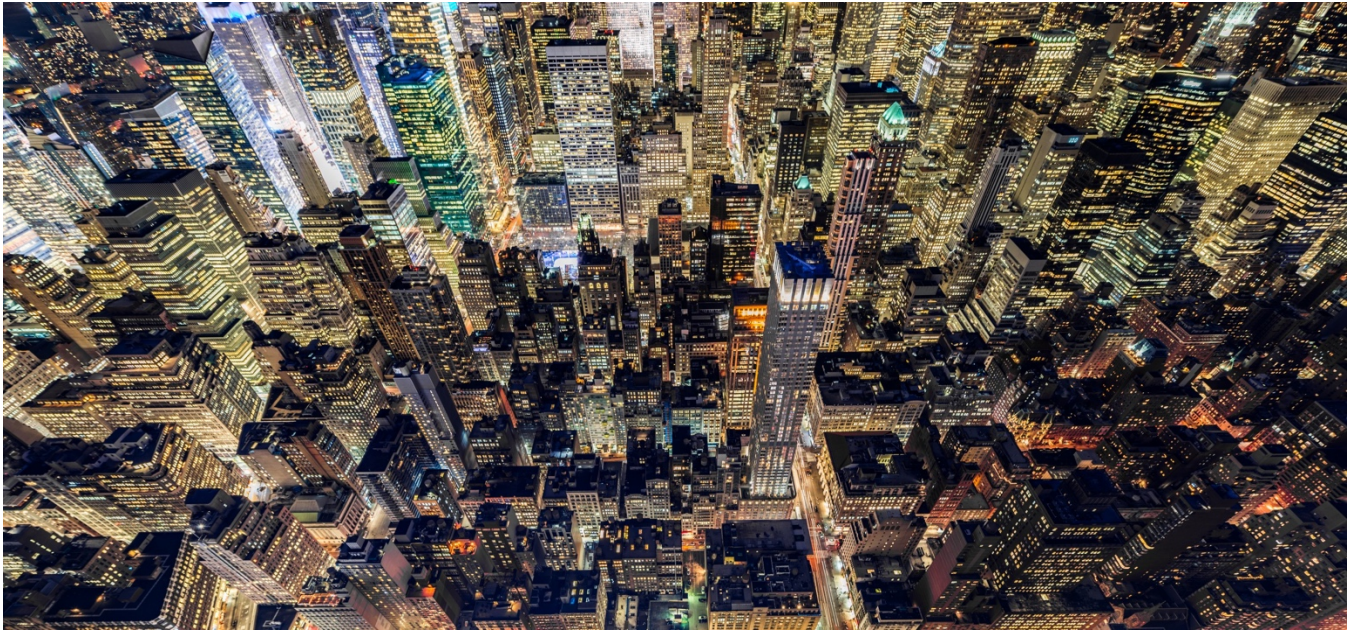




By the End of This Century, the Global Population Will Start to Shrink

The fertility rate is falling in every country on the planet



Credit: Dong Wenjie/Moment/Getty

[Darrell Bricker and John Ibbitson](#), Jan 29,

The great defining event of the 21st century—one of the great defining events in human history—will occur in three decades, give or take, when the global population starts to decline. Once that decline begins, it will never end. We do not face the challenge of a population bomb, so rampant in the popular imagination, but of a population bust—a relentless, generation-after-generation culling of the human herd. Nothing like this has ever happened before.

If you find this news shocking, that's not surprising. The United Nations forecasts that our population will grow from 7 billion to 11 billion in this century before leveling off after 2100. But an increasing number of demographers around the world believe the UN estimates are far too high.

More likely, they say, the planet's population will peak at around 9 billion sometime between 2040 and

2060 and then start to decline. By the end of this century, we could be back to where we are right now and steadily growing fewer.

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Populations are already declining in about two dozen states around the world; by 2050, that number will have climbed to three dozen. Some of the richest places on earth are shedding people every year: Japan, Korea, Spain, Italy, much of Eastern Europe. “We are a dying country,” lamented Beatrice Lorenzin, Italy's health minister, in 2015.

But this isn't the big news. The big news is that the largest developing nations are also about to grow smaller as their own fertility rates come down. China will begin losing people in a few years. By the middle



of this century, Brazil and Indonesia will follow suit. Even India, soon to become the most populous nation on earth, will see its numbers stabilize in about a generation and then start to decline. Fertility rates remain sky-high in sub-Saharan Africa and parts of the Middle East. Even here, though, things are changing as young women obtain access to education and birth control. Africa is likely to end its unchecked baby boom much sooner than the UN's demographers think.

