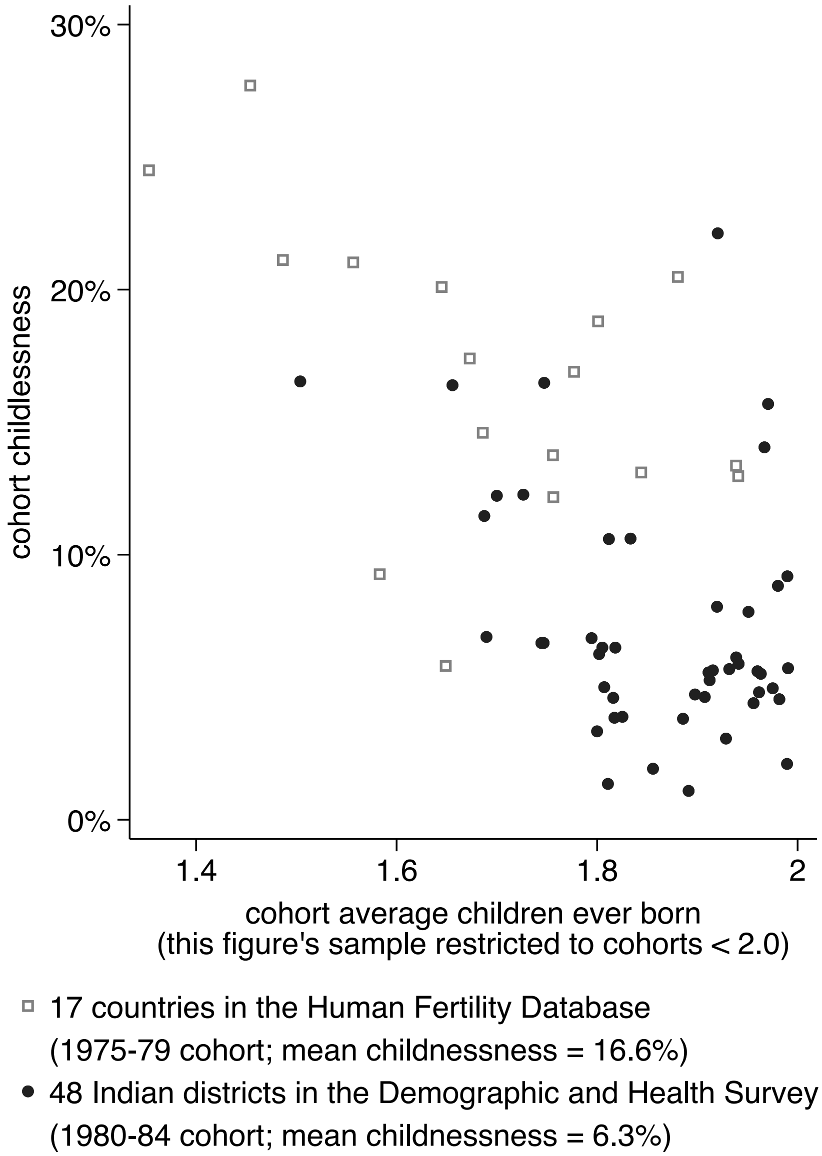
We begin by documenting wide variation in cohort childlessness among recent cohorts with low fertility. A "recent" cohort in this context implies a birth year in 1975 or later, just old enough for members to have completed, or nearly completed, childbearing years by 2025. Figure 2 plots cohort childlessness against cohort fertility among the most recent cohorts in our data for which cohort fertility is sub-replacement, implemented here as fertility below 2.0 for simplicity.[9] This includes 17 country-cohorts from 1975-1979 in the Human Fertility Database and 48 Indian districts for the 1980-1984 cohorts.

Figure 2 shows that lower cohort fertility is associated with a greater cohort share that is childless, as expected. It also shows that there is significant conditional variation in childlessness, for a given level of fertility. In some low-fertility cohorts, childlessness is common—in excess of 25 percent. In others, childlessness is below 5 percent.

There is a clear visible difference in the figure between low-fertility cohorts in India, where childlessness is less common than in HFD cohorts, conditional on the same cohort fertility rates, though in some Indian districts, cohort childlessness exceeds 15 percent. Formally, in a regression of childlessness on cohort fertility using the data points in the figure, we estimate a large and statistically significant effect on an indicator for being an Indian district cohort (rather than an HFD country cohort): At the same level of cohort fertility, Indian observations have 7 percentage points (s.e.

