

# SOCIAL IMPLICATIONS OF DEMOGRAPHIC CHANGE IN JAPAN

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Declining population as well as population aging has substantial impacts on the economy and on the society. By contrast, the size of the population usually does not matter for economic development, if it is stable; Switzerland and Sweden, for example, are rich countries with fewer than 10 million people. However, the process of declining does matter, particularly when it is accompanied by a significant change in the age structure. The aging of the population is a more serious issue in Japan than in any other OECD country. First, the speed of aging has been more rapid there, reflecting the rapid economic development in the past, which has been similar to that in other Asian countries (Figure 1). Second, the social system in Japan is heavily dependent on seniority rules, based on the pyramid-like age structure of the past. Third, human resource allocation in Japan is constrained by the fixed social roles for men and women, both at work and at home.

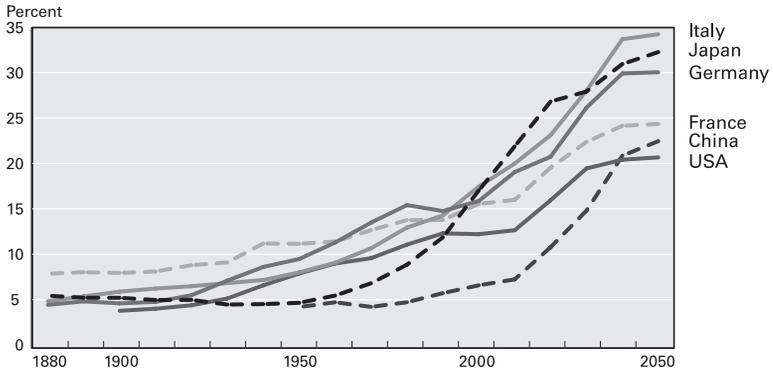
## DOES DEMOGRAPHIC CHANGE MATTER?

It has been argued in previous sessions that demographic change per se does not matter, and that what matters is the social security system, which can distort the economy through its tax collections and benefit provisions. Though I do not deny the social security problems, I do think that declining fertility is also an important issue, at least for those countries where fertility is at a particularly low level, Italy, Germany, and Japan, for example. Concerning the causes for the fertility decline, Gary Becker's theoretical explanation that households are substituting quality

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**Figure 1**  
**The Share of the Elderly in Total Population, Various Countries**

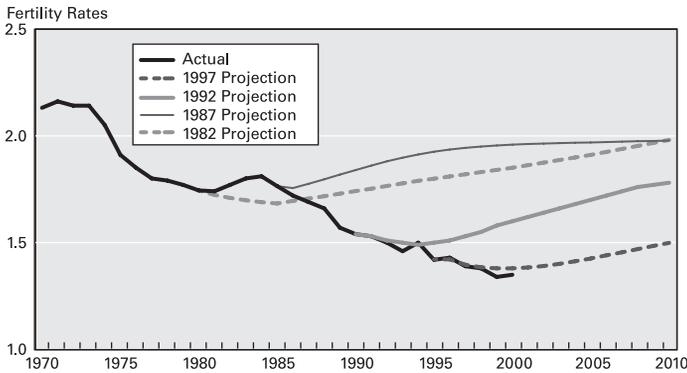


Source: *Demographic Statistics 1996*, Institute of Population Problems, MHW.

for quantity of children seems to be applicable to many industrial countries, including Japan in the period from the postwar baby boom to the mid 1950s. However, after stabilizing at the population replacement ratio of 2.1 in the following two decades, the Japanese fertility ratio has since declined continuously, reaching 1.35 in 2000. A major factor behind the fertility decline since the mid 1970s is its association with the falling marriage rate. In Japan, where only 1 percent of births occur outside marriage, the lower marriage rate leads directly to fewer children, even with the average number of children per married couple unchanged at two. The continuous decline was not entirely expected by demographers, and persistent prediction errors have been made in only one direction, that is, the projections have always been optimistic (Figure 2). Although this is evidence of the difficulty of projecting fertility trends, it also indicates the presence of an underlying force lowering the fertility rate that is associated with economic development. I believe the decline in the Japanese fertility rate is not necessarily the result of optimal decisions by individuals, but it is to some extent the result of market failure.

The increase in the labor force participation of Japanese women is the single most important factor in the decline in fertility. The increase in the number of working women reflects an expansion of the service industries, providing better working opportunities, and an increase in college enrollment, improving the quality of labor. Higher labor market participation by itself does not necessarily lower the fertility rate, as shown by the example of the Scandinavian countries. But this subtle revolution has

**Figure 2**  
**Fertility Ratio in Japan: Actual versus Predicted**



caused various frictions in Japanese society, with its traditional values. Faced with society's fixed gender roles with men at work and women at home, Japanese women find it particularly difficult to manage working full-time and child-rearing at the same time.

