## A Declining Birth Rate Amid Affluence

By Inoki Takenori

## A Paradox of Rationality

Only about 20,000 people lived in the Japanese archipelago in the early Jomon Period several thousand years ago, according to an estimate by historical demography experts. Japan's population topped the 12 million mark in the Azuchi-Momoyama Period (1573-1600) and, despite a brief lull in the 18th century, continued increasing to slightly exceed 30 million at the end of the Edo Period (1600-1868). At the peak of high economic growth in 1967, when the Japanese population surpassed 100 million, there was talk that a time would come when the country would be iammed with people wriggling like a swarm of cockroaches. About this time, it was generally believed that Japan's population would increase without limit. Writer Fukazawa Shichiro jokingly proposed a "mankind extinction cult" and expressed his wish to see Tokyo's population shrink to a minuscule 50. He believed unrestrained population growth would foul the air and water, and pollute rivers and oceans, while a population decrease would have a cleansing effect.

Japan's population began to sag after the first oil crisis in the early 1970s, with the total fertility rate (the average number of children a woman bears in her lifetime) dropping below two. But changes in population are of course governed not only by births but also by deaths. The continued rise in Japanese people's life expectancy, needless to say, also contributed to population growth. However, the total fertility rate has now come down to 1.32. If the trend continues, it is estimated that Japan's population will shrink to 130,000 in 500 years and total a mere 130 in 1,000 years' time, which means that the Japanese will be virtually extinct. In order for Japan's population to hold steady among generational

groups, the total fertility rate must be 2.07, assuming the current death rate remains unchanged. The current total fertility rate of 1.32 is far below that level.

The falling birth rate is attributed above all to a rise in the marriage age and an increase in the number of unmarried persons.

The recent national census contained alarming figures. Among men aged between 35 and 39, 22.61% were single, while among women in that age bracket 10.04% were single. Comparative figures in the 1970 census were 4.67% for men and 5.80% for women. Though occurring slowly, great social changes have been taking place over the past quarter of a century.

Since worrying about what Japan will be like 1,000 years from now is just like making a fuss about science fiction, assuming an "after us the deluge" attitude is understandable. But people who don't care about the issue of declining population without any conditions or reservations are also just unscientific or simplistic. Those who say that a falling birthrate will ease the intense entrance examination competition and improve traffic and housing conditions are speaking only on impulse. As long as people wish to enter prestigious universities, there will always be entrance examination competition. A falling birthrate will have a considerable impact on the entire educational front, including preparatory schools and universities. Similarly, a decrease in the number of road users will result in higher per-capita maintenance costs.

A decrease in the number of children means a relative increase in the aged population. Its economic consequences are foreseeable. Reductions in savings and investment as well as a breakdown in the pension financing system and other fallouts from demographic changes have already been fully discussed. There is also a possibility of people who receive care outnumbering those who offer care. The situation is that serious. But we should not be too pessimistic about the future, because labor productivity and living standards depend on the progress of capital accumulation, on changes in the per-head capital volume and on the extent of technological progress. Even so, it is an undeniable fact that population is a serious problem which must be fully considered.

The population problem is so serious that its root cause must be investigated. If the Malthusian theory no longer holds true, a more general theoretical explanation is needed. Contemporary economics somehow offers an explanation of the cause. The explanation is that there is an increasing number of people who consider it more rational to curb spending on having children and spend their income on other things because the costs of childbearing and childcare have become so expensive. Childcare costs include food and clothing as well as educational costs. But the enormity of such direct costs is not the biggest obstacle. People in today's society know that there are hidden costs that outpace direct costs, the foremost being the "loss of income" that results when a parent leaves the labor market for child rearing.

A phenomenon underpinning such a presumption is actually occurring in the labor market. As an increasing number of women receive higher education and their potential earning power increases, women become less motivated to get married and have children. They consider it more sensible to take advantage of their economic opportunities by refraining from or delaying marriage than to become pressured with housework and childcare or get involved in a household dispute over who washes the

Figure 1 Declining Japan's Population



Source: "Vital Statistics of Japan," Statistics and Information Department, Minister's Secretariat,
Ministry of Health, Labour and Welfare

dishes. In fact, demographic experts attribute the recent decline in the birthrate to a factor totally different from that of the birthrate decline that immediately followed the first postwar baby boom in the 1950s. While the birthrate decline in the 1950s stemmed from a fall in the number of children per household, the declining birthrate for the past 20 years resulted mainly from an increase in the number of people who get married late in life. It is a matter of course that an increase in the number of people getting married late in life would lead to a decline in the birthrate. It can be said that the expansion of individuals' economic opportunities has begun to have a negative social impact on population. A choice deemed sensible for individuals is not necessarily ideal for society as a whole. There is thus a paradox between what is good for the individual and what is good for society as a whole.

