

Adair Turner writes: The United Nations' latest population projections suggest that Japan's population could fall from 127 million today to 83 million by 2100, with 35% of the population then over 65 years old. Europe and other developed economies are aging as well, owing to low fertility rates and increasing longevity. Population aging in advanced economies is the manageable consequence of positive developments. By contrast, rapid population growth in many poorer countries still poses a severe threat to human welfare.

In 2008, the UN projected the world's population reaching 9.1 billion by 2050 and peaking at about ten billion by 2100. It now anticipates a population of 9.7 billion in 2050, and 11.2 billion – and still rising – by 2100, because fertility rates in several countries have fallen more slowly than expected (in some, notably Egypt and Algeria, fertility has actually risen since 2005). While the combined population of East and Southeast Asia, the Americas, and Europe is projected to rise just 12% by 2050 and then start falling, sub-Saharan Africa's population could rise from 960 million today to 2.1 billion by 2050 and almost four billion by 2100. North Africa's population will likely double from today's 220 million.

Such rapid population growth, on top of even faster increases over the last 50 years, is a major barrier to economic development. From 1950 to 2050, Uganda's population will have increased 20-fold, and Niger's 30-fold. Neither the industrializing countries of the nineteenth century nor the successful Asian catch-up economies of the late twentieth century ever experienced anything close to such rates of population growth.

Such rates make it impossible to increase per capita capital stock or workforce skills fast enough to achieve economic catch-up, or to create jobs fast enough to prevent chronic underemployment. East Asia has gained a huge demographic dividend from rapid fertility declines: in much of Africa and the Middle East, the dividend is still missing.

In some countries, sheer population density also impedes growth. India's population may stabilize within 50 years; but, with the number of people per square kilometer 2.5 times that of Western Europe and 11 times that of the contiguous United States, disputes over land acquisition for industrial development create serious barriers to economic growth. In much of Africa, density is not a problem, but in Rwanda competition for land, driven by high and rising density, was among the root causes of the 1994 genocide. By 2100, Uganda's population density could be more than twice India's current level.

The demographic challenges facing advanced economies are slight in comparison. Greater longevity poses no threat to economic growth or pension-system sustainability as long as average retirement ages rise accordingly. Population stabilization reduces pressure on environmental assets such as unspoiled countryside, which people value more as their incomes increase.

To be sure, rapid population decline would create difficulties. But if writers like Erik Brynjolfsson and Andrew McAfee are right that information technology will create new opportunities to automate jobs, gradual population decline could help offset falling demand for labor, which otherwise would generate unemployment and/or rising inequality.

On the other hand, increased automation could be a huge barrier to economic development for countries still facing rapid population growth. By making it possible to manufacture in almost workerless factories in advanced economies, automation could cut off the path of export-led growth that all of the successful East Asian economies pursued. The resulting high unemployment, particularly of young men, could foster political instability. The radical violence of ISIS has many roots, but the tripling of the population of North Africa and the Middle East over the last 50 years certainly is one of them.

Continued high unemployment throughout Africa and the Middle East, and political instability in many countries, may in turn make unrealistic the UN's projection that Europe's population will fall from 730 million today to 640 million by 2100. With Africa's population likely to increase by more than three billion over the next 85 years, the European Union could be facing a wave of migration that makes current debates about accepting hundreds of thousands of asylum seekers seem irrelevant. The UN assumes net migration from Africa of just 34 million over the century – only 1% of the population increase. The actual figure could be many times that.

As a result, Europe's population – unlike, say, that of East Asia or even the Americas – may well continue to rise throughout the century. This, some will say, will help “solve Europe's aging problem.” But, given that the aging “problem” is overstated and solvable by other means, mass migration may instead undermine Europe's ability to reap the benefits of a stable or gently falling population.

Both increased longevity and falling fertility rates are hugely positive developments for human welfare. Even in the highest-fertility countries, rates have fallen – from six or more children per woman in the 1960s to 3-4 today. The sooner fertility rates reach two or below, the better for humanity.

Achieving this goal does not require the unacceptable coerciveness of China's one-child policy. It merely requires high levels of female education, the uninhibited supply of contraceptives, and freedom for women to make their own reproductive choices, unconstrained by the moral pressure of conservative religious authorities or of politicians operating under the delusion that rapid population growth will drive national economic success. Wherever these conditions prevail, and regardless of supposedly deep cultural differences – in Iran and Brazil as much as in Korea – fertility is now at or below replacement levels.

Ensuring that women are educated and free is by far the most important demographic challenge facing the world today. Worrying about the coming population decline in advanced countries is a meaningless diversion.