## Financial Balancing between Work and Retirement in Aging Populations : The Japan Case

## (Summary)

Following a persistent decline in fertility over recent decades, Japan's total population will soon begin to fall sharply to reach 60 or even 40 percent of its current level by the end of the next century. This trend will soon reflected in a sharp decline in young labor, in a falling savings rate and in a decrease in capital formation, all of which will contribute to a further shrinking of the country's economy. The economy will everywhere in the country be characterized by excess supply and Japan's presence in the world economy will stagnate and dwindle as we move into the 21st century.

How to financially balance work and retirement in these How can the social security pensions be circumstances? A possible solution may be 1) containing their sustainable? aggregate costs by a) changing benefit increases from wageindexation to CPI-indexation, b) extending contribution years for full benefits from 40 to 45, c) introducing a work earnings test for those workers in the latter 60s, and 2) freezing or even decreasing contribution rates for social security pensions, with introducing an ear-marked consumption-based tax into social security By these measures, the normal retirement age and the pensions. benefit level can be maintained and the peak level of the earmarked tax above mentioned will be 6.1% in 2025. The above solution will be a little painful to all of the members of the community. Without pains, however, we will have no answer.

Social support for child-bearing/raising within the public pension system will be increasingly demanding in Japan. Pension arrangements for women will be reformed, too.

(Text)

#### 1. Introduction

The total fertility rate of Japan has been declining sharply since 1974 and the current level in 1997 was 1.39. There is still little sign that the TFR will stabilize or return to a higher level. The total number of the population for Japan will peak out at about 127 millions around 2007 and then begin to fall sharply, reaching 54 percent (medium projections) or even 40 percent (pessimistic ones) of the current number in 2100. The proportion of the elderly (65 years and above) will be one third after 2040. Japan will then have one of the oldest populations in the world.

Some may argue that Japan will probably be involved in difficulties in containing the social security costs, since social security benefits are mainly for the elderly and the proportion of the elderly population is rapidly going up and up. A long-term decline in the future Japanese economy may intensify these difficulties.

Are there any solutions for containing the social security costs? This paper will try to show some policy options to address the financial problems of social security pensions in Japan. Social support for child-bearing/raising within the public pension system will be discussed, too. Pension arrangements for women will also be mentioned.

## 2. The Current System of Public Pensions

## The Two-Tier Benefit System and Coverage

Japan currently has six public pension programmes covering different sections of the population. The earliest plan was established in 1890; the most recent, in 1961. Legislation enacted in 1985 introduced substantial changes to the country's entire old-age, disability and survivors' benefits under the social

security system. The new two-tier system, which became effective on 1 April 1986, provides that all sectors of the population receive the first tier, flat-rate basic benefit. The second tier, earning-related benefit, applies only to employees. The principal programme for private sector employees is the Kosei-Nenkin-Hoken (KNH). Independent workers, self-emoloyed and persons with no occupations are covered under the Kokumin-Nenkin (KN).

#### Basic Benefits

The flat-rate basic benefits cover all residents of ages 20 to 60. This dates from 1 April 1961, when the KN was first implemented. The KN provides the flat-rate basic benefits.

The full old-age pension is payable after 40 years of contributions, provided the contributions were made before 60 years of age. This requirement can be met only by those born after 2 April 1941. There are special transitional provisions for those born after 2 April 1926 with at least 25 years of coverage. They can receive the maximum pension even with fewer contribution years, provided they had been contributing since April 1961.

The maximum monthly pension of 65,000 yen<sup>1)</sup> at 1994 prices (for a pension with maximum years of coverage) is payable from age 65. The benefit is indexed automatically each fiscal year (from 1 April) to reflect changes in the consumer price index of the previous calendar year.

The pension may be claimed at any age between 60 and 70 years. It is subject to actuarial reduction if claimed before age 65 or an actuarial increase if claimed after 65 years.

## Earnings-related Benefits

Earnings-related benefits are given to all employees. Under the KNH, the accrual rate for the earnings-related component of old-age benefits is 0.75 percent per year. Thus, forty years of contributions will earn 30 percent of career average monthly real earnings. This accrual rate is applicable only to those employees born after 2 April 1946. There are also special transitional provisions for those born before 1 April 1946. The accrual rate is 1.00 percent for those born before 1927 and it varies from 0.98 percent to 0.75 percent depending on the date of birth for those born after 1927. The reductions in the accrual rate correspond to the longer average contributing years of the younger cohorts. On average, each cohort is expected to receive 30 percent of his/her career average monthly real earnings, as the earnings-related component.

