

Updated Population Study

Census Bureau Projections through 2100

Alan Zimmermann November 2023



WHAT WE DO

GAZ Research LLC is newly formed company based on Alan Zimmermann's many decades of insurance industry expertise. The firm's main mission is to provide educational teach-ins on the insurance industry to all levels of participants, including new hires, executives new to the business and recently named directors. The teach-ins are also useful for those in the investment community looking to learn more about how insurance impacts the global financial markets.

Alan Zimmermann has conducted these teach-ins for more than 25 years for more than a thousand participants on three continents.

Teach-ins can be presented in multiple formats including pre-recorded webinars, virtual meetings or in-person presentations. While the focus will be to ensure participants gain a basic industry introduction, presentations can be tailored to include more advanced topics. Custom programs can also be developed upon request.

In addition to the teach-in program, GAZ Research LLC will distribute periodic notes and reports on relevant property-casualty industry topics.

INSURANCE TEACH-INS AND RESEARCH





ALAN ZIMMERMANN

A long-time insurance analyst focuses much of his attention on accounting, regulatory, and other macro-industry matters. He is well known in the insurance industry from his many years on Wall Street. He now spends considerable time conducting educational Teach-ins for all levels in the industry from new hires to executives new to the industry, to recently named directors.

For the last ten years he has been a Managing Director at Assured Research, a research and advisory firm concentrating on the property-casualty industry. Prior to joining Assured Research, he was a Wall Street analyst and executive for many years. He was the head of the property-casualty insurance research team at Macquarie Securities which he joined in 2009 with the acquisition of Fox-Pitt, Kelton. At FPK he held a variety of managerial positions including Director of US Research, Head of US Equities, and international research coordinator.

Prior to joining FPK in 2000, he was an insurance industry analyst at various investment banking firms including Morgan Stanley, Smith Barney, and Prudential Securities, and for many years was named to Institutional Investor Magazine's "All American Research Team" as a top analyst for both the property-casualty and life insurance industries.



Overview

In early November the Census Bureau published its long-term population projections that go out to 2100. This was the first time the bureau updated its projections since 2018 when its forecast extended to 2060. We have long believed that studying demographic data is critical to developing strategies for insurers, as well as all companies and industries, so we looked at the numbers in detail to get some perspective.

In reporting the news, the media focused on the fact that the Bureau foresaw that the U.S. population would peak in 2080 and decline thereafter. Aside from seeing this as an interesting (and foreboding) data point, we do not see it having much impact on corporate decision making because of the extended time horizon.

However, we believe the key point that companies should focus on is that the Census Bureau has lowered its forecast of the near-term population level from its previous projections. This is critical as a lower population level presents all companies with reduced potential future demand, making it more difficult to achieve growth.

The following slides provide what we believe are the key points from the projections.

Population discussion



As a starting point, <u>Slide 6</u> shows how the current forecast differs from previous projections. The population in 2030 is forecast to be 3% below the Bureau's most recent estimate, while the 2060 population is projected to be 10% lower than previous.

Overall, population growth (or shrink) occurs from two components; the difference between births and deaths, which demographers refer to as the "natural change," and the net migration of people moving into and out of an area. In <u>Slide 7</u> we show the historical (since 1960) and projected trends for births and deaths. As shown, the natural change is expected to turn negative in 2028 as the declining trend in births continues and the number of deaths rise as the population ages.

With the decline in the natural change, the only positive factor driving population growth is immigration. (Slide 8). Since the Bureau recognizes that immigration policies are uncertain for a variety of political and economic reasons, they have provided a range of alternative scenarios.

Other countries such as Germany and Italy are also facing long-term declines, but Japan is already there as its population peaked in 2010. For perspective on how populations decline we include Japan's birth and death data on Slide 9 and show how this compares to the U.S. in <u>Slide 10.</u>

The potential impacts on society and the economy from a declining population are profound and in <u>Slide 11</u> we touch on two; the fact that at sometime in the next few years the number of people 65 and older will outnumber those 18 and under, and that the number of people in the key workforce years, 25-54, will decline thus reducing the ratio of workers to retirees which will make it more difficult to fund Social Security and Medicare.



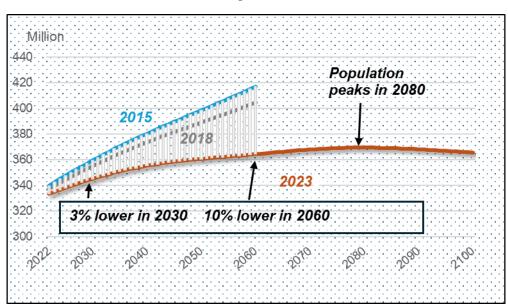
Census Bureau lowers long-term population forecast

The Census Bureau has extended its long-term forecast through 2100, previous projections went to 2060.

While the projected population peak in 2080 and subsequent decline is interesting, we believe the more important point is the lower expectations for the near term.

Source: U.S. Census Bureau, GAZ Research

Census Bureau Population Forecasts





Births declining; deaths rising

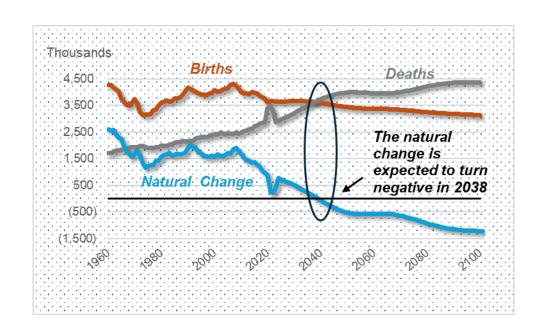
The number of births has been declining for the last 15 years and that is expected to continue.

