

JAPAN'S RIDE INTO THE DEMOGRAPHIC DANGER ZONE - AND WHY IT'S NOTHING TO FEAR

An NPG Forum Paper
by Nathaniel Gronewold

Abstract: Major media outlets are still sounding false alarms over the precipitous slowdown in America's population growth. *Bloomberg* and *The Atlantic* are the latest to join the fray, warning of only dire consequences to come should the nation's leaders fail to encourage more births and ever-higher levels of immigration. But Japan's experience paints a different picture: the positives of population decline often outweigh the negatives. This reality and new research are inspiring a few brave voices to push back, lending credence to the majority opinion that America is already too crowded and could use some relief. The evidence is mounting: a declining population need not spell economic doom and could even usher in something of a renaissance.

Japan's population is falling. This isn't news to you – almost everyone already knows this. And it isn't all that unusual – lots of countries are losing population, but the rate at which Japan's population is contracting is worth noticing.

China will soon surpass Japan's population decline in terms of gross numbers, but for now, all eyes are on the Land of the Rising Sun. According to the Statistics Bureau of Japan, this nation's total population declined by 949,000 from 2015 to 2020. As of October 1, 2020, the government counted 126.15 million people living in Japan.¹ The loss of over 1 million native-born residents was slightly offset by a gain in foreign-born residents. Factoring in an ongoing trend of population decline, the government's COVID-19 ban on new foreign entries, and pandemic-related mortality, and it's safe to say that figure is likely lower now, probably just north of 125 million.

Most pundits have declared this trend to be an unmitigated disaster for Japan. Doom and gloom will surely follow the nation as its population numbers dwindle over time, they say; or at a minimum, the economy will stagnate and then contract at an alarming rate. It's certainly reasonable to anticipate an economic contraction, but thus far the data doesn't show one. When Japan shed nearly 1 million people from 2015 to 2020 the nation's gross domestic product (GDP) expanded somewhat – the World Bank's data shows GDP rose from \$4.4 trillion in 2015 to around \$5.14 trillion in 2019. Sharp annual declines in Japanese GDP have occurred in the past but these episodes are attributed to the devastating March 2011 earthquake and tsunami that hit the Tohoku region, as well as the ongoing pandemic. Subsequent GDP expansions likely represent economic rebounds from past catastrophes. Thus far, these earlier negative swings in GDP can't be attributed to

population decline – the statistics don't show it, and the academic literature hasn't found it, either.

Here's the real mystery – as Japan's population is falling, its domestic electricity consumption has actually been increasing.

Japan started losing population back in 2009 or 2010 nationwide. In several regions of Japan, particularly on the islands of Hokkaido, Shikoku, and Kyushu, populations have been falling since the late 1990s. Meanwhile, electricity consumption in these same regions expanded even as the number of individual electricity consumers fell, according to the Institute of Energy Economics, Japan. IEEJ reports that regions experiencing population declines of 3% or greater since 1997 had collectively experienced a 22% increase in electricity demand up until the devastating 2011 tsunami. Post-tsunami, those regions lost an additional 4% of their populations but boosted their electricity consumption by another 16%, even as the government begged citizens to conserve electricity.² “Populations in the areas of seven general electric utilities other than Tokyo, Chubu, and Kansai Electric Power Companies – namely Hokkaido, Tohoku, Hokuriku, Chugoku, Shikoku, Kyushu, and Okinawa Electric Power companies – have already declined over more than 15 years since 1998,” IEEJ economist Akira Yanagisawa noted in a report. “Electricity consumption, however, had increased almost consistently before the global financial crisis.”³ IEEJ now thinks Japan's total electricity consumption rose by another 1.1% last year but attributes this to recovery from the COVID-19 pandemic.⁴

How is this possible? How could fewer total residents result in higher electricity consumption?

It's counterintuitive but true – as Japan's population fell its power demand conversely went up. This is possible because Japan is showing the world that demographics need not be destiny and that a nation can experience rising human welfare and a better life for its citizens and permanent residents even amid a shrinking total population.