The career average monthly earnings are calculated over the employee's entire period of coverage, adjusted by a wage index factor, and converted to the current earnings level. These conversions are carried out at least every five years and after the conversion, benefits are indexed automatically every fiscal year to reflect changes in the consumer price index.

The full pension is payable from age 60 to an employee who is fully retired. From 60, he or she can receive the full amount of benefits, including the flat-rate component, without any reductions. Since the flat-rate basic benefits to employees are given from age 65 by the KN, the KNH fills the gap, paying the equivalent flat-rate benefits from age 60 to 65.

An individual who has reached 60 years but has not fully retired can receive a reduced pension.

At present, the KNH old-age benefits for the newly awarded "model" retired person (with an average salary earned during 37 years of coverage) and his dependent spouse (full-time housewife) were about 231,000 yen per month in 1994, replacing

68 percent of average monthly earnings of currently active male workers.

In Japan, employees usually receive semi-annual bonuses which typically amount to four to five months salary, although in small companies they are often much smaller. Since these bonuses are not included in the earnings base for both public pension contributions and benefits, the replacement rate for the above-mentioned "model" retired person will be considerably lower, about 50 percent of the average annual earnings.

To put it another way, the 68 percent replacement is the rate for gross salary. Active workers pay income tax and make social security contributions, and their deductions currently average about 16 percent of their monthly earnings. For retired persons the deduction from their pension benefits is zero or quite small. Consequently the current replacement rate to take-home pay or net income is about 80 percent.

#### **Contributions**

Under the KNH, equal percentage contributions are required of employees and their employers. The contribution are based on the Hyojyun-Hoshyu-Getsugaku (HHG), the monthly standard earnings, graded into 30 levels currently ranging from 92,000 yen to 590,000 yen per month. The total percentage in effect from November 1994 was 16.5 percent. The total percentage increased to 17.35 percent from October 1996. The current contribution rate has to be raised by 2.5 percentage point every five years reaching 35.0 percentage point in 2025, although this increase in the contribution rate is not legally fixed.

It should be noted that the HHG includes wages, salaries, allowances, and all other cash income paid to an employee for services rendered, but excludes the traditional semi-annual bonuses. The HHG is also used as the earnings base for

calculating benefits.

Non-employed persons between the age of 20 to 60 years pay flat-rate individual contributions to the KN. The current rate since April 1998 is 13,300 yen per month. It is scheduled to rise each fiscal year by 500 yen plus the increase in the consumer price index from the previous calendar year. The projected maximum rate will be 26,000 yen (at 1999 prices) from April 2015 onwards.

For those who cannot pay due to financial reasons, exemptions will be permitted. The flat-rate basic benefits for the period of exemption will be one-third (equal to the government subsidy) of the normal amount.

Under the current system, if the husband has the contribution deducted from his salary and placed in the KNH, his dependent wife is automatically entitled to the flat-rate basic benefits, and she is not required to make any individual payments to the public pension system.

The total annual cost of the flat-rate basic benefits is shared by the KN, KNH and the other four special programmes on a fully pay-as-you-go basis. This cost sharing is in proportion to the number of covered persons, and in calculating each share, dependent wives of employed men in the KNH are also counted in the KNH coverage.

It should be noted that those covered by the KNH are not required to make individual contributions to the KN, while the KNH itself is responsible for the financial participation in the first-tier basic pensions. Through these indirect financial arrangements, those covered by the KNH are regarded as covered also by the KN.

The government subsidizes one-third of the total cost of the

flat-rate basic benefits provided by the KN. There is no subsidy for the earnings-related part of the KNH. The government pays administrative expenses as well.

Contributions, irrespective of employers or of employees, are fully tax deductible and the annual return from the funded reserve of the KNH are tax-exempt.

The funded reserve of the KNH has been invested in social overhead capital for the construction of highways, railways, bridges, airports, public hospitals, and other public projects. It provides housing loans, too.

#### 3. The 1994 Reform of Public Pensions

Major changes in the public pension system have thus far been made roughly once every 10 years. As a great overhaul was proposed in 1984, the chances were that 1994 would become another year of pension reform. The reform bill was approved by the National Diet on 2 November, 1994. The main contents of the reform bill are as follows.

## Raising the Normal Commencement Age for Employees

As noted, Japan has a two-tired system of basic benefits for everybody in tier 1 and earnings-related benefits for employees in tier 2. In principle payments of benefits begin at the age of 65, but there is a legal provision allowing employees to receive "special old-age benefits" corresponding to the full amounts for both tiers starting from 60 years. The currently approved legislation guarantees that the tier-2 benefits for retired employees between 60 and 64 years will be paid without any reduction.