[9] The exact replacement rate is above 2.0 and varies across both time and place, as a function of female age-specific mortality rates from infancy through mid-life. For example, in Uttar Pradesh, India in the 2010 decade, the replacement rate was 2.39, while in the richer, lower-mortality state of Kerala, it was 2.09, according to estimates by Gietel-Basten and Scherbov (2019).

Figure 2: Cohort childlessness varies widely conditional on cohort average fertility



$$\widehat{\text{fraction childless}} = \underset{(0.07)}{0.42} - \underset{(0.04)}{0.15}\ \text{cohort fertility} - \underset{(0.01)}{0.07}\ \text{India.}$$

Notes: The sample includes Human Fertility Database countries and Indian districts, restricted to cohorts with completed cohort fertility below 2.0. The regression estimates are from an OLS regression of the fraction (0 to 1) childless (vertical axis) on cohort average fertility (horizontal axis) and on an indicator for the observation being an Indian district rather than an HFD country, with heteroskedasticity-robust standard errors in parentheses ($n = 65$, no weights).

1 pp) lower cohort childlessness.[10]

3.2 Would Cohort Fertility Be Below Replacement Even Dropping the Zeros?

Figure 2 investigated childlessness. The other component of cohort fertility, and the focus of Figure 3, is average lifetime fertility among parous women. Figure 3 compares this statistic (excluding nulliparous women) against simple cohort fertility (including nulliparous women) in HFD cohorts and Indian districts.

Average cohort fertility among parous is highly correlated with unrestricted completed cohort fertility. R^2 statistics are reported in each panel of the figure. The diagonal line in each panel is a $45°$-line, which would indicate no childlessness. All cohorts must be weakly above this line.

In Figure 3, solid, darker markers indicate cohort observations for which average lifetime cohort fertility among parous women is below 2.1 (panels A and B) or below 2.0 (panel C). The figure shows many such cohorts across the three panels: For 272 of 683 country-cohorts in panel A, the average number of children ever born among parous women was below 2.1. It was also below 2.1 for the most recent cohorts from 12 (of 31) countries in our data (panel B). It was below 2.0 in 23 Indian districts (panel C). In 41 Indian districts, the average number of children ever born among all women was below 2.0 and among parous women was below 2.1 (not shown). Indeed, about 120 million Indians live in one of the 41 districts where average cohort fertility is below 2.0 and the average cohort fertility among parous women is below 2.1.[11] If they were their own country, these 41 Indian districts would be the 12th most

[10]The estimating equation is fraction childless $= \beta$ cohort fertility$_i + \mathbf{1}[\text{India}_i] + \epsilon_i$, where cohorts are denoted by i and India$_i$ is an indicator for an Indian cohort.

[11]All Indian population sizes in this paper are approximate, because India has not conducted a census since 2011.

populous country, between Japan and the Philippines. So below-replacement average lifetime fertility among parous women is a quantitatively significant component of the worldwide pattern of birth demography.

