

Japan's Aging Population, Declining Birthrate and the Economic Outlook

By Tani Sadafumi

IN late October last year, the Minister of State for Economic and Fiscal Policy, Takenaka Heizo, submitted to the Cabinet the *Annual Report on the Japanese Economy and Public Finance 2002-2003*. Subtitled "No Gain Without Reforms III," the *Annual Report* gives a straightforward analysis of two trends affecting the Japanese economy – the country's low birthrate and aging population. Not wishing to encroach on the policy-making prerogatives of other government offices, the *Annual Report* makes only vague proposals, but it is a significant document nonetheless, because it redefines problems inherent in the public pension system and Japan's declining savings rate, and it indicates directions that discussions should take on these issues.

The *Annual Report* is composed of three chapters: Chapter 1, Outlook for Economic Recovery; Chapter 2, Restructuring the Financial System and Corporations; and Chapter 3, Challenges Posed by an Aging Population and Population Decline. Here I will examine the issues raised in Chapter 3.

Japan's productive-age population (aged 15-64) peaked in 1995 and has already begun declining because of the falling birthrate. The population of Japan is projected to peak at 127.74 million in 2006, then decline as a result of two factors – the low birthrate, and a higher death rate because elderly people now form a substantial part of the population.

In 2002, Japan's total fertility rate (TFR), the average number of births per woman during her lifetime, slumped to a low of 1.32. In 1947, the TFR was at an exceptional high of 4.54. This generation of baby boomers will retire in a few years. In the 1960s and 1970s the TFR hovered around 2.0, but in recent years it has declined fairly consistently. The TFR needed to ensure a stable population is said to be 2.07.

According to intermediate estimates, which are generally considered as stan-

dard, the TFR will drop to 1.31 in 2007, then rise slightly, and then remain stable at about 1.39 for many years. However, some experts suggest that low estimates are more realistic, because actual TFRs in the past have been lower than anticipated. According to the low estimates, the TFR will continue declining gradually until 2050, when it will have dropped to 1.10. Even intermediate estimates show a substantial decline, with the productive-age population dropping from 86.22 million in 2000 to 53.89 million in 2050. These figures represent 68.1% to 53.6% of the total population, respectively.

Japan's population is aging faster than that of any other developed country. In 2002, the elderly population (65 and over) was 23.63 million, or 18.5% of the total population. It took only 24 years for the elderly population to jump from 7% to 14% of the total population, far less time than it took for France (115 years), Sweden (85 years), the United Kingdom (47 years) or Germany (40 years). According to intermediate estimates, Japan's elderly population ratio will rise to 28.7% by 2025 and to 35.7% by 2050. Today, 3.6 people in the working generations (aged 20-64) must support one elderly person (65 and over). In 2025, 1.9 people must support one elderly, and in 2050, just 1.4 will have to do so.

One reason why the population is aging is because of the falling death rate among elderly people. The rate is falling primarily because of better medical care, healthier diets and improved living conditions. As previously mentioned, Japan's population will decline partly because of a higher death rate, but that is only because the elderly account for a growing percentage of the total population. In 1947, the average life expectancy in Japan was 50.06 years for men and 53.96 for women. In 2002, it was much longer – 78.32 and 85.23, respectively.

Another reason why the population is aging and the birthrate is dropping is that more people are not marrying, or

they are marrying at a later age. In 1980, 28.5% of men and 20.9% of women had not married. By 2000, the percentages had jumped to 31.8% and 23.7%, respectively. During the same 20-year period, they rose even more remarkably among the group commonly considered to be the most suitable age for marrying (25 to 29) – in 1980, 55.1% of men and 24.0% of women in this age group had never married, while in 2000 the ratios were 69.3% and 54.0%, respectively.

The *Annual Report* also shows how the financial burden of having a child is also lowering TFR. It gives an example of a woman with a university degree who leaves the workforce at the age of 28 to give birth and raise a child, and then returns to work at the age of 34, after the child enters elementary school. Her lifetime income would be ¥85 million less than if she had kept working without having a child.

And that is not all. Over the last 30 years, educational expenses in Japan have doubled as a percentage of total consumer spending. The *Annual Report* suggests one solution lies in "changing the customs and various aspects of the socioeconomic system to permit women to hold a job and have children."

If, as the *Annual Report* recommends, the government needs to develop effective policies for women, will Japan be able to solve the problems caused by the low birthrate and aging population? The *Annual Report* indicates that "even if policies are able to boost the TFR, the population structure will not change overnight." The current TFR will affect the population structure for the next 70 or 80 years – the parameter of today's children and the children who are going to arrive in the future are small, so even if they can increase the TFR, the total number of children will still be comparatively small. This is a case of geometrical progression in reverse: the low birthrate is built into the social structure.