The tier-1 benefits for this age group are to be phased out by stages (between 2001 and 2013 for men), and eventually nobody under 65 years will receive full basic benefits. The phasing out of basic benefits for female employees will be delayed five years after the schedule for male employees, starting only in 2006. In exchange, employees between 60 and 64 years will become eligible for advance payments at a reduced rate from basic benefits, as is currently the case for non-employees.

## Switching Benefit Indexation from a Gross- to a Net-Wage Basis

The time has come to ensure a sound balance between the benefits received pensioners and the contributions paid by active workers. Hitherto the government had adjusted benefits upwards in line with increases in gross wages, but as of October 1994 net wages are used as the index.

In essence, a public pension system lays down rules for dividing the economic pie between people in old age and the working generation. Retired persons should be able to maintain thier dignity, while workers should be adequately rewarded for their labors. It is the pension system that prescribes the rules for satisfying these two needs.

From this perspective, the old rules were lacking. They were giving pensioners a gradually growing portion of the pie with each step toward an old-aged society. In the case of the KNH, around 1975, the standard benefits amounted to approximately 60 percent of active male workers' average monthly wages before taxes. In those days national and local income taxes and social security contributions reduced wage earners' monthly paychecks by about 10 percent on average, whilst the same burden on retired persons was quite light. Thus while the ratio of monthly wages to benefits was 100 percent to 60 percent, or 5:3, before taxes, it narrowed to 90 percent to 60 percent, or 3:2, after taxes. Thereafter, this fine balance tilted in favour of people in retirement. By 1986 their benefits had risen to 68 percent of monthly pre-tax wages, and the tax and social

security burden on the workers had grown to 16 percent, reducing their net wages to 84 percent of the gross amount. This works out as a 5:4 ratio between net wages and benefits.

The greying of Japanese society will be continuing apace, and inevitably the tax and social security burden will grow much heavier. Take-home pay is likely to decline eventually to 75 percent or even 70 percent of the pre-tax amount. In the absence of reform, old-age benefits will then be virtually the same size as the worker's monthly paycheck.

To hold the current net income balance between the two generations constant, a debate on benefit levels must take net wages as its departure point. The ratio on a net basis is now in the vicinity of 5:4, and if we like it there, all we need to do is to agree on maintaining it. A consensus on this point alone will keep benefits pegged to a fixed share of net wages no matter how far the aging process goes, and each pensioner's slice of the pie will remain constant until death. Compared with the way the pie was being divided, this will be much fairer.

## Promoting Later Retirement

The former earnings test between ages 60 to 65 was revised so as to promote later retirement<sup>2)</sup>. Salaried workers today can increase their total income by earning more money. With each hike in wages, the combined sum of their benefits and wages moves up. The ratio between wage increments and benefit reductions is 2:1. The new test is effective from April 1995.

Old-age employment benefits provided by the employment insurance system were newly introduced from April 1995 to motivate those with the will and the ability to work to remain employed during their early sixties. Specifically, these people are to be provided benefits amounting to 25 percent of their new wages just after the mandatory retirement age of 60.

To balance the employment benefits, the pensions of such workers are to be cut by an amount equivalent to 10 percent of their new monthly salary.

## Exemption of Contributions for Child Care

From April 1995, the new reform frees people on child-care leave from paying their share of pension contributions as well as health and employment contributions. Employers still have to continue to pay contributions as in the past.

#### Contributions from Bonuses

After April 1995, contributions are deducted from bonuses. The rate is 1 percent of the bonuses, with employees and their employers each contributing half this amount. These contributions are not used for benefit calculation purposes.

## 4. Future Policy Options

How a substantial gap of contribution rates for social security pensions between current and future generations can be diminished? This section will propose a set of policy options to solve this problem.

# 4.1 A Partial Funding Shift from Wage-Based Contributions to an Ear-Marked Consumption-Based Tax

The first-tier, flat-rate basic benefit is currently financed partly be general revenue. The share of general revenue is currently one third. The remaining two-thirds are financed by contributions.

For self-employed and jobless persons together with those of no-occupation, the flat-rate contributions are levied for basic

pensions. They are virtually poll taxes. The current drop-out rate is nearly 40 percent and a cherished dream for a universal pension is getting far- and far-reaching. For employed persons, 17.35 percentage contributions are currently levied for basic and earnings-related pensions. They are virtually wage taxes, doing harms to employees as well as their employers.