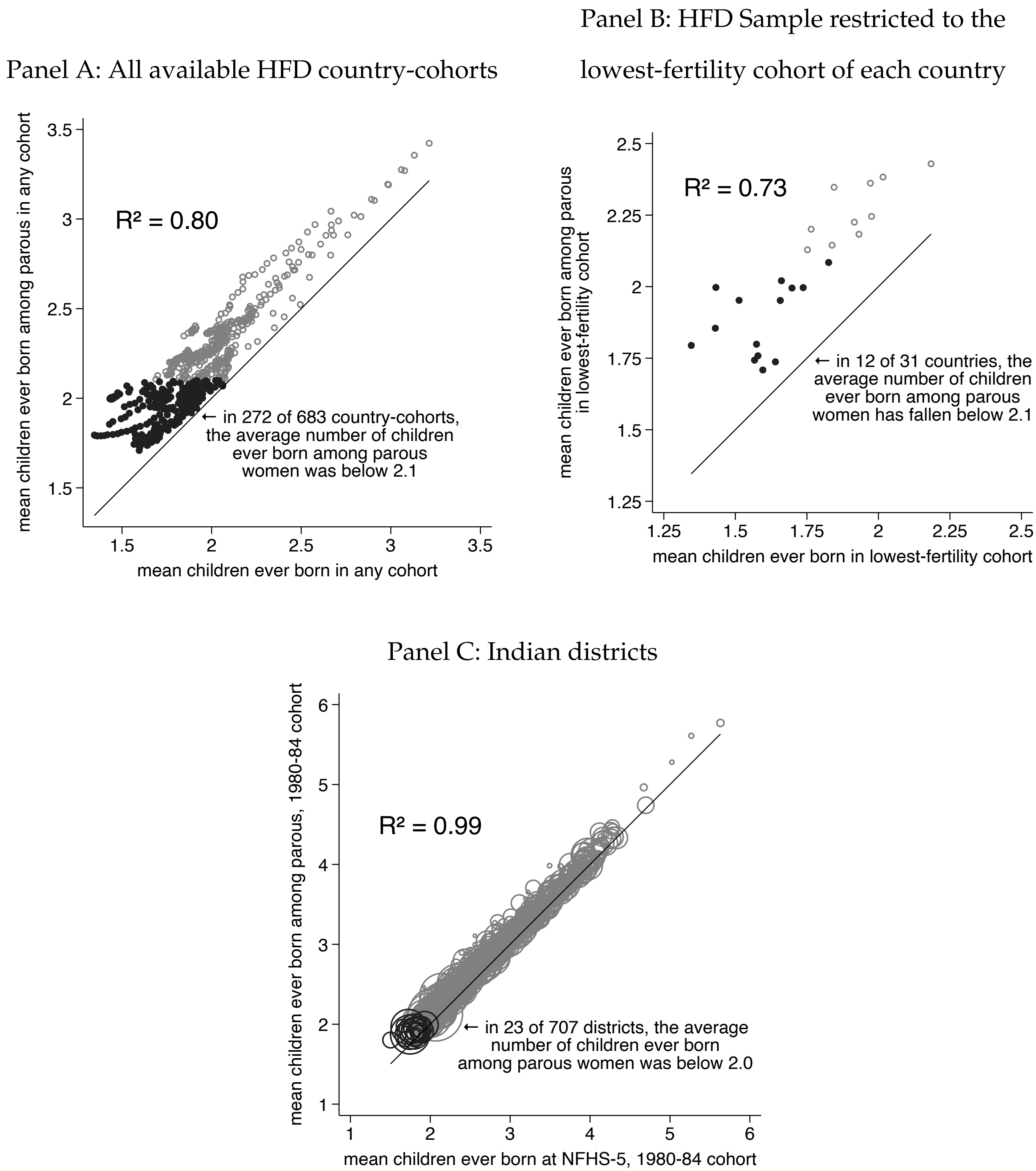
3.3 Decompositions

Tables 1 and 2 report the results of our Kitagawa decompositions of changes (or differences) in average cohort fertility. Table 1 compares the latest cohorts in the HFD with cohorts twenty years earlier from the same country. The average decline in fertility among these recent cohorts relative to the cohorts preceding these by 20 years was 0.25 births (panel B). Of this decline, 0.09 births, or 38% of gap, is statistically accounted for by increased childlessness in the later cohort. The remaining 0.16 births, or 62% of the gap, is accounted for by declines in fertility among the parous.

Table 2 reports on a similar exercise that compares Indian districts with the lowest and highest cohort fertility rates. Here, the difference to be decomposed is cross sectional, across districts for women born in the same set of years. In particular, the "low fertility" districts used in the table are the 48 Indian districts with cohort fertility below 2.0. These are compared with the 48 highest-fertility districts. The average difference between the high fertility and low fertility districts is large: 2.17 births. Almost all of this difference, 2.13 births (94%) is accounted for by the difference in fertility among the parous. Differing patterns of childlessness account for only 6% of the gap between high-fertility and low-fertility districts.

In both Table 1 and Table 2, average lifetime fertility among parous women is responsible for a majority of the difference to be explained. These results cohere with the evidence in Figure 3 that average lifetime fertility among parous women is an important part of understanding low-fertility populations. These findings and patterns contrast with recent accounts of childlessness playing a special, outsized

Figure 3: Below-replacement average cohort fertility is found even within parous sub-cohorts



Notes: Data in Panel A and B are from the Human Fertility Database (HFD); for a list of countries included, see section 2.1. Data in Panel C are from India's 2019-2021 Demographic and Health Survey; each observation is an Indian district, which is an administrative subdivision of a state. Data points exactly on the diagonal $45°$ lines would reflect zero childlessness.