Yanagisawa says Japan is boosting its power consumption even as the number of Japanese falls because the nation's economy is becoming more efficient and technologically advanced, especially in its manufacturing sectors. Humans certainly consume lots of electricity, but not as much as robots do – that's where the extra power demand is coming from. “Decreases in the labor force must be compensated by other factors,” Yanagisawa wrote. “Such factors are greater technological advances, more capital, and more energy. In the future, population decline may induce increases in electricity demand, not decreases.”⁵

Forget the popular press stories – Japan's economy isn't what you think it is. Stagnant? Sure, in terms of annual GDP growth rates. But Japan is increasingly sophisticated and has largely cornered the global market on a host of advanced materials and components critical to modern manufacturing. It's for this reason that Japan is the only advanced nation on Earth that enjoys balanced trade relations and even occasional trade surpluses with China. Japan is the world's leading manufacturer and exporter of industrial robotics, and much of the internet runs on Japanese technology. America's business reporters are fond of pointing out how no Japanese company has a product success story equivalent to the Apple iPhone or Samsung Galaxy smartphone. They're entirely ignorant of the fact that iPhones and Android smartphones couldn't exist without Japanese hardware. South Korea's politicians frequently fret about their nation's dependence on Japanese technology. Apple is quieter about it.

IEEJ's electricity data shows the Japanese economy is becoming more productive. In other words, Japan is generating more output with fewer workers. This was starting to result in improving per-capita welfare before the pandemic struck. I've seen this with my own eyes. Japan's notoriously low wages were finally on the uptick after decades of stagnation as workers' bargaining power increased. Meanwhile, the cost of living can be surprisingly reasonable. In northern Japan, my wife

and I purchased a three-bedroom, two-bathroom house on an unusually large lot by Japanese standards. The house backs into a beautiful verdant park featuring thousands of tall trees, pleasant walking trails, tennis courts, deer, and occasionally foxes. Our place is a 15-minute walk to a college campus, two grocery stores, numerous restaurants, bars, and other amenities. We bought it for less than half the median price of a home in the United States, in a coastal city of about 200,000 people surrounded by nature and an easy drive to three of the nation's most famous national parks. My work now has us renting a three-bedroom, two-bathroom townhouse in an outer suburb of Tokyo near a train station putting me in central Tokyo in 45 minutes. We pay about \$800 per month in rent, free high-speed internet included.

You may be thinking this makes no sense – after all, Japan is notoriously expensive, right? Actually, Tokyo is notoriously expensive – even a bad house can easily cost more than half a million U.S. dollars in any of the city's 23 wards. Nationwide, America is fast catching up. In January, the Federal Reserve Bank of St. Louis reported the median U.S. home sales price hit \$408,000. That's for the U.S. as a whole. How about for the rest of Japan? CEIC Data, an economic research firm, said the median home sales price in Japan in 2021 was about \$265,000 (at current exchange rates). And mortgage rates are a fraction of what you're forced to pay in the states.

That's right, reader: America is more expensive than Japan, and it's been that way for a while now. As America's population has swelled and swelled life there has been getting noticeably more expensive, more difficult, and less pleasant. Pre-pandemic, the reverse was starting to occur in shrinking Japan – life was starting to become a little bit easier.

But try convincing the mainstream media in America of this.

THE HAND WRINGING CONTINUES

There's compelling evidence that the majority of the American public believes America's population should stop growing and even fall a bit. In an earlier *NPG Forum* paper, Alan Saly does an excellent job of documenting how *New York Times* readers objected to the paper's negative spin on the trend of declining birth rates – the readers overwhelmingly think a lower population would be a good thing.⁶

But they're wrong, or so declares Derek Thompson of *The Atlantic*, in his March 28, 2022 opinion piece. In the article, Thompson outright dismisses this view as nonsense. "Even if you're of the dubious opinion that the U.S. would be better off with a smaller population, American demographic policy is bad for Americans who are alive right now," he wrote. "Simply put, the U.S. has too few births, too many deaths, and not enough immigrants. Whether by accident, design, or a total misunderstanding of basic economics, America has steered itself into the demographic danger zone."⁷

The "demographic danger zone" – sounds horrifying, right?

Bloomberg opinion columnist and George Mason University economics professor Tyler Cowen entirely concurs. "It costs relatively little to allow more people to enjoy and benefit from America's Constitution, its favorable business environment, and its nuclear umbrella," Cowen argues. Ignore decades of stagnant wages, a skyrocketing cost of living, terrible job security, and a rising tax burden in most U.S. jurisdictions, and Cowen's assertion might barely be true. He even asserts that you're not a real American unless you support population growth. "The more patriotic you are, the more you ought to believe in a large and growing population," Cowen adds.⁸ In a wonderful bit of trolling, the photo editor illustrated Cowen's piece with an image of a pile of humanity jostling cheek-to-jowl as they struggle to exit a New York City subway station. "Who

