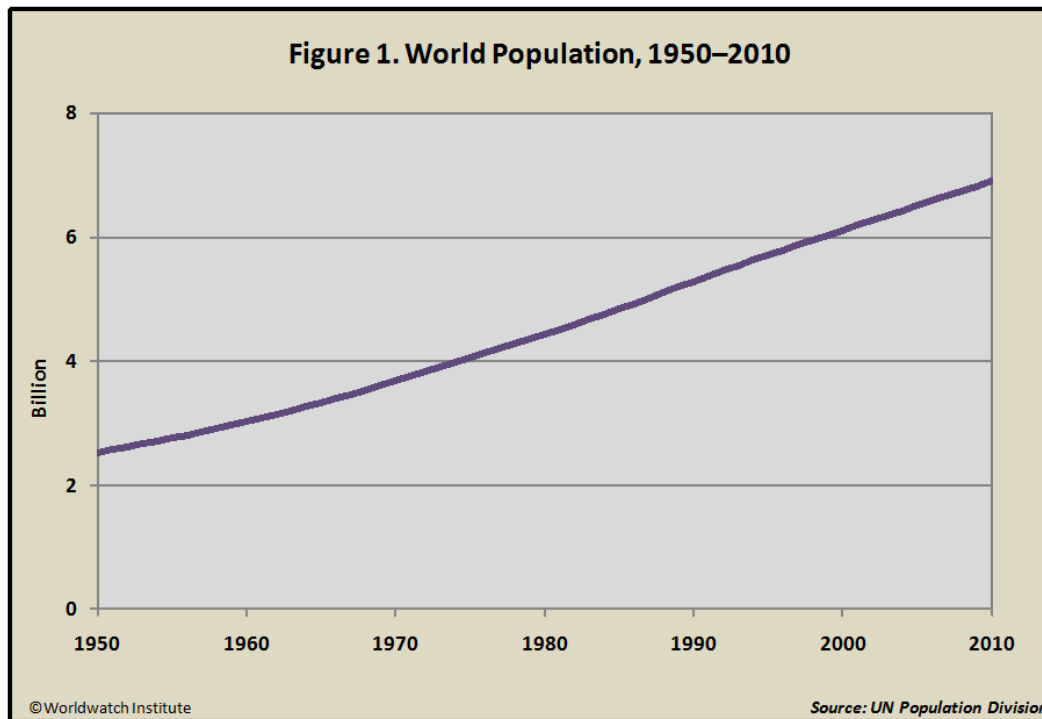


## World Population Growth Slows Modestly, Still on Track for 7 Billion in Late 2011

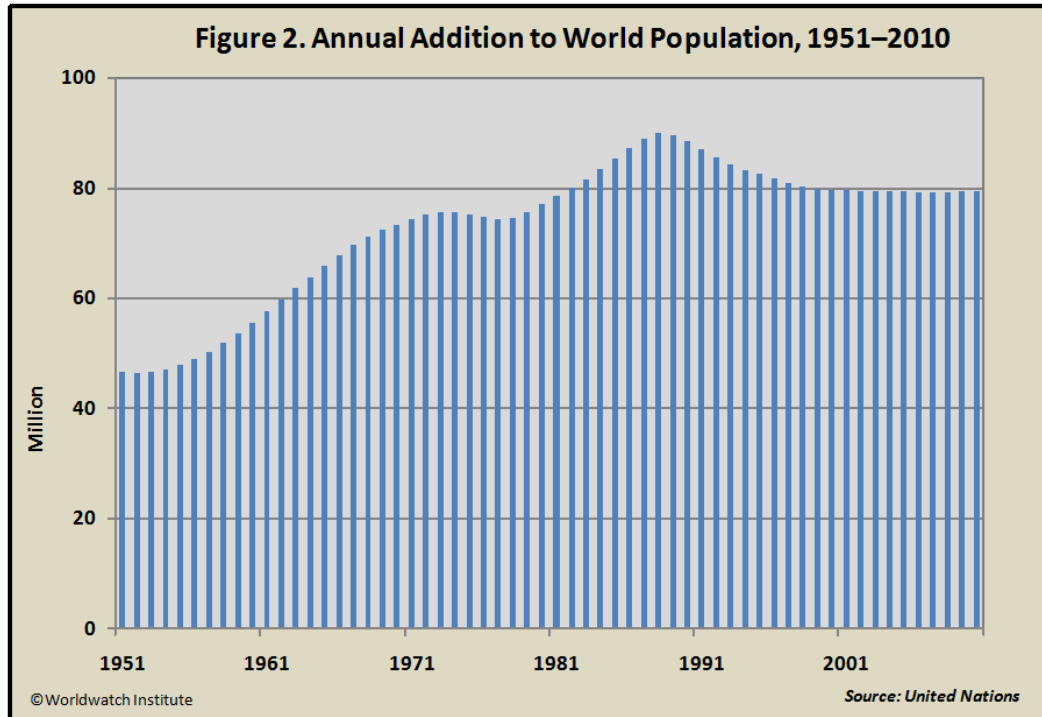
By Robert Engelman | December 17, 2010

**W**orld population passed 6.9 billion in mid-2010, according to United Nations demographers, and is on track to reach 7 billion in late 2011.<sup>1</sup> (See Figure 1.) The number of people added to the population each year—79.3 million—has been consistent for nearly a decade. Since the world population is larger each year, of course, this consistent increment equates to a slow fall in the annual growth rate. From mid-2009 to mid-2010, the population grew 1.16 percent, compared with 1.32 percent annually a decade earlier and with slightly more than 2 percent four decades ago. (See Figure 2.)



At the same time, humanity's median age is consistently rising, a byproduct of longer life expectancy and the fact that women are having fewer children on average than their

mothers had. (See Figure 3.) In 1970, the world’s median age—the precise age at which half of all people are younger and half are older—was 22.1 years. In 2010, it is 29.1 years. Yet overall “youthening” was the consistent trend from 1950, when the median age was 24 years, until 1970. Since then the median age has risen by two to three months every year, a trend that now shows no signs of slowing.