Table 1: Decomposition of fertility decline: Childlessness versus fewer children among the parous in advanced economies

Panel A: Sample means	most recent cohort	cohort 20 years before
country-cohorts in sample	19	19
average cohort year	1976.1	1956.1
average completed fertility	1.77	2.01
average completed fertility among parous	2.06	2.23
average childlessness	0.14	0.10

Panel B: Kitagawa-like decomposition	
Total difference in completed cohort fertility:	0.25 births
Difference in fertility among parous:	0.18 births
Difference in childlessness:	4.4 percentage points
Difference due to childlessness:	0.09 births, or 38% of gap
Difference due to fertility among parous:	0.16 births, or 62% of gap

Notes: Decomposition compares cohorts separated by 20 years in 19 countries in the HFD. Each observation is a country-cohort in the Human Fertility Database, unweighted. The sample is smaller than in Figure 3 because a country must have two cohort-observations 20 years apart to be included. Some fractions may not add to one due to rounding.

Table 2: Decomposition of fertility decline: Childlessness versus fewer children among the parous in Indian districts

Panel A: Sample means	low-fertility districts	high-fertility districts
number of districts in sample	48	48
average completed fertility in 1980-84 cohort	1.87	4.04
average completed fertility among parous in 1980-84 cohort	2.00	4.13
average childlessness in 1980-84 cohort	0.06	0.02

Panel B: Kitagawa-style decomposition	
Total difference in completed cohort fertility:	2.17 births
Difference in fertility among parous:	2.13 births
Difference in childlessness:	4.4 percentage points
Difference due to childlessness:	0.13 births, or 6% of gap
Difference due to fertility among parous:	2.04 births, or 94% of gap

Notes: Decomposition compares 48 Indian districts with cohort fertility below 2.0 with the 48 highest-fertility districts. Each observation is an Indian district, which is an administrative subdivision of a state. In the data, there are 48 districts with a completed cohort fertility below 2.0; we call these the "low-fertility districts." To match this sample size, we choose the 48 highest-fertility districts and call these the "high-fertility districts." Data are from India's 2019-2021 Demographic and Health Survey. All analyses are weighted by district population, as reflected in the DHS sample weights. Some fractions may not add to one due to rounding.

role in accounting for falling fertility in the United States.

The United States is somewhat unusual in its patterns of fertility decline. Indeed, in recent decades, birth rates in the U.S. have been unlike birthrates in other low-fertility countries, as we describe in Spears and Geruso (2025). For example, the period total fertility rate was relatively flat in the U.S. over a 35-year span from about 1975 to about 2010, even as birth rates were falling elsewhere around the world. In addition, cohort average completed fertility substantially rose in the U.S. from the 1958 cohort (1.99) to the 1978 cohort (2.20, the latest in the HFD). This pattern is an outlier compared to most other countries in the HFD: Of 18 other countries with data, cohort fertility fell in 17 of them over this period; in the 18th, Denmark, the increase was a much smaller 0.04 births. See Appendix Table A1 for a complete listing.

These facts prompt a question: Is childlessness also different in the U.S.—for example, as the contrast between our findings and Kearney et al. (2022) might suggest? Childlessness in the United States does appear to be somewhat different.

One of us collaborated with Wolfe (2024) to decompose a recent change in U.S. birth rates into childlessness and average fertility among parous women, like in Tables 1 and 2. That analysis found a larger role for childlessness in the U.S. than the results in this paper for a broader set of countries. Appendix Figure A1 puts the U.S. statistics from Wolfe (2024) in a global context. They are not outside of the distribution of points. But a line that connects them would be flatter than the relationships observed in this paper's samples, consistent with a larger role for childlessness. In short, the conclusions in Wolfe (2024) are correct for the U.S., but the U.S. is moderately unusual in international comparison.

4 Conclusion

Understanding childlessness is important, but focusing on childlessness gives an incomplete accounting of global fertility decline. Low cohort birth rates cannot be understood and characterized without considering average fertility among parous cohorts. In many country-cohorts and in many Indian districts, average completed cohort fertility has been below two births per two adults, even omitting the nulliparous subcohort from the average. If this pattern becomes more common as birth rates continue to fall—and Figure 3 suggests that this pattern may well become more common—then global depopulation could result both because of increasing childlessness and because of smaller families among those with children.

