

## THE POPULATION BUST

It has been generally accepted in recent decades that the globe was facing a severe population explosion. Uncontrolled population growth would strip scarce resources and devastate the environment. More people would require more resources in the form of food, energy, and goods, which in turn would lead to a rise in global warming and other ecological catastrophes. There was no disagreement on the basic premise that population was growing.

This model no longer holds true, however. We already see a change taking place in advanced industrial countries. People are living longer, and because of declining birthrates there are fewer younger workers to support the vast increase in retirees. Europe and Japan are experiencing this problem already. But an aging population is only the tip of the iceberg, the first problem presented by the coming population bust.

People assume that while population growth might be slowing down in Europe, the world's total population will continue to spiral out of control because of high birthrates in less developed countries. In fact, the opposite is true. Birthrates are plunging everywhere. The advanced industrial countries are on the cutting edge of the decline, but the rest of the world is following right behind them. And this demographic shift will help shape the twenty-first century.

Some of the most important, advanced countries in the world, like Germany and Russia, are going to lose large percentages of their population. Europe's population today, taken as a whole, is 728 million people. The United Nations forecasts that by 2050 it will drop to between 557 and 653 million, a remarkable decline. The lower number assumes that women will average 1.6 children each. The second number assumes 2.1 children. In Europe today, the fertility rate per woman is 1.4 children. This is why we will be focusing on the lower projections going forward.

Traditionally, declining population has meant declining power. For Europe, this will indeed be the case. But for other countries, like the United States, maintaining population levels or finding technological ways to augment a declining population will be essential if political power is to be retained in the next hundred years.

An assertion this extreme has to be supported, so we must pause and drill into the numbers a bit before we consider the consequences. This is a pivotal event in human history and we need to understand why it's happening.

Let's start simply. Between about 1750 and 1950, the world's population grew from about one billion people to about three billion. Between 1950 and 2000, it doubled, from three billion to six billion. Not only was the population of the world growing, but the growth was accelerating at an amazing rate. If that trajectory had continued, the result would have been global catastrophe.

But the growth rate has not accelerated. It has actually slowed down dramatically. According to the United Nations, between 2000 and 2050 the population will continue to grow, but only by about 50 percent, halving the growth rate of the previous fifty years. In the second half of the century, it becomes more interesting. Again, the population will continue to grow, but only by 10 percent statistically, according to other forecasters. This is like slamming on the brakes. In fact, some forecasts (not by the UN) have indicated that the total human population will decline by 2100.

The most dramatic effect will be seen in the advanced industrial countries, many of which will experience remarkable declines in population. The middle tier of countries, like Brazil and South Korea, will see their populations stabilize by mid-century and slowly decline by 2100. Only in the least developed part of the world, in countries like Congo and Bangladesh, will populations continue to increase until 2100, but not by nearly as much as over the past hundred years. Any way you look at it, the population explosion is ending.

Let's examine a critical number: 2.1. This is the number of children that each woman must have, on average, in order to maintain a generally stable world population. Anything above that number and the population grows; anything below, the population declines, all other things being equal. According to the United Nations, women had an average of 4.5 children in 1970. In 2000, that number had dropped to 2.7 children. Remember, this is a worldwide average. That is a dramatic drop and explains why the population continued to grow, but more slowly than before.