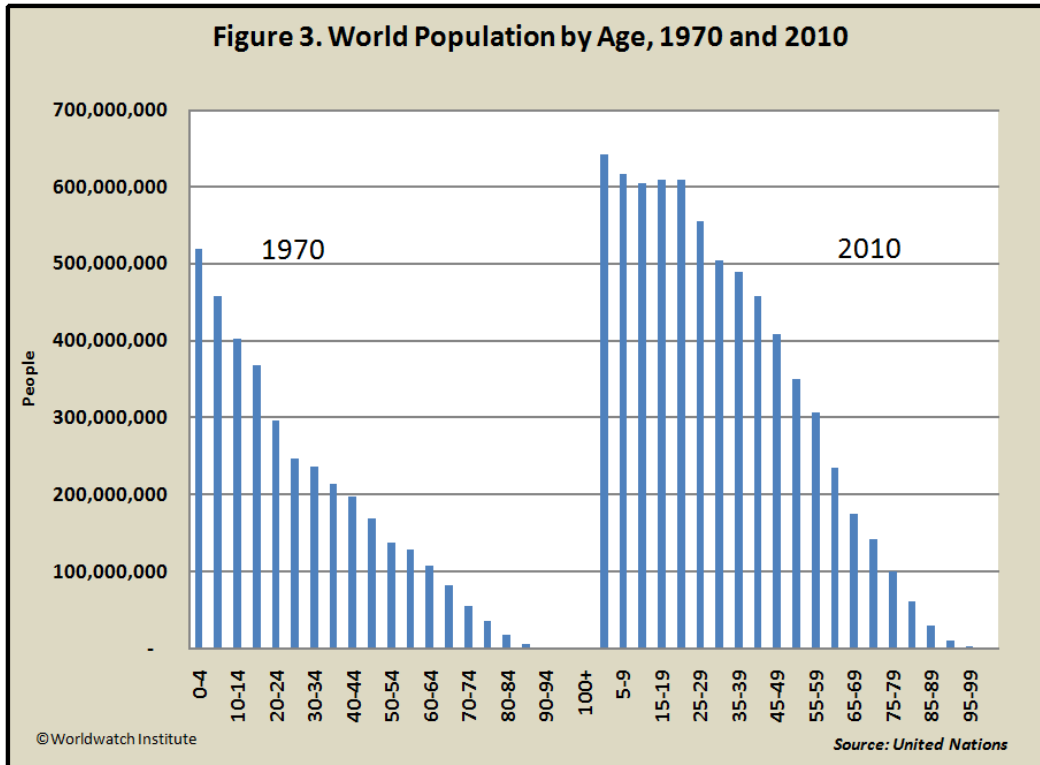


The overall growth and aging of human population mask an unprecedented range of demographic diversity. (See Table 1.) Many industrial countries are now experiencing either relatively slow population growth or—in Japan, Germany, and 14 East European countries—absolute decline. The combination of rising life expectancy and falling fertility has led these countries to experience significant population aging, meaning a rise in the median age. In contrast, many developing countries continue to grow rapidly and have still-large proportions of young people. Median ages are nonetheless rising slowly (albeit from low bases) in most of these countries for the same reasons as in industrial nations: increasing life expectancy and declining fertility. Some developing countries already have relatively low fertility accompanied by fairly rapid aging, with China being the most often discussed example.

Today 95 percent of population growth is occurring in the world’s developing countries, already home to 82 percent of the world’s people yet producing just 34 percent of gross world product in absolute dollar terms.<sup>2</sup> The largest family sizes and the most rapid population growth tend to occur in the least developed countries. Niger, Afghanistan, Uganda, Timor-Leste (East Timor), the Palestinian territories (West Bank and Gaza), Liberia, and Burkina Faso all have population growth rates above 3 percent a year, a rate that if maintained would see populations double in less than 25 years.

Regionally, most of the countries growing more rapidly than 2 percent a year are in sub-Saharan Africa (average growth rate, 2.4 percent), although a few are in Asia, home to 60 percent of all human beings. The latter continent is especially demographically diverse. Its growth rates range from a high of 3.5 percent in Afghanistan to a negative

one tenth of 1 percent in Japan. Among Asia's emerging economies, South Korea and Singapore are facing the prospect of population shrinkage in the near future, due primarily to very low fertility rates that could fail to replenish their populations over the next decade or two. Overall, the growth rate in Asia is just under 1.2 percent, almost identical to that of the world as a whole.