Japan's famous employment practices of long-term job security and seniority-based wages have been considered to be favorable to most workers. But these benefits to workers are only possible in exchange for long working hours, frequent job rotations (often to different locations), and large wage differentials between full-time and part-time workers. These Japanese employment practices obviously work against many female employees. A married man is considered to be more reliable by his supervisor if he has a his family to support at home, while a married woman is assumed to be less productive, since she has her husband and children to take care of. This "asymmetry" in the consequences of marriage by gender has brought about a trade-off for women between work and marriage. Women used to prefer marriage to work in the past, but they have come to do the opposite with the increase in the "opportunity costs of marriage," as they relate to women's own earnings. This is not inconsistent with the fact that 90 percent of Japanese single women still wish to marry sometime, when they meet men who can compensate for the opportunity costs of marriage, although the possibility becomes scarcer with the increasing economic position of the average woman in Japan.

The opportunity costs of marriage are substantial under a system of long-term job security and seniority-based wages. Once a woman leaves

a firm with favorable working conditions for marriage or childbearing, she cannot return to her previous full-time job after several years of child-rearing, but only to part-time jobs with lower wages. This is the case mainly because of the lack of mid-career job opportunities and the fact that hiring older persons is more costly for the firm. Thus, if one accounts for the lifetime opportunity costs of marriage and child-rearing for an average woman college graduate, they amount to about \$1.5 million when compared with the aggregate earnings at full-time up to the age of retirement. Of course, one does not always count the cost of having children in money, but there is a good possibility that these substantial and still rising opportunity costs affect people's behavior.

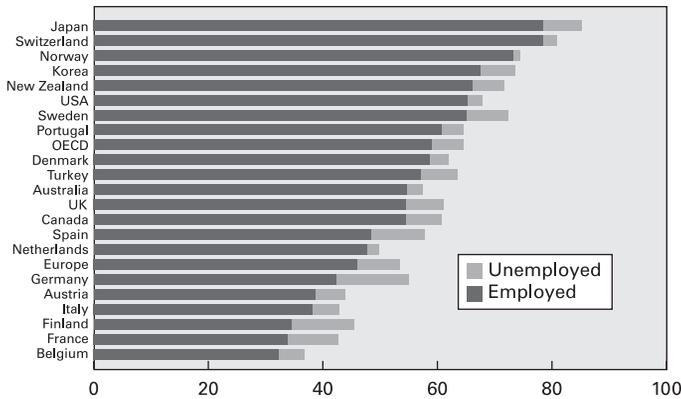
The above economic analysis of the reasons for declining fertility gives us a clue to future developments. Because the labor force is declining, the labor force participation of women should be further stimulated, which is likely to lower the fertility trend still more. This "vicious circle" between an increasing number of women working and a declining fertility rate is what demographers have missed for a long time. Although declining fertility is to some extent inevitable in industrial countries, in those countries, including Japan, where the fertility rate is at the lower end, the decline also may reflect underlying social problems, as a fever does sickness. The government has put top priority on the policy target of reversing the decline in fertility, but its effectiveness depends on a major change in labor market practices, along with various new policies to support the two-earner family.

## MAJOR IMPLICATIONS OF DEMOGRAPHIC CHANGES

In many developed nations, a common reform of the social security system aims at preventing early retirement. In European nations, in contrast to both the United States and Japan, skilled laborers who are still able to work have a marked tendency to choose to leave the labor market and to rely on a public pension. This tendency results in a high rate of early retirement (Figure 3). When the number of older workers is viewed as a percentage of the total number of workers, excluding the currently unemployed, an even sharper disparity appears. A relatively low rate of employment for the population at large tends to raise labor costs. This increase reduces firms' demand for workers and raises unemployment among young people. It also narrows the tax base for social security and increases the tax burdens on individuals and firms, resulting in the possibility of a vicious circle between a further decrease in employment by firms and increases in their tax burden.

Turning to social security issues, the public pension system serves the elderly population in two ways: First, it provides a stable financial base for the elderly, and second, it supplements the loss of income that results from leaving the workplace. A person is eligible for this pension