wouldn't want to be part of this?" the caption asks. To be fair, many New Yorkers thrive on the congestion and organized chaos that gives the city its character. But considering how New York has lost population, especially during the pandemic, it's clear that there's a limit to how many are willing to tolerate endless gridlock and sky-high rents. But don't tell Cowen this. The gist of his argument is that more people mean more output, and thus more growth, which is de-facto better no matter what. The Japanese are already proving you can increase output with fewer people, but this U.S.-based economist remains unconvinced. "Allowing more people in the country is like allowing more people to fill the empty seats in a theater," Cowen says.⁹ That subway station doesn't look so empty to me, but I digress.

Those "dubious" opinion holders Thompson refers to include me, most Americans, and NPG, among others. Other detractors include a handful of contrarian economists and intellectuals, like Yanagisawa, who are demonstrating why a falling population doesn't necessarily mean economic disaster. In fact, there's emerging evidence that population decline can lead to better public welfare and a happier society over time. This is the conversation America's punditry should be having because population stagnation and decline are inevitable. I'll repeat this point for emphasis – no matter the objections of American economists and journalists, *America's population will begin declining at some point in the future*. It's a physical, statistical, and mathematical certainty, so we might as well learn to enjoy the ride.

THE CONTRARIAN ECONOMISTS GIVE THEIR TWO CENTS

A few years back, a team of economists from Portugal undertook a comprehensive review of the academic literature on the impact of aging and population decline on national economies. This is a matter of great interest in Europe – Italy, Spain, Portugal, and several Eastern European nations are already seeing population declines, just as Japan

and South Korea are. The review's focus was mainly on population aging but noted how this phenomenon is running in tandem with population declines in several E.U. states. E.U. policymakers want to know what to expect: will population aging and population decline be negative, neutral, or positive for the economic bloc? The answer is yes – some outcomes can be interpreted as negative, some neutral, and others as very positive, according to these researchers. They zeroed in on three factors: public expenditures, human capital, and rates of savings and consumption. Public spending likely falls, the literature shows, so bad from this point-of-view and hardly surprising given that governments will see smaller tax bases. However, any impact on human capital – the degree to which people can individually contribute to the economy – appears to be non-existent. "Almost all the empirical studies that have focused on public social expenditure convey a negative impact," they found, "whereas the majority...of empirical studies that focus on human capital do not find any statistically significant relationship." In other words, older people are more productive than economists give them credit for, and a declining population doesn't seem to harm workers. Savings and consumption actually increase, so a positive development emerges.¹⁰

Yanagisawa and IEEJ present evidence that a declining population in Japan is spurring more innovation and process automation. These trends could eventually lead to greater per-capita welfare and higher wages. And in the case of Japan, these positive outcomes would materialize in an environment where the cost of living isn't increasing and in fact may be decreasing in much of the country. Consumption and savings could obviously expand in these circumstances. Two other Japanese economists offer up further evidence to support this view.

Economist Atsumasa Kondo shows in his research that population decline does not necessarily result in price declines economy-wide.

This is the dreaded deflation scenario feared by so many economists worldwide (though America's current headache is soaring inflation). In his research paper, Kondo shows how an economy's response to a declining population depends greatly on the policy implementations and amendments by the government. A declining population and tax base can exacerbate public debts, but a model run by Kondo predicts governments will react to this by printing more money and adopting a more expansionary monetary policy – basically, his model predicts bank lending becomes less restrictive. This either halts deflation in an economy or spurs price increases. “A declining population places downwards pressure on the upper bound for public debt,” Kondo wrote. “This then motivates a government to print more money to maintain the upper bound. Consequently, inflation accelerates, or deflation slows.”¹¹ The effect depends greatly on the existing size of the public debt. Japan's debt as a percentage of its GDP is quite large. So is America's. Kondo's take seems to suggest that as long as America can get a handle on its ballooning deficits (ballooning in tandem with the population size, I might point out) then a population fall need not result in a perpetual economic funk. “If the primary deficit is not high and monetary policy is expanding, a slight decrease in the population growth rate increases inflation,” Kondo concludes.¹² Thus, a country's economy can expand even in the face of a declining and aging demographic profile.

In a more recent study, Economist Hiroaki Sasaki reaches the same conclusion, finding “positive per-capita output growth is possible” as a country's population shrinks. “Even an economy with non-renewable resources and declining population can obtain sustainable economic growth,” Sasaki finds.¹³

There are even more tantalizing signs emerging from China.

