PAGE ONE Economics®

July 2026

The Baby Bust: How Economics Can Explain Demographic Changes

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> "I have five young children under the age of 11… Not one of my children has ever offered to pick up the check when we go out to eat."
> —Jim Gaffigan

Introduction

If you have children, you're likely familiar with back-to-school shopping. This annual tradition is one of the many responsibilities of parenthood, and one small example of the economic costs of children.

Demographics, or the study of groups of people, has shown us that birth rates over the past few generations have declined in many countries, including the United States. Some basic economics can help us better understand the *economic* factors involved in choosing to have children or not. The two most important are money and time.

How Populations Have Changed

A nation's population equals the number of domestic births minus the number of deaths plus the impact of net migration. For simplicity, let's just focus on the domestic birth rate. Demographers calculate this using the following formula:

Birth rate = (number of births / total population) x 1,000

Since the nineteenth century, nations that had an industrial revolution also had a "demographic transition," where high birth rates and high childhood mortality were replaced by lower birth rates and lower childhood mortality. Figure 1 below shows the birth rates for a group of European nations between 1850 and 1915. Note the declining trend since the mid-1870s.

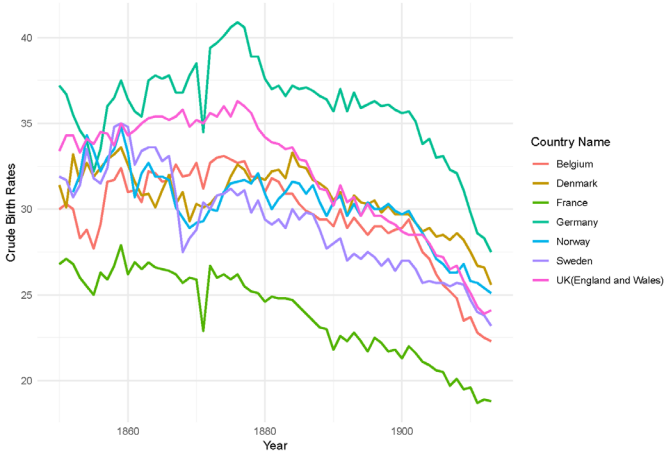
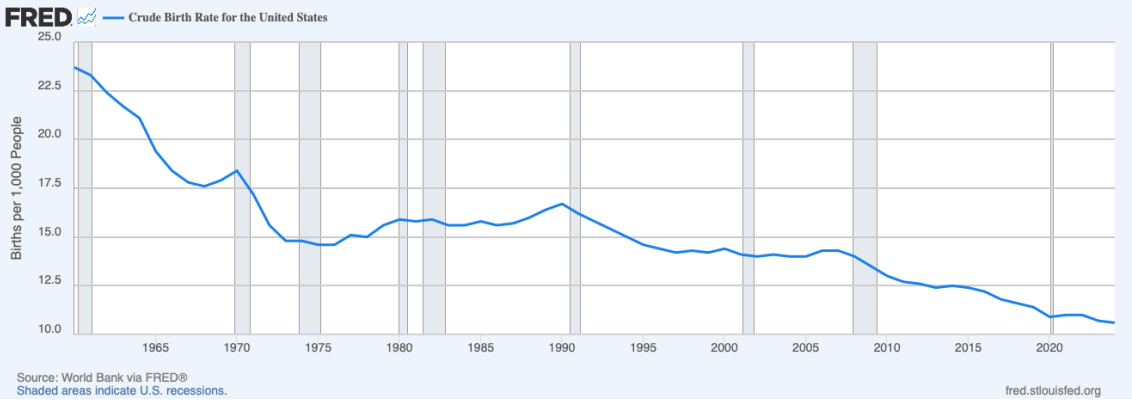


Figure 1: **Births per 1,000 People for Selected European Nations, 1850-1915**

SOURCE: Authors' calculations.

Figure 2: **Crude Birth Rate for the U.S., 1960-2024**



SOURCE: Crude Birth Rate for the United States, World Bank via FRED, Federal Reserve Bank of St. Louis, accessed March 20, 2026.