Latin America and the Caribbean together form the world's most demographically homogenous major region, with a 1.1 percent growth rate, just under the global average, and with few countries straying far from the average. Haiti is growing at 1.5 percent annually, while Honduras grows at nearly 2 percent. Uruguay has population dynamics similar to the industrial world, with a 0.3 percent growth rate. Relatively wealthy Chile is among the developing countries with a fertility rate below replacement, at 1.9 children per woman. Mexico, once among the world's more rapidly growing countries, now expands at just over 0.9 percent—essentially the same pace as the population of the United States. U.S. population growth, of course, includes net annual increases in immigrants, more of them from Mexico than from any other single country.

The industrial world also varies in its demographic dynamics, but around a narrow band of lower fertility and hence slower growth. Contrary to some perceptions, population growth continues among these wealthier countries as a whole, at almost exactly Uruguay's 0.3 percent annual rate, adding some 3.8 million people to the world each year. The English-speaking countries have higher growth rates, with Australia's population expanding at 1 percent annually while that of the United Kingdom grows at 0.5 percent. These numbers include net immigration, which in Australia and the United Kingdom, as in the United States, is a significant component of population growth. Population is declining in Germany (-0.1 percent), while in Eastern Europe the average growth rate is 0.04 percent. According to national rather than U.N. data, Russia recently halted the shrinkage it had experienced since 1993 and may even have begun growing slowly again.<sup>3</sup>

**Table 1: Regional Population Basics**

Region	Population growth from 2009 to 2010 in numbers of people (and percent change)	Share of absolute global population, 2010	Share of the increase in global population from 2009 to 2010
Africa	23,150,000 (2.29%)	15%	29%
Asia	45,644,000 (1.1%)	60%	57%
Europe	553,000 (0.08%)	11%	1%
Latin America and the Caribbean	6,231,000 (1.07%)	9%	8%
North America	3,299,000 (0.95%)	5%	4%
Oceania	451,000 (1.27%)	1%	1%