Therefore, if Japan wants to stop its population decline, it will need to open

its doors to more foreign workers and immigrants. Foreigners registered as residents in Japan represent 1.4% of the total population (as of December 2001). This percentage is far lower than that in Germany (8.9% in 2000) or the United States (10.6% in the same year), showing that Japan has leeway to admit more. But if it were to offset the rapid decline in the productive-age population only by admitting enough immigrants, it would have to accept 640,000 per year, which is more than 10 times the number it accepted per year in the last decade (an average of 50,000 per year). The *Annual Report* calls for "prudent consideration" of this issue, taking the social cost and other factors into account. It suggests, without stating the case definitively, that Japan should maintain its labor force by accepting a limited number of immigrants while making more effective use of elderly and female workers.

In the end, Japan will probably find it difficult to reverse the population decline and the growing proportion of elderly, even if it adopts a longer perspective of nearly 100 years. If this is the case, we Japan must carefully examine how these trends will impact the economy. The *Annual Report* sees a positive relationship between population growth and economic growth rates in the Organization for Economic Cooperation and Development countries between 1971 and 2001. If there is such a positive relationship, does the reverse also hold true – will Japan's economy fall into a negative growth situation, beginning in 2006 when the population starts to decline? The *Annual Report's* answer to this question is that, although the population decline will impede economic growth, Japan can still achieve growth by improving other economic infrastructure and boosting per-capita productivity.

Based on this conclusion, the *Annual Report* sets out two scenarios for Japan's economy between 2011 and 2020, when the trends of aging population and

declining population will be exceptionally pronounced. Both scenarios are based on an intermediate estimate of the nation's TFR. The first scenario, called the "status quo scenario," assumes that employment opportunities for women and the elderly will not open up much, and that productivity will rise at an average 0.8% per year, as it has over the past few years. The second scenario, called the "economic stimulation scenario," assumes that employment opportunities for women and elderly people wishing to work will steadily open up, and that productivity will rise at an average 1.4% per year, as it did in the 1980s.

In the first scenario, the average annual economic growth rate projected for the decade between 2011 and 2020 is 0.2% to 0.4% in real terms. During that decade, the decline in the productive-age population will push the growth rate down by 0.7 to 0.9 percentage points. On the other hand, in the second scenario, the average growth rate will be relatively high, from 1.4% to 1.6%, with the labor force boosting growth by 0.2 to 0.5 percentage points, in spite of the decline in the productive-age population.

Under the economic stimulation scenario, the population decline will act as a brake on the economy, but other policy initiatives could offset the braking effect and create some positive growth, though hardly enough. As policy initiatives, the *Annual Report* proposes: deregulation; disposal of non-performing loans; the promotion of employment for women and the elderly; the accumulation of capital stock; research and development efforts that yield technical innovations; and training and education programs to increase human capital. I will briefly examine the issue of "capital" below.

Japan's household savings rate was almost 16% in 1985, higher than that of the United States (more than 9% at the time) or Germany (12%). By fiscal 2000, Japan's rate had plummeted to 9.3%, and to 6.6% by fiscal 2001, coming in lower than Germany or France

(both over 10%), and approaching the low level of the United States (around 4%).

Japan's household savings rate has dropped, partly because of withdrawals by elderly households. If it is impossible to reverse the declining birthrate and the graying of the population, the savings rate will continue to decline. The result will be that the private sector will not be able to procure enough investment capital. There is also a risk that the government will be unable to sell off its new issue of bonds, which represent almost 45% of the annual income projected in the fiscal 2003 general account budget. Fiscal restructuring is essential, of course, but the government cannot expect to greatly increase tax revenues while the productive-age population is in decline.

The total amount of foreign direct investment in Japan represents only 1.2% of nominal GDP, far less than the 40% in France or more than 20% in the United States and Germany. Foreigners hold only about 3% of all Japanese government bonds, far less than the 30% of bonds issued by the American government.

This is not a problem, as long as capital can be procured from domestic sources. But the above-mentioned economic stimulation scenario cannot be transformed into reality unless Japan becomes dependent on foreign capital. The day of reckoning is fast approaching. The *Annual Report* says Japan's high level of savings in the past makes it unlikely that a capital shortfall will occur in the immediate future, but "over the long term, it will be necessary to develop an environment that facilitates the inflow of capital from abroad." **JS**

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