

POPULATION “MOMENTUM”

An important and often misunderstood characteristic of human populations is the tendency of a highly fertile population that has been increasing rapidly in size to continue to do so for decades after the onset of even a substantial decline in fertility. This results from the youthful age structure of such a population, as discussed below. These populations contain large numbers of children who have still to grow into adulthood and the years of reproduction. Thus even a dramatic decline in fertility, which affects only the numbers at age zero, cannot prevent the continuing growth of the number of adults of childbearing age for at least two or three decades.

Eventually, of course, as these large groups pass through the childbearing years to middle and older age, the smaller numbers of children resulting from the fertility decline lead to a moderation in the rate of population growth. But the delays are lengthy, allowing very substantial additional population growth after fertility has declined. This phenomenon gives rise to the term population momentum, which is of great significance to developing countries with rapid population growth and limited natural resources. The nature of population growth means that the metaphor of a “population bomb” used by some lay analysts of population trends in the 1960s was really quite inaccurate. Bombs explode with tremendous force, but such force is rapidly spent. A more appropriate metaphor for rapid population growth is that of a [glacier](#), since a glacier moves at a slow pace but with enormous effects wherever it goes and with a long-term momentum that is unstoppable.