One reason for Russia's loss of population up to now was a phenomenon that once was frequent among large human groups but is now much less familiar: declining life expectancy. Whether due to increasing alcoholism or stresses related to the large country's transition from its communist past, life expectancy at birth among both sexes fell from a peak above 69 years in the late 1960s to less than 65 in the early part of the present decade. Until life expectancy began rising in the past two or three years, Russia was among nine countries worldwide with falling life expectancies over most of the past two decades. These causes also characterize reduced life expectancy in Belarus and Ukraine. In six countries in Africa (the Democratic Republic of the Congo, Lesotho, South Africa, Swaziland, Zambia, and Zimbabwe), civil conflict and the high prevalence of HIV/AIDS have shortened lives.<sup>4</sup>

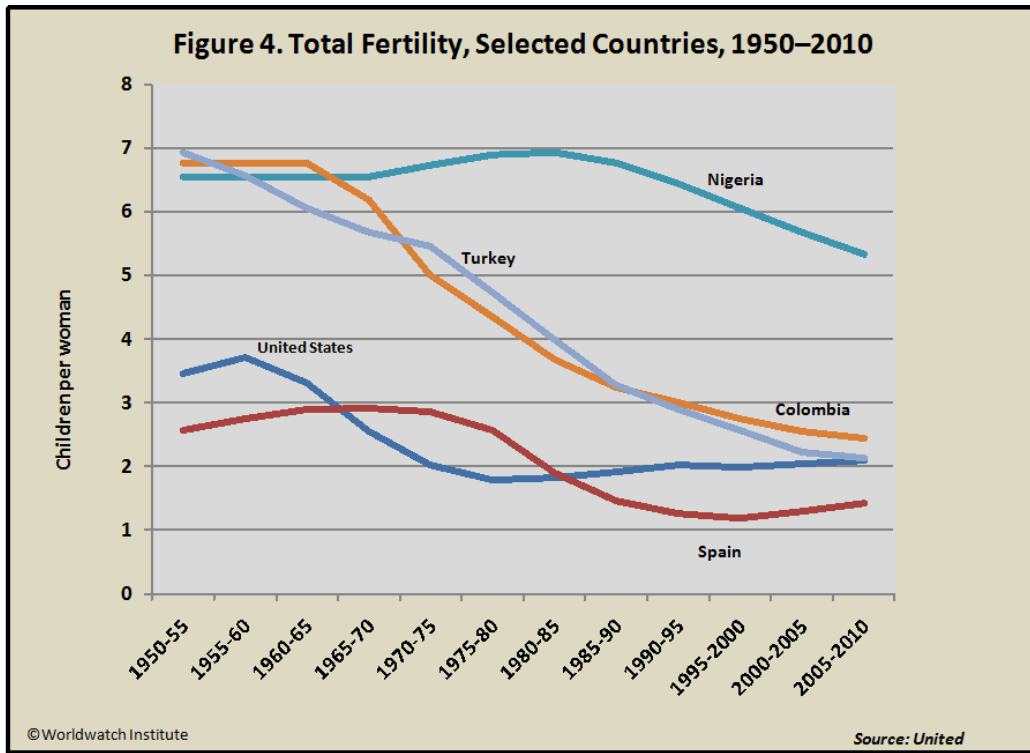
Some commentators contend that population growth may constrain future economic growth in high-fertility countries while population aging may do so in low-fertility ones.<sup>5</sup> Due in large part to population growth, demand is continuously rising for food, energy, commodities, and jobs, with the most rapid rates of population increase often in countries that are least economically productive at home and least able to afford imports. At the same time, in many industrial and some rapidly developing countries, labor forces are beginning to shrink proportionally and sometimes absolutely. This helps to improve wages—as in China in recent years—but it also raises questions about future support for the elderly and about competitiveness in a globalized economy. Many industrial and some developing countries have proportions of elderly unprecedented in demographic history, with 23 percent of Japan's current 127 million population being older than 64.