A universal pension can be attained by financing basic pensions not through contributions but through taxes. One alternative is an ear-marked consumption-based tax. Earmarking will be required for a majority of people to accept its A consumption-based tax is less introduction as plausible. harmful than a wage tax, with spreading pension burdens to entire life stages. In the short-term, the funding shift will enable the KNH contribution rate to decrease. It can be pulled down by 4.0 percentage point in 1998, with an introduction of the ear-marked consumption-based tax (its tax rate: 3.3 percentage point). The monthly flat-rate contributions (13,300 yen per person) for non-employees are entirely replaced by the above consumption-based tax. Through this change, enrollees will lessen their pension burdens in net terms, while pensioners are forced to begin to bear some part of pension burdens.

The rate of consumption-based tax for basic pensions is estimated to be 6.1 percentage point in 2025. It substantially decreases the KNH contributions from 35 to about 22 percentage point in the same year (see Figure 1).

## 4.2 Containing Aggregate Costs for Social Security Pensions

## A. Changing Benefit Increases from Wage-Indexation to CPI-Indexation

Social security pension benefits, once received, are currently wage-indexed in net terms in Japan. They can be

CPI-indexed, however. Benefit indexation is quite crucial for public pensions, but if wage-indexation is found to be too expensive and harmful to actively working generations, CPI-indexation will be an alternative. The UK, the US, France and many other countries are currently adopting CPI-indexation. Germany and Japan are major countries with wage-indexation.

Changing benefit increases from wage-indexation to CPI-indexation will be estimated to decrease aggregate pension costs for social security by 11 percent by 2025. The estimated peak-level contribution rate (22 percentage point) will further go down to 19.5 percentage point in 2025 (see Figure 1).

## B. Introducing an Earnings-Test for Those Aged 65-69

Currently, the earnings-test is applied for those employees aged 60-64, but workers aged 65-69 enjoy full KNH benefits even if they earn considerably high income. Another earnings-test can be applied to these workers aged 65-69. This change will further pull down the KNH future contribution rate to 18.2 percentage point in 2025 (see Figure 1).

## C. Extending the Contribution Period for Full Benefits from 40 to 45 Years

In the current legislation, the normal contribution period for full benefits is assumed to be 40 years. It can be extended to 45 years.

According to the latest population projections, the life expectancy at age 65 will get longer. In 1995, it was 16.48 years for men, and 20.94 years for women. In 2025, it is estimated to be 18.21 years for men, and 23.15 years for women. A little more than 10 percent increases will be expected. Consequently, the period for receiving pension benefits would get longer in the future.

One can say that the contribution period should be extended proportionately for the pension system to be sustainable. The idea is that the contribution period for full pensions has to be changed step by step from 40 to 45 years. Note that this change will virtually pull down the benefit level in real terms for late comers into the labor market, while preserving the normal pensionable age. This change can save the aggregate pension costs by about 10 percent in 2025. Combined with a funding shift to a consumption based-tax, together with other measures listed above, this can decrease the KNH contribution rate to 16.4 percentage point in 2025, which is lower than the current level (17.35 percentage point). Through these measures, we can freeze any further increases in the KNH contribution rate (see Figure 1)<sup>3)</sup>.

## D. Other Options

The normal pensionable age for the earnings-related pension benefits can also be raised from 60 to 65 in the long future. Japanese people seem to be quite nervous, however, to increase it. It may require 10 or 15 years for them to reluctantly accept it.

The bonus payments should be wholly included in the contribution base as is the case of monthly wages and salaries. Consequently, pension benefits will be calculated on the annual amount of wages and salaries. Note that this change is revenueneutral as far as the aggregate revenue is concerned.

Anyway, through these measures we still maintain the current level of pension benefits for the "model" retirees, preserve the normal pensionable age legislated in the current provisions, and decrease the contribution rate for the long future. This is, indeed, not a magic.

## 5. Supporting Childbirth and the Raising of Children

In order to stabilize the declining TFR or return to a higher level, several policy measures have to be adopted. In the pension field, for example, there is a pressing need to use the system to support both childbirth by introducing childbirth benefits and the raising of children by use of a child-support deduction when public pension contribution are calculated. Those people with one child or with no children have to contribute more, while those with three children or more contribute less.

Furthermore, child deduction in income tax provisions can be abolished and be integrated with child benefits. The new child benefits can be given as one of the benefits of social security pension system.

New provisions will also be asked to free employers as well, from paying social security contributions for their employees on child-care leave.

#### 6. Pensions for Women

Turning now to the debate over providing pension coverage to part-timers (mostly females), we find that the current system does not directly apply to those who work fewer than 33 hours per week. In principle these part-timers are treated like full-time homemakers. But if their annual pay exceeds 1.3 million yen, they lose the right to be treated as a dependent spouse. They then become obligated to participate in the tier-1 system as flat-rate contribution payers. Because this arrangement tends to encourage part-time jobs that pay less than 1.3 million yen, calls are being made for the introduction of a system in which part-timers can enrol.