China's massive population is almost certainly already in decline, according to a scientist living in

Wisconsin. Fuxian Yi recently made a compelling case for why China's leaders are lying to the world, insisting that the country's total population size has been trending lower since at least 2018. Yi told *Reuters* he's convinced China's total population stood at around 1.28 billion in 2020, far below the official 1.41 billion figure, and that it's now declining further.¹⁴ Whatever the total population figure for China is today, even the government acknowledges several provinces are already seeing their populations falling. Three scientists in China set out to determine whether population declines were having any noticeable or measurable impact on the economic performances of those provinces.

This particular research team says they actually agree with the pundits: they think a declining population must inevitably lead to negative economic outcomes at some point in the future. But they also acknowledge that the actual data they unearthed didn't turn up any compelling evidence that this was already happening in shrinking Chinese provinces. So they now allow for a caveat – ultimately, they find that whether the negative effects of population decline outweigh any benefits depends entirely on the policy responses by governments. “From 2009 to 2019, the overall trend of the economic resilience of resource-based cities in northeast China was first upward, then downward, and finally stable,” they wrote. “The national support policies implemented after the economic crisis, the changes in external market demand, and the momentum of economic growth, as well as attempts at transformation, are all important factors.”¹⁵

ARE EXPERTS' ATTITUDES STARTING TO CHANGE?

Most demographers are in-step with the economists: they fear the negatives of population decline. But a few of them acknowledge that the idea is rather popular with the public, especially given the massive environmental challenges humanity faces, in particular global warming.

When one set of researchers asked members of the general public their preferences for global population sizes, a majority of respondents said they would like to see the world's population fall, or at a minimum, they'd prefer to see an end to population growth. This is the reality Saly discussed in that earlier *NPG Forum* paper – most people want population stagnation and/or decline. “Population size preferences differ by geographic proximity, as the majority of respondents favor a decline in the global population but support a stationary population closer to home,” demographers Hendrik van Dalen and Kene Henkens reported in the journal *Demographic Research*. The people surveyed said they expect mainly benefits to be had from a declining population, especially of the environmental kind. “Population decline is clearly not always met with fear,” the researchers said.¹⁶

It's not always feared because the public understands better than op-ed authors that population stabilization and decline need not always be bad things. The research cited above demonstrates this. And before the pandemic struck, there were emerging signs in Japan that the Japanese public stood to benefit greatly from having fewer neighbors.

Are there negative outcomes? Of course. Those famous news reports aren't lying – schools really are closing in parts of rural Japan, nearby houses are sitting empty, and entire neighborhoods in declining smaller cities and towns are becoming something of eyesores. Sales taxes are going up, and public expenditures are trending down. The nation's healthcare and retirement systems are feeling the stress. All true. But these bad things happen amidst population booms, as well. Detroit declined as America grew. The city of Niagara Falls, New York lost almost half its population over the course of a few decades. Localized population declines and their aftermaths aren't necessarily representative of a national situation – think about this the next time you see another exposé about a “dying” Japanese, South Korea, or Italian town.

The doomsayers have been ignoring the positive indicators entirely. News reports indicated that Japan's youth were having a far easier time finding their first post-graduation jobs compared to years prior, at least before COVID-19 hit – and indeed, Ministry of Education, Japan data shows new university graduate employment rates were steadily rising since at least 2015. The Japanese economy's permanent “freeter” phenomenon – a portmanteau of the English words for “freelancer” and “part-timer” (Americans call it the “gig economy” and pretend it's a good thing) – was well on its way to becoming a thing of the past. Wages were on the uptick. The country was becoming more open to immigration (at far lower and more sustainable levels than in North America) and more accepting of greater diversity, while still enjoying more space, less economic pressure, and an overall higher standard of living. These forces for greater public welfare should all reassert themselves in Japan once the pandemic is over. Meanwhile, nature is rebounding as abandoned farms give way to wetlands and forests. Biodiversity is recovering. Tourists may eventually return, helping to fill the gap left by the nearly 1 million fewer people no longer permanently residing or shopping in this archipelago.

Perhaps public opinion is finally starting to sway the punditry on this topic? I say this because it appears the media – ever in lock-step with the doom-and-gloom prognosticators as it is – is beginning to show some willingness to allow the pro-population decline crowd a little say on the matter.

