Japan's Ageing Problem and Macroeconomic Context

by

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The total population of Japan will peak at 128 million around 2006 and then begin to fall steadily, decreasing to about 50% of the current number by 2100.

The total fertility rate (TFR) was 1.32 in 2002. There is still little sign that the TFR will stabilize or return to a higher level.

Because it has the longest life expectancy, Japan is now experiencing a very rapid ageing of its population. The number of the elderly (65 years and above) is currently 24.3 million in 2003. It will increase sharply to reach 34 million by 2018, remaining around 34-36 million thereafter until around 2060. Consequently the proportion of the elderly will go up very rapidly from 19.0% in 2003 to 25.3% by 2014, rising further to more than 30% by 2033. Japan already has one of the oldest populations in the world.

In Japan, nearly 70% of social security benefits are currently distributed to the elderly. The rapid ageing may put more and more stresses on financing social security. Is the future picture of Japan so gloomy?

A simple life-cycle model tells us that a higher proportion of the elderly will

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induce a lower saving rate and correspondingly a lower capital/labor ratio.

On the other hand, a population ageing /decline will make the labor force more and more scarce relative to capital, inducing higher capital/labor ratio.

Thus, there will be two offsetting factors in the process of population ageing/decline. If the positive effect through a declining number of labor force dominates the negative effect through a reduced saving rate, then the economy will still enjoy a higher capital/labor ratio, enabling a higher per-capita income.

This result can be more probable if labor-augmenting technological progress is taking place and if the economy is flexible enough to adjust itself to changing circumstances.

Such theoretical conjecture is verified by the historical evidence of Italy in the $14^{th} - 15^{th}$ centuries. The Italian population decline during that period induced a higher per-capita income through flexible shifts of labor and capital, bring about the Renaissance.

But we have another evidence in Germany at the same age. Here, the German population decline induced a weakened economy, which was mainly due to the rigidity of labor with little transformation of industry.

In short, as far as economic thinking is concerned, a population ageing/decline can induce few serious macro-economic effects, if the economy is flexible enough.

In Japan, we are currently under a sort of pessimism for the future. But this pessimism may turn out groundless in the long run. What is missing in present Japan is an idea of sound "sans souci". A higher per-capita income will mitigate the difficulties involved in the population ageing/decline.

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