Four other problematic points involving pensions for women have also been raised. First, a full-time housewife who divorces has no right to claim part of the earning-related benefits her husband accumulated while she was married. It has been suggested that the right to these benefits be divided between the two. Second, payments of survivor's pensions terminate upon remarriage, but critics say they should continue. Third, critics also find it strange that a spouse who marries after beginning to receive an old-age pension becomes entitled to claim a survivor's pension. Fourth, while a fatherless family has the right to a survivor's annuity, a motherless family does not. This, it is said, violates equality of the sexes.

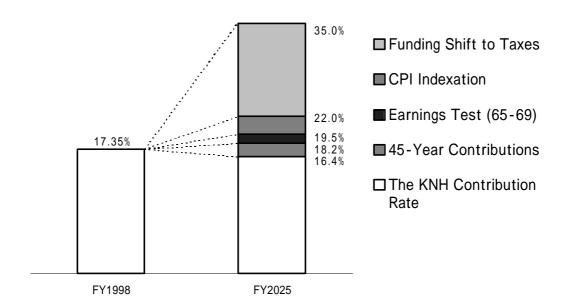
Under the current system, dependent spouses of citizens enrolled in the KNH are automatically entitled to the flat-rate basic benefits, and the spouse is not required to make any individual payments to the public pension system. This treatment is often attacked as too generous and unfair by single women and dual-income couples. It can be said, however, that it is quite fair as far as the old-age benefits are concerned, since benefits/contribution relations are essentially neutral.

But one can say that the survivor's benefits are unfair between dependent spouses and spouses of dual-income couples. They can receive three-fourths of earnings related old-age benefits of their husband. It is often a case that survivor's benefits are less for spouses of dual-income couples, who received the same amount of combined old-age benefits. An earning-split between couples will be one solution to this problem.

## 7. Promoting Private Initiatives

Overly generous public pension benefits should be further reduced, while the contribution rate can be frozen at the current level or be reduced through a partial shift of funding to a consumption-based tax. At the same time, we should encourage private initiatives including a private, personal saving account for retirement, through the use of powerful tax-incentives<sup>4)</sup>.

Figure 1 Future Contribution Rates by Alternative Policy Options



#### References

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<sup>\*</sup> This report is largely based on Takayama (1992, 1996,1998).

 $<sup>^{1)}</sup>$  10,000 yen = USD85.4 = UKL49.8 = DM139.5 = FFr467.4 = Ecu70.3 as at 9 October 1998.

 $<sup>^{2)}\,\,</sup>$  The labor force participation rates for elderly Japanese male aged 60-64 are currently still considerably high, compared with those in other OECD countries. There

may be four major reasons for this. First, Japanese elderly of this generation are still workaholics. They seem to follow a work ethic like that of the classic Protestantism, previously seen in Germany and the US. Second, they have created a new working style which makes it enjoyable and entertaining. Work is not perceived by them as torturous. Retirement, however, will imply a departure from a life which has something to live for. There is little sense of "happy retirement" in Japan, yet. Third, their higher participation is an outcome of the established sex roles between men and women in market and in the home. It partly reflects the lower rates of labor force participation for Japanese women, and similarly quite a low participation for guest workers from abroad. Commonly substitutions are made between elderly workers and female and/or guest workers in labor market. Fourth, due to a seniority-based wage system, elderly males in Japan will usually face a drastic income gap just before and after their mandatory retirement. They are virtually forced to get money other than public pension benefits, and salaries are still their keen interest after age 60. The higher participation of Japanese elderly seems to suggest that there has been little success in the employment policy by the government.

<sup>3)</sup> In December 1998, the Japanese government proposed to freeze increases in the KNK and KN contribution rates in fiscal 1999, with a partial funding shift to general revenue from one third to one half from fiscal 2004 at the latest. A five percent reduction in the KNH earnings-related benefits along with increasing the normal pensionable age for the earnings-related benefits from 60 to 65 will be also proposed. Changes to CPI-indexation, an introduction of an earnings-test for those aged 65-69, a shift from the HHG base to the annual salary base, and freeing employers from paying social security contributions for their employees on child-care leave will be included in the forthcoming bill, too.

<sup>4)</sup> Prefunding should be done in the private scheme, since political risks are inevitable in the public one. Prefunding in the private scheme, however, faces a volatility in the market rate of return. Take the 401(k) in the US, for example. It has served the US economy like an "economic viagla." Any viaglas should be used properly. Missing are proper regulatory institutions against investment risks.