

The Economic Implications of the Declining Birth Rate in the United States

By Ian Keller

Suppose we lived in an
economy with 53% of the
current population.

Introduction

- United States Current Birth Rate = 1.62 children per woman
 - Replacement Rate = 2.1 children per woman
- In 3 generations we will half as many ancestors
 - Holding birth rate constant
- 20% decrease in birth rate since 2007
- Over 1 million less births in 2023 vs 2022 in the United States

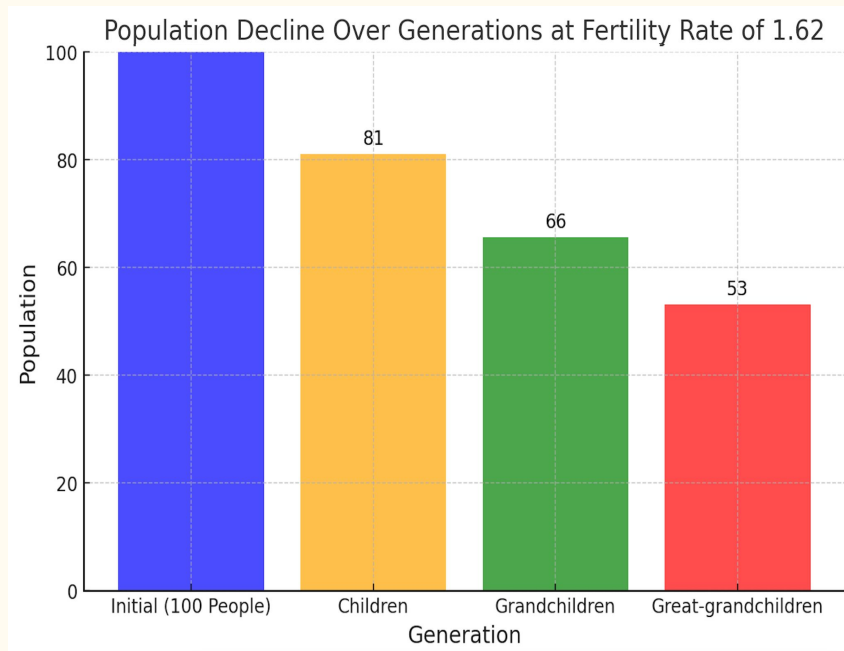


Image Source: ChatGPT

Causes of Declining Birth Rate

- Initial drop due to the Great Recession (2007-2009)
- Lack of Affordable Housing
 - House Price Index (HPI) doubled since 2009
- Child care costs
 - 22% increase in daycare/preschool costs between 2020-2024 (BLS)
 - Costs of leaving work
- Shifting of priorities towards careers
- Contraception popularity

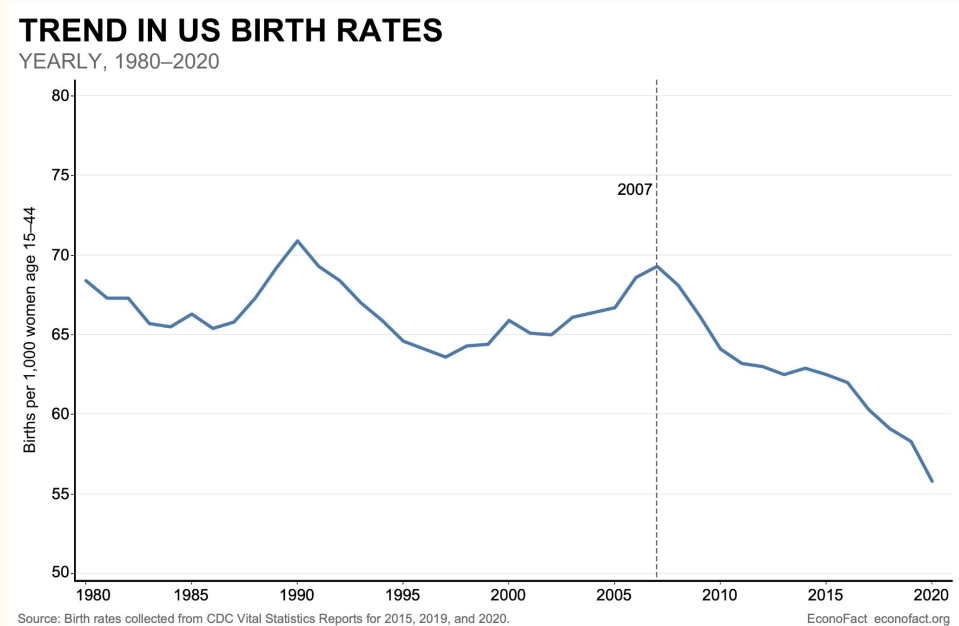


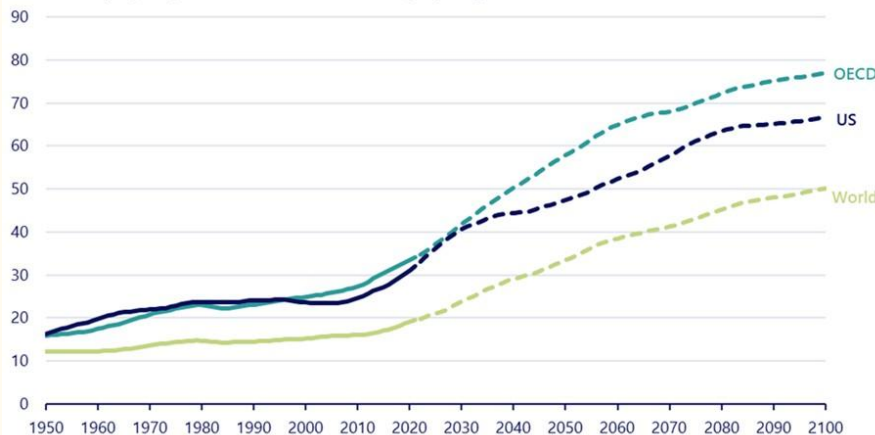
Image Source: The Puzzle of Falling US Birth Rates since the Great Recession (Kearney et. al)

