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Volume Title: The Economic Consequences of Demographic Change in East Asia, NBER-EASE Volume 19

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Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-38685-6  
ISBN13: 978-0-226-38685-0

Volume URL: [http://www.nber.org/books/ito\\_08-2](http://www.nber.org/books/ito_08-2)

Conference Date: June 19-21, 2008

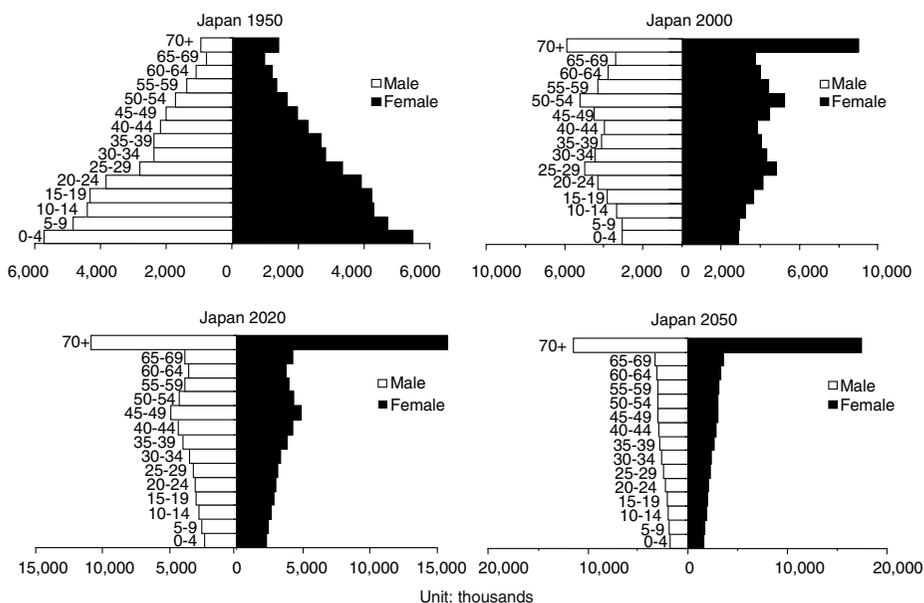
Publication Date: August 2010

Chapter Title: Comment on "Pension Issues in Japan: How Can We Cope with the Declining Population?"

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Chapter URL: <http://www.nber.org/chapters/c8159>

Chapter pages in book: (189 - 192)



**Fig. 5C.1** Japan's population by age group

Source: IPSS ([www.ipss.go.jp/site-ad/TopPageData/p\\_age2.xls](http://www.ipss.go.jp/site-ad/TopPageData/p_age2.xls), accessed January 30, 2007).

tribution. Consumption tax is regressive in nature. It hurts the poor more than the rich. Additional consumption tax increase may increase the number of poor elderly in Japan. Then, new social issues will arise.

The Japanese pension reform is all about the intergeneration share of "pie." Looking at the balance sheet, we learn that the piece of pie the old will have is getting smaller and smaller. But, the number of old will be larger. The young will have to share their pie with the old. This is not easy since the author shows that the 2004 reform made the present value of future benefits account for only 80 percent of the present value of future contribution. The question is how to make the young willing to share their pie with the old when they are not sure that the number of their offspring will not be large enough to make a big pie that is shareable?

## Comment Hyungpyo Moon

In his excellent chapter, Professor Takayama provides very comprehensive reviews and appraisals of the current pension issues in Japan from the per-

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spectives of financial sustainability and distributional equity. In particular, he analyzes lucidly the contributions and limitations of the 2004 Pension Reform in Japan using the ingenious balance sheet approach, which enables separate accounting of past pension liabilities from future ones. He goes further to outline a possible new pension reform option that could be more sustainable and incentive-compatible.

As described in the chapter, the 2004 pension reform's major target is to make the pension plans—both earnings-related pension (KNH) and basic pension—more sustainable in a super-aged society. The KNH achieved this goal through a substantial increase in contribution rate as well as reduction in benefit levels. The contribution rate will increase gradually from 13.59 percent in 2004 to 18.30 percent in 2017. Benefits will be lowered automatically by introducing the built-in stabilizer to neutralize demographic factors, which is equivalent to the negative benefit adjustment of approximately 0.9 percentage point per year. By this measure, the average income replacement rate of the KNH is projected to decline by 9.1 percentage points during the next twenty years. Reduction schedule will be halted in 2023, so that the average replacement rate does not fall below the 50 percent level.