Overall, however, there is little agreement among economists and demographers about precisely how strongly these demographic forces will shape future economic change. Recently, one group of demographers argued that population aging is exaggerated as a negative economic force, noting in particular that the "younger old" (people in their 60s and early 70s) are generally healthier than in previous generations and often are willing and able to work well beyond traditional retirement ages.<sup>6</sup>

Although many analysts assume that U.N. and other demographers predict world population to stabilize at roughly 9 billion by the middle of this century, this is not true. The U.N. Population Division's latest medium-fertility population projection (one of the

three most often used projections, each of which is a conditional forecast based on different assumptions about future fertility rates) posits 9.15 billion people in 2050. But that number is projected not as a peak but simply a passing elevation sign. Population would still be growing by nearly 27 million annually at that time. Under the rarely cited low-fertility projection, world population would peak in the early 2040s at around 8 billion; under the high-fertility projection, it would hit nearly 10.5 billion in 2050 and still be rising rapidly. (Since the U.N. biennial population projection series does not go past 2050, there is no indication of when population will peak in the medium- and high-fertility projections, but the mid-century growth rates suggest no peak for either for many decades.) Taken together, these projections—all of which assume future fertility levels lower than today's—suggest the range of demographers' expectations. The actual demographic outcome hinges on population-related social policies—as well as on developments in health, the economy, and the environment—over the next four decades.

While most of the world's population continues to benefit from rising life expectancies, the future holds no promises that this trend will continue. The likelihood of climate change and the risks it poses to global food security, health, and security suggest at least one major potential challenge to falling mortality rates worldwide.



There is uncertainty as well about the future of fertility, which has declined dramatically worldwide since the early 1960s, when women gave birth to five children on average. Today the average is 2.53, almost half that number. More than any other demographic factor, falling fertility has slowed the rise of population from the 1960s to today. The fall of fertility is unpredictable, however. Within the population of industrial countries as a whole, fertility stopped falling at least by 2005 and has risen since then.<sup>7</sup> In many developing countries, meanwhile, fertility is falling relatively slowly and is still well above the so-called population replacement rate.<sup>8</sup> (See Figure 4.) These two trends suggest continued population growth for some time to come in both the industrial and the developing world.

*Vital Signs Online* provides business leaders, policymakers, and engaged citizens with the latest data and analysis they need to understand critical global trends. Subscribe now for full access to hard data and research-based insights on the sustainability trends that are shaping our future.

**Worldwatch Institute**

1776 Massachusetts Avenue, NW  
Washington, DC 20036  
Phone: 202.452.1999  
vitalsigns.worldwatch.org

## Notes

<sup>1</sup> U.N. Population Division, *World Population Prospects: The 2008 Revision, Population Database*, at [esa.un.org/unpp](http://esa.un.org/unpp), viewed 5 November 2010. Unless otherwise noted, all population data are from this database, in some cases with additional calculations based on them by the author.

<sup>2</sup> Gross world product data from International Monetary Fund, *World Economic Outlook Database*, at [www.imf.org/external/pubs/ft/weo/2010/02/weodata/index.aspx](http://www.imf.org/external/pubs/ft/weo/2010/02/weodata/index.aspx), viewed on 8 November 2010. If purchasing power parity is calculated, the developing world proportion of gross world product is much higher, at 48 percent.

<sup>3</sup> Alexander Zhukov, deputy prime minister of Russia, "Russia and the World: Challenges for the New Decade," address to conference, 22 January 2010.

<sup>4</sup> U.N. Development Programme, *Human Development Report 2010* (New York: 2010), p. 32.

<sup>5</sup> Nicholas Eberstadt, "The Demographic Future," *Foreign Affairs*, November/December 2010, pp. 54–64.

<sup>6</sup> Warren Sanderson and Sergei Scherbov Sanderson, "Remeasuring Aging," *Science*, 10 September 2010, pp. 1287–88.

<sup>7</sup> Julia Whitty, "The Last Taboo," *Mother Jones*, May/June 2010, pp. 24–43.

<sup>8</sup> Fertility data from U.N. Population Division, op. cit. note 1, and from ICF Macro/Measure DHS (Demographic and Health Surveys), available at [www.statcompiler.com](http://www.statcompiler.com).