**Figure 3**  
**International Comparison of Employment Ratio at Ages 55 to 64**

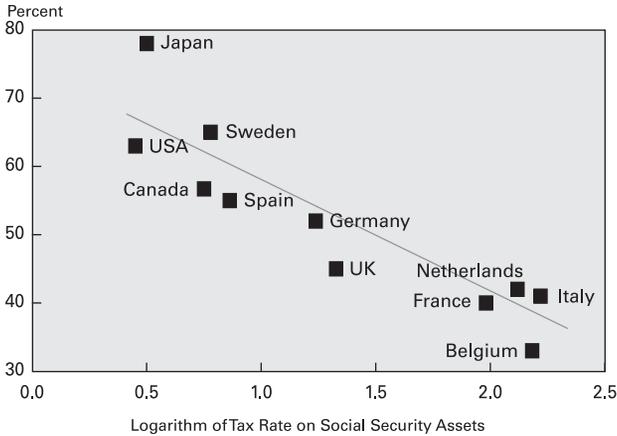


once reaching a certain age; however, he or she must have retired from the labor market to receive it. A pension that is granted on the condition of a person’s retirement from the workplace has the same effect as a subsidy that facilitates retirement among the elderly (alternatively, it works as a “tax” on one’s work in the labor market), thereby creating a dilemma between providing an income for the elderly and promoting a longer stay in the labor market.

Such problems are addressed in Japan through a “part-employment, part-pension” system, which helps maintain a set level of income on the basis of wages and pension added together for those between the ages of 60 and 64. However, if the amount of additional income through earnings results in a corresponding decrease in the pension, that income is in effect fully taxable, thereby discouraging continued employment among the elderly. For this reason, a reform was implemented in 1994 whereby the decrease in the pension was fixed at one-half the amount of increase from the earnings (making the earnings only 50 percent taxable).

Even in this case, where an individual continues to work after reaching the age of 60 (the age eligible for a pension), he or she will not be able to receive the full amount of pension entitlement in his or her lifetime. A comparison of OECD nations in terms of the taxation of “social security wealth” that could be obtained in full upon early retirement reveals that in social systems where “working does not pay” the rate of employment among the elderly population is significantly lower (Figure 4). In addition to the cultural factors which are often thought to explain the gap between nations in elderly employment rates, it is evident that economic incentives also play an important role.

**Figure 4**  
**Tax on Social Security Assets and**  
**Labor Force Participation of Old Persons**



In order not to discourage employment of the elderly population, it becomes necessary to classify the public pension as a type of savings after retirement, by designating age as the only condition for receiving a pension. The total amount of pension granted in life can remain fixed, on the basis of average life expectancy, regardless of the actual age at which an individual retires. It would also be important to set up a rate of adjustment (decrease or increase) that corresponds to the time at which the pension begins. Also, fixing the amount of pension that a person is eligible to receive at a standard retirement age (for example, at 65) such that it correlates to social security insurance premiums will help to establish an equilibrium between earnings and expenditures of the pension program. However, one problem that should be noted here is that this approach is inconsistent with the traditional understanding of social security, which is intended to “secure a pension for daily sustenance.”

## FOREIGN TRADE AND IMMIGRATION

Finally, let me comment briefly about immigration, in which so many people have expressed interest. Does it serve to solve a demographic problem? Most people say no, and I am inclined to agree, because immigrants eventually get older and they need benefits too. What we could do to offset demographic change is simply to employ foreign workers of productive ages, who would then retire in their own country.

Theoretically, it is our best solution. I do not know whether such an approach is feasible or not, but we can do the same thing through international trade. Economics suggests that importing a labor-intensive product from abroad is the same thing as importing a foreign neighbor, and that is what Japan has been doing recently. We export capital to China, or another East Asian country, and let the Chinese or East Asians work in their own country. We then import their labor-intensive goods from abroad. That substitutes for the actual importing of labor, and it is more efficient.

Importing foreign workers would simply defer our structural adjustment, because the immigrants would be concentrated in the cheap labor pool used by the labor-intensive industries that Japan cannot sustain otherwise. If instead we export capital to another country and import its labor-intensive products, then that will stimulate our own structural adjustment. So this indirect way of importing foreign workers has better effects for economic development. We try to make the best use of our existing workers and also to utilize foreign trade.

As far as a policy for immigrants is concerned, the Japanese have tried to open the door for skilled workers while still closing it against the unskilled, with few exceptions. I do not believe this policy will be sustainable in the long term, but in the immediate future I think this policy will be maintained.

## CONCLUSIONS

Demographic change does matter to the economy and to society, particularly when it reflects underlying structural problems. With rapid economic development in Japan and many East Asian countries, the economy has changed a great deal, but the employment and family systems have remained basically unchanged. Declining fertility may be one of the indicators of various mismatches in the current social-economic system. Removing such tensions, and improving the economic and social system, should be an important policy target.

Also, the consequences of demographic change need to be minimized. It is essential to reform a public pension system that has been based on the concept of a traditional society, in which a relatively small elderly population has depended on social support provided by a large number of workers, and people have enjoyed growing prosperous. In facing the aging society ahead, improvements in the current system can be realized by maintaining flexibility, fairness, and neutrality in public systems, including taxation and social insurance.

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