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ast-Aging East Asia: Lessons from Japan?

High Hopes for Closer Regional Cooperation

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Population Aging Fast in East Asia

East Asian countries may be roughly classified into four categories according to the speed of population aging (Chart 1). Japan, in the first category, has the most aged population, followed by South Korea, Singapore and Hong Kong in the second category, and China and Thailand in the third, with other members of the Association of Southeast Asian Nations (ASEAN) still slow in population aging.

One of East Asia's major characteristics is the rapidity of population change. Besides, most East Asian countries are still emerging economies. China and Thailand, for instance, still linger low in terms of per capita gross domestic product (GDP) although ranking high in the ratio of aged population (65 and older).

On the other hand, social security in most East Asian nations can be summed up by the fact that public pension and medical insurance systems are available to public servants, military personnel and big business employees, but not to other sectors of people. That is, people engaging in primary industries such as agriculture and fisheries, self-employed people, and workers in "the informal sector" of the economy account for an overly high proportion and, as a result, many workers are not covered by public medical insurance and pension systems. Although some countries have adopted the social security insurance system, other countries such as Singapore, Malaysia and Indonesia have a "provident fund" system.

Be that as it may, the social security system in East Asia is still in the developing stage, while the aging of population is progressing rapidly.

Generation Gap Due to Pay-As-You-Go Social Security

Meanwhile, Japan is in the midst of fast population aging. This experience is considered to hold certain suggestions for East Asian nations. For instance, Japan can possibly serve as a bad example from which other nations can learn lessons in the sphere of social security (hereafter meaning pensions, medical treatment and nursing care), which now constitutes one of the overriding problems for present-day Japan.

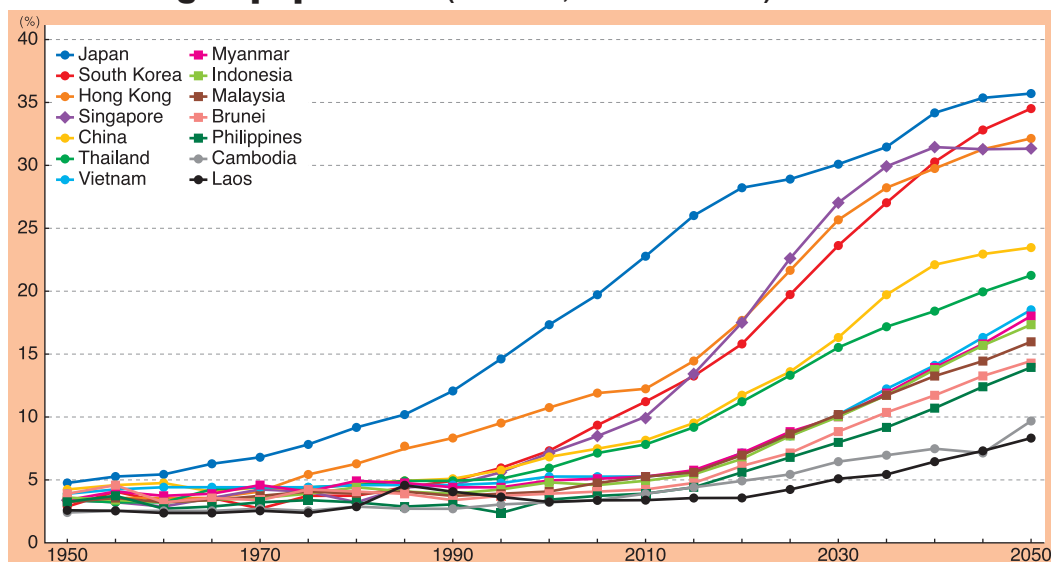
The "intergenerational accounting" estimate, announced in the "Annual Report on the Japanese Economy and Public Finance 2005" of the Cabinet Office, has made it clear that future generations will suffer a loss of as much as about 100 million yen per person compared with the aged generation (65 and over). The reason why such a generation gap will occur is quite simple.

That is, Japan's present social security is based on a "pay-as-you-go formula" (the working generation supports the aged generation), and this formula is used for institutional planning. Therefore, an easy way out of the current difficulty is to halt or revise the pay-as-you-go formula.

Therefore, let us take a look at "funded financing in advance," which is one of the ways to rectify the generation gap stemming from "pay-as-you-go social security" in consideration of lessons learned from Japan's example. This "pre-funding" amounts to "compulsory savings" for the rectification of the generation gap. To under-

CHART 1

Ratio of aged population (65 & over, median estimate)



Source: "World Population Prospects," United Nations, 2004

stand it distinctly, it is advisable first of all to have a clear-cut idea of the mechanism of how the pay-as-you-go social security system causes the generation gap.