This pattern was true for European nations since the late nineteenth century and true for the United States in the twentieth century. Figure 2 shows the birth rate for the U.S., which we can clearly see has been declining.

The postwar baby boom in the U.S. faded in the mid-1960s, and birth rates fell by more than half by 2020.

Researchers who study populations have been raising this issue for quite some time, but they've struggled to formulate a hypothesis as to *why* domestic birth rates in many countries have been declining. Economics can help identify the forces at work here.

Opportunity Costs, Productivity, and Population

Economists are well known for studying the decisionmaking process of individuals and the consequences of those choices. One of the biggest decisions any adult faces is whether to have children, as they require an enormous amount of financial resources: According to a 2017 report from the U.S. Department of Agriculture, the average cost to provide for a child is $233,610, or just under $13,000 a year for a middle-income family. Using the Minneapolis Fed's inflation calculator, that amount increases to $306,825 in 2026 and includes food, clothes, shelter, transportation, and healthcare…but *not* college.

This presents a major **opportunity cost** for potential parents: Do they choose to invest in what can be over a quarter of a million dollars in having a child, or is the next-best alternative spending that money on themselves now or even saving it for future wants?

Individual choices aside, an interesting mystery facing economists and demographers is that in affluent nations such as the U.S., where per capita (per person) income is one of the highest in the world, birth rates are declining as incomes are rising. Shouldn't most American families have enough money to afford expensive "things" such as children?

A potential answer may be found in another pattern rooted in the mid-1960s U.S. economy. Figure 3 below is a graph from the Bureau of Labor Statistics (PDF) showing steadily increasing **productivity** by workers in the U.S. over the past five years—a trend that supporting data show has continued for the past 60 years.

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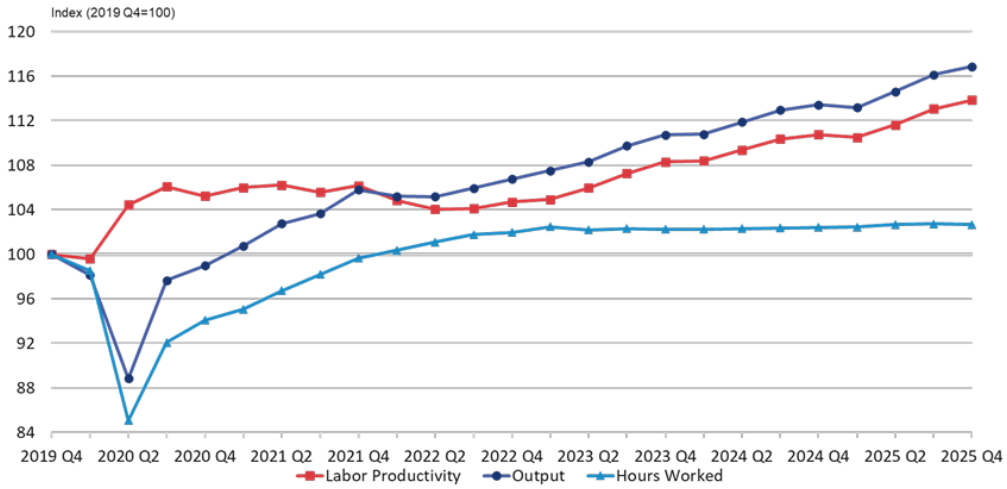
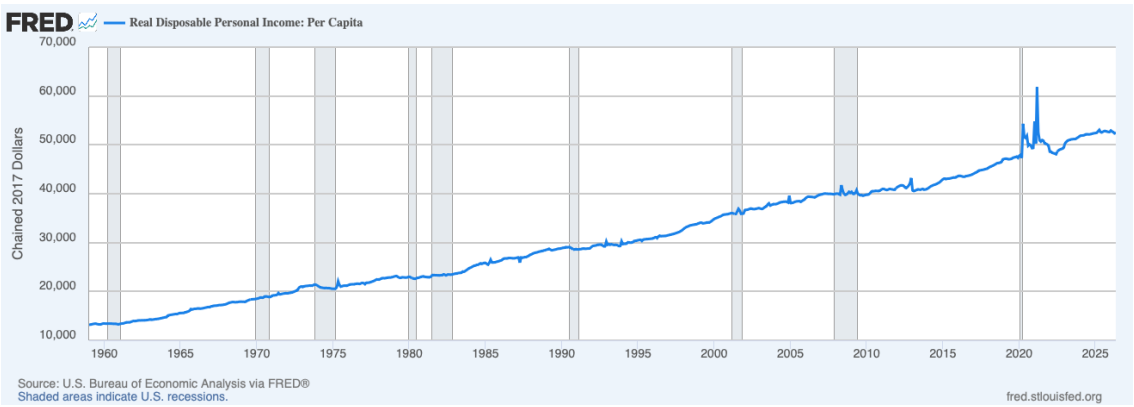
Figure 3: **Labor Productivity, Output, and Hours Worked in the U.S., 2019-2025**