On March 7, 2022, *The Hill* published a rare op-ed in support of slower and even slightly negative U.S. population growth. The piece calls for the President, Congress, and the public to aim for U.S. population stabilization. “After years of U.S. population growth, it's time for a pause,” declared contributor Joseph Chamie. His argument is mainly grounded in environmental concerns, especially worries over climate change. Here, he echoes the recent call by thousands of scientists for

policymakers to finally include population size in their discussions on how to tackle global environmental challenges.¹⁷ Chamie says mainstream economists have yet to make a convincing case that eternal growth is always a good thing. “There is hardly any major problem facing America with a solution that would be easier if the nation’s population were larger,” he wrote. “On the contrary, population stabilization would help resolve several.” It’s worth noting here that while Cowen is an accomplished economist, and Thompson a talented journalist, Chamie is a professional demographer and former director of the United Nations Population Division.

Chamie notes that opinion writers insisting America is far from being full never bother to clarify at what population size they might finally declare America sufficiently peopled.¹⁸ I make this same point in my book *Anthill Economics: Animal Ecosystems and the Human Economy*. I’ll repeat a line from my book here:

Perpetual growth and expansion in any system is an impossibility, especially in finite systems like the one we call Earth. It defies the laws of physics and nature and is thus an illusion. When economists insist that America’s population must continue to rise and rise out to infinity, one must wonder at what U.S. population size their thirst for endless growth will finally be slaked: at four hundred million, five hundred million, two billion, perhaps five billion Americans?

When I first wrote those lines, I was unaware that the journalist Matthew Yglesias published a book arguing for the U.S. to aspire to a population size of one billion.¹⁹ Imagine what that might look like. Picture a world where you must make a reservation five years in advance to visit Yellowstone or Glacier National Parks (the National Park Service was seriously considering introducing a reservation system for the nation’s most crowded natural attractions not all that long ago). Imagine paying sky-high prices for the privilege to live in one small corner of a massive,

cold, ugly apartment complex, as many residents of Seoul do. Renters throughout Japan were once forced to shell out thousands of dollars in non-refundable “honorarium” or “key money” to landlords just for the privilege of renting units. Those days are now largely gone thanks to population decline.

Perhaps there are those out there who wish America would expand to 5 billion or more people. That’s not any world I would want to live in. Luckily, I won’t have to, because Yglesias and other pro-growth pundits have yet to find a clever rhetorical argument around this central fact: nothing grows forever, not even populations. Population decline is an inevitability faced by every nation on Earth, including ours. If America’s population must eventually peak, and then decline (and it will do both, I guarantee it) then perhaps there’s no better time to start this transition than the present given the immense pressures humanity is placing on the environment, the planet’s resources, its oceans, atmosphere, and society.

Is population stagnation the “danger zone” Thompson warns us about? Hardly. It’s more like the inevitable zone – how it impacts us entirely depends on policy.

Yglesias and like-minded thinkers believe America’s population should be in the ballpark of one billion or more. I know of at least two places where this has already been achieved. China holds 1.2 billion to 1.4 billion people today, but China’s population is declining. India is over 1.3 billion strong and growing. So, population growth proponents need not wait for America to almost triple in size—I invite them to move to India today and happily live out their dreams.

As for myself, I’ll gladly take that ride into the danger zone – I’m looking forward to returning to my home in northern Japan to enjoy a little glass of Suntory whiskey as I watch foxes and deer frolic in the park below my balcony.

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Nathaniel Gronewold, is an assistant professor of international relations and environmental studies at Tsukuba Gakuin University in Japan. He is the author of *Anthill Economics: Animal Ecosystems and the Human Economy*, available on Amazon and other book retailers. Nathaniel is a veteran international journalist with experience running assignments in Pakistan, Colombia, Kenya, Haiti, Singapore, South Korea, Taiwan, and beyond. He is the winner of the 2019 National Press Club Award for newsletter writing. Gronewold has written close to 3,000 articles, including reports featured in *Scientific American*, *Science Magazine*, *Asian Scientist*, the *Economist*, and the *New York Times*. He is a two-time recipient of the Gold Prize for coverage of climate change from the United Nations Correspondents Association and received a 2012 honorable mention from the National Press Club. He lives in Japan with his wife while pursuing his PhD in environmental science at Hokkaido University.

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Negative Population Growth, Inc.

2861 Duke Street, Suite 36
Alexandria, VA 22314

Phone: (703) 370-9510

Fax: (703) 370-9514

Email: npg@npg.org

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