Let us consider the mechanism by means of a simple economic formula as described in *Chart 2*. As is the case with the present Japanese economy marked by the fast-aging population, let us assume that the ratio of aging in this given economy in the first stage, which stands at 16.7% (namely, one aged person to every five young persons), climbs to 25% (one aged person to every three young persons) in the second stage when young people in the first stage join the aged population.

Meanwhile, expenditures for medical and nursing care services are concentrated in the aged population and financed primarily by the working generation, and both expenditures are financed by the pay-as-you-go system as in the case of pensions. Therefore, let us assume that per capita social security expenses of the aged population work out at 4 million yen per year and are financed by the working generation.

With these assumptions, let us estimate the burden (insurance premium) on the working generation in the first and second stages. Since every aged person is supported by five young persons in the first stage, the per capita burden on young people comes to 800,000 yen per year (4 million yen divided by five). In other words, the per capita amount of the working generation that is transferred to the aged population is 800,000 yen. If the per capita annual income of the working generation is 5 million yen, the insurance premium in the first stage works out at 16% (800,000 yen divided by 5 million yen).

On the other hand, in the second stage marked by progress in aging, every aged person is supported by only three young people. As a result, the per capita burden on the young generation comes to 1.33 million yen per year (4 million yen divided by three). Namely, the per capita amount of the working generation that is transferred to the aged population expands to as much as 1.33 million yen. If the per capita income of the working generation is 5 million yen in the second stage, the insurance premium shoots up to 27% (1.33 million yen divided by 5 million yen).

As is clear from the above estimates, the burden (insurance premium) on the working generation needs to be raised from 800,000 yen (16%) to 1.33 million yen (27%) if the per capita social security expenses (4 million yen) of the aged population in the first stage are to be kept at the same level in the second stage.

If the burden on the working generation is to be curbed, it is necessary to restrict social security benefits for the aged population. That is, if the pay-as-you-go social security scheme is maintained despite progress in aging, the government and the general public are forced to face a dilemma of whether to place an excessive burden on the working generation or curb social security benefits and put a greater burden on the aged population, as is the case with present-

CHART 2

Progress in aging & social security burden

		Ratio to population	Per capita amount of working generation transferred to aged generation
1st stage	Working generation	5	¥800,000/year
	Aged generation	1	
2nd stage	Working generation	3	¥1,330,000/year
	Aged generation	1	

Source: Compiled by author

day Japan. As a result, although the burden of a particular generation becomes overly heavy, the burden of a different generation is spared. This is the mechanism of the generation gap stemming from the pay-as-you-go social security system.

“Pre-funding” Fills Generation Gap of Social Security

Next, let us consider how to resolve the generation gap arising from the pay-as-you-go social security scheme. One possible solution is “pre-funding.” The aforementioned *Chart 2* case also enables us to easily understand this funding method.

In the above *Chart 2* case, as the aging of population progresses from the first to the second stage, the per capita burden of the working generation increases from 800,000 yen to 1.33 million yen. The prime reason for this is that the per capita amount of the working generation, which is “transferred” (that is, contributed) to the aged population, is different between the first stage (800,000 yen) and the second stage (1.33 million yen).

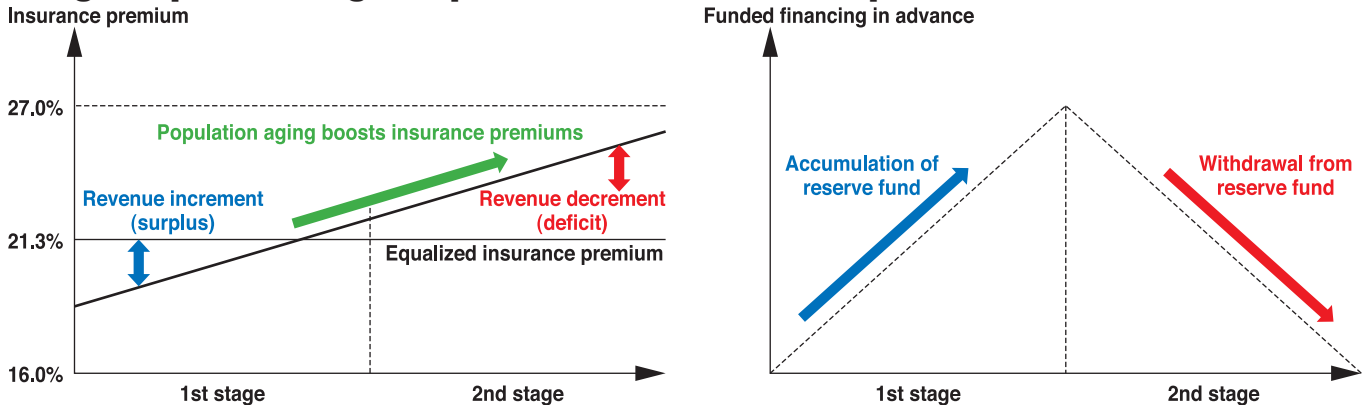
When viewed from a different angle, this simply means that the “transfer” in the first stage (800,000 yen) is “too little,” whereas the “transfer” in the second stage (1.33 million yen) is “too much.”