SOURCE: Productivity and Costs, Fourth Quarter and Annual Averages 2025, Preliminary.

Economies get richer when people become more productive. As productivity has increased at a faster rate than population growth over the past decades, **per capita personal income** in the U.S. has soared even when adjusted for inflation, as shown in Figure 4 below with data from the Bureau of Economic Analysis.

Figure 4: **Real Disposable Personal Income: Per Capita for the U.S., 1960-2025**



SOURCE: Real Disposable Personal Income: Per Capita, U.S. Bureau of Economic Analysis via FRED, Federal Reserve Bank of St. Louis, accessed March 20, 2026.

Increased productivity and higher per capita income suggest that families can afford to raise more children. However, a key resource in raising children is time; parents have to devote a significant amount of time raising someone who otherwise can't provide for themselves. This presents an opportunity cost for those thinking of becoming parents: It's giving up potential wages from working to spend time with their children.

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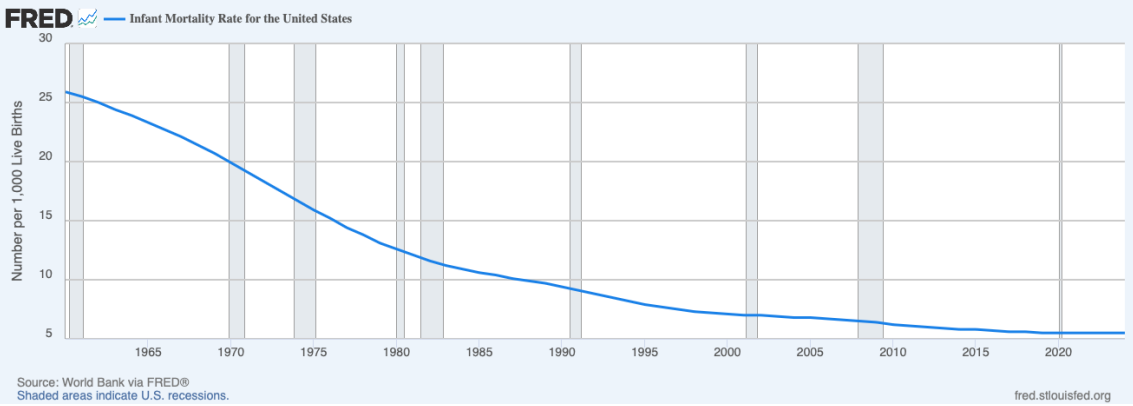
Another consideration is the need for job specialization skills in industrialized economies. Children will need to acquire skills to become efficient laborers, which also requires significant time and financial resources from parents.

So on the one hand, economies get richer when people become more productive and families can afford to have more children. On the other hand, children become more expensive via the opportunity cost of their parents' time. Economists have found that the cost of parents' time is the main reason birth rates have been declining.

Technology, Government Policy, and Population

Technology also plays a crucial role in productivity and population changes, as advances affect not only how efficient workers can be, but also how many children can be raised to adulthood to become workers and how long they can be effective employees. For example, thanks to medical technology, mortality rates of children in Western Europe and North America have plummeted, as shown for the U.S. in Figure 5 below with data provided by the World Bank.