The Problem: Economic Impact

- Increasing Old Age Dependency Ratio
- Less Labor Force Participation
 - Lower tax revenue
- Standard of Living decreases
 - Represented by Output per Capita
 - $\text{Output per Capita} = \text{output per worker} \times \text{workers per capita}$
- Slowing Economic Growth (GDP)
 - Ex) Japan's current stagnation over last 20 years
 - Less innovation

Figure 1. Old Age Dependency Ratio

Number of people aged 65 and over for each 100 people aged 25 - 64



Council of Economic Advisers

Sources: UN World Population Data, 2022; CEA calculations.

Note: OECD is a simple mean of all OECD countries. Data after 2021 are projections using the UN medium variant projections.

As of May 6, 2024 at 6:00pm

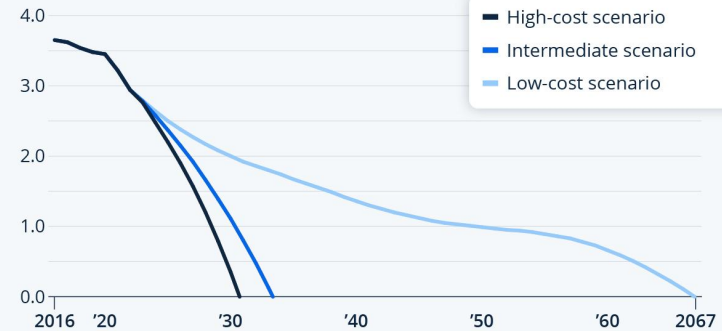
Image Source: A First-Principles Look at Historically Low U.S. Fertility and its Macroeconomic Implications (whitehouse.gov)

The Problem: Social Systems

- Challenges to Social Security Systems
 - Less working age people paying into Pension system
 - Project depletion between year 2031 and 2067 (SSA)
- Increased healthcare costs due to aging population
 - Without adequate support infrastructure

When Is the Social Security Trust Fund Running Out?

Social security asset reserve amounts at year-end (in trillion U.S. dollars) and scenarios of depletion



OASDI combined. In CPI-indexed 2023 dollars. Official SSA projection only until year before depletion
Source: Social Security Administration 2023 OASDI Trustees Report



statista

Image Source: Statista

Case Study: Learning From South Korea

- South Korean President Yoon Suk Yeol declares low birth rates a “national emergency”
- 0.72 children per woman in 2023
- \$200 billion spent over last 16 years to increase birth rate
 - Minimal Effect
- Considered by many a band-aid solution
 - Reactive Rather than Proactive
 - Provide short-term solutions

Figure 1

South Korean Total Fertility Rate, 1950–2023

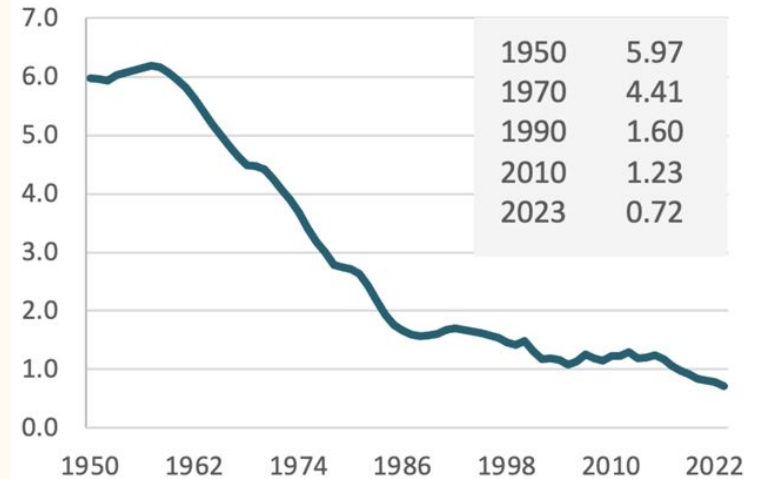


Image Source: UN Population Division

Framework for Addressing Low Fertility Impacts

- Recall:
 - Standard of Living (output per capita) = output per worker * workers per capita
- Increase Productivity
 - Leverage investments in technology to boost efficiency (AI)
- Adopt Flexible Immigration Policy
 - Increases labor supply to address shortages
- Implement pronatal policies
 - Reduce Childcare costs
 - Expand paid parental leave
 - Direct Government Incentives for families

Actionable Takeaways

- Encourage remote/flexible work models:
 - Reduces childcare costs (EIG)
 - May improve worker productivity (Barrero et. al)
- Implement Flexible Immigration Policies
 - Implement Visa reforms to attract foreign talent in high need industries, increasing labor supply
 - Ex) STEM, Healthcare, Childcare
 - Support Family-Based Immigration
 - Allow family reunification to stabilize communities



Questions?