The KNH reform in 2004 will undoubtedly enhance its financial stability. However, it is still questionable whether the reform fully recovers the plan's longer-term financial sustainability. If the contribution rate will be fixed after 2017 and benefit levels will be fixed after 2023, what will happen after 2023? There is no doubt that population aging in Japan will continue even after 2023. According to the projections, old-age dependency rate is expected to go up as high as 40 percent in 2052, due to both increased longevity and low fertility. This trend will inevitably create financial shortage problems even after 2023, despite the recent reform.

Even if both contribution rate and benefit level are fixed, we can still maintain the plan's financial balance by adjusting the minimum pensionable age. But my question is whether the minimum replacement rate target of 50 percent is really the “Masino line” to guarantee social adequacy. The 2004 reform promised that the KNH replacement rate will not fall below the 50 percent level for the full participants. However, many developed countries provide less generous public pension benefits and complement the inadequacy through fostering corporate/individual annuity markets. As almost all the KNH participants in Japan receive corporate level retirement benefits, the total replacement rate can still be high despite the KNH benefit cut. In addition, increasing the role of private pensions will strengthen the prefunding of the entire old-age income security system, thereby making the entire system less vulnerable (more sustainable) to demographic changes. Considering this, it seems to me that setting the “adequacy” target for the old-age income security system as a whole, rather than for the public pension provision only, may be more effective.

Professor Takayama proposes that the NHK be converted to the notional defined contribution (NDC) plan to make the plan more sustainable and more incentive-compatible. This can be done by separating the past liabilities—or legacy debt—and financing them through the increase in consumption tax. My second question is whether the NDC is really incentive-compatible or actuarially fair. A shift to the NDC will increase the marginal linkage between contributions and benefits conceptually: “Every dollar counts in the NDC,” as Takayama puts it. However, the NDC is still a PAYGO system, and vulnerable to demographic changes. While the unfunded defined benefit plans often neutralize the negative impacts of demographic changes by adjusting the benefit levels, the NDC does this by adjusting the internal rate of return: that is, the rate of return applied to the NDC—notional rate of return—is a function of aging factors as well as wage growth rate. Hence, increasing longevity and low fertility will inevitably lower the notional rate of return. In this case, people still can compare the rate of return on the NDC with those of other financial portfolios to find out the NDC is not attractive (actuarially fair) anyhow.

Another question is whether tax financing of the past KNH liabilities is socially equitable. As mentioned in the chapter, the past liabilities are “sunk costs” and can be financed by tax revenues. An introduction of the earmarked consumption tax will not only reduce the deadweight loss, as it is more broadly-based than income taxes, but it will also increase intergenerational equity as the old generations will share the burden. However, the KNH plan is for the employees only, excluding nonemployees. In this case, tax financing of the KNH legacy debt will inevitably result in transfers from nonemployees to employees, and thereby creating intragenerational inequity.

My final question is whether a shift to the funded defined contribution (FDC) plan cannot be an option in Japan. From the perspectives of financial sustainability and intergenerational equity, the effective countermeasure to depopulation would be a transition from the conventional PAYGO system to a funded system. Sweden, for example, recently introduced the mandated FDC with 2.5 percent of contribution rate to supplement the NDC. Is it impossible for Japan to introduce the FDC partially together with a shift to the NDC? If the “double taxation burden” problem matters, is it impossible to spread the burden intertemporally through a proper mixture of tax financing and debt financing?

Professor Takayama also proposes that the current basic pension be shifted to a noncontributory universal pension, instead of increasing government’s matching subsidy to the basic pension as in the 2004 reform. I agree that this shift could solve the noncompliance problem, and improve both efficiency (by utilizing more broadly-based consumption tax) and equity (by making the system more progressive). In spite of that, one thing we should take into

consideration from the perspective of financial burden is the rapid population aging in Japanese society. The significant demographic changes in the future signal that there will be a tremendous increase in financial burden when a universal noncontributory basic pension is introduced and the consumption tax rate will have to increase to a substantial degree, thereby reducing economic efficiency.