Why is the UN's prediction wrong? According to Wolfgang Lutz, of the Vienna University of Economics and Business, the reason, in a word, is education. "The brain is the most important reproductive organ," he asserts. Once a woman receives enough information and autonomy to make an informed and self-directed choice about when to have children and how many to have, she immediately has fewer of them and has them later. "Once a woman is socialized to have an education and a career, she is socialized to have a smaller family," he explains. "There's no going back." Lutz and his fellow demographers at Vienna's International Institute for Applied Systems Analysis (IIASA) believe that advancing education in developing countries, brought about by increasing urbanization, should be factored into future population projections, which the UN doesn't do. Using those factors, the IIASA predicts a stabilizing population by midcentury, followed by a decline. Lutz believes the human population will be shrinking as early as 2060.

His is hardly a lone voice. Jørgen Randers is a Norwegian academic who co-authored *The Limits to Growth*, which predicted that global population would reach unsustainable levels by 2100. But since publishing the book, he has changed his mind. "The world population will never reach 9 billion people," he now believes. "It will peak at 8 billion in 2040 and then decline." He attributes the unexpected drop to women in developing countries moving into urban slums. "And in an urban slum, it does not make sense to have a large family."

The *Economist* is also skeptical of the UN estimates: Previous projections, it observed in a 2014 analysis, failed to forecast "the spectacular declines in fertility in Bangladesh or Iran since 1980 (in both countries, from roughly six children per woman to about two now). At the moment, Africa is the source of much

new population growth and the authors assume that fertility rates will continue to fall more slowly there than they did in Asia and Latin America. But no one can be sure."

One way to begin to understand the problem is to look at what has changed about the way we measure population trends.

The demographic transition model, which was first developed in 1929, used to contain only four stages. Stage four, the final stage, envisioned a world in which life expectancy was high and the fertility rate was low, around the level needed to sustain the population: 2.1 babies per mother (one per mother, one per father, and an extra 0.1 to account for children who die in infancy and women who die before childbearing age). But as it turned out, there is a fifth stage: one in which life expectancy continues to slowly increase, even as fertility rates continue to decline *below* the replacement rate, eventually leading to a declining population. Just about the entire developed world is in stage five.

In the 1970s, the fertility rate began to drop below 2.1 in the most advanced economies and began dropping in developing countries as well, a phenomenon that has been described as "one of history's most astounding global shifts." In hindsight, it shouldn't have been a surprise at all. The more a society urbanizes and the more control women exert over their bodies, the fewer babies they choose to have. Today, in most Western nations, such as the United States (fertility rate: 1.9) and Canada (fertility rate: 1.6), 80 percent of the population live in cities, and women have something close to total control over their reproductive choices.

Let's take Spain as an example. The former imperial giant is firmly in stage five of population growth. It has a very low fertility rate—1.3 births per woman, far below the rate of replacement. It also has a very high life expectancy: 82.5 years, the fourth highest in the world (behind Japan, Iceland, and Switzerland). But even with all those old people, Spain's population started to decline in 2012, because in some regions, two people die for every baby that is born. Thus far, the drop has been gradual, shaving 400,000 souls from the 2011 population of 46.8 million. But the trend is about to accelerate. Madrid estimates that a



million people will disappear from the country within a decade and 5.6 million by 2080. The government is so eager to reverse or at least slow this trend that it appointed a “sex czar,” charged with developing a national strategy to address Spain’s demographic imbalances.

Most European countries, especially those that limit immigration, are like Spain. But Europe is not alone. Japan’s population is expected to decline by 25 percent over the next 35 years, taking it from 127 million to 95 million. The numbers are similar for South Korea and Singapore, two other fully developed Asian societies.

But fertility declines aren’t unique to the developed world. Urbanization and the empowerment of women are global phenomena. We know that China and India are at or below the 2.1 replacement rate. But so are other developing countries: Brazil (1.8), Mexico (2.3), Malaysia (2.1), Thailand (1.5). Birth rates are still very high in Africa (Niger: 7.4; Malawi: 4.9; Ghana: 4.2) and parts of the Middle East (Afghanistan: 5.3; Iraq 4.6; Egypt: 3.4). But these high-fertility countries share one thing in common with their low-fertility counterparts: Everywhere, virtually without exception, birth rates are coming down. Nowhere are they going up.