## **Economics of Household Labor**

Housework or child-rearing receives no monetary compensation. On the other hand, work in the labor market outside the household receives immediate evaluation and compensation in a tangible form. This difference is indeed great in the short term. People's sense of fulfillment may differ depending on whether or not their work brings monetary compensation.

There was in the past some economic argument about the evaluation of housework. Household labor is not included in the official data on national income. Accordingly, national income differs depending on who does housework or childcare. If housework performed by a wife is entrusted to a helper, it becomes a productive act done through the labor market and thus national income increases. Some time ago, university students majoring in economics were often asked in examinations to answer whether national income would increase if the mistress of a mansion marries her butler. The correct answer is that national income would decrease unless she employs another butler.

As such, the value exchanged in a household or community in non-monetary terms is not included in gross domestic product (GDP). This fact will lead to a surprising result when GDP in developed countries is compared with that in developing countries. For example, children in Japan used to pat their grandparents on their shoulders while they were sitting in the sun. Grandchildren occasionally received pocket money in return. Such a sight has disappeared from Japanese homes, as fewer and fewer aged people live with their grandchildren, and markets for medical care and health care for aged people have been established. As a result, GDP has increased due to the services offered to aged people. These examples abound. GDP in countries where the food service industry flourishes outpaces that in countries where households are basically self-sufficient in food supply. The difference is in proportion to the amount of food outsourced, that is, ordered from the market. Economic growth measured by GDP includes such "affluence" as well.

Discussions at the World Conference on Women increasingly take note of the fact that no wages are paid for housework and child care in households and assert that countries should have viewpoints on unpaid work reflected to a greater extent in their policies. The Japanese government is paying attention to such a trend and five years ago the Cabinet Office released its estimate of the value of unpaid work. The estimate was roughly based on two methods. One is opportunity cost, which is evaluated by the amount of wages lost by forgoing the sale of labor to the market, which is the result of unpaid work done in households. The other is alternative cost, which is evaluated by the wages of people who offer on the market the services similar to those selfproduced by unpaid work in households.

Total GDP differs depending on which method is adopted. However, the ratio of the value of unpaid work to GDP is stable compared with the estimates over several fiscal years. For example, the value of unpaid work measured by opportunity cost remains high at about 21% of GDP. A survey by what used to be the Economic Research Institute of the Economic Planning Agency (the predecessor of the Economic and Social Research Institute, which belongs to the Cabinet Office) in its "National Economic Accounts Quarterly" released in December 1997 estimated the annual value of unpaid work done by a housewife at \(\frac{4}{2}\).76 million, or 1.2 times the average annual wage of women working in the market, which stands at \{2.35} million.

Actually, a woman can earn total wages of around ¥100 million in her lifetime if she remains in the work-

force. Therefore, it is safe to assume that women feel they would lose a great deal if they quit work to get married or care for children. As most people in contemporary society make rational economic decisions. they thus have chosen not to have children in support of the economic rationality of individuals. They have hardly paid attention to the fact that the optimization of individual welfare would cause problems for the entire society.

As I think about such a situation, I find human reason puzzling. Humans are said to be rational beings and have by far the best calculation capabilities in nature. But whether humans have higher calculation capabilities than other animals depends on the definition of "calculation capabilities." But one thing is certain: if individuals focus their attention solely on individual welfare and devote themselves to optimizing such attention, their action is totally insufficient for humankind as a whole in the

long term. As I have already mentioned, humans cannot escape from the paradox between individuals and the entire society. There can be no discussion of individual welfare without con-

sidering public interests.

The aging of the population due to the declining rates of births and deaths is neither as dismal nor as bright a story as is often talked about. The decline in the number of children and the aging of the population are taking place rapidly. But this phenomenon did not emerge suddenly. There can be no other response to the situation than muddling through on a trial-and-error basis. This is the wisdom of liberal democracy. Population policy based on rational planning is rather alarming. The posture of muddling through does not mean that we are becoming irresponsible bystanders. The population problem has an unfathomable, complicated structure and concerns private domains. It is not a simple problem, to which



A Japanese working mother picks up her children at a nursery school late at night

state intervention can hardly offer the best solution. Even if we cannot find the right answer, we can make the situation develop in a different way as long as we are aware of its serious nature. We should pin our hopes on this point. The absence of a mechanism enabling working women to care for children and increasing the economic burdens on child bearing and child care are cited as factors that have brought about the current situation. The fact that the Japanese economy has become moderately affluent also greatly affects this phenomenon. In other words, the richer the economy grows, the less enthusiastic people become.