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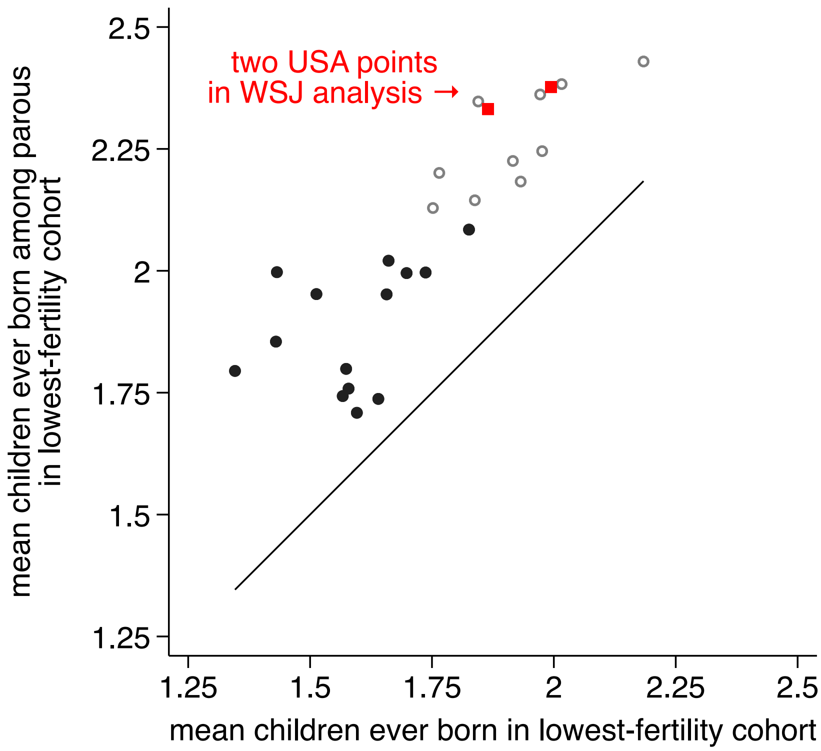
Figure A1: Comparing Human Fertility Database results with Wall Street Journal analysis of two recent U.S. cohorts



Note: See note for Figure 3, which this figures replicates for comparison except for the two added squares from Wolfe (2024). The two added squares are average births so far for 35-to-44-year-old women in the Census Bureau's Current Population Survey in 2012 and 2022. As the article notes, this is a wide age range; many women will give birth during this range, especially as society trends towards parenting at later ages. Dean Spears thanks Rachel Wolfe for this collaboration.

Table A1: Data for Human Fertility Database decomposition (in Table 1)

country	cohort	completed fertility	completed fertility among parous	% childless
Bulgaria	1957	2.04	2.08	2.0
Bulgaria	1977	1.66	1.76	6.0
Belarus	1954	1.92	2.03	5.7
Belarus	1974	1.57	1.80	12.5
Canada	1955	1.85	2.22	16.4
Canada	1975	1.80	2.22	18.8
Czech Republic	1957	2.07	2.20	5.9
Czech Republic	1977	1.74	2.00	13.0
Denmark	1959	1.88	2.20	14.7
Denmark	1979	1.91	2.21	13.3
Estonia	1955	1.97	2.10	6.1
Estonia	1975	1.84	2.12	13.1
Hungary	1956	1.97	2.14	7.8
Hungary	1976	1.66	2.02	17.8
Ireland	1958	2.49	2.87	13.4
Ireland	1978	2.02	2.38	15.4
Japan	1959	1.87	2.21	15.2
Japan	1979	1.48	2.03	27.3
Lithuania	1956	1.95	2.06	5.2
Lithuania	1976	1.77	2.05	13.5
Netherlands	1955	1.87	2.25	17.1
Netherlands	1975	1.78	2.14	16.9
Norway	1958	2.07	2.36	12.3
Norway	1978	1.98	2.25	12.0
Poland	1958	2.20	2.44	9.6
Poland	1978	1.51	1.95	22.5
Portugal	1959	1.95	2.02	3.8
Portugal	1979	1.57	1.74	10.1
Russia	1954	1.89	2.02	6.6
Russia	1974	1.61	1.80	10.4
Slovakia	1950	2.30	2.55	9.7
Slovakia	1970	1.93	2.18	11.5
Sweden	1959	2.05	2.36	13.4
Sweden	1979	1.92	2.23	13.9
Ukraine	1949	1.92	1.95	1.5
Ukraine	1969	1.60	1.71	6.6
United States	1958	1.99	2.38	16.2
United States	1978	2.20	2.49	11.5

Note: The United States is an outlier: In 17 of 19 countries, completed cohort fertility declined. It increased by a small 0.04-birth difference in Denmark, but increased by a 0.22-birth difference in the United States, which is about as large in absolute vale (but opposite in sign) as the average change in this sample. Childlessness also declined in the U.S. over this interval.