We know that urbanization changes the economic calculus of having children and leads to the empowerment of women through education. Recent research has shown that other factors are in play as well. One of them is the decline in the ability of kin to influence kin. If you live in a more rural, less developed society, your social environment most likely revolves around the family, in which the elders endlessly nag the young to get married and have kids. But as societies become more modern and urban, friends and co-workers replace siblings, parents, uncles, and aunts. “This change is the critical factor in decreasing birth rates,” writes psychologist Ilan Shrira, of Chicago’s Loyola University, “because family members encourage each other to have children, whereas non-kin don’t.”

Another factor is the declining power of religion in most parts of the world. There is no question that societies in which religion wields considerable influence over individual decisions have higher fertility rates than societies in which religious influence is minimal. Three WIN/Gallup polls, taken

in 2008, 2009, and 2015, asked respondents whether they felt religious. In Malawi and Niger—which, as we’ve seen, have among the highest fertility rates in the world—99 percent of those polled answered yes. Only 39 percent said yes in Spain, which is now considered one of the least religious countries in the world. (Interesting correlation: Societies where the power of the Catholic Church rapidly collapsed, such as Spain, Quebec, and Ireland, tend to go from having relatively high to relatively low fertility rates especially quickly.)

Another example that wraps all these forces together is found in the Philippines. As the Philippines urbanizes, the rights of women in Filipino society grow stronger. In 1965, the Filipino fertility rate was seven. Today, it’s three and falling at a rate of about half a baby every five years. Half a baby every five years! The Philippines population is expected to increase from its current level of 101 million to 142 million by 2045 and will then probably start to decline. This story is repeated throughout the world.

You might think this would be cause for celebration. The planet’s lungs would surely breathe easier without the press of so many billions of humans; famine and poverty would surely wane with fewer mouths to feed and families to house. And you would be right—partly. The economic and geopolitical impact, however, would be more mixed.

Population decline isn’t a good thing or a bad thing. But it is a big thing. A child born today will reach middle age in a world in which conditions and expectations are very different from our own. She will find the planet more urban, with less crime, environmentally healthier but with many more old people. She won’t have trouble finding a job, but she may struggle to make ends meet as taxes to pay for health care and pensions for all those seniors eat into her salary. There won’t be as many schools, because there won’t be as many children.

Once having one or two children becomes the norm, it stays the norm.

Population decline will shape the nature of war and peace in the decades ahead as some nations grapple with the fallout of their shrinking, aging societies while others remain able to sustain themselves. The defining geopolitical challenge in the coming decades



could involve accommodating and containing an angry, frightened China as it confronts the consequences of its disastrous one-child policy.

Some of those who fear the fallout of a diminishing population advocate government policies to increase the number of children couples have. But the evidence suggests this is futile. The “low-fertility trap” ensures that once having one or two children becomes the norm, it stays the norm. Couples no longer see having children as a duty they must perform to satisfy their obligation to their families or their god. Rather, they choose to raise a child as an act of personal fulfillment. And they are quickly fulfilled.

The human herd has been culled in the past by famine or plague. This time, we are culling ourselves; we are choosing to become fewer. Will our choice be permanent? The answer is: probably yes. Though

governments have sometimes been able to increase the number of children couples are willing to have through generous child care payments and other supports, they have never managed to bring fertility back up to the replacement level of, on average, 2.1 children per woman needed to sustain a population. Besides, such programs are extremely expensive and tend to be cut back during economic downturns. And it is arguably unethical for a government to try to convince a couple to have a child that they would otherwise not have had.

As we settle into a world growing smaller, will we celebrate or mourn our diminishing numbers? Will we struggle to preserve growth or accept with grace a world in which people both thrive and strive less? We don't know. But it may be a poet who observes that, for the first time in the history of our race, humanity feels old.



Adapted from [Empty Planet: The Shock of Global Population Decline](https://medium.com/s/story/by-the-end-of-this-century-the-global-population-will-start-to-shrink-2f606c1ef088). Copyright © 2019 by John Ibbitson and Darrell Bricker. Published by Crown, an imprint of Penguin Random House LLC.