Therefore, the resolution of this problem is by no means difficult. The average of two figures – 800,000 yen (insurance premium 16%) and 1.33 million yen (insurance premium 27%) – is 1,065,000 yen, which corresponds to the insurance premium of 21.3% (1,065,000 yen divided by 5 million yen). Accordingly, all that has to be done is to raise the insurance premium in the first stage to the level of roughly 21.3%. The revenue increment accruing from this raise (per capita increase of 265,000 yen for the working population = 1,065,000 yen minus 800,000 yen) is set aside for “pre-funding” to provide for progress in population aging. On the other hand, the insurance premium in the second stage has only to be lowered to 21.3% or the same as in the first stage by dipping into the reserve fund (*Chart 3*).

This enables the equalization of insurance premiums in the first and second stages, making it possible to keep the social security burden of all generations at the same level (1,065,000 yen). On the other hand, because each generation’s social security benefits are identical (4 million yen), each generation’s net burden (burden minus

CHART 3

Image of pre-funding & equalization of insurance premiums



Source: "2009 Aging Report," *European Economy*, 2, European Commission

benefits) is equalized. In other words, pre-funding serves to rectify the generation gap stemming from the pay-as-you-go social security system. That explains how the funded financing enables improvement with respect to the generation gap.

Lessons from Japan & High Hopes for Closer Regional Cooperation

It follows from the foregoing that improvement can be hoped for in regard to the generation gap if the pre-funding scheme is introduced into the pay-as-you-go social security system. Nevertheless, the reform of social security makes no headway in Japan. The reason lies in the aging of population. That is, in present-day Japan, people of middle and advanced ages wield considerable power in elections. As is clear from the country's population makeup, the average age of the Japanese, including those aged less than 20 who have no voting rights, was 43.78 as of 2010. If all people are lined up according to age, this age is "right in the middle." Namely, people aged 40 and over account for a majority of the Japanese population. Which generation benefits from a majority decision is self-evident.

Moreover, the aging of population affects the economy in all aspects, ranging for instance from the domestic savings ratio and investment to the international flow of labor and capital. Families have to deal with an increase in feeble old people while corporations are confronted with, say, a decline in young consumers and new employees. Even more serious is the swelling shift of financial resources from young to old generations as the aging of society progresses.

That is, the aging of population spells the expansion of pensions, medical services and social services, and expenditures for aged people. The increase in such expenses makes it difficult to fulfill investment and other needs that can lead to future growth.

Therefore, East Asian nations, when dealing with population aging and undertaking institutional planning for social security, should strive to learn lessons from the example of Japan while pondering such points as what role should be performed by the government, the market, self-help efforts, families and society, and the "informal safety net" that offers poor people free or low-cost care provided by private professionals and organizations.

Nonetheless, it is only natural that East Asian nations vary in the

stage of development and the level of income. As is clear from *Chart 1*, they differ widely in the level and speed of aging. Accordingly, there can be no single overall solution. Under these circumstances, it is first of all necessary for high-income countries and territories such as Hong Kong, Singapore, Japan, South Korea, Taiwan and China to take the lead in exploring their own best practice for coping with population aging.

On the other hand, China and Thailand need to cope with future fiscal pressures of population aging by reinforcing policies and institutional frameworks. At the same time, it is essential to secure resources not only for economic shifts and development, but also for poverty reduction and social equity.

In this respect, economic partnership agreements (EPAs) and free trade agreements (FTAs) have come to attract attention of late. In this sense, policy dialogue is becoming very useful in the East Asian region. I deem it necessary for policy-making authorities in the region to share information, learn from each other's experiences and make better policy-making decisions in the years ahead. On top of that, education and human resources, capital, knowledge, the opening of investment and trade, the introduction of competition, the development and deepening of the financial market, the Asian bond market initiative and asset management, and labor mobility and immigration will become examples of common agendas for the region.

Furthermore, to better cope with economic problems due to population aging, it is considered essential for such countries as Singapore, Japan and South Korea to make effective use of capital and savings in the first place. To that end, it will also become necessary to make policy decisions from a broader point of view, including the improvement of the capital market and the introduction of an efficient tax system in East Asian nations.

Be that as it may, the aging of population in East Asia is bound to become a common intraregional problem and, as such, can possibly stimulate regional cooperation. In this sense, great expectations are being placed on the deepening of regional cooperation in East Asia, including Japan. **J.S**

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