Figure 5: **Infant Mortality Rate for the U.S., 1960-2024**



SOURCE: Infant Mortality Rate for the United States, World Bank via FRED, Federal Reserve Bank of St. Louis, accessed March 20, 2026.

With fewer deaths of young children, parents may choose to have smaller families because of the increased costs of raising children into adulthood. And there are better chances that children will survive well into adulthood and potentially provide for their aging parents.

Aside from individual family-planning decisions, politics and government policies have also influenced demographic and productivity trends. Since the 1800s, many western nations have sought to provide protection and increase education for children through child labor laws. In the U.S., the National Child Labor Committee (1904), Keating Owen Act (1916), and Fair Labor Standards Act (1936) all coincided with movements to take children out of the workforce and keep them in schools.

To this day, many states have laws forbidding children from joining the domestic workforce; they include minimum ages for dropping out of school and work permit regulations that must be signed by school officials, to name a couple. As a result, the high school graduation rate in the U.S. has steadily increased from 24.5% in 1940 to 91.4% in 2024, according to U.S. Census information.

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For the elderly, many governments provide old-age pensions and healthcare assistance, which transfers the economic burden of taking care of aging parents from adult children to the government. Programs like Social Security and Medicare in the U.S. also reduce the need for children to provide for their parents.

Conclusion

As there have been fewer younger workers to replace older workers transitioning to retirement and beyond, there is a valid argument that government-provided social safety nets built on the pay-as-you-go principle, such as Social Security, may not be sustainable. What is missing from this debate are the economic reasons influencing individual decisions that, collectively, make up our population and economy.

Factors such as the opportunity costs to raise children need to be considered, along with a study of whether technology and government policies will continue to support productivity and economic growth across a declining population. Artificial intelligence, further medical breakthroughs, and the ability to participate in the workforce for longer periods may sustain a growing economy with fewer people. Fortunately, economics offers an explanation and potential solution for this new reality.

Glossary

Opportunity cost: The value of the next-best alternative when a decision is made; it's what is given up.

Per capita personal income: The total income earned by individuals in a state, region, or country during a year, divided by the population of the state, region, or country.

Productivity: The ratio of output per worker per unit of time.

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Name_____ **Period**_____

Reading Q&A
The Baby Bust: How Economics Can Explain Demographic Changes

After reading the article, complete the following:

1. Which two economic factors are most influential in deciding whether to have children?
   a. Education and healthcare
   b. Money and time
   c. Housing and transportation
   d. Income and taxes

2. The demographic transition in post-industrialized nations is generally
   a. increasing birth rates and decreasing childhood mortality.
   b. decreasing birth rates and decreasing childhood mortality.
   c. increasing birth rates and increasing childhood mortality.
   d. decreasing birth rates and increasing childhood mortality.

3. The major opportunity cost for potential parents having children is
   a. paying for college expenses.
   b. giving up potential wages.
   c. providing healthcare coverage.
   d. purchasing childcare services.

4. Why does rising productivity complicate the expectation that higher incomes should lead to higher birth rates?
   a. Rising productivity reduces the need for skilled labor.
   b. Rising productivity increases the opportunity cost of raising children.
   c. Productivity improvements reduce demand for new workers.
   d. Increased productivity makes childcare more expensive for potential parents.

5. How might declining infant mortality change potential parents' attitudes when starting a family?
   a. They have more children if they had other children who died unexpectedly.
   b. They have fewer children because each one is more likely to survive.
   c. They may delay having children longer than previous generations.
   d. They can spend less time on parental responsibilities.

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6. Which historical development in the United States contributed to children leaving the workforce and entering schools?
   a. Creation of Social Security
   b. Productivity growth after 1960
   c. Passage of child labor laws
   d. Increased immigration to western nations

7. Government social safety nets such as Social Security may become less sustainable primarily because
   a. infant mortality is rising.
   b. older workers are becoming less productive.
   c. there are fewer younger workers than older workers.
   d. taxes on income have been reduced.

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