## Counterattack by Affluence

Economy, politics and culture are all run by individuals. Humans can make changes and move things forward if they are motivated to do so. Civilization has developed by human motivation in the broad sense of the word. We cannot emphasize the importance of human motivation and vitality too much. After all, it is neither natural resources nor technology but the human mind or spiritual structures that ultimately decide the future of human society.

We must pay attention to the presence of several factors in Japanese society that may block human motivation in the future. As we look at the "National Survey on Lifestyle Preferences" conducted by the former Economic Planning Agency, we can see that Japanese people's energy has been emaciated considerably over the past quarter of a century.

This time series survey, conducted every three years since 1978, asks people about the matters they consider important, to what extent they are satisfied with those important matters in their daily lives, and to what extent they place expectations on government policies for the settlement of important prob-

lems. The questions cover 10 welfare sectors that concern people's daily lives. The 10 sectors are sub-divided into 60 items with questions on what they consider important and to what extent they are satisfied. They are also asked to what extent they are satisfied

in their broader daily lives.

The 10 sectors are 1) medical care and health; 2) education and culture; 3) working life; 4) holidays and leisure life; 5) income and consumer life; 6) living environment; 7) safety and protection of individuals; 8) family; 9) regional life; and 10) fairness and welfare. Respondents were asked to choose what they consider the three most important sectors.

In the latest 2002 survey, "medical care and health" ranked first, followed by "income and consumer life" and "working life." "Medical care and health" has retained the top slot since 1981, while "family" fell from third place, a position it had retained up to 1999. Generally speaking, the higher

the level of importance rises, the higher policy priority becomes. In regard to policy priority, "medical care and health" topped the list of items respondents wished to see implemented, followed by "income and consumer life" and "working life." "Family" still ranks high in terms of the level of importance, though its ranking has been declining since 1996, but its ranking is low in terms of policy priority. This implies that it is difficult for the "family" sector to become a policy subject.

In what form does "satisfaction in life" emerge? The survey asked, "Are you satisfied or dissatisfied with your life in general?" It was asking about subjective well-being to find out respondents' self-reported happiness and life satisfaction. Those "dissatisfied" or "rather dissatisfied" accounted for 26.6% of the total respondents in the 2002 survey. The ratio represented a slight increase reflecting a prolonged recession, but was still on a low level. Not surprisingly, the ratio of people who think their lives are on track for improvement has been declining since it peaked in 1990 and the ratio of those who have a bright outlook for their old age has also been decreasing since it peaked in 1984. These results show that many Japanese have already become moderately affluent in economic terms, and they are now more concerned about how to enjoy their leisure than about toiling to improve their lives economically. The changes that have occurred over the past quarter of a century cannot be ignored. The motivation and power of the average Japanese have apparently declined compared with what they were during the high growth period.

Another factor obstructing their motivation is the fact that the collection and dissemination of information have become thoroughly efficient. A generation ago, people had difficulties finding out how their performance based on their qualities and efforts was evaluated and what social position they would attain. In those days, ambitious young people in any area tried hard to seek challenges anyway as they did not have sufficient information and data about



the competition.

However, young people's spirit for such challenges has weakened, because they can somehow read the future thanks to the affluent, instantaneous and accurate diffusion of information. They may also be influenced by the fact that they can obtain knowledge and technology of the highest level at a minimal cost, thanks to the advancement of reproduction technology. Those who wish to improve their tennis can watch world-class players in action on video. Those who wish to enjoy or study the best performances of classical music only need to listen to CDs or DVDs. Technology allows us to compare our ability with top players or performers. Under these circumstances, young people are finding it difficult to summon the enthusiasm to imagine a successful future. Even those who pass entrance examinations and enter firstrate companies after obtaining an advanced education can almost see what they will be like in 30 or 40 years' time.

The dissemination of information and the enhancement of reproduction technology have thus created severe environmental conditions for young people who are trying to accumulate technology and knowledge. They would have been motivated to act if they had been left ignorant of their future possibilities. But now that they know what is in store for them, they have become more hesi-

tant about taking the first step toward a future which is "not uncertain." People are motivated to act only if they are uncertain about their future. Sufficient knowledge and information have the function of restraining people's behavior. The availability of sufficient information has enhanced the possibility of emaciating people's motivations.

In the 18th century, Adam Smith noted that population size and the rate of population increase provide the best vardstick for determining the potential strength a country requires for its development. Just as the Malthusian population theory no longer holds true, population can hardly be the best yardstick for measuring national strength in contemporary industrial society. Even so, population still remains potentially one of the most important resources for countries. From that viewpoint, we can see the paradoxical structure of modern society, in which the progress of capital accumulation on the back of affluence and technological innovation results in the emaciation of economic activities in the form of a declining population.

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