Deaths are rising with the aging population.

The natural change is expected to turn negative in 2038 and continue to decline.

Source: U.S. Census Bureau, GAZ Research

Births and Deaths: 1960-2100



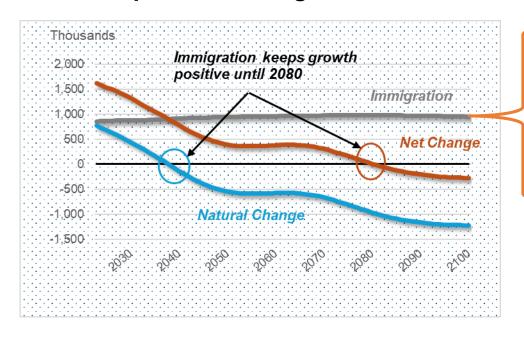


Long-term growth is dependent on immigration

With the natural increase turning negative, the only factor that keeps the population growing is immigration.

Because future immigration policies are uncertain, the bureau offers alternative scenarios.

Net Population Change: 2022-2100



Current forecast has immigration averaging about 1.0 million per annum. Under alternative scenarios immigration could range from a low of 500,000 to a high of 1.5 million.

Source: U.S. Census Bureau, GAZ Research



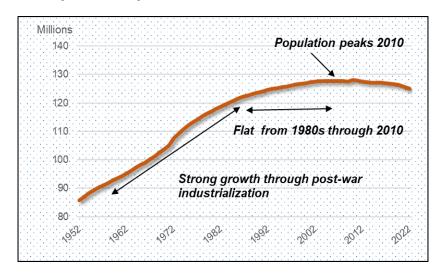
Japan's Population has been declining for many years

Other countries such as Germany and Italy are also facing long-term declines, but Japan is already there.

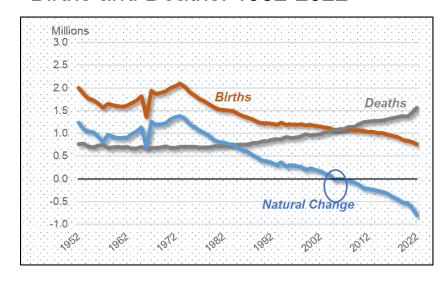
Population peaked 2005, stayed flattish for several years, then declined.

Key reason; sharp decline in birth rates.

Japan Population: 1952-2022



Births and Deaths: 1952-2022



Source: Statistics Bureau of Japan, GAZ Research



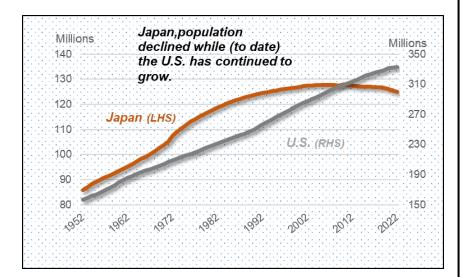
Interesting to compare Japan and the U.S.

Why did Japan's population decline while the U.S. has continued to grow (to date)? Different birth rates.

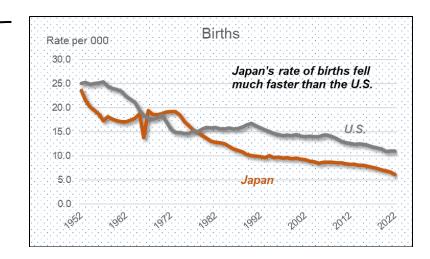
Plus, Japan does not have any meaningful immigration.

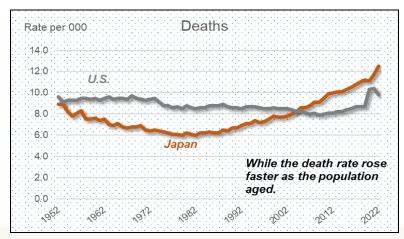
Source: U.S. Census Bureau, Statistics Bureau of Japan, GAZ Research

Populations:1952-2022



Put falling births together with rising deaths and you get a declining population!



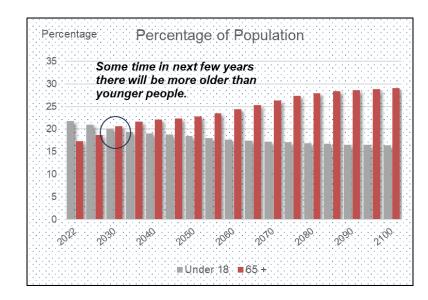


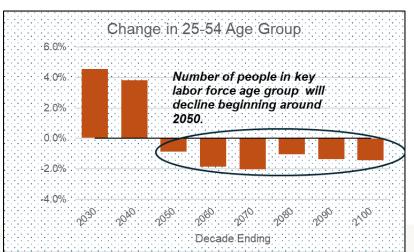


The implications of a slowing population are profound

The population will age. At some point in the next few years there will be more people 65 and over than 18 and under.

The number of people in the key working years will decline. This will make it harder for the economy to grow, and the declining ratio of workers to retirees will make it more difficult to fund Social Security and Medicare (which are already facing major funding challenges).





Source: U.S. Census Bureau, GAZ Research



THANK YOU

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